# Appendix D
## **Phase I ESA**

ESA

Leighton Consulting, Inc.
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# T R A N S M I T T A L

To: Los Angeles County Department of Public Works
Geotechnical and Materials Engineering Division
Geology Investigations Unit
900 South Fremont Avenue
Alhambra, California 91803

Date: March 14, 2017

Project No. 603287.052

Attention: Mr. Gregory Sena

| Transmitted: | | The Following: | | For: | |
|---|---|---|---|---|---|
| ____ | Mail/Overnight | ____ | Draft Report | _X_ | Your Use |
| ____ | Courier | _X_ | Final Report | ____ | As Requested |
| ____ | Pick Up | ____ | Extra Report | | |
| _X_ | Email | ____ | Proposal | | |
| | | ____ | Other | | |

Subject: Phase I Environmental Site Assessment Report, United Rock Products, Quarry No. 3, 1137 Meridian Street (APN's 8531-026-019, 8531-032-009, 8531-032-010, 8531-033-007, 8531-034-026, and 8531-034-032) Irwindale, California 91706

LEIGHTON CONSULTING, INC.

By: Meredith Church

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# PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT
# UNITED ROCK PRODUCTS, QUARRY NO. 3
# 1137 MERIDIAN STREET
# IRWINDALE, CALIFORNIA 91706

Prepared For:

**LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS**
900 South Fremont Avenue
Alhambra, California 91803

Project No. 603287.052

November 1, 2016



Leighton Consulting, Inc.
A LEIGHTON GROUP COMPANY

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November 1, 2016

Project No. 603287.052

Los Angeles County Department of Public Works
Geotechnical and Materials Engineering Division, Geology Investigations Unit
900 South Fremont Avenue
Alhambra, California 91803

Attention: Mr. Gregory Sena

**Subject: Phase I Environmental Site Assessment (ESA), United Rock Products, Quarry No. 3, 1137 Meridian Street (APN's 8531-026-019, 8531-032-009, 8531-032-010, 8531-033-007, 8531-034-026, and 8531-034-032), Irwindale, California 91706**

Leighton Consulting, Inc. (Leighton Consulting) is pleased to present this Phase I Environmental Site Assessment Report for the Site.

Leighton Consulting has the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Site. Leighton Consulting has developed and performed the all appropriate inquiries in conformance with the standards and practices prescribed in ASTM International (ASTM) E1527-13.

If you have any questions regarding this report, please do not hesitate to contact us. We appreciate the opportunity to be of service.

Respectfully Submitted,

LEIGHTON CONSULTING, INC.

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# LIST OF ACRONYMS

| | |
|---|---|
| AOC | Area of Concern |
| APN | Assessor's Parcel Number |
| AST | Aboveground Storage Tank |
| ASTM | ASTM International |
| bgs | below ground surface |
| CDHS | California Department of Health Services |
| CREC | Controlled Recognized Environmental Condition |
| CUP | Conditional Use Permit |
| DOGGR | Division of Oil Gas and Geothermal Resources |
| DTSC | Department of Toxic Substances Control |
| EDR | Environmental Data Resources |
| EDR Radius Report | EDR Radius Map Report with GeoCheck |
| EIR | Environmental Impact Report |
| EPA | Environmental Protection Agency |
| ESA | Environmental Site Assessment |
| FEIR | Final Environmental Impact Report |
| FEMA | Federal Emergency Management Agency |
| FIRM | Flood Insurance Rate Maps |
| GBA | Geoprofessional Business Association |
| HREC | Historical Recognized Environmental Condition |
| HW Manifest | Hazardous Waste Manifest |
| LACDPW | Los Angeles County Department of Public Works |
| LACFCD | Los Angeles County Flood Control District |
| LACSD | Sanitation Districts of Los Angeles County |
| Leighton Consulting | Leighton Consulting, Inc. |
| LUST | Leaking Underground Storage Tank |
| MCL | Maximum Contaminant Level |
| mg/L | Milligrams per Liter |
| MRP | Monitoring and Reporting Program |
| MSL | Mean Sea Level |
| MTBE | Methyl t-butyl ether |
| NETR | Nationwide Environmental Title Research, LLC |
| NPMS | National Pipeline Mapping System |
| PCBs | Polychlorinated Biphenyls |
| PCE | Perchloroethylene or Tetrachloroethylene |
| pCi/L | PicoCuries per liter |
| PEA | Preliminary Endangerment Assessment |
| REC | Recognized Environmental Condition |
| RWQCB | Regional Water Quality Control Board |
| SCAQMD | South Coast Air Quality Management District |
| SLIC | Spills, Leaks, Investigations and Cleanup |
| SWAT | Solid Waste Assessment Test |

TCE.....Tetrachloroethylene
TPH.....Total Petroleum Hydrocarbons
µg/L.....Micrograms per Liter
URP.....United Rock Products/United Rock Products Corporation
USEPA.....United States Environmental Protection Agency
UST.....Underground Storage Tank
VCA.....Voluntary Cleanup Agreement
VOCs.....Volatile Organic Compounds
WDR.....Waste Discharge Requirement

Note: This list does not include acronyms exclusively from the EDR Radius Report discussed in Section 4.2, see text and/or Appendix E, Section GR-1

# EXECUTIVE SUMMARY

Leighton Consulting, Inc. (Leighton Consulting) performed a Phase I Environmental Site Assessment (ESA) of the United Rock Products (URP), Quarry No. 3, 1137 Meridian Street, Irwindale, California (referred to as the "Site" or "Site" – Figure 1, *Site Location Map*). The purpose of this ESA was to identify, to the extent feasible pursuant to the processes prescribed in ASTM International (ASTM) E1527-13, recognized environmental conditions (RECs), historical RECs (HRECs), or controlled RECs (CRECs) in connection with the Site. Exceptions to, or deletions from, this practice are described in Section 1.5 of this report.

The Site consists of six parcels, APN's 8531-026-019, 8531-032-009, 8531-032-010, 8531-033-007, 8531-034-026, and 8531-034-032, and is approximately 110 acres in size. The Site is currently occupied by United Rock Products (URP) Quarry No. 3, which is a sand and gravel quarry. Current operations include dredge mining for aggregate materials, short term storage of wet mined materials, and transportation of mined materials via an electrical conveyor belt to an offsite processing facility. Hazardous materials/waste storage was not reported or identified onsite.

Historically, the northern portion of the Site appeared to have been utilized for agricultural purposes and the southern portion appeared to be vacant with the San Gabriel Wash extending through the southeast corner. Agricultural use appeared to have ended onsite by at least 1964. Quarry operations commenced in the southeast portion of the Site by at least 1936 and covered the majority of the Site by at least 1972 and have continued through the present.

The regional topography generally slopes towards the southwest and groundwater is exposed creating a pond throughout the majority of the bottom of the quarry.

The Site is permitted as a Land Disposal Site that can accept inert fill material and is regulated by the Los Angeles Regional Water Quality Control Board (RWQCB). Fill material has been documented to have been placed at three locations at Quarry No. 3. In 1973 and 1974, 4,156 tons (2,445 cubic yards) of inert waste consisting of broken concrete block was reported to be placed in the northeast portion of the Site (Law Environmental, 1989). Concrete material is generally inert and is considered to have a low potential to contain contaminants. In 1986 or 1987, the City of Irwindale placed fill on the eastern side of the gravel quarry to stabilize the embankment along Buena Vista Street so that the street could be reconstructed. Slope erosion had been reported to be affecting the stability of Buena Vista Street. The fill consisted of an unknown quantity of

earth and rock, with some concrete and asphalt fragments (Law Environmental, 1989). In 2014, 3,000 cubic yards of inert waste that was in compliance with the Land Disposal Site's Waste Discharge Requirements (WDRs) was placed in the northeast quadrant of the Site (URP, 2014). Detailed information on the type of inert waste was not provided. The approximate locations of the reported fill materials are shown on Figure 3, Fill Location Map.

Two groundwater monitoring wells are located onsite and three groundwater monitoring wells associated with the monitoring network are located offsite. Groundwater monitoring is conducted to satisfy Monitoring and Reporting Program (MRP) requirements of the RWQCB. The monitoring conducted indicates that the water meets the Water Quality Protection Standards and volatile organic compounds (VOCs) analyzed have been below laboratory detection limits; therefore, the mining and land disposal operations do not appear to have adversely affected groundwater conditions at the Site.

This assessment has not revealed evidence of RECs, CRECs, or HRECs in connection with the property. Although not considered a REC, Leighton Consulting identified the following potential environmental concern:

- Fill material has been documented to have been placed at three locations in the northeast quadrant of Quarry No. 3 (Figure 3). The fill material has been reported to be, and/or is considered likely to be, inert fill that would be in compliance with the current WDR permit. However, confidence in fill material being inert cannot be high without detailed documentation of the fill material source and/or analytical testing. The fill material emplaced at the Site containing soil and/or other materials from unidentified sources is considered a potential environmental concern due to the lack of source documentation and/or analytical testing.

Based upon the findings of this Phase I ESA, Leighton Consulting makes the following recommendations:

- Conduct soil sampling within the areas where fill materials containing soil and/or other materials from unidentified soils was placed in the mid-1980s and in 2014 to assess and document that the material tested is inert. As a conservative measure, the inert concrete rubble fill material placed in 1973/1974 may also be evaluated.
- Observations should be made during any future Site development for areas of possible contamination such as, but not limited to, the presence of underground

facilities, buried debris, waste drums, tanks, and stained or odorous soils. Further investigation and analysis may be necessary if such materials are encountered.

# 1.0 INTRODUCTION

## 1.1 Authorization

Leighton Consulting, Inc. (Leighton Consulting) performed a Phase I Environmental Site Assessment (ESA) of the United Rock Products (URP), Quarry No. 3, located at 1137 Meridian Street in Irwindale, California (referred to as the "Site" – Figure 1, Site Location Map). The Phase I ESA was conducted in accordance with the Los Angeles County Department of Public Works (LACDPW) authorization dated September 8, 2016.

## 1.2 Purpose

The purpose of the Phase I ESA was to identify, to the extent feasible and pursuant to the processes prescribed in ASTM International (ASTM) E1527-13, recognized environmental conditions (RECs), historical RECs (HRECs), or controlled RECs (CRECs) in connection with the Site.

RECs are defined, according to ASTM E1527-13 as: *the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment*. *De minimis* conditions are not RECs (ASTM 1527-13, 2013).

HRECs are defined, according to ASTM E1527-13 as: *a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls*.

CRECs are defined, according to ASTM E1527-13 as: a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

## 1.3 Scope of Work

The scope of work was performed in accordance with Leighton Consulting's proposal and included the following tasks:

- A reconnaissance-level visit of the Site for evidence of release(s) of hazardous materials and petroleum products and to assess the potential for onsite releases of hazardous materials and petroleum products;
- Records Review (including review of previous environmental reports, selected governmental databases, and historical review);
- Interviews; and
- Preparation of a report presenting our findings.

## 1.4 Significant Assumptions

Leighton Consulting assumes that the information provided by the Client, interviews, regulatory database, and regulatory agencies is true and reliable.

## 1.5 Limitations and Exceptions

Site-specific activities performed by Leighton Consulting and information collected regarding these activities are summarized in the following sections. The findings of this ESA are presented in Section 7.0. Opinions, and conclusions drawn by Leighton Consulting, based on the information collected as part of the ESA, are presented in Sections 8.0 and 9.0, respectively.

This Phase I ESA was conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions.

The observations and conclusions presented in this report are professional opinions based on the scope of activities, work schedule, and information obtained through the ESA described herein. Opinions presented herein apply to the conditions of the Site existing at the time of our study and cannot necessarily be taken to apply to conditions or changes of the Site that we are not aware of or have not had the opportunity to evaluate. It must be recognized that conclusions drawn from these data are limited to the amount, type, distribution, and integrity of the information collected at the time of the investigation, the methods utilized to collect and evaluate the data, and that a full and complete evaluation of

environmental risks cannot be made. Although Leighton Consulting has taken steps to obtain true copies of available information, we make no representation or warranty with respect to the accuracy or completeness of this information.

This practice does not address whether requirements in addition to all appropriate inquiry have been met in order to qualify for the landowner liability protections including the continuing obligation not to impede the integrity and effectiveness of activity and use limitations, or the duty to take reasonable steps to prevent releases, or the duty to comply with legally required release reporting obligations. Users should also be aware that there are likely to be other legal obligations with regard to hazardous substances or petroleum products discovered on the Site that are not addressed in this practice and that may pose risks of civil and/or criminal sanctions for non-compliance.

## 1.6 Special Terms and Conditions

The scope of work for this Phase I ESA did not include non-scope considerations, such as, but not limited to, those listed in Section 13 of ASTM E1527-13. This scope of work did not include items such as testing of electrical equipment for the presence of polychlorinated biphenyls (PCBs) or collection of other environmental samples, such as, water, soil, building materials, or paint; assessment of natural hazards such as naturally occurring asbestos, radon gas, methane gas, or mold; assessment of the potential presence of radionuclides, biological agents, or lead in drinking water; assessment of indoor air quality (such as vapor intrusion assessment); or assessment of nonchemical hazards such as the potential for damage from earthquakes or floods, or the presence of endangered species or wildlife habitats. This Phase I ESA also did not include an extensive assessment of the environmental compliance status of the Site or of businesses operating at the Site, or a health-based risk assessment.

## 1.7 User Reliance

This report is for the exclusive use of the County of Los Angeles, including, but not limited to, the LACDPW, the Chief Executive Office, the Los Angeles County Flood Control District (LACFCD), and the Water Resources Division. Use of this report by any other party shall be at such party's sole risk.

## 1.8 Important Information About Geoenvironmental Reports

The Client is referred to Appendix K regarding important information provided by the Geoprofessional Business Association (GBA) on geoenvironmental studies and reports.

# 2.0 SITE DESCRIPTION

## 2.1 Site Location and Legal Description

The Site is located to the west of Buena Vista Street and north of Meridian Street primarily within the City of Irwindale, California. The primary address associated with the Site is 1137 Meridian Street, Irwindale, California. It should be noted that some records identify the address to be located within the City of Duarte; however, the City of Irwindale confirmed that the Site address is located within Irwindale jurisdiction. The assessor's parcel numbers (APNs) for the Site, as identified by the County of Los Angeles Assessor's Office, are 8531-026-019, 8531-032-009, 8531-032-010, 8531-033-007, 8531-034-026, and 8531-034-032 and the assessor's map indicates that the property is a total of approximately 110 acres in size. APN 8531-034-032 is located within the City of Duarte and has an address of 2151 Buena Vista Street. APN 8531-026-019 is also located within the City of Duarte; however, it does not have an address associated with the parcel. The APNs are depicted on Figure 2, Site Plan. The Site is located in the southeast quarter of Section 36, Township 1 North, Range 11 West, of the San Bernardino Baseline and Meridian. A legal description for the APNs is contained within the Environmental Lien Search and Chain of Title documents included in Appendix C.

## 2.2 Site and Vicinity General Characteristics

The Site area that is located within Irwindale jurisdiction is occupied by a sand and gravel quarry operated by URP. APN 8531-034-032, a small parcel approximately 0.57 acres in size at the northeast portion of the Site is landscaped with grass and trees. APN 8531-026-019 is a narrow parcel approximately 0.39 acres in size located to the west of the quarry that extends between two rows of single-family residences to Mountain Avenue. It appears that the residential properties are encroaching on the narrow parcel.

The surrounding vicinity is occupied primarily by light industrial, wholesaling, distribution, and commercial land uses as well as a residential development to the north and northwest (Figure 2, Site Plan). The regional topography generally slopes towards the southwest and groundwater forms a pond at the bottom of the quarry.

## 2.3 Current and Proposed Use of the Site

The Site is currently occupied by the URP Quarry No. 3, and is used as a sand and gravel quarry. Sand and gravel is excavated by a dredge, crushed, and then moved offsite to the sorting plant via a conveyor belt. Fines from offsite washing processes are directed to the siltation pond on the URP plant located to the south of the Site at 2600 Avenida Barbosa.

A Reclamation Plan for URP's Quarry No. 3 is on file with the City of Irwindale. The Reclamation Plan describes methods for reclamation and proposed future use of the Site after termination of aggregate mining and processing (URP, 2004). The document states that the quarry is proposed to be utilized as a groundwater recharge basin and designated as open space.

LACFCD proposes to purchase the Site and backfill it with sediment and debris from LACFCD flood control facilities. The Site has existing Waste Discharge Requirements (WDRs) that allows for placement of inert fill material within the quarry. The responsibility to comply with WDRs is transferred from the current owner to the new owner at the time of a property transaction. After a property purchase, the new owner can apply for a revision to the existing WDR and Reclamation Plan if operations will change.

## 2.4 Descriptions of Structures, Roads and Other Improvements on the Site

The majority of the property has been extensively quarried for sand and gravel and the Site consists primarily of the open quarry with few improvements onsite. There is one 500-ton dredge in the center of the Site and a conveyor belt system that extends from near the dredge to the northeast and around the eastern and southern perimeters of the Site to a tunnel that is located under Meridian Street. The conveyor belt goes through the tunnel and ends at the URP plant located to the south of the Site.

## 2.5 Current Uses of Adjoining Properties

The adjacent property to the north is occupied primarily by residential development followed by Beardslee Park and Beardslee Elementary School. The Site is bound to the east by Buena Vista Street, followed by commercial businesses including Southwest Products and Airgas Store. The Site is bound to the south by Meridian Street, followed by Buena Vista Spreading Basin and commercial warehouses including ABC Hardware and PickUp USA Fitness.

Adjacent property to the west is occupied by light industrial, warehouses, commercial businesses, and residential development.

# 3.0 USER PROVIDED INFORMATION

The user of this Phase I ESA is identified as the client, LACDPW. A User Questionnaire form was completed by Mr. Christopher Stone, Assistant Deputy Director with LACDPW. In addition, several LACDPW staff attended the Site inspection led by Mr. Ken Barker, the Site Environmental Manager, on September 21, 2016. LACDPW did not have direct knowledge regarding the Site other than that provided by URP to Leighton Consulting; see the Owner Interview Section 6.1 for additional information.

## 3.1 Title Records

Title records were not provided by LACDPW. Chain of Title Reports were prepared by Nationwide Environmental Title Research, LLC (NETR) for the Site and are discussed in Section 4.4.6 and included in Appendix C.

## 3.2 Environmental Liens or Activity and Use Limitations

LACDPW was not aware of environment liens or activity and use limitations associated with the Site. An Environmental Lien Report dated September 16, 2016, was prepared by NETR for APNs 8531-032-009, 8531-033-007, and 8531-034-026, and environmental liens or activity and use limitations were not identified on the Site parcels (Appendix C). An Environmental Lien Report dated October 5, 2016, was prepared by NETR for APNs 8531-034-032, 8531-032-010, and 8531-026-019, and environmental liens or activity and use limitations were not identified on the Site parcels (Appendix C).

## 3.3 Specialized Knowledge

LACDPW did not have specialized knowledge regarding the Site.

## 3.4 Commonly Known or Reasonably Ascertainable Information

LACDPW was not aware of commonly known or reasonably ascertainable information regarding the Site with the exception of its use as a sand and gravel quarry and that the property is listed as a Land Disposal Site with the Los Angeles Regional Water Quality Control Board (RWQCB).

3.5 Valuation Reduction for Environmental Issues

LACDPW was not aware of valuation reduction for environmental issues.

3.6 Owner, Property Manager, and Occupant Information

The property is owned by United Rock Products Corporation (URP) and was deeded to them on December 30, 1988, from Sully-Miler Contracting. Sully-Miller Contracting Company is a parent company that includes Sully-Miller Contracting, Blue Diamond Materials, and URP. URP provides the aggregate, Blue Diamond Materials provides the hot and warm asphalt manufacturing, and Sully-Miller Contracting executes the projects. URP operates Quarry No. 3. The Site contact at the time of this report was identified to be Mr. Dave Martinez.

3.7 Reason for Performing Phase I

The purpose of the Phase I ESA was reported to be for due diligence activities, in association with a property purchase, in order to identify, to the extent feasible and pursuant to the processes prescribed in ASTM International E1527-13, RECs in connection with the Site.

3.8 Other

Additional information was not provided by LACDPW.

# 4.0 RECORDS REVIEW

## 4.1 Physical Setting Source(s)

Leighton Consulting reviewed pertinent maps and readily available literature for information on the physiography and hydrogeology of the Site. A summary of this information is presented in the following subsections.

### 4.1.1 Topography

The elevation of the property ranges from approximately 437 feet above mean sea level (MSL) at the eastern edge to approximately 407 feet above MSL at the western edge of the quarry. The surface water in the quarry is at an elevation of approximately 180 feet above MSL. The quarry extends approximately 30 to 60 feet below the surface of the water according to Mr. Ken Barker, the quarry Environmental Manager. The regional topography generally slopes gently towards the southwest in the vicinity of the Site.

### 4.1.2 Surface Water

The quarry has been excavated to the depth of groundwater, forming a pond throughout the majority of the bottom of the excavation. Stormwater runoff and drainage from existing mining operations is completely contained onsite and has been controlled through a variety of ways including a system of dikes, berms, silt fences, revegetation efforts, hay bales, and other standard best management practices (Greystone, 2004). The Site does not contain any permanent drainage or streams, or any natural drainage courses.

The San Gabriel Wash is depicted transecting the southeast corner of the Site in historical topographic maps. In the 1953 Azusa topographic map the San Gabriel Wash has been channelized and the Santa Fe Dam and Santa Fe Flood Control Basin are depicted to the east with an associated spillway to the southeast of the Site.

### 4.1.3 Geology and Soils

The Site is located within the San Gabriel Valley in the eastern portion of the Los Angeles Basin. This is a geologically complex region of southern California near the intersection the Peninsular Range's geomorphic province (Los Angeles Basin) and the Transverse Range province (San Gabriel Mountains).

The Site is developed on the alluvial fan of the San Gabriel River and significant quantities of surface material have accumulated over the valley basement rock. This fan extends out approximately eight miles to the southwest from the mountains and consists mostly of sand rich Holocene to Late Pleistocene rock (unconsolidated silts, sands, gravels, cobbles, and boulders). Rock fragments consist of granite, granodiorite, diorite, granitic gneiss, schist, and quartz (Kohler, 1982). Deposits of the high-grade construction aggregates are known to be about 200 feet thick near the south end of the fan. At the URP facilities, the thickness of the commercially valuable aggregate deposits within the fan has not been accurately measured, but is estimated to be 600 feet (Kohler, 1982; URP, 2004). Geologic information pertaining to seismic hazards, subsidence, landslides, liquefaction, and mineral resources at the Site is documented in the 2004 Draft United Rock Quarry and Reclamation Plan Environmental Impact Report (Draft Reclamation Plan EIR) (Greystone, 2004) included in Appendix F.

### 4.1.4 Hydrogeology

The Site is located within the eastern boundary of the Los Angeles River watershed and immediately adjacent to the San Gabriel River watershed. The Site lies within the north-central portion of the San Gabriel Valley Groundwater Basin. The San Gabriel Valley Groundwater Basin is bounded to the north by the Raymond fault and the contact between the unconsolidated valley fill and the consolidated bedrock of the San Gabriel Mountains. On the south and west the basin is bounded by the consolidated bedrock of the Repetto, Merced, and Puente Hills. The basin is bounded to the west by the San Jose Fault and the Chino Basin. Principal water-bearing formations of the basin are unconsolidated and semi-consolidated sediments which range in size from coarse gravel to fine-grained sands.

Water levels fluctuate substantially in the Basin due to infiltration from major storms, surface water spreading operations along the San Gabriel River, and wet/drought conditions throughout Southern California.

A significant portion of the bottom of the quarry has exposed groundwater due to the mining operations. The City of Irwindale approved conditional use permit (CUP) 6-04 in 2004 which allows the quarry to be mined to a maximum depth of 440 feet below ground surface (bgs) or until December 31, 2037, whichever comes first. The groundwater level within the quarry was estimated to be at 200 feet MSL in 2003 with an average level at approximately 250 feet MSL and historic high levels reaching up to 332 feet MSL (Jones and Stokes, 2003).

Groundwater monitoring is conducted at the Site to satisfy the Monitoring and Reporting Program (MRP) adopted by the RWQCB in 2001. New WDRs were also adopted in 2001 that established monitoring requirements. The MRP and WDR require semi-annual monitoring. There are five groundwater monitoring wells that are part of the monitoring network, two of which are located onsite, IRW-3A located in the northeast portion of the Site and IRW-3B located in the southwest corner. Groundwater was last measured on April 19, 2016, and the only well where groundwater was encountered was IRW-3B at an elevation of 178.19 feet MSL, at a depth of approximately 229 feet bgs (Amec Foster Wheeler, 2016). Groundwater gradient was not able to be measured due to the remainder of the wells being dry; however, it is expected to follow topographic gradient and be toward the southwest. Groundwater gradient has historically been reported be generally to the southwest and south (WDR Permit, 2001; Greystone, 2004).

### 4.1.5 Floodplain and Wetlands

The EDR Radius Map Report with GeoCheck (EDR Radius Report), included as Appendix E, does not depict the Site or surrounding areas as located within the 100-year or 500-year flood zone. The Site is depicted on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) 06037C1415F and 06037C1700F, dated September 26, 2008. The FIRM maps depict the Site as Zone X defined as areas determined to be outside 500-year floodplain which is outside the 1% and 0.2% annual chance floodplains.

A 2004 Reclamation Plan stated that the June 2003 FEMA Map indicated that Quarry 3 is located in Zone C, an area outside the 500-year floodplain (URP, 2004). The Draft Reclamation Plan EIR prepared for the Site in 2004 stated that the quarry is located within the 100-year floodplain and that in the event of a 100-year flood, the quarry may become inundated (Greystone, 2004; City of Irwindale, 2003); however, this information appears to be incorrect or outdated. As stated in the previous paragraph, the Site is depicted as Zone X on the most current FEMA FIRM maps.

The Site is located adjacent to a major flood control dam and associated flood control basin constructed on the San Gabriel River. The 2004 Reclamation Plan stated that it was unlikely that the quarry would be inundated due to the overflow from the Santa Fe Dam spillway (URP, 2004). In the event of a major storm, the storm water in the spillway would be diverted back to the San Gabriel River.

The EDR Radius Report indicates that portions of the Site are within the National Wetland Inventory. The Site inspection revealed standing water within the majority of the bottom of the quarry.

#### 4.1.6 Oil and Gas Fields

According to the EDR Radius Report and the California Department of Conservation, there are no oil wells located on or adjacent to the Site (DOGGR, 2016).

### 4.2 Standard Environmental Record Sources

A search of selected government databases was conducted by Leighton Consulting using the EDR Radius Report, dated September 20, 2016. Details of the database search along with descriptions of each database researched are provided in the EDR Radius Report (Appendix E). The report meets the government records search requirements of ASTM E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

### 4.2.1 Site

The Site address of 1137 Meridian Street was identified in the EDR Radius Report, and the occupant was reported variously as Livingston-Graham, United Rock Products, Irwindale Site, and United Rock Pit No. 3 (synonymous with Quarry No. 3). The Site was listed on the following databases:

- ENF: Enforcement Action
- LDS: Land Disposal Sites
- LOS ANGELES CO. HMS: Street Number List, Industrial Waste and Underground Storage Tank (UST) Site maintained by LACDPW
- LOS ANGELES CO. LF: Los Angeles County Landfill List
- RGA LF: Recovered Government Archive Solid Waste Facilities
- SWF/LF: Solid Waste Disposal Facilities or Landfills
- WDS: Waste Discharge System
- WMUDS/SWAT: Waste Management Unit Database/Solid Waste Assessment Test

See the EDR Radius Report, Section GR-1, for a complete description of each database source. The database listings are in regards to permitted inert waste disposal and monitoring requirements associated with the Site. A summary of the Site information provided in the EDR Radius Report for each listing is included below. Additional Site information was identified during the regulatory agency reviews and is summarized in Section 4.3.1.

- United Rock Products Pit No. 3 - SWF/LF: Listed as an inert waste disposal site with a “Closed” operational status and an “exempt” regulation status. Facility ID & SWIS Number: 19-AA-0020

- United Rock Products Pit No. 3 – LOS ANGELES CO. LF: Listed as a municipal solid waste landfill beginning in 1973 and ending in 1975 with a closed status and presently used for gravel mining. The disposal area is listed as 2 acres.

- United Rock Products Pit No. 3 – LDS: Listed as a land disposal site with a status of “open-operating” and overseen by the Los Angeles RWQCB.

- United Rock Products Pit No. 3 – ENF: Listed as a landfill privately owned business for inert solid wastes. The status is listed as "active" with an effective date of September 19, 2001. A notice of noncompliance was sent on December 26, 2000 for 9 overdue Division of Mining and Reclamation forms. A notice of violation was sent on January 29, 2001 for noncompliance with WDRs.

- Livingston-Graham – RGA LF: An EDR compiled list of landfills derived from historical databases identifies the Site on the list from 1998 through 2005.

- United Rock Pit #3 – RGA LF: An EDR compiled list of landfills derived from historical databases identifies the Site on the list for the years 2006, 2007, 2008, 2011, and 2012.

- Livingston-Graham, Inc. – LOS ANGELES CO. HMS: Lists the permit category as "I" (i.e. industrial waste) with a facility status of "closed".

- Irwindale Site – WMUDS/SWAT: The database is used by the RWQCB for program tracking and inventory of waste management units. The primary waste is listed as solid waste and the type is identified to be "inert/influent or solid wastes that do not contain soluble pollutants or organic wastes and have little adverse impact on water quality. Such wastes could cause turbidity and siltation. Uncontaminated soil, rubble, and concrete are examples of this category." The facility type is listed as "Other – does not fall into the category of municipal/domestic, industrial, agricultural or solid waste (Class I, II, or III)" and the operator is listed as United Rock Products Corporation. The threat to water quality is listed as "moderate – a violation could have a major adverse impact on receiving biota, can cause aesthetic impairment to a significant human population, or render unusable a potential domestic or municipal water supply. Aesthetic impairment would include nuisance from a waste treatment facility". The facility is listed as having a quarterly self-monitoring submittal. There is a comment that notes "Cap < 50,000 cubic yards".

- Irwindale Site – WDS: this listing contains similar information as the previous WMUDS/SWAT database.

### 4.2.2 Offsite

The groundwater gradient at the Site is expected to follow topographic gradient and be generally toward the southwest. Properties that are located approximately within 0.3 miles to the northeast of the Site, and adjacent properties to the north and east of the Site, are expected to have the greatest potential to adversely affect the Site. Properties that are located outside of the specified area are expected to have a low potential to adversely affect the Site based on their distance and expected groundwater gradient.

AOCONCERN: The database identifies areas of concern (AOCs). Portions of the San Gabriel Valley are identified as an area of concern where volatile organic carbon (VOC) contamination in the groundwater is at or above the maximum contaminant level (MCL) as designated by the Region 9 Environmental Protection Agency (EPA) office. The map shows AOCs located approximately a half mile to the northwest, west, and southwest of the Site. The AOCs are considered to have a low potential to adversely affect the Site based on the intervening distance and cross-/down-gradient locations.

Federal NPL List: The EPA National Priorities List (NPL) of uncontrolled or abandoned hazardous waste sites was reviewed for sites within a mile radius of the Site. To appear on the NPL, sites must have met or surpassed a predetermined hazard ranking system score, been chosen as a State's top priority site, pose a significant health or environmental threat, or be a site where the EPA has determined that remedial action is more cost effective than removal action. The database search did not identify NPL sites within a 1.0 mile radius of the Site.

Delisted NPL List: The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) established the criteria the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425. (e), sites may be deleted from the NPL when no further response is appropriate. The database search did not identify delisted NPL facilities located within a 1.0 mile radius of the Site.

Federal CERCLIS/SEMS List: The EPA's Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)

listings, renamed the Superfund Enterprise Management System (SEMS) was reviewed to evaluate if sites within ½ mile of the Site are listed for investigation. The CERCLIS/SEMS database identifies hazardous waste sites that require investigation and possible remedial action to mitigate potential negative impacts on human health or the environment. The database search did not identify any CERCLIS/SEMS facilities within a 0.5 mile radius of the Site.

Federal CERCLIS NFRAP/SEMS-ARCHIVE List: CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS, and the list has been renamed SEMS-ARCHIVE. These may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and EPA has determined no further steps will be taken to list the site on the NPL, unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The database did not identify any CERCLIS-NFRAP/SEMS-ARCHIVE facilities within a 0.5 mile radius of the Site.

Federal RCRA List: The current Resource Conservation Recovery Act (RCRA) Notifiers List was reviewed to evaluate if RCRA treatment, storage, or disposal sites (TSDs) are located within a 0.5 mile radius of the Site. It should be noted, however, that inclusion in the RCRA database is not indicative of a release or waste storage/handling violation. Rather, it indicates that the generator is following manifest and reporting procedures. The database search did not identify RCRA TSD facilities within a 0.5 mile radius of the Site.

The RCRA Corrective Action Sites (CORRACTS) List is maintained for sites that are undergoing "a corrective action." A corrective action order is issued when there has been a release of hazardous waste constituents into the environment from a RCRA facility. The database search did not identify RCRA Corrective Action sites within a 1.0 mile radius of the Site.

The RCRA regulated Hazardous Waste Generator Notifiers list was reviewed to evaluate if RCRA generator facilities are located within a 0.25 mile radius of the Site. The database search identified zero large quantity generators (LQG) and three small quantity generators (SQG) within approximately 0.25 miles of the Site that include the following:

- Southwest Productions is located adjacent to the east of the Site across Buena Vista Street at 2240 Buena Vista. No violations were reported for this facility.

- L P D Auto Wrecking is located approximately 900 feet southwest of the Site at 845 Alpha Street. No violations were reported for this facility.

- Sully Miller is located approximately 1,000 feet to the south of the Site at 2600 Buena Vista Avenue. No violations were reported for this facility.

The SQG listings are expected to have a low potential to adversely affect the Site based on the small quantity of materials generated and lack of violations or releases associated with the listing.

Response – State and Tribal Equivalent NPL: This list identifies confirmed release sites where Department of Toxic Substances Control (DTSC) is involved in remediation and are generally high-priority and high potential risk sites. The database search did not identify any facilities within a 1.0 mile radius of the Site.

Historical (HIST) Calsites Database: The DTSC HIST Calsites database contains potential or confirmed hazardous substance release properties. This database is no longer updated and has been replaced by ENVIROSTOR. The database search did not identify any facilities within a 1.0 mile radius of the Site.

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data comes from the Integrated Waste Management Board's Solid Waste Information System (SWIS) database, provided by the Department of Consumer and Regulatory Affairs, and consists of open,

and closed and inactive solid waste disposal facilities and transfer stations (SWL). The database search identified 5 offsite facilities within a 0.5 mile radius of the Site; however, one of the properties was duplicated for a total of four facilities.

- Alpha Investment Associates is located adjacent to the south of the Site across Meridian Street at 2501-59 Bateman and is listed a Municipal Inert Solid Waste Landfill that closed in December 1983. No violations were reported. The facility is also listed on the WMUDS/SWAT database.

- United Rock Products Pit No. 2 is located approximately 0.3 mile south of the Site operating with the address of 1245 Arrow Highway. The facility is operated as an active inert debris engineered fill operation. The facility is also listed on the LDS, ENF, and NPDES databases. One notice of violation was issued on July 12, 2002 for violation of Order No. 01-179.

- TBD operated by United Rock Products located approximately 0.3 mile south of the Site operating with the address of 1245 Arrow Highway. The facility is operated as an active inert debris engineered fill operation. The facility is also listed on the LUST, HIST UST, NPDES, LA Co. Site Mitigation, and WDS databases. The LUST listing is in regards to a release of diesel or oil to soil and it is listed as eligible for closure, but it is expected to have a low potential to adversely affect the Site based on the intervening distance and down-gradient location.

- Mead Wrecking Co. #313 is located approximately 0.4 mile to the north-northeast of the Site at 1215 Duarte Road. The facility was approximately 2 acres in size and operated as a Municipal Solid Waste Landfill that accepted inert waste from an unknown date until closure in 1970. The facility is also listed on the WMUDS/SWAT database.

The SWF/LF listings are expected to have a low potential to adversely affect the Site based on the down-/cross-gradient location, intervening distance, and/or inert material accepted at the facilities.

Underground Storage Tank (UST) Sites: The California State Water Resources Control Board (SWRCB) UST inventory list was reviewed to evaluate if USTs are located with a 0.25 miles radius to the Site. It should be noted that a listing in the UST databases does not necessarily mean that a leak has occurred. The database search identified one UST facility located within a 0.25 mile radius of the Site.

- United Ready Mixed Concrete Company located approximately 0.2 mile to the south of the Site. The facility is expected to have a low potential to adversely affect the Site based on the distance, down-gradient location, and lack of a reported release.

CA FID, HIST UST, and SWEEPS: The Facility Inventory Database (FID), Historical UST Registered Database (HIST UST), and the Statewide Environmental Evaluation and Planning System (SWEEPS) contain active and inactive UST locations; however, they typically list historical USTs. The database search identified six UST properties located within a 0.25 mile radius from the Site.

- Irwindale Iron & Metal located adjacent to the south of the Site across Buena Vista Street at 2401 Buena Vista Avenue. The facility is listed on the SWEEPS database as having one tank active as of June 30, 1989. No information was given on given on the contents of the tank.

- Airco Duarte located adjacent to the east of the Site across Buena Vista Street at 2250 Buena Vista Street. The facility is listed on the SWEEPS database as having one tank active as of June 30, 1989. No further information was available.

- Southwest Products Company located adjacent to the east of the Site across Buena Vista Street at 2240 Buena Vista Street. The facility is listed on the SWEEPS and HIST UST databases. Two USTs were reported to have been associated with the Site, a 3,008 gallon waste oil UST and a 1,690 gallon waste oil UST. The Los Angeles Co. HMS database lists at least one tank as having been removed. The facility is also listed on the LUST and additional databases. See the LUST subsection for additional information.

- Irwindale Iron & Metal located adjacent to the south of the Site across Buena Vista Street at 2495 Buena Vista Avenue. The facility is listed on the SWEEPS database listed as active on June 30, 1989. No further information was available. The facility is also listed as SA Recycling, LLC on the SWRCY database which indicates that it has been a recycling facility.

- Vernon Asphalt Materials located approximately 0.2 mile south of the Site at 2600 Buena Vista Street. The facility is listed on the SWEEPS and HIST UST databases. Three USTs were reported to be associated with the facility active as of June 30, 1989. Additional information was not provided. The facility is also listed on the LUST database, see this subsection for additional information.

- United Ready Mix located approximately 0.2 mile south of the Site at 2620 Buena Vista Street. The facility is listed on the SWEEPS and HIST UST database. Two 12,000 gallon diesel tanks were installed in 1983 and no leaks were reported.

The USTs do not appear to be, or have been, located directly adjacent to the property border. The UST listings are expected to have a low potential to adversely affect the Site when not located directly adjacent to the Site and when releases have not been reported. See the LUST subsection for information on properties where a release was reported.

Leaking Underground Storage Tank (LUST) Sites: The EPA maintains lists of information pertaining to reported LUSTs in the state. The database search identified 7 LUST facilities within a 0.50 mile radius of the Site. LUST facilities that are outside the primary area of concern described at the beginning of Section 4.2.2 and/or have a “Case Closed” status without being located adjacent to the Site are expected to have a low potential to adversely affect the Site. All of the LUSTs are listed as “Case Closed” and five of them are located at a distance of approximately 0.2 mile or greater from the Site in a down-gradient or cross-gradient location. One of the facilities is located at a distance greater than 0.3 mile up-gradient of the Site. The remaining LUST facility is discussed below:

- Southwest Productions Company, 2240 Buena Vista Street, located adjacent to the east of the Site, across Buena Vista Street. A release of hydrocarbons that impacted soil was reported in 1993. The case was closed on July 25, 1994. Due to the release of heavy hydrocarbons to soil only and that it has been issued regulatory closure, it is expected to have a low potential to adversely affect the Site.

ENVIROSTOR: The DTSC's ENVIROSTOR database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (NPL); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. ENVIROSTOR provides similar information to the information that was available in Cal Sites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites. The database identified 7 facilities within a 1.0 mile radius of the Site. The listings were reviewed and 5 facilities were determined to have a low potential to adversely affect the Site based on a location of 0.4 mile or more from the Site. The two remaining facilities are discussed below:

- Alpha II/Irwindale, 2432-2536 Bateman Avenue, located adjacent to the south of the Site across Meridian Street. The facility is located just north of the intersection of Bateman Avenue and Buena Vista Street and is bordered by Meridian Street on the north, Alpha Street on the west, and Buena Vista spreading grounds on the east. The property consists of 11 parcels totaling approximately 16 acres. The property was used for agricultural purposes prior to the 1954. Later uses included automobile wrecking yards and pipe wrapping operations. The first on-site for wrecking yards appears to have begun in 1954. Other activities at the facility included rock quarries and municipal landfill for waste disposal; the landfill operated approximately ten years. All disposal activities ceased by 1989. The property was contaminated with waste oil and lead. The responsible party states that the property was remediated including

the removal of site structures and scrap, excavation and removal of soils with concentrations exceeding 1,000 parts per million of total petroleum hydrocarbons (TPH) and lead. A Preliminary Endangerment Assessment (PEA) was prepared for the Site and it was determined that there were elevated levels of PCBs and cadmium that posed a potential threat to human health and/or the environment. The responsible party entered into a Voluntary Cleanup Agreement (VCA) with the DTSC and a Human Health Screening Evaluation was prepared for the property. DTSC reviewed supplemental information for the PEA and based upon the review DTSC recommended that no further action was warranted for the Site and it was issued closure on February 10, 1997. Based on the regulatory closure this facility is expected to have a low potential to adversely affect the Site.

- Southwest Products, 2240 Buena Vista Street, located adjacent to the east of the Site across Buena Vista Street. The 4.5-acre site was owned and operated by Southwest Products from 1978-1997. Southwest Products manufactured metal bearings for aircraft and marine vessels. Union Bank acquired the property through foreclosure in 1994. Union Bank entered into a VCA with DTSC to assess the Site. The PEA indicated that levels of TPH encountered at the property were well below the concentrations considered acceptable in soils above groundwater. Volatile organic compounds (VOCs) were not detected, and soils containing greater than 50 mg/kg of lead were excavated and removed from the facility. Therefore, DTSC determined that "No Further Action" was required and regulatory closure was issued on February 4, 1998. Based on the regulatory closure this facility is expected to have a low potential to adversely affect the Site.

SLIC: This is the California RWQCB Spills, Leaks, Investigations and Cleanup (SLIC) list. The database identified two SLIC cases within a 0.5 mile radius of the Site. One of the facilities was located approximately 0.47 mile to the north-northwest of the Site and is expected to have a low potential to adversely affect the Site based on the intervening distance. The remaining facility is discussed below:

- Aldon Concrete Products, 2455 Buena Vista Street, located adjacent to the south of the Site across Buena Vista Street. The following actions have been reported:

    - A leak was reported on January 2, 1965.

    - A request for closure was issued on March 25, 2003.

    - "Enforcement – other, No Action, dated April 1, 2003. Additional information was not provided. The status is listed as "open – inactive as of January 29, 2015". The potential contaminant of concern is listed as VOCs; however, the potential media of concern is not listed.

Although it does not appear that this facility has been issued regulatory closure, it is expected to have a low potential to adversely affect the Site based on a previous request for closure and that additional assessment and/or remedial activities do not appear to have been pursued by the regulatory agency. In addition, there have not been visual or olfactory indications of contamination onsite at the quarry and groundwater monitoring has not indicated that the groundwater has been adversely impacted.

Mines and US Mines: One mine was reported on the lists, United Rock Products, Irwindale Plant, located at 1245 East Arrow Highway, Irwindale, CA (Correct site address is 1245 Arrow Highway, Irwindale, CA). The US Mines database reports violations; however, details were not provided. The Mines database indicates that the facility is an active sand and gravel mining quarry and that reclamation has not started.

HWP: The HWP database provides information on permitted hazardous waste facilities and corrective action tracked in EnviroStor. There were two facilities listed that were both over 0.6 mile from the Site and are therefore expected to have a low potential to adversely affect the Site.

Drycleaners: A review of the Drycleaners identified no dry cleaning facilities with an EPA ID number located within a 0.25 mile radius of the Site.

EDR Historical Cleaners: A review of the EDR Historical Cleaners list identified no historical cleaner facilities located within a 0.25 mile radius of the Site.

EDR Historical Auto Stations: A review of the EDR Historical Auto Stations list identified two historical auto stations located within a 0.125 mile radius of the Site.

- Javier Auto Electric & ME, 2136 Citrus View Avenue, located approximately 640 feet west of the Site. The property is occupied by a residence; therefore, the potential for this property to adversely affect the Site appears to be low.

- Western Texaco, 700 West El Sur Street in Glendale, reported to be located approximately 0.1 mile to the West of the Site and as a gas station in 1967. This facility appears to be improperly geolocated and does not appear to be located within 0.125 mile of the Site.

EDR Manufactured Gas Plants (MGP): A review of the EDR Manufactured Gas Plants did not identify MGPs located within 1.0 miles of the Site.

Unmapped Listings: Several properties were listed within EDR report as "unmapped listings" (Orphan Summary). Unmapped listings are properties without a complete street address and therefore cannot be located on a map. Leighton reviewed these listings to evaluate if the properties were possibly located near the Site. The listings did not appear to be located near the Site. These unmapped sites are unlikely to have the potential to adversely impact the Site, based on the information provided in the EDR report.

### 4.2.3 Vapor Encroachment

The Site has been utilized as a quarry since at least the 1930s and has had groundwater monitoring conducted at least semi-annually since the first quarter of 2011. Groundwater is exposed onsite and according to the groundwater monitoring report produced by Taylor Environmental Services, Inc., dated June 14, 2016, the groundwater meets the Water

Quality Protection Standards for all constituents. The standards are based on the objectives for the western area of the main San Gabriel Basin contained in the Los Angeles RWQCB Basin Plan dated June 13, 1994. Facilities were not identified during the EDR Radius Report that appeared likely to contribute to potential vapor issues at the Site. Furthermore, enclosed structures are not located onsite and are not planned for the future use; therefore, vapor intrusions issues are not a concern at this time.

## 4.3 Additional Environmental Record Sources

### 4.3.1 Regulatory Agency Consultations

Leighton Consulting requested regulatory records from the agencies listed below for the following address associated with the Site: 1137 Meridian Street located in Irwindale, California 91706, and 2151 Buena Vista Street, Duarte, California 91010.

Copies of regulatory responses and records reviewed are included in Appendix F.

National Pipeline Mapping System (NPMS)

The NPMS, a web tool that plots pipeline maps for the general public, was reviewed for pipelines on, or near, the Site on September 13, 2016. The map did not depict pipelines on or adjacent to the Site.

State of California Radon Survey

The California Department of Health Services (CDHS) maintains an online database of California indoor radon levels sorted by zip code. According to this database, eight radon tests have been conducted within the zip code of 91706 and thirteen tests within zip code 91010 (the Site's zip codes), and none detected radon above the EPA action level of 4 picoCuries per liter (pCi/L) (CDHS, 2010).

In addition, the EDR Radius Report indicates that Los Angeles County is located in EPA Radon Zone 2. According to the EPA, buildings in zone 2 typically have radon levels greater than 2 pCi/L and less than 4 pCi/L.

Therefore, the potential for elevated levels of naturally occurring radon at the Site appears to be low.

Southern California Air Quality Management District (SCAQMD)

The SCAQMD online Facility Information Detail database was reviewed on September 13 and 20, 2016, for records associated with the Site addresses and none were identified. A faxed records request was sent on September 12, 2016, to SCAQMD and a phone call was received stating that there were not records associated with the Site.

Mr. Ken Barker, the URP Environmental Manager, stated that processes requiring SCAQMD permits do not occur at Quarry No. 3 and that there are not emissions generated from onsite activities. Mr. Barker stated that URP has SCAQMD permits associated with their rock processing plant located to the south of the Site at 1245 East Arrow Highway, Irwindale; however, they are not related to Quarry No. 3. The SCAQMD documents for 1245 East Arrow Highway, Irwindale are included in Appendix F.

Department of Toxic Substance Control (DTSC)

On September 12, 2016, a file request was sent to the DTSC requesting records for the Site address 1137 Meridian Street, Irwindale, California. On September 13 and 15, 2016, the DTSC-Cypress office and the DTSC-Chatsworth office, respectively, indicated that they did not have records for the address requested.

On September 20, 2016, a file request was sent to the DTSC requesting records for the Site address 2151 Buena Vista Road, Duarte, California. On September 15 and 27, 2016, the DTSC-Cypress office and DTSC-Chatsworth office, respectively, indicated that they did not have records for the address requested.

The DTSC online Envirostor website was reviewed on September 12, 2016, and DTSC regulated sites, on or adjacent to the Site, were not indicated on the area map with the exception of a VCA site located adjacent to the east and discussed in Section 4.2.2 (Southwest Products, 2240 Buena Vista Street).

Regional Water Quality Control Board (RWQCB)

On September 8, 2016, a file request was sent to the RWQCB requesting records for the Site address 1137 Meridian Street, Irwindale, California. On September 16, 2016, the RWQCB indicated that they had a file for the address requested and that they would request the file to be pulled. A follow up communication was sent to the RWQCB on October 3, 2016, and they responded that a file does exist, but only electronically and a link to the Geotracker website was provided. The RWQCB indicated that they did not have any records available for the Site other than that located on the Geotracker website.

On September 19, 2016, a file request was sent to the RWQCB requesting records for the Site address 2151 Buena Vista Street, Duarte, California. On September 29, 2016, the RWQCB responded that they did not have records for the address requested.

The RWQCB online GeoTracker database, a web tool that allows searching for public information regarding LUST, SLIC, and landfill sites, was reviewed on September 13, 2016, for records associated with the Site and adjacent properties. The reports located are summarized below:

Request for Exemption from Solid Waste Assessment Test (SWAT)

A Request for Exemption from SWAT, dated February 16, 1989, was submitted to the RWQCB by Law Environmental Inc., on behalf of Livingston-Graham, Inc., for Livingston-Graham-Irwindale, an inactive Class III inert waste disposal site. The exemption was requested because records indicated that Livingston-Graham disposed of far less than 50,000 cubic yards of inert waste on the Site. The request noted that 4,156 tons (2,445 cubic yards) of inert waste had been disposed of on the northeast portion of the Site between 1973 and 1974. Letters were provided to the Irwindale City Engineer indicating that the inert fill consisted of broken concrete block (Class 3, Type E or 2.105) and it was noted that the lease on the disposal site was set to expire in the year 1986 (later amended to state 1985).

No other fill was reported to have been deposited at the Site with the exception of fill emplaced in 1986 or 1987 by the City of Irwindale, with

verbal permission from Blue Diamond Materials. The fill was placed on the eastern side of the gravel quarry to stabilize the embankment along Buena Vista Street so that the street could be reconstructed. Slope erosion had been reported to be affecting the stability of Buena Vista Street. Only inert waste was stated to be accepted at the facility, and the fill was reported to consist of an unknown quantity of earth and rock, with some concrete and asphalt fragments. The location of the road stabilization fill emplaced by the City and the inert waste deposited by Livingston-Graham, as depicted in the report, are shown on Figure 3, Fill Location Map.

Waste Discharge Requirements (WDRs) - URP, Quarry No. 3 Inert Landfill (File No. 72-124; Order No. 01-131, CI 5801)

On November 25, 2001, the RWQCB issued WDRs for URP's Quarry No. 3 Inert Landfill. The document noted that no inert solid waste has been discharged onsite since at least 1988, except for native geological materials generated by mining activities but stated that URP planned on backfilling the quarries with inert solid waste from offsite within the next ten years. The requirements for onsite disposal of waste are that the waste must be composed of inert mining wastes, uncontaminated soil, rock, and gravel, broken concrete, bricks, glass, ceramics, inert plastics, broken asphalt paving fragments, and shredded tires. Asphalt and tires are not permitted to be dumped into standing water or placed below the highest anticipated groundwater elevation.

The WDRs also included groundwater monitoring to be conducted on a quarterly basis for the first year, and semi-annually thereafter. The groundwater monitoring needed to include data on pH, electrical conductivity, alkalinity, bicarbonate, carbonate, carbon dioxide, chemical oxygen demand, total hardness (CaCO3), total dissolved solids, nitrates, chloride, sulfate, boron, cadmium, chromium, lead, nickel, benzene, PCE (perchloroethylene), TCE (trichloroethylene), MTBE (Methyl t-butyl ether), and vinyl chloride.

The responsibility to comply with WDRs is transferred from the current owner to the new owner at the time of a property transaction. After a property purchase, the new owner can apply for a revision to the existing WDR if operations will change.

Incident Reports: Inadvertent Total Submersion of Dredge

On December 25, 2013, a 500 ton gravel dredge was inadvertently and totally submerged in URP Quarry No. 3. URP reported that the dredge was powered by grid electricity, had no internal combustion engines, and that all hydraulic fluids were EPA approved vegetable oil based products. Eight water samples were taken between December 27, 2013, and January 29, 2014, and an additional twenty samples were taken between February 10, 2014, and April 9, 2014. The grab sample taken from Quarry No. 3 on February 26, 2014 had the highest concentrations of hydrocarbons from the samples with TPH (C10 to C22) detected at a concentration of 0.24 milligrams per liter (mg/L) and TPH (C22 to C36) detected at a concentration of 0.56 mg/L.

Los Angeles RWQCB Revised Groundwater Monitoring Work Plan

On November 15, 2014, the RWQCB issued approval for a revised groundwater monitoring work plan for URP Quarry No. 3. The revised Work Plan included the addition of a down-gradient monitoring well, increasing the depth of both the up-gradient and down-gradient wells from 205 feet to 250 feet, and modifications of design of the proposed groundwater monitoring wells.

Waste Disposal and Groundwater Monitoring Reports

Waste Disposal and Groundwater Monitoring Reports are available from the fourth quarter of 2011 to the first semiannual report for 2016. Data on the groundwater monitoring is available from September 2, 2014, through April 19, 2016. Benzene, MTBE, TCE, PCE, and vinyl chloride were all below laboratory detection limits. Available Waste Disposal Reports state that the only waste disposed of onsite between 2011 and 2016 happened January 2014, and consisted of 3,000 cubic yards of inert waste that was in compliance with WDRs (File No. 72-124, Order 01-131). Detailed information on the type of inert waste was not provided.

Los Angeles County Department of Public Works (LACDPW)

On September 13, 2016, the LACDPW online database was reviewed for records associated with the Site. The online file review indicated that

there was one file, 000733-I00740, associated with Livingston-Graham, Inc. at 1137 Meridian Street, Duarte, 91010. The type is listed as "I" (i.e. Industrial Waste) and the status is listed as "closed". The LACDPW was called and they indicated that there was no physical file associated with the Site and that no additional information was available.

The LACDPW online well database was reviewed on September 14, 2016, and an inactive well was indicated, Well Number 4227B. There were well measurements from 1961 through 1980 when it was last measured with a water surface elevation of 261.3 MSL, 162.7 feet bgs. The LACDPW provided well logs for wells 4227, 4227A, 4227B, and 4227C, all which were located on or adjacent to the Site. The well logs provided by LACDPW are included in Appendix F.

Los Angeles County Public Health

A records request was emailed to Los Angeles County's Public Health Investigation on September 12, 2016, for 1137 Meridian Street, Irwindale, California 91706. On September 19, 2016, the Los Angeles County Public Health office indicated that they did not have records for the address requested.

A records request was emailed to Los Angeles County's Public Health Investigation on September 20, 2016, for 2151 Buena Vista Street, Duarte, California 91010. On September 20 and 26, 2016, the Los Angeles County Public Health office indicated that they did not have records for the address requested.

Sanitation Districts of Los Angeles County (LACSD)

On September 13, 2016, a file request was sent to the LACSD requesting records for the Site address 1137 Meridian Street, Irwindale, California. On September 21, 2016, the LACSD office indicated that they did not have records for the address requested.

On September 20, 2016, a file request was sent to the LACSD requesting records for the Site address 2151 Buena Vista, Duarte, California. On September 27, 2016, the LACSD office indicated that they did not have records for the address requested.

Irwindale City Clerk's Office

A records request was emailed to the Irwindale's City Clerk's Office on September 12, 2016. The Clerk's office indicated that the Department of Building and Safety had permits for the Site, and these are discussed in Section 4.4.7. The Clerk's office also indicated that the City of Irwindale Public Works Department had documents pertaining to the Site. The City of Irwindale is the Lead Regulatory Agency for the URP Quarry No. 3. Irwindale Public Works provided these documents on October 25, 2016, and they are summarized below:

Draft United Rock Quarry and Reclamation Plan Environmental Impact Report (EIR), May 3, 2004

The Draft Reclamation Plan EIR assessed environmental impacts of the proposed project which was to increase the allowable mining depths in Quarries No. 2 and 3, extend the duration of mining activities in both quarries, and merge the previously unmined western portion of Quarry No. 4 with Quarry No. 2. The new reclamation plan was submitted for Quarries No. 2 and 3 which described methods for reclamation and proposed future use of the Site after termination of aggregate mining and processing. Mining operations of Quarry No. 3 was proposed to continue through 2035 at which time reclamation would begin and the maximum permitted depth was proposed to be 440 feet (increased from the previously approved 275 feet). At the time of the Draft Reclamation Plan EIR, Quarry No. 3 was not currently operating and dry mining was reported to be intermittent over the last 10 years. Aggregate (dry) mining was performed using heavy equipment such as drag lines, bulldozers, and front end loaders and the material was placed on a conveyor system for transport to Quarry No. 4/Production Plant. Following completion of mining activities of Quarry No. 2, clamshell dredge mining would start at Quarry No. 3.

Quarry No. 3 zoning was listed as Q-Quarry and A-1, Agricultural. High groundwater level was reported to be 332 MSL, average groundwater level at 250 feet MSL, and current groundwater level to be 200 MSL. Most of the bottom of Quarry No. 3 was reported to be generally above groundwater, although seasonably variable. Groundwater was not sampled at Quarry No. 3 at the time of the EIR; however, water samples

collected quarterly at Quarry No. 4/Production Plant showed that both organic and inorganic groundwater quality parameters met California Drinking Water Standards.

The main concern regarding hazardous materials uses were reported to be 1) the environmental risk and effects regarding onsite sediment and contaminant discharges to exposed groundwater, and/or 2) the potential impacts to exposed groundwater associated with nearby offsite stormwater runoff reaching these facilities. A full Phase I ESA was not performed in support of the Draft Reclamation Plan EIR; however, a literature search of government databases was performed to identify onsite and offsite sources and location of hazardous materials in or near the URP facilities. Ten of seventeen database sites near Quarry No. 3 were spill related; however, none of them were considered a current risk to the environment or the public.

At Quarry No. 3, the main hazardous materials used onsite were reported to be related to the operation of the conveyor system that was installed in 2003, and were primarily hydrocarbon-based lubricants. In addition, fuel was reported to be used for the equipment (gasoline or diesel) and products used to service and maintain mobile equipment. Fuel would be dispensed at the site using fuel trucks with trained personnel or taken to another location for fueling. Routine maintenance or emergency servicing would involve lubricating oil, hydraulic fluids, cleaning solvents, and/or motor oil. Generally, servicing of equipment would involve small volumes of hazardous materials (e.g. 5 to 10 gallons). Significant spills of hazardous materials were not anticipated during servicing of equipment at the Site. The clamshell dredge operations described for Quarry No. 2 (which would later be implemented at Quarry No. 3) included small quantities of hydraulic fluids, lubricating oils, motor oils, and cleaning solvents ranging in size from approximately 5 to 55 gallons. The dredge is electrically powered and the clamshell does not emit wastes or pollutants into the exposed groundwater. Potential environmental impacts associated with hazardous materials use at Quarry No. 3 were reported to not be significant because large amounts would not be stored or used at the site, and any spills would be small and easily contained and removed. No impacts were identified to be significant with respect to hazardous materials and no mitigation measures were recommended to be required or proposed.

Reclamation of Quarry No. 3 was proposed to be designated Industrial Commercial use or Open Space. If reclaimed, the quarry would be backfilled to street level, and subsequently developed with production and retail businesses. Under the Open Space alternative, the quarry would be retained for use as a groundwater recharge basin. Fill material would require compaction and would consist of inert material (inorganic construction material; soil removed from sedimentation, flood control and debris reservoirs, and exported soil from building projects in the area).

Mitigation measures were prepared with respect to air quality, geology and soils, hydrology and drainage, land use and planning, noise, public services and utilities, and traffic and circulation, in order to mitigate the potential environmental issues to less than significant. A few mitigation measures to note include the following: 1) all areas of fill or backfill in the quarry during mining and reclamation should be compacted appropriately and results of the compaction samples submitted to the City of Irwindale, 2) surface and groundwater samples should be collected on an annual basis as long as groundwater is exposed, and 3) measures should be implemented to reduce the potential for hazardous constituents in fill material or to later reclaimed areas through compliance with all WDRs as established by the RWQCB and prohibit use of hazardous wastes, toxic waste, asbestos products, or the use of asphalt products unless placed above the high water mark. See the Draft Reclamation Plan EIR included in Appendix F for a full list of potential environmental impacts and the mitigation measures.

Prior to preparation of the Draft Reclamation Plan EIR, a Notice of Preparation and Initial Study dated October 2003 was prepared and is included in Appendix A of the Draft Reclamation Plan EIR. The Main San Gabriel Basin Watermaster prepared a response to the document and indicated a concern with protection of the water quality of the groundwater basin and requested that the Reclamation Plan EIR address measures to protect groundwater. In addition, the Watermaster pointed out that on April 27, 2000, five surface samples apparently collected by DTSC from the quarry lake were all determined to contain MTBE ranging from 1.8 to 4.5 micrograms per liter (µg/L) (below the MCL of 13 µg/L). However, the DTSC samples were collected from the Hanson quarry located at 13550 Live Oak Avenue in Irwindale. MTBE was not reported to have been identified at the URP Quarries in the Draft Reclamation Plan EIR.

URP Quarry No. 3, Reclamation Plan, July, 2004

This is the most recent reclamation plan provided to Leighton Consulting for review. The report states the City of Irwindale Ordinance No. 534 requires an updated, revised, or amended reclamation plan for the project to be filed with the City every 5 years, or following a significant modification or change to project. The purpose of the Reclamation Plan was to describe methods for reclamation and proposed future use of the Site after termination of aggregate mining and processing. The document stated that the San Gabriel Watermaster expressed interest in accepting the Site upon completion of reclamation for use as a groundwater recharge basin and the plan allowed for the Site to be used by such entity, or another appropriate government entity, as a groundwater recharge basin.

Conditional Use Permit No. 6-04

The City of Irwindale prepared a resolution to allow URP to continue mining Quarry No. 3 and to reclaim the quarry site as a water recharge basin, and the conditions of the document were accepted by the owner on August 26, 2004 (City of Irwindale, 2004). The mining would be allowed to continue until December 31, 2037, or until reaching the maximum permitted depth of 440 feet, whichever event occurs first. The Conditional Use Permit references the Draft Reclamation Plan EIR discussed previously and states that it was circulated for review and that comments were received from seven public agencies. Responses to comments were prepared and together with the comments, were included in the Final EIR (FEIR). The FEIR was made available for review by the public at the City of Irwindale Planning Department and the City of Irwindale Public Library, and was certified by City Council on July 20, 2004. The FEIR was not provided to Leighton Consulting by the Irwindale City Clerk's Department. The conditions of the permit include general conditions; planning department conditions pertaining to landscaping, slope revegetation, air quality/dust control, zoning code changes, and noise control; and Public Works Department Conditions pertaining to security plan, traffic circulation, drainage/runoff, water quality, soils, and reclamation. The conditions are generally consistent with the mitigation requirements of the Draft Reclamation Plan EIR.

### 4.3.2 Previous Environmental Assessment Reports

Previous environmental documents were reviewed during the agency file reviews and are summarized in Section 4.3.1. Additional environmental assessment reports were not reviewed.

## 4.4 Historical Use Information on the Property

Leighton Consulting reviewed selected historical information on the Site for evidence of activities which would suggest the potential presence of hazardous substances at the Site and to evaluate the potential for the Site to be impacted by offsite sources of contamination. The following paragraphs are a chronological summary of the review.

### 4.4.1 Aerial Photographs

Aerial photographs were provided for the Site by EDR and are included in Appendix G. The aerial photographs were reviewed for information regarding past Site uses and a summary is included below:

| Date | Site | Adjoining Sites |
|---|---|---|
| 1928 | The northern portion of the Site appears to be used for agricultural purposes and has a number of structures on the northwestern quadrant that appear to be agriculturally related.<br><br>The southern portion of the Site appears to be vacant and occupied by the San Gabriel River Wash.<br><br>The western limb of the Site appears to be an unpaved access road surrounded by agricultural land. The east-west trending road extends through the northern portion of the Site. | North: Agricultural use<br>South: San Gabriel River Wash<br>West: Agricultural use with associated structures<br>East: San Gabriel River Wash |
| 1938 | The northern portion of the Site appears to be used for agricultural purposes and has a number of structures on the northwestern quadrant that appear to be agriculturally related. Some of the structures from the 1928 aerial photograph have been removed.<br><br>The southeast portion of the Site appears to have been developed with a quarry.<br><br>The western limb of the Site appears to be an unpaved access road surrounded by agricultural land. The east-west trending road extends through the northern portion of the Site. | North: Agricultural use<br>South: San Gabriel River Wash<br>West: Agricultural use with associated structures<br>East: San Gabriel River Wash |

| Date | Site | Adjoining Sites |
|---|---|---|
| 1952 | The northern portion of the Site appears to be partially used for agricultural purposes and possibly fallow land. There are scattered structures in the northern and west-central portions that may be agriculturally related and/or residential structures. The quarry is primarily within the southeast quadrant; however, the extent and depth has increased since the 1938 aerial photograph and is partially filled with water in the northeast portion. Mining equipment is located in the central and southern portions of the quarry area.<br><br>The western limb of the Site no longer appears to be an access road that leads onto the Site. It appears to possibly be an alley between residential developments.<br><br>There appears to be residential structures and trees located on the northeastern parcel that is located within the City of Duarte. | North: Residential neighborhoods<br>South: San Gabriel River Wash, minor quarry or commercial activity<br>West: Appeared to be storage yard followed by residential development<br>San Gabriel River Wash, vacant land<br>East: |
| 1964 | The Site has been cleared of all former buildings and the quarry operations have expanded further north and west. The northern portion of the Site is primarily vacant land.<br><br>The western limb of the Site appears to be an alley between residential developments and/or that some residences have encroached upon it and are using it for storage or yard/patios.<br><br>The northeastern Duarte parcel appears to be possibly occupied by residential structures and by trees. | Relatively unchanged from the 1952 aerial photograph. |
| 1972, 1977, and 1981 | The Site appears to be entirely occupied by the quarry. A 2004 EIR prepared for the Site indicated that processing activities occurred onsite at least in the early 1970s. There is equipment observed in the southeastern portion of the Site. Groundwater was observed in the quarry. There appeared to be some storage on the western border.<br><br>The western limb of the Site appears to be an alley between residential developments and/or that some residences have encroached upon it and are using it for storage or yard/patios.<br><br>There appear to be trees but there do not appear to be any structures on the northeastern Duarte parcel. | North: No significant land use changes are observed on adjacent property to the north.<br>South: A spreading basin and what appear to be several lots occupied by auto salvage yards are observed.<br>East: A road where modern Buena Vista Street is located is observed followed by a large rectangular structure and associated paved parking<br>West No significant land use changes are observed on adjacent property to the west. |
| 1990 and 1994 | The Site is entirely occupied by the quarry. There appears to be a conveyor belt system through the central and western portion of the Site and there was some storage along the southwestern border. | North: No significant land use changes are observed.<br>South: Vacant land and spreading basin. Auto salvage yards are no longer observed on adjacent property directly to the south, several remain to the southwest. |

| Date | Site | Adjoining Sites |
|---|---|---|
| | The western limb and northeastern Duarte parcel remain relatively unchanged. | East: A second structure and associated parking is observed to the east.<br>West: Ten large rectangular structures with associated parking are observed. Residential developments. |
| 2002 and 2005 | The Site is occupied by the quarry and there is some groundwater observed in the 2002 aerial photograph; however, equipment is not observed and there may not be active quarry activities occurring. The floor bottom is almost entirely covered by water by 2005 and there appears to be some storage on the east at the current location of the bone yard. Dredging and conveyor equipment was not observed. | North: No significant land use changes are observed.<br>South: On adjacent property to the south six buildings with associated paved parking are observed west of the spreading basin, and five buildings with associated paved parking are observed east of the spreading basin.<br>East: No significant land use changes are observed.<br>West: No significant land use changes are observed. |
| 2009, 2010, and 2012 | The Site is entirely occupied by the quarry and there appear to be active quarry activities. What appears to be a dredging system is observed in the southwest quadrant and a conveyor belt system in roughly its present position. There is minor groundwater in the southwest portion in the 2009 aerial photograph that increases significantly across the Site in the 2010 and 2012 aerial photographs. | No significant land use changes are observed on adjacent properties with the exception of one salvage yard to the southwest that has been developed into residences. The spreading basin appears to be dry in the 2010 and 2012 aerial photographs. |

### 4.4.2 Sanborn Maps

Sanborn Maps, or fire insurance maps, are detailed city plans showing building footprints, construction details, use of structure, street address, etc. The maps were designed to assist fire insurance agents in determining the degree of hazard associated with a particular property. Sanborn Maps were produced from approximately 1867 to the present for commercial, industrial, and residential sections of approximately 12,000 cities and towns in the United States.

The Sanborn Library was searched by EDR and the Site was not found. A copy of the EDR Sanborn search results is included in Appendix H.

### 4.4.3 Historical Topographic Maps

Historical topographic maps were provided for the Site by EDR and are included in Appendix I. The topographic maps were reviewed for information regarding past Site uses and a summary is included below:

**1894, 1896/1897, 1898, and 1900/1904:** The Site appears to be depicted as vacant, undeveloped land. The San Gabriel Wash is depicted trending northeast-southwest through the southeast portion of the Site. A single structure with a north-south trending road (Buena Vista Street) terminating to the east of the structure appears to be located adjacent to the northeast corner of the Site. Mountain Avenue appears to be located to the west of the Site. No other structures or roads appeared to be depicted adjacent to the Site. The Atchison Topeka Railroad, roads, and scattered structures are depicted in the surrounding vicinity to the north and west. The San Gabriel Wash and primarily vacant land is located to the south and east of the Site.

**1923/1925 and 1926/1927/1928:** Three structures and two roads are depicted in the central northwestern portion of the Site. A single structure is depicted on the northernmost area of the Site, and a single structure is depicted on the eastern portion of the Site with an associated road entering the Site from the north. An unimproved road is depicted entering the western limb of the Site and terminating in the northern central portion of the Site. The remainder of the Site is depicted as vacant, undeveloped land. The San Gabriel Wash is depicted trending northeast-southwest and extends through the southeast portion of the Site. Scattered structures and roads are depicted to the north and west of the Site and the Atchison Topeka Railroad is located to the north. The San Gabriel Wash and vacant land is located to the east and west of the Site.

**1939:** Four structures and two roads are depicted in the central northwestern portion of the Site. A single structure is depicted on the northernmost area of the Site, and a single structure and Buena Vista Road is depicted adjacent to the eastern portion of the Site. An unimproved road is depicted entering the western limb of the Site and terminating in the northern central portion of the Site. The southeast portion of the Site has two structures depicted to the north of a quarry. The remainder of the Site is depicted as vacant, undeveloped land. The San Gabriel Wash is depicted trending northeast-southwest through the southeast portion of the Site. A road (Meridian Street) and two small structures are located adjacent to the south of the Site. Scattered structures and roads are depicted to the north and west of the Site and the Atchison Topeka Railroad is located to the north. The San Gabriel Wash and vacant land is located to the east and west of the Site.

**1953:** Approximately fifteen structures are depicted throughout the Site as well as two unpaved roads in the central and northwestern portions of the Site. An unimproved road also enters the Site in the southwest corner. Quarry operations have expanded to the north from the 1939 topographic map and this area contains water. The western limb of the Site is no longer depicted as occupied by a road but is surrounded by residential development to the north, south, and west. The remainder of the Site is depicted as vacant land. Buena Vista Street borders the Site to the east. The Santa Fe Dam and Flood Control Basin is located approximately 0.75 mile east of the Site and the spill way channel is located nearly adjacent to the southeast of the Site. Adjacent property to the north is occupied by residences. A small quarry and two structures appear to be located adjacent to the south of the Site across Meridian Street. Adjacent property to the west is occupied by Palm Grove Sanitarium and two structures followed by a red-shaded that shows only primary structures (this is a residential neighborhood).

**1966, 1972, and 1981:** The Site is indicated to be a “Gravel Pit”. Four structures are depicted in the southeast portion of the Site as well as multiple dirt roads. A small amount of water is indicated in the central-eastern portion of the Site in the 1966 and 1972 topographic maps. The extent of the pit appears to be expanded in the 1981 topographic map. The western limb of the Site is depicted as surrounded by residential development to the north, south, and west. Buena Vista Street borders the Site to the east followed by one commercial structure in the 1972 topographic map and two commercial structures in the 1981 topographic map. The Santa Fe Dam and Flood Control Basin is located approximately 0.75 mile east of the Site and the spill way channel is located nearly adjacent to the southeast of the Site. Adjacent property to the north is occupied by residences. A small body of water (appears to be former quarry) appears to be located adjacent to the south of the Site across Meridian Street. Adjacent property to the west is occupied by three small structures followed by a red-shaded area that shows only primary structures (this is a residential neighborhood).

In general, topographic maps are limited in the amount of structural detail and property use depicted. No additional information associated with the Site use was identified from the topographic map review.

### 4.4.4 Historical City Directories

City Directories have been published for cities and towns across the US since the 1700s. For each street address listed, the directory recorded the name of the resident or business that operated from this addresses. While city directory coverage is usually comprehensive for major cities, it may be sporadic for rural areas and small towns. The purpose of the City Directory research was to attempt to evaluate the businesses that were historically located onsite.

A City Directory Abstract was prepared for the Site by EDR and is included in Appendix J. The City Directory included business listings from 1975 through 1985 for the Site. During this time period the Site was occupied by Pankow Builders Inc., Arrow Rock Company, Ready Mix Plant, and Livingston Graham. Addresses identified by the City Directory report in the surrounding vicinity appeared to consist primarily of light industrial and commercial buildings. Residential addresses to the north and northwest of the Site were not included in the City Directory. Site addresses and addresses adjacent to the Site are detailed below. It should be noted that City Directory listings often include misspellings and abbreviations.

| Year | Business Listed |
|---|---|
| **1137 Meridian Street, Irwindale California (Onsite address)** | |
| 1985 | Pankow Builders Inc. |
| 1975 | Arrow Rock Co<br>Livingston Graham<br>Ready Mix Plant |
| **2151 Buena Vista Street, Duarte, California (Onsite address)** | |
| | No listings |
| **2240 Buena Vista Street, Irwindale, California** | |
| 1980, 1985, 1999 | Southwest Products Company Aircraft Equipment |
| 2003 | Gary Horany, Southwest Products Co |
| 2013 | RBC Bearings Inc.<br>Southwest Products |
| **2250 Buena Vista Street, Irwindale, California** | |
| 1975 | Brown Welding Supply |
| 1980 | Airco Welding PRDS<br>Miller Brown Welding |
| 2003 | AirGas, Merit Hosey |
| 2003, 2008, 2013 | Airgas |

| Year | Business Listed |
|---|---|
| **2387 Buena Vista Street, Irwindale, California** | |
| 2013 | Crafty Innovations Inc. |
| **2385 Buena Vista Street, Irwindale, California** | |
| 2013 | Winstar Textile, Inc. |
| **2381 Buena Vista Street, Irwindale, California** | |
| 2013 | China Leather Collection |
| **2399 Bateman Avenue, Irwindale, California** | |
| 2003, 2008 | Deland Designs |
| **2398 Bateman Avenue, Irwindale, California** | |
| 2003 | ST Argos Co. |
| 2008,<br>2013 | ABC Hardware Inc.<br>J T Hardware |
| **829 - 861 Meridian Street, Irwindale, California** | |
| 1992, 1995 | Enas Cassette World, CA Windows, Solrac Enterprises, Pro Printing Inc, Richlene Inc, Smith Industrial Tires, Irwindale Auto Museum, MR GS 123 Towing, Endodent Inc, Arcadia Addressing, Great Western Distributing, Ava Import Export Inc, William H Fletcher & Assoc Inc, Kobo World Inc, Farmer Brothers Coffee Co, Nicholas Precision Engineering |
| 1999 | Peachy Kids, Arcadia Addressing Company, Great Western Distributing Service, Nicholas Precision Engineering Incorporated |
| 2003, 2008 | Multiple light industrial/warehouse companies |
| 2013 | Stile Jas O Inc., Dahon, Jetco, SIT Enterprises, Smith Industrial Tires, Gene Fluidics, Quiet Valley Building Co., Endodent Inc., Aerocraft Fasteners Inc., Kobo World, Inc., Flanders Co. |
| **1112 Meridian Street, Irwindale, California** | |
| | No listings |

### 4.4.5 Property Tax Files

The Los Angeles County Treasurer and Tax Collector website listed the tax amount and balance due date of the Site parcels, but additional information relevant to the Phase I ESA was not provided. Additional tax files were not reviewed as they were not reasonably ascertainable.

### 4.4.6 Recorded Land Title Records

Historical Chain of Title Reports and Environmental Lien Search Reports were prepared for the Site parcels by NETR and are included in Appendix C. No environmental liens or activity and use limitations were identified for the parcels reviewed.

The historical Chain of Title report for APNs 8531-032-009, 8531-033-007, and 8531-034-026 lists individual names as the grantor/grantee from 1884 through 1951. The Site was granted to B & J Rock Company (formerly known as Arrow Rock Company) in 1956. There was a grant deed to Robinson Development Company in 1980 and then to Sully-Miller Contracting Company that same year. The property was deeded to United Rock Products on December 30, 1988.

The historical Chain of Title report for APN 8531-026-019 lists individual names as the grantor/grantee from 1948 through 1964 and was granted to the Sully-Miller Contracting Company in 1980 and to URP in 1988. The historical Chain of Title report for APN 8531-032-010 indicates that Arrow Rock Company deeded the parcel to M.F. Joyce and Arthur W. Beaucaire in 1956. The Parcel was deeded to Sully-Miller Contracting Company in 1980 and to URP in 1988. The historical Chain of Title report for APN 8531-034-032 indicates that Arrow Rock Company deeded the parcel to Mae T. Cobb in 1957. The Parcel was deeded to Sully-Miller Contracting Company in 1980 and to URP in 1988.

4.4.7 Building Department, Zoning and/or Land Use Records

Building permits were provided by the City of Irwindale Building Department on September 21, 2016. Permits were on file for the Site between the years 1936 through 1965. The building permits are included in Appendix F (note that some are very faint and difficult to read) and are summarized below:

**1137 Meridian Street, Irwindale**

| Date | Permit |
|---|---|
| 9/17/1936 | Building permit, use of building appears to be “asphalt hot plant”, 3 stories |
| 1941 | Plumbing permit, cess pool |
| 9/7/1949 | Switch house, all steel building, 364 square feet |
| 12/2/1949 | Electrical permit for Arrow Rock Company |
| 4/12/1950 | Electrical permit for Arrow Rock Company |
| 1/30/1953 | Rock and sand storage bins, replace existing wood structure with steel structure. Job assignment for special inspections of welding dated June 11, 1953. Special inspector’s weekly report regarding replacement of wood structure dated June 16, 1993. Inspection report of steel structure on June 30, 1953. |
| 11/17/1953 | Electrical permit for Arrow Rock Company |
| 12/1/1953 | Electrical permit for Arrow Rock Company |
| 5/31/1953 | Electrical Permit for Arrow Rock Company |
| 4/14/1960 | Electrical permit |
| 12/30/1963 | Electrical permit for Arrow Rock Company |
| 4/26/1965 | Plumbing permit, gas system and water system |
| 4/26/1965 | Electrical permit |
| 4/26/1965 | Install low pressure boiler and roof |
| 6/10/1965 | Electrical permit, temporary power pole |

The City of Irwindale and City of Duarte Departments of Building and Safety were asked if they had permits associated with 2151 Buena Vista Street; however, both departments indicated that they did not. The City of Irwindale stated that the address appeared to be located within the City of Duarte.

### 4.4.8 Other Historical Sources

Other historical sources were not reviewed as part of this assessment.

### 4.4.9 Summary of Historical Land Use

Based on historical records, land usage is summarized as follows:

| Historical Usage (Approximate Dates) | | |
|---|---|---|
| Date | Use | Source(s) |
| At least 1894 through 1904 | The Site was depicted as vacant land with the San Gabriel Wash extending through the southeast portion of the Site. | Topographic Maps |
| At least 1923 through 1928 | The Site appeared to be used possibly for agricultural purposes in the northern portion and the remainder was vacant with the San Gabriel Wash extending through the southeast portion of the Site, based on the aerial photograph review. The aerial photographs and topographic maps depict structures in the northwest portion that may have been agriculturally related. | Topographic Maps<br>Aerial Photographs |
| At least 1936 through 1953 | Quarry activities appeared to have commenced in the southeast corner of the Site at least by 1936. Building permits indicate an asphalt hot plant onsite in 1936 and a cess pool in 1941. The northern portion appeared to be agriculturally related and included an access road.<br><br>The western limb of the Site appeared to be an unpaved access road surrounded by agricultural land. The northeast corner appeared to be occupied by residences and landscaping. | Topographic Maps<br>Aerial Photographs<br>Building Permits |
| 1953 through 1972 | Between 1953 through 1964 the quarry appears to have expanded to cover much of the central and southern portion of the Site. The structures from the northwest portion of the Site were removed and there did not appear to be any ongoing agricultural use of the Site by 1964. Between 1964 through 1972 the quarry expanded to cover the majority of the Site.<br><br>The western limb of the Site appeared to be a narrow strip between single-family residences. The northeast corner appeared to be occupied by residences and landscaping through 1964, and the structures appeared to have been removed by 1972. | Topographic Maps<br>Aerial Photographs<br>Building Permits |
| 1972 through the Present | The Site has been occupied by a sand and gravel quarry across the majority of the Site.<br><br>The western limb of the Site appears to be an alley between residences that is being utilized for storage and temporary structures. | Topographic Maps<br>Aerial Photographs<br>Building Permits<br>City Directories<br>Interviews<br>Site Inspection<br>Previous Reports |

## 4.5 Historical Use Information on the Surrounding Properties

The properties to the north and west have historically been occupied by agricultural property or vacant, undeveloped land up until 1952 when residential development occurred. Property to the south was vacant, undeveloped land until at least 1964. Between 1964 and 1981, property to the south was occupied by what appears to be multiple vehicle salvage yards and a quarry. There was increasing commercial and light industrial development to the east, south, and west of the Site from the 1980s through the 2000s. The San Gabriel River is located to the southeast of the Site. Presently, there is residential development to the north and west; light industrial buildings and residential development followed by the spillway channel for the Santa Fe Dam to the east; and light industrial and commercial developments as well as the Buena Vista Spreading Basin to the south.

# 5.0 SITE RECONNAISSANCE

## 5.1 Methodology and Limiting Conditions

On September 21, 2016 representatives of Leighton Consulting Ms. Meredith Church, a California licensed Professional Geologist, and Ms. Becky Steever, conducted a reconnaissance–level assessment of the Site, with the assistance of Mr. Ken Barker, from Sully-Miller Contracting Co., the environmental manager for URP. In addition, Mr. Greg Johnson, a Supervising Engineering Geologist III for LACDPW, assisted in providing Site information. A number of other employees from the LACDPW also attended the Site reconnaissance. The Site reconnaissance consisted of the observation and documentation of existing Site conditions and the nature of the neighboring property development within approximately 0.25 mile of the Site. Photographs of the Site are presented in Appendix B and their view-directions are noted on Figure 2 (Photo Nos. 1 – 25).

## 5.2 General Site Setting

The Site is occupied by an aggregate construction quarry operated by URP. Site operations include dredge mining for aggregate materials, short term storage of wet mined materials and transportation of mined materials via an electrical conveyor belt to an offsite processing facility. The surrounding vicinity is occupied primarily by residential development to the north and west; light industrial buildings and residential development followed by the spillway channel for the Santa Fe Dam to the east; and light industrial and commercial development as well as the Buena Vista Spreading Basin to the south. The regional topography generally slopes towards the southwest and the groundwater in the vicinity is approximately 229 feet bgs (Amec Foster Wheeler, 2016).

## 5.3 Exterior and Interior Observations

### 5.3.1 Hazardous Substances, Drums, and Other Chemical Containers

Empty 55-gallon drums used for the storage of parts were observed on the northeastern portion of the Site where the boneyard was located. Several oil filters were observed in a metal container near the 55-gallon drums (Photo No. 13). Mr. Ken Barker advised that containers of lubricants were brought onsite to maintain equipment, but were not stored onsite.

### 5.3.2 Storage Tanks

Evidence of USTs or aboveground storage tanks (ASTs) was not observed at the Site. Mr. Ken Barker was not aware of any history of USTs onsite.

### 5.3.3 Polychlorinated Biphenyls (PCBs)

PCBs were once used as industrial chemicals whose high stability contributed to both their commercial usefulness and their long-term deleterious environmental and health effects. PCBs can be present in coolants or lubricating oils used in older electrical transformers, hydraulic systems, and other similar equipment. In 1979, the USEPA generally prohibited the domestic manufacture of PCBs in electrical capacitors, electrical transformers, vacuum pumps, hydraulic pumps, and gas turbines. Transformers were observed at multiple locations onsite and Mr. Barker indicated that they were new and did not contain PCBs (Photo Nos. 19 and 20). One pole-mounted transformer was observed on the west side of the Site (Photo Nos. 7 and 10). Evidence of leaking or staining was not observed around any of the transformers.

### 5.3.4 Waste Disposal

Solid waste disposal was not observed at the Site. There was a boneyard located near the northeast border and along the eastern border of the Site where out of service equipment was stored, as well as some concrete, wood, and wire debris (Photo Nos. 13 through 16).

### 5.3.5 Dumping

Evidence of dumping was not observed onsite.

### 5.3.6 Pits, Ponds, Lagoons, Septic Systems, Wastewater, Drains, Cisterns, and Sumps

The Site is primarily occupied by an open quarry pit and the majority of the bottom is filled with groundwater.

Evidence of lagoons, septic systems, wastewater, drains, cisterns, and sumps was not observed onsite.

5.3.7 Pesticide Use

Evidence of pesticide use was not observed onsite.

5.3.8 Staining and Discolored Surfaces and Soils

Evidence of staining and discolored surfaces or soils was not observed onsite.

5.3.9 Stressed Vegetation

Stressed vegetation was not observed onsite.

5.3.10 Unusual Odors

Unusual odors were not detected onsite.

5.3.11 Onsite Wells

Two groundwater monitoring wells were observed at the Site (Photo Nos. 5 and 11). IRW-3B is located in the southwest corner of the Site and IRW-3A is located in the northeast corner of the Site.

5.3.12 Asbestos

Permanent structures are not located onsite. Evidence of equipment or features with potential friable asbestos-containing materials that may impact the soil was not observed.

5.3.13 Lead-Based Paint

Permanent structures are not located onsite. Evidence of equipment or features with peeling paint that may impact the soil was not observed.

5.3.14 Other Observations

There is one 500-ton dredge in the center of the Site and a conveyor belt system that extends from near the dredge to the northeast and around the eastern and southern perimeters of the Site to a tunnel that is located under Meridian Street. The conveyor belt goes through the tunnel and

ends at the URP plant located to the south of the Site. The dredge and conveyor belt operate by electricity and are not reported to utilize fuel.

# 6.0 INTERVIEWS

Leighton Consulting conducted interviews with persons having knowledge of current or past Site usage. Mr. Ken Barker, Environmental Manager for Sully-Miller Contracting Company, completed an Owner Interview Form on September 15, 2016, that is included in Appendix C. Mr. Barker assisted in the property inspection and provided information regarding the Site operations.

## 6.1 Interview with Owner

Mr. Barker indicated that the Site was used as a construction aggregate quarry and that hazardous materials or waste were not stored onsite. He indicated that only minor quantities of lubricants and cleaners were used onsite to maintain equipment. The dredge and conveyor belt system were reported to be operated electrically and fuel was not utilized onsite with the exception of trucks and equipment such as backhoes which were fueled offsite. Mr. Barker indicated that he was aware of drums, stained soil or surfaces, wells, and fill material associated with the Site. The drums are located onsite but are only used for storage of non-hazardous items. The stained soil or surfaces were reported to be minor surficial staining onsite created by vehicles; however, staining was not observed during the Site reconnaissance (September 21, 2016). Mr. Barker indicated during the Site inspection that he was not aware of any spills or releases onsite. A small amount of fill material was documented to have historically been placed at three locations onsite as discussed in Section 4.3.1 (Figure 3, Fill Locations). Mr. Barker noted that there are two groundwater monitoring wells onsite. These wells are required for compliance with URP's existing WDR permit.

Mr. Barker provided two environmental documents regarding Quarry No. 3, including the WDR Permit and a 2004 Reclamation Plan (URP, 2004). The WDR Permit is discussed in the RWQCB paragraph of Section 4.3.1 and the Reclamation Plan is discussed in the City of Irwindale Public Works paragraph of Section 4.3.1.

## 6.2 Interview with Site/Property Manager

See Section 6.1.

## 6.3 Interviews with Occupants

See Section 6.1.

## 6.4 Interviews with Local Government Officials

Leighton Consulting did not interview employees with local government agencies to request information regarding historic and current uses of the Site with the exception of those noted in Section 4.2.

## 6.5 Interviews with Others

Leighton Consulting did not conduct any other interviews for this Phase I ESA with the exception of the User Interview discussed in Section 3.0.

# 7.0 FINDINGS

Leighton Consulting performed a Phase I ESA of the URP Quarry No. 3 located at 1137 Meridian Street, Irwindale, California.

## 7.1 Onsite

The Site is primarily occupied by a sand and gravel quarry owned and operated by URP. APNs for the Site include 8531-026-019, 8531-032-009, 8531-032-010, 8531-033-007, 8531-034-026, and 8531-034-032 that total approximately 110 acres in size. Two of the parcels are located within the City of Duarte and are not part of the quarry operations. APN 8531-034-032, a small parcel approximately 0.57 acres in size at the northeast portion of the Site, is landscaped with grass and trees and appears to have formerly been occupied by residential structures. APN 8531-026-019 is a narrow parcel approximately 0.39 acres in size located to the west of the quarry that extends between two rows of single-family residences to Mountain Avenue, and was formerly an access road onto the Site. It appears that the residential property fence lines extend within the Site parcel so that it is located within residential yards.

Historically, the northern portion of the Site appeared to have been utilized possibly for agricultural purposes and the southern portion appeared to be vacant with the San Gabriel Wash extending through the southeast corner. Agricultural use appeared to have ended onsite by at least 1964. Quarry operations commenced in the southeast portion of the Site by at least 1936 and covered the majority of the Site by at least 1972 and have continued through the present.

The regional topography generally slopes towards the southwest and groundwater is exposed creating a pond throughout the majority of the bottom of the quarry.

Site operations include dredge mining for aggregate materials, short term storage of wet mined materials and transportation of mined materials via an electrical conveyor belt to an offsite processing facility. The Site has remained unpaved since mining operations commenced. There is a boneyard located near the northeast and eastern borders of the Site where out of service equipment is stored. Two empty 55-gallon drums were observed in the boneyard area but they were reported to be used for the storage of non-hazardous parts. Several oil filters were observed in a metal container near the 55-gallon drums (Photo No. 13). Mr. Ken Barker reported that containers of lubricants were brought onsite to maintain equipment, but were not stored onsite. Additional evidence of

hazardous materials/waste storage at the property was not reported or identified. Permanent structures are not located onsite.

The Site is permitted as a Land Disposal Site that can accept inert fill material and is regulated by the RWQCB. Fill material has been documented to have been placed at three locations at Quarry No. 3. In 1973 and 1974, 4,156 tons (2,445 cubic yards) of inert waste consisting of broken concrete block was reported to be placed in the northeast portion of the Site (Law Environmental, 1989). In 1986 or 1987, the City of Irwindale placed fill on the eastern side of the gravel quarry to stabilize the embankment along Buena Vista Street so that the street could be reconstructed. Slope erosion had been reported to be affecting the stability of Buena Vista Street. The fill consisted of an unknown quantity of earth and rock, with some concrete and asphalt fragments (Law Environmental, 1989). In 2014, 3,000 cubic yards of inert waste reported to be in compliance with the Land Disposal Site's WDRs was placed in the northeast quadrant of the Site (URP, 2014). Detailed information on the type of inert waste was not provided. The approximate locations of the reported fill materials are shown on Figure 3, Fill Location Map.

Groundwater monitoring onsite is conducted to satisfy the MRP requirements which have been adopted by the RWQCB. The MRP requires quarterly groundwater monitoring and waste disposal reporting during the first year (2014-2015) and semi-annually starting in 2016. Two groundwater monitoring wells are located onsite and three additional groundwater monitoring wells associated with the monitoring network are located offsite. Water quality is analyzed for pH, electrical conductivity, alkalinity, bicarbonate, carbonate, carbon dioxide, chemical oxygen demand, total hardness (CaCO3), total dissolved solids, nitrates, chloride, sulfate, boron, cadmium, chromium, lead, nickel, benzene, PCE, TCE, MTBE, and vinyl chloride. As of April 2016, standing groundwater in Quarry No. 3 as well as groundwater in associated downgradient wells currently meets the Water Quality Protection Standards for all constituents. VOCs analyzed have historically been below laboratory detection limits.

## 7.2 Offsite

The adjacent property to the north is occupied primarily by residential development followed by Beardslee Park and Beardslee Elementary School. The Site is bound to the east is by Buena Vista Street, followed by commercial businesses including Southwest Products and Airgas Store. The Site is bound to the south by Meridian Street, followed by Buena Vista Spreading Basin and commercial warehouses including ABC Hardware and PickUp USA Fitness.

Adjacent property to the west is occupied by light industrial, warehouses, commercial businesses, and residential development.

The surrounding vicinity is occupied primarily by light industrial, wholesaling, distribution, and commercial land uses as well as a residential development to the north and northwest. The historical property use on adjacent properties is summarized below:

North - The adjacent property to the north had historically been agricultural use, followed by the Atchison Topeka railroad from at least 1928 to 1938. By 1952 adjacent property to the north was used for residential purposes and was at or near present day configurations.

South – The adjacent property to the south, across from Meridian Street, appeared to be vacant, undeveloped land from at least 1928 to 1952. The property appeared to be developed with a quarry by 1952 and several automobile salvage yards. By 1990 the automobile salvage yards appeared to have been removed and by 2002 several commercial buildings and associated parking lots were constructed.

East – Adjacent property to the east appeared to be vacant, undeveloped land from at least 1894 to 1953. The Santa Fe Dam Spillway Channel is depicted as present by at least 1953. Buena Vista Street is present by at least 1972 as well as a large rectangular structure and associated parking.

West – Adjacent property to the west appeared to be agricultural use and occupied by associated storage structures from at least 1928 to 1952. The property has been occupied by residential development from at least 1952 to present.

A search of selected government databases was conducted by Leighton Consulting using the EDR Radius Report, dated September 20, 2016. Properties that appeared likely to adversely affect the Site by contaminant migration were not identified.

## 7.3 Data Gaps

ASTM E1527-13 requires review of standard historical sources at approximate five-year intervals from at least 1940 to the present, or the earliest development of the site. The availability of extensive historical information varies significantly between locations and it is common to have gaps in the data for one or more of

the periods where historical property uses are unknown or uncertain. There is also a potential for unidentified uses to have occurred between data points, or prior to the earliest acquired data.

The earliest data acquired for the Site indicating past property usage was from 1894. There is a data gap regarding property operations on the northern portion of the Site from at least the 1920s through the 1950s, although aerial photographs indicate that at least part of the use was agriculturally related. The general property use of the remainder of the Site is relatively well documented. The Site has been used as an aggregate quarry since at least the 1930s. This data gap is expected to have a low potential to alter the conclusions or recommendations of this report due to the quarry operations having removed the soil and sediment from within the majority of the northern area where the use was formerly agricultural and not well documented.

APN 8531-026-019 was not accessible during the site walk due to being fenced off. It appears that portions, or all, of the parcel are located within residential yards and some may have patios or storage structures located within the parcel. Residences do not typically store significant quantities of hazardous materials on their property; therefore, this data gap is considered to have a low potential to alter the conclusions or recommendations of this report.

Analytical testing of fill material formerly placed at the Site was not identified. This data gap is considered significant.

# 8.0 OPINION

## 8.1 Onsite

The northern portion of the Site was used for agricultural purposes in the 1920s through the 1950s and there were undocumented structures located onsite during this time that may have been agriculturally related or used for other purposes. A 1939 building permit for an asphalt plant and a 1941 permit for a cess pool were on file for the Site. It is Leighton's opinion that these former uses have a low potential to adversely affect the Site based on the majority of the soil and sediment apparently having been removed from these areas as part of the quarry operations.

The fill material placed on the eastern side of the Site in 1986 or 1987 by the City of Irwindale was reported to consist of an unknown quantity of earth and rock, with some concrete and asphalt fragments (Law Environmental, 1989). The material was not specified to be "inert" in the report; however, the facility was identified to accept only inert waste and Leighton Consulting considers it likely that the City of Irwindale did not place materials at the Site known to contain hazardous materials. The fill material on the northeast quadrant of the Site in 2014 was reported to consist of inert waste in compliance with WDRs (URP, 2014). However, confidence in fill material being inert cannot be high without documentation of the source of the fill material, such as in a Phase I ESA, and/or analytical testing. Although the apparently inert fill material emplaced at the Site is not considered a REC, it is considered a potential environmental concern due to the lack of source documentation and/or analytical testing.

It is Leighton Consulting's opinion that the inert waste placed at the northeast portion of the Site that was reported to consist of crushed concrete in 1973 and 1974 has a low probability to contain contaminants. However, as a conservative measure this area may be assessed with the other fill material that is considered a potential environmental concern.

It is Leighton Consulting's opinion that other RECs, HRECs, CRECs, or potential environmental concerns were not identified at the Site.

## 8.2 Offsite

It is Leighton Consulting's opinion that nearby properties do not appear to represent a potential source of migration of hazardous substances to the Site.

# 9.0 CONCLUSIONS AND RECOMMENDATIONS

Leighton Consulting performed a Phase I ESA for the URP Quarry No. 3 located at 1137 Meridian Street, Irwindale, California, in conformance with the scope and limitations of ASTM Practice E1527-13. Exceptions to, or deletions from, this practice are described in Section 1.5 of this report. This assessment has not revealed evidence of RECs, CRECs, or HRECs in connection with the property. Although not considered a REC, Leighton Consulting identified the following potential environmental concern:

- Fill material has been documented to have been placed at three locations in the northeast quadrant of Quarry No. 3 (Figure 3). The fill material has been reported to be, and/or is considered likely to be, inert fill that would be in compliance with the current WDR permit. However, confidence in fill material being inert cannot be high without detailed documentation of the fill material source and/or analytical testing. The fill material emplaced at the Site containing soil and/or other materials from unidentified sources is considered a potential environmental concern due to the lack of source documentation and/or analytical testing.

Based upon the findings of this Phase I ESA, Leighton Consulting makes the following recommendations:

- Conduct soil sampling within the areas where fill materials containing soil and/or other materials from unidentified soils was placed in the mid-1980s and in 2014 to assess and document that the material tested is inert. As a conservative measure, the inert concrete rubble fill material placed in 1973/1974 may also be evaluated.
- Observations should be made during any future Site development for areas of possible contamination such as, but not limited to, the presence of underground facilities, buried debris, waste drums, tanks, and stained or odorous soils. Further investigation and analysis may be necessary if such materials are encountered.

# 10.0 DEVIATIONS

Leighton Consulting did not deviate from or alter the scope of work, as defined in Section 1.3 of this report.

# 11.0 ADDITIONAL SERVICES

Leighton Consulting did not perform work outside the scope of work as defined in Section 1.3 of this report.

# 12.0 QUALIFICATIONS

## 12.1 Corporate

Leighton Consulting, Inc. is a California corporation, providing geotechnical and environmental services throughout California. We are solely a firm without interests in real property other than our eight offices in Southern California. We provide professional environmental services including application of science and engineering to environmental compliance, hazardous materials/waste assessment and cleanup, and management of hazardous, solid and industrial waste. Phase I Environmental Site Assessments are a part of this practice area and have been conducted by us.

## 12.2 Individual

The qualifications of the Project Manager and the other Leighton Consulting environmental professionals involved in this Phase I ESA meet the Leighton corporate requirements for performing Phase I ESAs as specified by ASTM E1527-13. In addition, Ms. Meredith Church is a Professional Geologist.

## 12.3 Environmental Professional Statement

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental professional as defined by §312.10 of 40 CFR Part 312.

I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Site. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Meredith Church

Meredith Church, P.G.
Associate Geologist






Leighton




| | |
|---|---|
| Project: 603287.052 | Eng/Geol: MC |
| Scale: 1 " = 2,000 ' | Date: March 2017 |

Base Map: ESRI ArcGIS Online 2017
Thematic Information: Leighton
Author: Leighton Geomatics (mmurphy)

# SITE LOCATION MAP

United Rock Products, Quarry No. 3
1137 Meridian Street
Irwindale, California 91706

Figure 1

Leighton

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| | |
|---|---|
| Project: 603287.052 | Eng/Geol: MC |
| Scale: 1 " = 300 ' | Date: November 2016 |

Base Map: ESRI ArcGIS Online 2017
Thematic Information: Leighton
Author: Leighton Geomatics (mmurphy)

# SITE PLAN

United Rock Products, Quarry No. 3
1137 Meridian Street
Irwindale, California 91706

Figure 2

Leighton

Map Saved as P:\Drafting\603287\052\Maps\603287-052_F02_SP_2017-03-14.mxd on 3/14/2017 10:27:23 AM




| | |
|---|---|
| Project: 603287.052 | Eng/Geol: MC |
| Scale: 1 " = 300 ' | Date: November 2016 |

Base Map: ESRI ArcGIS Online 2017
Thematic Information: Leighton
Author: Leighton Geomatics (mmurphy)

# FILL LOCATION MAP

United Rock Products, Quarry No. 3
1137 Meridian Street
Irwindale, California 91706

Figure 3

Leighton

Map Saved as P:\Drafting\603287\052\Maps\603287-052_F03_FLM_2017-03-14.mxd on 3/14/2017 10:31:25 AM

# Appendix A

# References

# APPENDIX A

## References

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APPENDIX A (Continued)

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APPENDIX A (Continued)

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# Appendix B

# Site Reconnaissance Photographs

| Leighton Consulting, Inc. | **PHOTOGRAPHIC RECORD**<br>**September 21, 2016** | |
|---|---|---|
| **Client Name: LACDPW** | **Site Location: URP Pit No. 3, 1137 Meridian Street, Irwindale, California** | **Project No. 603287.052** |

| **Photo No. 1** |  |
|---|---|
| **View Direction of Photo:**<br>Northeast | |
| **Description:**<br>Overview of the Site from the southwestern corner viewing the western extent of the quarry. The dredge and dredge guide wires are visible. | |

| **Photo No. 2** |  |
|---|---|
| **View Direction of Photo:**<br>Northeast | |
| **Description:**<br>Overview of the Site from the southwestern corner viewing the eastern extent of the quarry. The dredge and dredge guide wires are visible | |

| Leighton Consulting, Inc. | **PHOTOGRAPHIC RECORD**<br>**September 21, 2016** | |
|---|---|---|
| **Client Name: LACDPW** | **Site Location: URP Pit No. 3, 1137 Meridian Street, Irwindale, California** | **Project No. 603287.052** |

| | |
|---|---|
| **Photo No. 3**<br>**View Direction of Photo:**<br>North<br><br>**Description:**<br>View of western wall of quarry. |  |

| | |
|---|---|
| **Photo No. 4**<br>**View Direction of Photo:**<br>East<br><br>**Description:**<br>View of dirt road on the southern boundary of the Site. |  |

| Leighton Consulting, Inc. | **PHOTOGRAPHIC RECORD**<br>**September 21, 2016** | |
|---|---|---|
| **Client Name: LACDPW** | **Site Location: URP Pit No. 3, 1137 Meridian Street, Irwindale, California** | **Project No. 603287.052** |

| | |
|---|---|
| **Photo No. 5**<br>**View Direction of Photo:**<br>North<br><br>**Description:**<br>View of dirt road and commercial buildings on the western boundary of the subject site. Well No. IRW-3B is visible in the bottom center of the photograph. |  |

| | |
|---|---|
| **Photo No. 6**<br>**View Direction of Photo:**<br>Northwest<br><br>**Description:**<br>Limited view of the western limb of the Site which was inaccessible (APN 8531-026-019). |  |

| Leighton Consulting, Inc. | **PHOTOGRAPHIC RECORD**<br>**September 21, 2016** | |
|---|---|---|
| **Client Name: LACDPW** | **Site Location: URP Pit No. 3, 1137 Meridian Street, Irwindale, California** | **Project No. 603287.052** |

| | |
|---|---|
| **Photo No. 7**<br>**View Direction of Photo:**<br>South<br><br>**Description:**<br>View of the western edge of Site and a pole mounted transformer. Evidence of leaking was not observed around the transformer. |  |

| | |
|---|---|
| **Photo No. 8**<br>**View Direction of Photo:**<br>Northeast<br><br>**Description:**<br>View of the western edge of the Site. |  |

| Leighton Consulting, Inc. | **PHOTOGRAPHIC RECORD**<br>**September 21, 2016** | |
|---|---|---|
| **Client Name: LACDPW** | **Site Location: URP Pit No. 3, 1137 Meridian Street, Irwindale, California** | **Project No. 603287.052** |

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| **Photo No. 9**<br>**View Direction of Photo:**<br>East<br><br>**Description:**<br>Overview of the Site from the western edge of the quarry. |  |

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| **Photo No. 10**<br>**View Direction of Photo:**<br>South<br><br>**Description:**<br>View of a poll mounted transformer on the western boundary of the Site. Evidence of leaking was not observed around the base of the pole. |  |

| Leighton Consulting, Inc. | **PHOTOGRAPHIC RECORD**<br>**September 21, 2016** | |
|---|---|---|
| **Client Name: LACDPW** | **Site Location: URP Pit No. 3, 1137 Meridian Street, Irwindale, California** | **Project No. 603287.052** |

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| **Photo No. 11**<br>**View Direction of Photo:**<br>East<br><br>**Description:**<br>View of one of a groundwater monitoring well on the eastern portion of the Site (IRW-3A). |  |

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| **Photo No. 12**<br>**View Direction of Photo:**<br>Northeast<br><br>**Description:**<br>View of the landscaped northeastern portion of the subject site. A cement wall is visible in the foreground. |  |

| Leighton Consulting, Inc. | **PHOTOGRAPHIC RECORD**<br>**September 21, 2016** | |
|---|---|---|
| **Client Name: LACDPW** | **Site Location: URP Pit No. 3, 1137 Meridian Street, Irwindale, California** | **Project No. 603287.052** |

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|---|---|
| **Photo No. 13**<br>**View Direction of Photo:**<br>Northeast<br><br>**Description:**<br>View of two fifty gallon drums and a metal container with oil filters. The drums were reported by Mr. Barker to be empty and used for non-hazardous trash/supplies. He also indicated that the oil filters should not be onsite and that they would be removed. Maintenance is not conducted onsite; therefore, filters are not typically found onsite. |  |

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| **Photo No. 14**<br>**View Direction of Photo:**<br>Southeast<br><br>**Description:**<br>View of the boneyard at the northeastern portion of the Site, including a piece of the conveyor belt system and heavy machinery. |  |

| Leighton Consulting, Inc. | **PHOTOGRAPHIC RECORD**<br>**September 21, 2016** | |
|---|---|---|
| **Client Name: LACDPW** | **Site Location: URP Pit No. 3, 1137 Meridian Street, Irwindale, California** | **Project No. 603287.052** |

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|---|---|
| **Photo No. 15**<br>**View Direction of Photo:**<br>Northwest<br><br>**Description:**<br>View of what appears to be dumped concrete blocks, scraps of wood, and wires. It is uncertain if the concrete rubble is recent or from former fill brought to the Site as documented in the report. |  |

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| **Photo No. 16**<br>**View Direction of Photo:**<br>Southeast<br><br>**Description:**<br>View of what appears to be dumped concrete blocks, scraps of wood, and wires. |  |

| Leighton Consulting, Inc. | **PHOTOGRAPHIC RECORD**<br>**September 21, 2016** | |
|---|---|---|
| **Client Name: LACDPW** | **Site Location: URP Pit No. 3, 1137 Meridian Street, Irwindale, California** | **Project No. 603287.052** |

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| **Photo No. 17**<br>**View Direction of Photo:**<br>West<br><br>**Description:**<br>Overview of the Site from the eastern boundary. The dredge, conveyor system, and access road are visible. |  |

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| **Photo No. 18**<br>**View Direction of Photo:**<br>Southwest<br><br>**Description:**<br>View of access road, power poles, and conveyor system. |  |

| Leighton Consulting, Inc. | **PHOTOGRAPHIC RECORD**<br>**September 21, 2016** | |
|---|---|---|
| **Client Name: LACDPW** | **Site Location: URP Pit No. 3, 1137 Meridian Street, Irwindale, California** | **Project No. 603287.052** |

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| **Photo No. 19**<br>**View Direction of Photo:**<br>Southeast<br><br>**Description:**<br>View of transformer and electrical boxes. Mr. Barker indicated that all the transformer/electrical equipment have been installed recently and do not contain PCBs. |  |

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| **Photo No. 20**<br>**View Direction of Photo:**<br>Southwest<br><br>**Description:**<br>View of transformer and electrical boxes. Mr. Barker indicated that all the transformer/electrical equipment have been installed recently and do not contain PCBs. |  |

| Leighton Consulting, Inc. | **PHOTOGRAPHIC RECORD**<br>**September 21, 2016** | |
|---|---|---|
| **Client Name: LACDPW** | **Site Location: URP Pit No. 3, 1137 Meridian Street, Irwindale, California** | **Project No. 603287.052** |

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| **Photo No. 21**<br>**View Direction of Photo:**<br>North<br><br>**Description:**<br>View of access road, power poles, and conveyor system. |  |

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|---|---|
| **Photo No. 22**<br>**View Direction of Photo:**<br>East<br><br>**Description:**<br>View of the quarry wall on the eastern portion of the Site. There appeared to be some concrete rubble that may be associated with fill material placed at the Site by the Quarry in 1973/1974. |  |

| Leighton Consulting, Inc. | **PHOTOGRAPHIC RECORD**<br>**September 21, 2016** | |
|---|---|---|
| **Client Name: LACDPW** | **Site Location: URP Pit No. 3, 1137 Meridian Street, Irwindale, California** | **Project No. 603287.052** |

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|---|---|
| **Photo No. 23**<br>**View Direction of Photo:**<br>Southwest<br><br>**Description:**<br>View of the bottom of the quarry. |  |

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| **Photo No. 24**<br>**View Direction of Photo:**<br>Southwest<br><br>**Description:**<br>View of the tunnel that is a part of the conveyor belt system underneath Meridian Street. |  |

| Leighton Consulting, Inc. | **PHOTOGRAPHIC RECORD**<br>**September 21, 2016** | |
|---|---|---|
| **Client Name: LACDPW** | **Site Location: URP Pit No. 3, 1137 Meridian Street, Irwindale, California** | **Project No. 603287.052** |

| | |
|---|---|
| **Photo No. 25** |  |
| **View Direction of Photo:**<br>Southwest | |
| **Description:**<br>View of the Buena Vista Spreading Basin and the conveyor belt system located across Meridian Street, south of the Site. | |

# Appendix C

# Land Title Records

# The NETR Environmental Lien Search Report

**1137 MERIDIAN**
**IRWINDALE, CALIFORNIA**

**Friday, September 16, 2016**

**Project Number: L16-02169**

2055 East Rio Salado Parkway
Tempe, Arizona 85281

Telephone: 480-967-6752
Fax: 480-966-9422

# ENVIRONMENTAL LIEN REPORT

The NETR Environmental LienSearch Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied property information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' office, registries of deed, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved and description); and
- provide a copy of the deed or cite documents reviewed;

**Thank you for your business**
Please contact NETR at 480-967-6752
with any questions or comments

**Disclaimer - Copyright and Trademark Notice**

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# ENVIRONMENTAL LIEN REPORT

The NETR Environmental Lien Search Report is intended to assist in the search for environmental liens filed in land title records.

## TARGET PROPERTY INFORMATION

## ADDRESS

**1137 Meridian**
**Irwindale, California**

## RESEARCH SOURCE

Source: Los Angeles County Assessor
Los Angeles County Recorder

## DEED INFORMATION

Type of Instrument: Corporation Grant Deed

Grantor: Sully-Miller Contracting Company, a California corporation

Grantee: United Rock Products Corporation, a Delaware corporation

Deed Dated: 12/29/1988
Deed Recorded: 12/30/1988
Instrument: 88-2093006

## LEGAL DESCRIPTION

Those parts of Lots 9, 10, 13, 14, in the subdivision of Rancho Azusa de Duarte, according to the map or plat thereof, as filed of record in Book 6, Page 80, and that part of Lot 15 of the J. R. Loftus Tract No. 1, according to the map or plat thereof, as filed of record in Book 14, Page 29, situated and lying in the City of Irwindale, Los Angeles County, State of California

Assessor's Parcel Number(s): 8531-032-009, 8531-033-007 and 8531-034-026

## ENVIRONMENTAL LIEN

Environmental Lien: Found ☐ Not Found ☒

## OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AULs: Found ☐ Not Found ☒



88-2093006

RECORDED IN OFFICIAL RECORDS
RECORDER'S OFFICE
LOS ANGELES COUNTY
CALIFORNIA
1 MIN. PAST 1 PM DEC 30 1988

WHEN RECORDED MAIL TO:

Steve C. Owen, Esq.
Paul, Weiss, Rifkind,
Wharton & Garrison
1285 Avenue of the Americas
New York, New York 10019

FEE $ 32 M 5

A.F.N.F.

MAIL TAX STATEMENTS TO:

Spancrete of California
13131 Los Angeles Street
Irwindale, California 91706
Attn: Mr. Thomas S. Tedesco or
Mr. Joseph S. Tedesco

SURVEY MONUMENT FEE $10. CODE 99

The undersigned grantor declares that the documentary transfer tax is $_____, computed on the value of the remaining term of the lease.

CORPORATION GRANT DEED

TRANSFER TAX
NOT A PUBLIC RECORD

FOR VALUE RECEIVED, SULLY-MILLER CONTRACTING COMPANY, a California corporation, as grantor ("Grantor"), hereby grants and conveys unto UNITED ROCK PRODUCTS CORPORATION, a Delaware corporation, as grantee ("Grantee"), that certain real property situated in the City of Irwindale, County of Los Angeles, State of California, more particularly described in Exhibit "A" attached hereto and incorporated herein.

The conveyance of said real property by Grantor is made subject to all nondelinquent general and special real property taxes and assessments, and to all easements, encumbrances, covenants, conditions, restrictions, reservations, rights of way and other matters appearing in the Official Records of the County Recorder of Los Angeles County, California of whatever kind or nature, and subject to those matters that would be disclosed by a physical inspection of the property described in Exhibit "A" attached hereto. Grantor hereby reserves from this conveyance for itself, and for its successors and assigns, any and all water rights, whether riparian, appropriative, prescriptive, overlying or otherwise, whether or not appurtenant to the real property hereby conveyed, including but not limited to any and all prescriptive pumping rights adjudicated in favor of Grantor and its predecessors-in-interest by the court judgment, as entered and subsequently amended, in the legal proceeding entitled "Upper San Gabriel Valley Municipal Water District

2/347/008160-0447/74 12/29/88 Duarte

8538489-765

vs. City of Alhambra, et al.," Los Angeles County Superior Court Action No. 924128.

IN WITNESS WHEREOF, the Grantor has executed this Grant Deed.

Date: December 29, 1988

SULLY-MILLER CONTRACTING COMPANY,
a California corporation

By: R. R. Munro

Its: R. R. MUNRO, Ass't. Secretary

By: _____

Its: _____

STATE OF CALIFORNIA )
) ss.
COUNTY OF ~~LOS ANGELES~~ Orange )

On the 29th day of December, 1988, before me, the undersigned, a Notary Public, in and for said State and County, personally appeared R. R. Munro ~~and~~ _____ personally known to me (or proved to me on the basis of satisfactory evidence) to be the persons who executed the within instrument as the ~~President and~~ Assistant Secretary, on behalf of SULLY-MILLER CONTRACTING COMPANY, the corporation therein named, and acknowledged to me that such corporation executed the within instrument pursuant to its bylaws or a resolution of its board of directors.

WITNESS my hand and official seal.

SEAL)

OFFICIAL SEAL
BARBARA S. BAUMAN
NOTARY PUBLIC - CALIFORNIA
ORANGE COUNTY
My Comm. Expires Aug 7, 1989

Barbara S. Bauman
Notary Public

88-2093006

TICOR TITLE INSURANCE COMPANY OF CALIFORNIA

Exhibit "A" 3

DESCRIPTION:

PARCEL 1:

THOSE PORTIONS OF LOTS 9, 10, 11, 12, 13 AND 14 IN SECTION 36, TOWNSHIP 1 NORTH, RANGE 11 WEST, SUBDIVISION OF THE RANCHO AZUSA DE DUARTE, IN THE CITY OF IRWINDALE, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 6 PAGES 80 ET SEQ., OF MISCELLANEOUS RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS A WHOLE AS FOLLOWS:

BEGINNING AT A POINT ON THE WESTERLY LINE OF BUENA VISTA STREET, 80 FEET WIDE, AS SHOWN ON MAP OF TRACT NO. 17750, RECORDED IN BOOK 432 PAGES 14 AND 15 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DISTANT SOUTHERLY ALONG SAID WESTERLY LINE, 413 FEET FROM THE SOUTHEAST CORNER OF SAID TRACT NO. 17750; THENCE SOUTHERLY ALONG SAID BUENA VISTA STREET TO THE NORTH LINE OF SAID LOT 14; THENCE EASTERLY ALONG SAID NORTH LINE TO THE NORTHEASTERLY CORNER OF SAID LOT 14; THENCE SOUTHERLY ALONG THE EAST LINE OF SAID LOT 14, TO THE NORTHEASTERLY CORNER OF THE LAND DESCRIBED IN FINAL DECREE OF CONDEMNATION ENTERED IN DISTRICT COURT CASE NO. 1751, A COPY OF WHICH WAS RECORDED ON AUGUST 4, 1943 IN BOOK 20187 PAGE 100, OFFICIAL RECORDS, IN SAID OFFICE OF THE COUNTY RECORDER; THENCE ALONG THE BOUNDARY LINE OF THE LAND DESCRIBED IN SAID FINAL DECREE OF CONDEMNATION AS FOLLOWS:

WESTERLY 20 FEET TO THE BEGINNING OF A CURVE CONCAVE NORTHWESTERLY HAVING A RADIUS OF 580 FEET, TANGENT AT SAID BEGINNING TO THE WESTERLY LINE OF THE EASTERLY 20 FEET OF SAID LOT 14 AND TANGENT AT ITS POINT OF ENDING TO THE NORTHERLY LINE OF THE SOUTHERLY 20 FEET OF SAID LOT 14; SOUTHWESTERLY ALONG SAID CURVE TO SAID POINT OF ENDING; AND SOUTHERLY 20 FEET TO THE SOUTH LINE OF SAID LOT 14; THENCE WESTERLY ALONG THE SOUTH LINE OF SAID LOTS 14 AND 13 TO THE SOUTHWESTERLY CORNER OF SAID LOT 13; THENCE NORTHERLY ALONG THE WEST LINE OF SAID LOT 13 TO THE MOST NORTHERLY BOUNDARY LINE OF TRACT NO. 15969, AS SHOWN ON MAP RECORDED IN BOOK 413 PAGES 16 AND 17 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY;

THENCE WESTERLY ALONG SAID LAST MENTIONED BOUNDARY LINE AND ITS WESTERLY PROLONGATION, TO THE EASTERLY LINE OF MOUNTAIN AVENUE, AS SHOWN ON SAID MAP OF TRACT NO. 15969; THENCE NORTHERLY ALONG SAID MOUNTAIN AVENUE, 20 FEET TO THE SOUTHERLY LINE OF TRACT NO. 14089, AS SHOWN ON MAP RECORDED IN BOOK 335 PAGES 1, 2 AND 3 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY; THENCE EASTERLY ALONG SAID SOUTHERLY LINE TO THE MOST SOUTHERLY CORNER OF LOT 75 OF SAID TRACT NO. 14089;

THENCE CONTINUING ALONG THE BOUNDARY OF SAID TRACT NO. 14089; NORTHEASTERLY AND NORTH TO THE EASTERLY LINE OF THE LAND CONVEYED TO R. H. WILSON, BY DEED RECORDED IN BOOK 2095 PAGE 35 OF DEEDS, RECORDS OF SAID COUNTY; THENCE SOUTHERLY ALONG SAID EASTERLY LINE TO THE SOUTHWESTERLY PROLONGATION OF THAT CERTAIN COURSE IN THE SOUTHEASTERLY LINE OF GALEN STREET, SHOWN ON MAP OF TRACT NO. 16739, RECORDED IN BOOK 414 PAGES 27, 28 AND 29 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, AS HAVING A BEARING AND LENGTH OF NORTH 66 DEGREES 44 MINUTES 51 SECONDS EAST 689.82 FEET; THENCE NORTHEASTERLY ALONG SAID PROLONGATION AND CERTAIN COURSE AND ITS NORTHEASTERLY PROLONGATION, TO THE EASTERLY LINE OF SAID LOT 10; THENCE SOUTHERLY ALONG SAID EASTERLY LINE TO THE SOUTHERLY LINE OF GALEN STREET, 50 FEET WIDE, AS SHOWN ON SAID MAP OF TRACT NO. 16739; THENCE WESTERLY ALONG SAID LAST MENTIONED SOUTHERLY LINE, 12 FEET; THENCE SOUTHERLY PARALLEL WITH THE WESTERLY LINE OF

TICOR TITLE INSURANCE COMPANY OF CALIFORNIA

4

SAID TRACT NO. 17750, A DISTANCE OF 143.51 FEET TO THE WESTERLY PROLONGATION OF THE SOUTH LINE OF SAID TRACT NO. 17750; THENCE EASTERLY ALONG SAID LAST MENTIONED PROLONGATION AND SOUTH LINE TO THE EASTERLY LINE OF THE WEST 1000 FEET OF SAID LOT 9; THENCE SOUTHERLY ALONG SAID LAST MENTIONED EASTERLY LINE TO A LINE PARALLEL WITH THE SOUTH LINE OF SAID TRACT NO. 17750 AND WHICH PASSES THROUGH THE POINT OF BEGINNING; THENCE EASTERLY ALONG SAID PARALLEL LINE TO THE POINT OF BEGINNING.

EXCEPT THAT PORTION OF SAID LOT 13, DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE WEST LINE OF SAID LOT 13, WITH THE MOST NORTHERLY BOUNDARY LINE OF SAID TRACT NO. 15969; THENCE NORTHERLY ALONG SAID WEST LINE TO THE SOUTHERLY LINE OF LOT 75 OF SAID TRACT NO. 14089; THENCE EASTERLY ALONG SAID SOUTHERLY LINE TO THE MOST SOUTHERLY CORNER OF SAID LOT 75; THENCE SOUTHWESTERLY IN A DIRECT LINE TO THE POINT OF BEGINNING.

ALSO EXCEPT FROM THE SOUTHERLY 20 FEET OF SAID LOT 13, THE INTEREST CONVEYED TO THE COUNTY OF LOS ANGELES, BY DEED FOR ROAD PURPOSES, RECORDED IN BOOK 3702 PAGE 143 OF DEEDS, RECORDS OF SAID COUNTY.

PARCEL 2:

AN EASEMENT FOR ROAD AND PUBLIC UTILITIES PURPOSES, AS GRANTED TO ARROW ROCK CO., IN DEED RECORDED DECEMBER 27, 1951 AS INSTRUMENT NO. 635, TO BE USED COMMON BY THE GRANTOR AND GRANTEE AND THE ASSIGNS OF BOTH, OVER A STRIP OF LAND 60 FEET WIDTH, AND EXTENDING FROM THE WEST LINE OF BUENA VISTA STREET (AS DESCRIBED IN DEED TO THE COUNTY OF LOS ANGELES, RECORDED IN BOOK 4598 PAGE 65 OF DEEDS, RECORDS OF SAID COUNTY) TO A LINE PARALLEL WITH AND DISTANT 1000 FEET EASTERLY (MEASURED AT RIGHT ANGLES) FROM THE WEST LINE OF SAID LOT 9, THE NORTH LINE OF SAID STRIP BEING PARALLEL WITH AND DISTANT SOUTHERLY 275.00 FEET (MEASURED AT RIGHT ANGLES) FROM THE EASTERLY PROLONGATION OF THE SOUTH LINE OF SAID GALEN STREET, 50 FEET WIDE, AS SHOWN ON MAP OF SAID TRACT NO. 16739, SAID EASEMENT IS APPURTENANT TO PARCEL 1 ABOVE, AS DESCRIBED IN SAID DEED TO ARROW ROCK CO.

PARCEL 3:

AN EASEMENT FOR STREET PURPOSES, TO BE USED IN COMMON WITH OTHERS, OVER A STRIP OF LAND 10 FEET IN WIDTH, LYING NORTHERLY OF, ALONG AND ADJOINING THE SOUTHERLY BOUNDARY LINE OF THE NORTH 19.59 ACRES OF LOT 9, IN SECTION 36, TOWNSHIP 1 NORTH, RANGE 11 WEST, OF THE SUBDIVISION OF THE RANCHO AZUSA DE DUARTE, SAID 19.59 ACRES TO BE CUT OFF FROM SAID LOT BY A LINE PARALLEL WITH THE NORTH LINE OF SAID LOT AND FAR ENOUGH SOUTH OF SAID NORTH LINE TO CONTAIN SAID AMOUNT OF LAND AND NO MORE. SAID EASEMENT IS APPURTENANT TO A PORTION OF PARCEL 1 ABOVE.

PARCEL 4:

AN EASEMENT FOR STREET PURPOSES, TO BE USED IN COMMON WITH OTHERS, OVER AND ALONG THE NORTHERLY 10 FEET (MEASURED AT RIGHT ANGLES TO THE NORTHERLY LINE) OF THE FOLLOWING DESCRIBED LINE:

THAT PORTION OF LOT 10 IN SECTION 36, TONWSHIP 1 NORTH, RANGE 11 WEST, OF THE SUBDIVISION OF THE RANCHO AZUSA DE DUARTE, AS PER MAP RECORDED IN BOOK 6 PAGES 80 ET SEQ., OF MISCELLANEOUS RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

TICOR TITLE INSURANCE COMPANY OF CALIFORNIA

BEGINNING AT THE SOUTHEAST CORNER OF SAID LOT 10; THENCE NORTH ALONG THE EAST LINE OF SAID LOT, 674.12 FEET; THENCE SOUTH 66 DEGREES 41 MINUTES 19 SECONDS WEST 1058.87 FEET; THENCE SOUTH 26 DEGREES 30 MINUTES EAST 285 FEET TO THE SOUTHERLY LINE OF SAID LOT; THENCE ALONG SAID SOUTHERLY LINE, EAST 845.46 FEET TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM THAT PORTION LYING WESTERLY OF A LINE EXTENDING FROM A POINT IN THE SOUTHERLY LINE OF SAID LOT, DISTANT WESTERLY 292.85 FEET THEREON FROM THE SOUTHEAST CORNER OF SAID LOT, TO A POINT IN THE NORTHERLY LINE OF SAID LAND, DISTANT SOUTH 66 DEGREES 41 MINUTES 19 SECONDS WEST THEREON 313.66 FEET FROM THE NORTHEASTERLY CORNER THEREOF. SAID EASEMENT IS APPURTENANT TO A POINT OF PARCEL 1 ABOVE.

**2055 East Rio Salado Parkway, Suite 201**
**Tempe, Arizona 85281**
**Phone: (480) 967-6752**
**Fax Number: (480) 966-9422**
**Web Site: www.netronline.com**

# HISTORICAL CHAIN OF TITLE REPORT

1137 MERIDIAN
**IRWINDALE, CALIFORNIA**

**Submitted to:**

**LEIGHTON CONSULTING, INC.**
17781 Cowan
Irvine, California 92614

**Attention: Meredith Church**

**Project No. N16-02168**

**Friday, September 16, 2016**

**NETR - Real Estate Research & Information** hereby submits the following ASTM historical chain-of-title to the land described below, subject to the leases/miscellaneous shown in Section 2. Title to the estate or interest covered by this report appears to be vested in:

UNITED ROCK PRODUCTS CORPORATION, A DELAWARE CORPORATION

The following is the current property legal description:

Those parts of Lots 9, 10, 13, and 14, in the subdivision of Rancho Azusa de Duarte, according to the map or plat thereof, as filed of record in Book 6, Page 80, and that part of Lot 15 of the J. R. Loftus Tract No. 1, according to the map or plat thereof, as filed of record in Book 14, Page 29, situated and lying in the City of Irwindale, Los Angeles County, State of California

Assessor's Parcel Number(s): 8531-032-009, 8531-033-007 and 8531-034-026

## 1. HISTORICAL CHAIN OF TITLE

1. DEED
   - RECORDED: 04/01/1884
   - GRANTOR: Charles Roberts
   - GRANTEE: Levi Harris
   - INSTRUMENT: Book 121, Page 456

2. DEED
   - RECORDED: 11/03/1921
   - GRANTOR: Levi Harris
   - GRANTEE: Clara L. Harris
   - INSTRUMENT: 817

3. DEED
   - RECORDED: 11/03/1921
   - GRANTOR: Levi Harris
   - GRANTEE: Clara L. Harris
   - INSTRUMENT: 818

4. GRANT DEED
   - RECORDED: 04/20/1922
   - GRANTOR: Clara L. Harris, a widow
   - GRANTEE: Violet M. Seeds and P. B. Seeds, her husband, as joint tenants with right of survivorship
   - INSTRUMENT: 670

5. DEED
   - RECORDED: 09/23/1947
   - GRANTOR: Lorena C. Smith and Levi N. Harris
   - GRANTEE: Violet M. Seeds
   - INSTRUMENT: 584

6. DEED
   - RECORDED: 09/23/1947
   - GRANTOR: Violet M. Seeds
   - GRANTEE: George Wells and Beulah Wells
   - INSTRUMENT: 585

7. GRANT DEED

| | |
|---|---|
| RECORDED: | 10/04/1951 |
| GRANTOR: | George Wells and Beulah Wells |
| GRANTEE: | M. F. Joyce & Winifred Joyce, husband and wife, and Arthur W. Beaucaire & Helen B. Beaucaire, husband and wife |
| INSTRUMENT: | 1231 |

8. GRANT DEED

| | |
|---|---|
| RECORDED: | 03/16/1956 |
| GRANTOR: | M. F. Joyce & Winifred Joyce, husband and wife, and Arthur W. Beaucaire & Helen B. Beaucaire, husband and wife |
| GRANTEE: | Arrow Rock Co. |
| INSTRUMENT: | 4263 |

9. GRANT DEED

| | |
|---|---|
| RECORDED: | 03/16/1956 |
| GRANTOR: | M. F. Joyce & Winifred Joyce, husband and wife, and Arthur W. Beaucaire & Helen B. Beaucaire, husband and wife |
| GRANTEE: | Arrow Rock Co. |
| INSTRUMENT: | 4265 |

10. CORPORATION GRANT DEED

| | |
|---|---|
| RECORDED: | 05/14/1956 |
| GRANTOR: | B & J Rock Co., formerly known as Arrow Rock Co. |
| GRANTEE: | M. F. Joyce and Arthur W. Beaucaire |
| INSTRUMENT: | 4611 |

11. CORPORATION GRANT DEED

| | |
|---|---|
| RECORDED: | 05/14/1956 |
| GRANTOR: | B & J Rock Co., formerly known as Arrow Rock Co. |
| GRANTEE: | M. F. Joyce and Arthur W. Beaucaire |
| INSTRUMENT: | 4612 |

12. CORPORATION GRANT DEED

| | |
|---|---|
| RECORDED: | 05/14/1956 |
| GRANTOR: | B & J Rock Co., formerly known as Arrow Rock Co. |
| GRANTEE: | M. F. Joyce and Arthur W. Beaucaire |
| INSTRUMENT: | 4625 |

13. DECREE OF DISTRIBUTION

| | |
|---|---|
| RECORDED: | 10/31/1967 |
| GRANTOR: | Estate of Arthur W. Beaucaire, deceased |
| GRANTEE: | United California Bank, a California corporation, and Helen B. Beaucaire, as Co-Trustees under the Will of Arthur W. Beaucaire, deceased |
| INSTRUMENT: | 4523 |

14. DECREE OF DISTRIBUTION

| | |
|---|---|
| RECORDED: | 08/22/1978 |
| GRANTOR: | Estate of Maurice F. Joyce, deceased |
| GRANTEE: | United California Bank, a California corporation, and Arelene Joyce Beaucaire, as Co-Trustees under the Will of Arthur W. Beaucaire, deceased |
| INSTRUMENT: | 78-927310 |

15. DECREE OF DISTRIBUTION

| | |
|---|---|
| RECORDED: | 04/18/1980 |
| GRANTOR: | Estate of Helen B. Beaucaire, deceased |
| GRANTEE: | United California Bank, a California corporation, and Arelene Joyce Beaucaire, as Co-Trustees under the Will of Arthur W. Beaucaire, deceased |
| INSTRUMENT: | 393790 |

16. CO-TRUSTEES' DEED

| | |
|---|---|
| RECORDED: | 06/20/1980 |
| GRANTOR: | United California Bank, a California corporation, and Arlene Joyce Beaucaire, as Co-Trustees under the Will of Arthur W. Beaucaire, deceased; and United California Bank, a California corporation, Jack D. Most and Arlene Joyce Beaucaire, as Co-Trustees under the Will of Maurice F. Joyce, deceased |
| GRANTEE: | Arelene Joyce Beaucaire |
| INSTRUMENT: | 80-596042 |

17. GRANT DEED

| | |
|---|---|
| RECORDED: | 06/20/1980 |
| GRANTOR: | Arelene Joyce Beaucaire |
| GRANTEE: | Robinson Development Company, a California partnership |
| INSTRUMENT: | 80-596043 |

18. GRANT DEED

| | |
|---|---|
| RECORDED: | 06/20/1980 |
| GRANTOR: | Robinson Development Company, a California partnership |
| GRANTEE: | Sully-Miller Contracting Company, a California corporation |
| INSTRUMENT: | 80-596045 |

19. CORPORATION GRANT DEED

| | |
|---|---|
| RECORDED: | 12/30/1988 |
| GRANTOR: | Sully-Miller Contracting Company, a California corporation |
| GRANTEE: | United Rock Products Corporation, a Delaware corporation |
| INSTRUMENT: | 88-2093006 |

## 2. LEASES AND MISCELLANEOUS

1. A search of encumbrances was not part of the scope of work for this report.

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# The NETR Environmental Lien Search Report

**IRWINDALE, CALIFORNIA**

**Wednesday, October 5, 2016**

**Project Number: L16-02222**

2055 East Rio Salado Parkway
Tempe, Arizona 85281

Telephone: 480-967-6752
Fax: 480-966-9422

# ENVIRONMENTAL LIEN REPORT

The NETR Environmental LienSearch Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied property information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' office, registries of deed, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved and description); and
- provide a copy of the deed or cite documents reviewed;

**Thank you for your business**
Please contact NETR at 480-967-6752
with any questions or comments

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# ENVIRONMENTAL LIEN REPORT

The NETR Environmental Lien Search Report is intended to assist in the search for environmental liens filed in land title records.

**TARGET PROPERTY INFORMATION**

**ADDRESS**

**Irwindale, California**

**RESEARCH SOURCE**

Source: Los Angeles County Assessor
Los Angeles County Recorder

**DEED INFORMATION**

Type of Instrument: Corporation Grant Deed

Grantor: Sully-Miller Contracting Company, a California corporation

Grantee: United Rock Products Corporation, a Delaware corporation

Deed Dated: 12/29/1988
Deed Recorded: 12/30/1988
Instrument: 88-2093006

**LEGAL DESCRIPTION**

Those parts of Lots 9, 11, 12, 14, and 15, in the subdivision of Rancho Azusa de Duarte, according to the map or plat thereof, as filed of record in Book 6, Page 80, situated and lying in the City of Irwindale, Los Angeles County, State of California

Assessor's Parcel Number(s): 8531-034-032, 8531-032-010, and 8531-026-019

**ENVIRONMENTAL LIEN**

Environmental Lien: Found ☐ Not Found ☒

**OTHER ACTIVITY AND USE LIMITATIONS (AULs)**

Other AULs: Found ☐ Not Found ☒

**2055 East Rio Salado Parkway, Suite 201**
**Tempe, Arizona 85281**
**Phone: (480) 967-6752**
**Fax Number: (480) 966-9422**
**Web Site: www.netronline.com**

# HISTORICAL CHAIN OF TITLE REPORT

**IRWINDALE, CALIFORNIA**

**Submitted to:**

**LEIGHTON CONSULTING, INC.**
17781 Cowan
Irvine, California 92614

**Attention: Meredith Church**

**Project No. N16-02221**

**Wednesday, October 5, 2016**

**NETR - Real Estate Research & Information** hereby submits the following ASTM historical chain-of-title to the land described below, subject to the leases/miscellaneous shown in Section 2. Title to the estate or interest covered by this report appears to be vested in:

UNITED ROCK PRODUCTS CORPORATION, A DELAWARE CORPORATION

The following is the current property legal description:

Those parts of Lots 9, 11, 12, 14, and 15, in the subdivision of Rancho Azusa de Duarte, according to the map or plat thereof, as filed of record in Book 6, Page 80, situated and lying in the City of Irwindale, Los Angeles County, State of California

Assessor's Parcel Number(s): 8531-034-032, 8531-032-010, and 8531-026-019

## 1. HISTORICAL CHAIN OF TITLE

**Records were searched at the Los Angeles County Assessor's office and the Los Angeles County Recorder's office back to 1940. The following conveyances were found of record.**

### I. Chain 1 - As to Parcel 8531-026-019

1. DEED
   - RECORDED: 12/28/1948
   - GRANTOR: Mary C. Kuppens
   - GRANTEE: Walter C. Kuppens
   - INSTRUMENT: 357

2. DEED
   - RECORDED: 01/25/1951
   - GRANTOR: Walter C. Kuppens
   - GRANTEE: M. F. Joyce and Arthur W. Beaucaire
   - INSTRUMENT: 14097

3. DEED
   - RECORDED: 10/02/1964
   - GRANTOR: M. F. Joyce and Arthur W. Beaucaire
   - GRANTEE: United California Bank for M. F. Joyce and Arthur W. Beaucaire
   - INSTRUMENT: 859271

4. GRANT DEED
   - RECORDED: 06/20/1980
   - GRANTOR: Robinson Development Company, a California partnership
   - GRANTEE: Sully-Miller Contracting Company, a California corporation
   - INSTRUMENT: 80-596045

5. CORPORATION GRANT DEED
   - RECORDED: 12/30/1988
   - GRANTOR: Sully-Miller Contracting Company, a California corporation
   - GRANTEE: United Rock Products Corporation, a Delaware corporation
   - INSTRUMENT: 88-2093006

**II. Chain 2 - As to Parcel 8531-032-010**

6. DEED

| | |
|---|---|
| RECORDED: | 05/14/1956 |
| GRANTOR: | Arrow Rock Company |
| GRANTEE: | M. F. Joyce and Arthur W. Beaucaire |
| INSTRUMENT: | 49046 |

7. DEED

| | |
|---|---|
| RECORDED: | 10/02/1964 |
| GRANTOR: | M. F. Joyce and Arthur W. Beaucaire |
| GRANTEE: | United California Bank for M. F. Joyce and Arthur W. Beaucaire |
| INSTRUMENT: | 859271 |

8. GRANT DEED

| | |
|---|---|
| RECORDED: | 06/20/1980 |
| GRANTOR: | Arelene Joyce Beaucaire |
| GRANTEE: | Robinson Development Company, a California partnership |
| INSTRUMENT: | 80-596043 |

9. GRANT DEED

| | |
|---|---|
| RECORDED: | 06/20/1980 |
| GRANTOR: | Robinson Development Company, a California partnership |
| GRANTEE: | Sully-Miller Contracting Company, a California corporation |
| INSTRUMENT: | 80-596045 |

10. CORPORATION GRANT DEED

| | |
|---|---|
| RECORDED: | 12/30/1988 |
| GRANTOR: | Sully-Miller Contracting Company, a California corporation |
| GRANTEE: | United Rock Products Corporation, a Delaware corporation |
| INSTRUMENT: | 88-2093006 |

**III. Chain 3 - As to Parcel 8531-034-032**

11. DEED

| | |
|---|---|
| RECORDED: | 01/16/1957 |
| GRANTOR: | Arrow Rock Company |
| GRANTEE: | Mae T. Cobb |
| INSTRUMENT: | 6024 |

12. DEED

| | |
|---|---|
| RECORDED: | 02/15/1960 |
| GRANTOR: | Mae T. Cobb |
| GRANTEE: | M. F. Joyce and Arthur W. Beaucaire |
| INSTRUMENT: | 23456 |

13. DEED

| | |
|---|---|
| RECORDED: | 10/02/1964 |
| GRANTOR: | M. F. Joyce and Arthur W. Beaucaire |
| GRANTEE: | United California Bank for M. F. Joyce and Arthur W. Beaucaire |
| INSTRUMENT: | 859271 |

14. GRANT DEED

| | |
|---|---|
| RECORDED: | 06/20/1980 |
| GRANTOR: | Arelene Joyce Beaucaire |
| GRANTEE: | Robinson Development Company, a California partnership |
| INSTRUMENT: | 80-596043 |

15. GRANT DEED

| | |
|---|---|
| RECORDED: | 06/20/1980 |
| GRANTOR: | Robinson Development Company, a California partnership |
| GRANTEE: | Sully-Miller Contracting Company, a California corporation |
| INSTRUMENT: | 80-596045 |

16. CORPORATION GRANT DEED

| | |
|---|---|
| RECORDED: | 12/30/1988 |
| GRANTOR: | Sully-Miller Contracting Company, a California corporation |
| GRANTEE: | United Rock Products Corporation, a Delaware corporation |
| INSTRUMENT: | 88-2093006 |

## 2. LEASES AND MISCELLANEOUS

1. A search of encumbrances was not part of the scope of work for this report.

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# Appendix D

## Interview Forms, Client Provided Documents

# Phase I ESA Users Questionnaire

**Project Name:** United Rock Quarry No. 3 Proposed Sediment Placement Project

**Complete and Correct Address(es) of the Property and APN(s):** 8531-026-019; 8531-034-026; 8531-034-032

1137 Meridian St., Irwindale, 91010; APN: 8531-032-009; 8531-032-010; 8531-033-007;

| **User Company Name:** | **User Name/Title:** |
|---|---|
| LA County Dept. of Public Works | Christopher Stone, Assistant Deputy Director |

**User Phone/Email:** 626.458.6100, cstone@dpw.lacounty.gov

**Interviewee Name and Relationship to Project:**

Ken Barker, United Rock Products Employee

**Site Owner:** United Rock Products

**Reason Phase I is required:**

Potential purchase of real property by the Los Angeles County Flood Control District.

**Type of property:**

Irwindale Mining Pit

**Type of property transaction (e.g., Sale, purchase, exchange):**

Purchase

**Any scope of services beyond the ASTM Practice E 1527:**

No

**All Parties that will rely on the Phase I report:**

LA County Flood Control District, Water Resources Division

**Name and Contact Information for Site Contact:**

Dave Martinez, Dave.Martinez@Sully-Miller.com

**Any special terms or conditions:**

unknown

**Any other pertinent knowledge or experience with the property (e.g., prior reports, documents, correspondence concerning the environmental conditions of the property):**

unknown

**(1). Environmental cleanup liens that are filed or recorded against the site (40 CFR 312.25).**

Did a search of recorded land title records (or judicial records where appropriate identify any environmental liens filed or recorded against the property under federal, tribal, state or local law? ☐ Yes | ☒ No

If Yes, Describe:

**(2). Activity and land use limitations (AULs) that are in place on the site or that have been filed or recorded in a registry (40 CFR 312.26).**

Did a search of recorded land title records (or judicial records where appropriate) identify any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state or local law? ☐ Yes | ☒ No

If Yes, Describe:

**(3). Specialized knowledge or experience of the person seeking to qualify for the Landowners Liability Protections (LLP) (40 CFR 312.28).**

Do you have any specialized knowledge or experience related to the property or the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?
☐ Yes | ☒ No

If Yes, Describe:

**(4). Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 DRF 312.29).**

Does the purchase price being paid for this property reasonably reflect the fair market value of the property?

☒ Yes | ☐ No

If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property? ☐ Yes | ☐ No

If Yes, Describe:

**(5). Commonly known or reasonable ascertainable information about the property (40 CFR 312.30).**

Are you aware of commonly known or *reasonably ascertainable* information about the property that would help the *environmental professional* to identify conditions indicative of releases or threatened releases? For example, as user,

(a.) Do you know the past uses of the property? ☒ Yes | ☐ No

(b.) Do you know of specific chemicals that are present or once were present at the property? ☐ Yes | ☒ No

(c.) Do you know of spills or other chemical releases that have taken place at the property? ☐ Yes | ☒ No

(d.) Do you know of any environmental cleanups that have taken place at the property? ☐ Yes | ☒ No

If Yes, Describe:

**(6). The degree of obviousness of the presence of likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).**

Based on your knowledge and experience related to the *property*, are there any *obvious* indicators that point to the presence or likely presence of contamination at the *property?* ☐ Yes | ☒ No

If Yes, Describe:

Christopher Stone
Signature

10-03-16
Date



Leighton

Leighton

# Phase I ESA Owner/Site Contact Interview Form

**Interviewee Name:** Ken Barker **Title:** Environmental Manager

**Address:** 135 S. State College Blvd # 400 Brea, CA **Phone:** 714 758 9600

**Relationship to Property:** Environmental Manager for the site

**Name of Property Owner:** United Rock Products Corporation

**Address of Property Owner:** 135 S. State College Blvd. Suite 400, Brea, CA 92373

**Site Name:** United Rock Pit 3

**Property Address:** 1137 Meridian Street, Irwindale, California

**Previous Street Names/Numbers:**

**General Business Type/Present Property Use:** Construct Aggregate Mining

**Property Utilization during Ownership:** Construct Aggregate Mining

**Assessor Parcel #:** see bottom pg. 3 **Grant Total Square Footage:** Approx.110 Acres

**Total # of Buildings:** 0 **Date Built:** NA

**Name and Address of Past Owners (include dates of ownership):** Livingston & Graham

1940's 1950's ?

**Past Property Uses (include dates):** Construction Aggregate Mine

**Source of Potable Water Supply (municipal/groundwater wells):** 1 city service for landscape water

**Sewage Disposal (municipal/septic) (provide name of utility):** None

**Means of Heating/Cooling (gas, electric, heating oil, etc.):** None

**Fuel Source for Heating/Air Conditioning (provide name of utility):** None

**Neighboring Property Types (commercial/industrial/residential):** All three

**Current Uses of Adjoining Properties:**

**North:** Residential

**South:** Industrial & Light Industrial

**East:** Residential & Commercial

**West:** Residential & Light Industrial

**ARE THERE NOW, OR HAVE THERE BEEN IN THE PAST, ANY OF THESE ITEMS ONSITE OR ON ADJACENT PROPERTIES:**

| ITEM | YES | NO | UNK | ADJACENT PROPERTY |
|---|---|---|---|---|
| • Hazardous Materials | | ✓ | | UNK |
| • Hazardous Waste | | ✓ | | UNK |
| • MSDS Sheets | | ✓ | | UNK |
| • Underground Storage Tanks (USTs) | | ✓ | | UNK |
| • Aboveground Storage Tanks (ASTs) | | ✓ | | UNK |
| • Vent Pipes, fill pipes, or access ways indicating a fill pipe to an underground storage area | | ✓ | | UNK |
| • Odors | | ✓ | | UNK |
| • Drums | ✓ | | | UNK |
| • Electrical or hydraulic equipment known to contain Polychlorinated Biphenyls (PCBs) | | | ✓ | UNK |
| • Stained soil or surfaces | ✓ | | | UNK |
| • Drains | | ✓ | | UNK |
| • Sumps | | ✓ | | UNK |
| • Clarifier | | ✓ | | UNK |
| • Pits, ponds, or lagoons | | | ✓ | UNK |
| • Stressed vegetation | | ✓ | | UNK |
| • Areas for dumping solid waste (landfill) | | ✓ | | UNK |
| • Wastewater | | ✓ | | UNK |
| • Wells (groundwater, oil, and/or gas) 2 Monitoring wells | ✓ | | | UNK |
| • Septic Systems | | ✓ | | UNK |
| • Fill Material (if fill material is on site, please state source of fill) | ✓ | | | UNK |

| ADDITIONAL QUESTIONS: | YES | NO | UNK | REMARKS |
|---|---|---|---|---|
| Has the Site been used as any of the following: gas station, motor repair facility, commercial printing facility, metal plating, dry cleaners, photo developing laboratory, junkyard, or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility? If so, state which type of facility. | | ✓ | | |
| Are you aware of any Phase I or Phase II environmental site assessments, soil sampling reports, geotechnical or geologic reports, environmental compliance audit reports, environmental permits, registrations for USTs or ASTs, community right-to-know plans, environmental safety plans or reports regarding hazardous waste generation for the Site? | ✓ | | | WDR |
| Do you know of any notices or correspondence from any government agency relating to past or current violations of environmental laws with respect to the Site or relating to environmental liens encumbering the Site? | | ✓ | | |
| Do you know of any pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances or petroleum products in, on or from the Site? | | ✓ | | |
| Do you know of any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products? | | ✓ | | |
| Do you know of any environmental concerns associated with the Site? If so please state in remarks column. | | ✓ | | |
| Do you know of any environmental concerns associated with any adjacent or nearby properties? If so please state in remarks column. | | ✓ | | |

**Additional Comments:**

APN's: 8531-032-010, 8531-026-019, 8531-032-009, 8531-033-007, 8531-034-026

8531-034-032

Preparer presents that to the best of the preparer's knowledge the above statements and facts are true and correct, and to the best of the preparer's actual knowledge no material facts have been suppressed or misstated.

Ken Barker

Signature

September 15, 2016

Date



Leighton

# Appendix E

# EDR® Radius Map with Geocheck

**LACDPW - Irwindale Quarry**
1137 Meridian Street
Duarte, CA 91010

Inquiry Number: 4730719.2s
September 20, 2016

# The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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| | |
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***Thank you for your business.***
Please contact EDR at 1-800-352-0050
with any questions or comments.


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# EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

## TARGET PROPERTY INFORMATION

### ADDRESS

1137 MERIDIAN STREET
DUARTE, CA 91010

### COORDINATES

| | |
|---|---|
| Latitude (North): | 34.1240300 - 34° 7' 26.50'' |
| Longitude (West): | 117.9822610 - 117° 58' 56.13'' |
| Universal Tranverse Mercator: | Zone 11 |
| UTM X (Meters): | 409418.7 |
| UTM Y (Meters): | 3776149.0 |
| Elevation: | 245 ft. above sea level |

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

| | |
|---|---|
| Target Property Map: | 5619056 BALDWIN PARK, CA |
| Version Date: | 2012 |
| Northeast Map: | 5630601 AZUSA, CA |
| Version Date: | 2012 |
| Southwest Map: | 5630799 EL MONTE, CA |
| Version Date: | 2012 |
| Northwest Map: | 5636853 MOUNT WILSON, CA |
| Version Date: | 2012 |

### AERIAL PHOTOGRAPHY IN THIS REPORT

| | |
|---|---|
| Portions of Photo from: | 20140515 |
| Source: | USDA |

## MAPPED SITES SUMMARY

Target Property Address:
1137 MERIDIAN STREET
DUARTE, CA 91010

Click on Map ID to see full detail.

| MAP ID | SITE NAME | ADDRESS | DATABASE ACRONYMS | RELATIVE ELEVATION | DIST (ft. & mi.) DIRECTION |
|---|---|---|---|---|---|
| A1 | UNITED ROCK PRODUCTS | 1137 MERIDIAN STREET | SWF/LF, LDS, ENF | | TP |
| A2 | LIVINGSTON-GRAHAM IR | 1137 MERIDIAN ST. | RGA LF | | TP |
| A3 | UNITED ROCK PIT # 3 | 1137 MERIDIAN HWY. | RGA LF | | TP |
| A4 | LIVINGSTON-GRAHAM IN | 1137 MERIDIAN ST | LOS ANGELES CO. HMS | | TP |
| A5 | IRWINDALE SITE | 1137 MERIDIAN ST | WMUDS/SWAT, WDS | | TP |
| Reg | SAN GABRIEL VALLEY | | AOCONCERN | Same | 4147, 0.785, West |
| 6 | UNITED ROCK PROD. PI | 1245 EAST ARROW HIGH | MINES | Higher | 1 ft. |
| 7 | IRWINDALE IRON & MET | 2401 BUENA VISTA AVE | SWEEPS UST | Higher | 16, 0.003, ESE |
| B8 | AIRCO DUARTE | 2250 BUENA VISTA ST | SWEEPS UST | Higher | 192, 0.036, East |
| 9 | ALPHA II/IRWINDALE | 2432-2536 BATEMAN AV | ENVIROSTOR, VCP | Higher | 236, 0.045, SW |
| 10 | | 2136 CITRUS VIEW AV | EDR Hist Auto | Higher | 257, 0.049, West |
| B11 | SOUTHWEST PRODUCTION | 2240 BUENA VISTA | RCRA-SQG, ENVIROSTOR, LUST, VCP, HIST UST, FINDS,... | Higher | 282, 0.053, East |
| B12 | SOUTHWEST PRODUCTS C | 2240 BUENA VISTA ST | SWEEPS UST, LOS ANGELES CO. HMS | Higher | 282, 0.053, East |
| 13 | WESTERN TEXACO | 700 W EL SUR ST | EDR Hist Auto | Higher | 596, 0.113, West |
| 14 | ALPHA INVESTMENT ASS | 2501-59 BATEMAN | SWF/LF | Higher | 660, 0.125, SSW |
| C15 | IRWINDALE IRON & MET | 2495 BUENA VISTA AVE | SWEEPS UST | Higher | 701, 0.133, South |
| C16 | SA RECYCLING LLC | 2495 BUENA VISTA | SWRCY, NPDES, LA Co. Site Mitigation | Higher | 701, 0.133, South |
| C17 | ALDON CONCRETE PRODU | 2455 BUENA VISTA ST | SLIC, LA Co. Site Mitigation | Higher | 729, 0.138, South |
| D18 | ALPHA INVESTMENT ASS | 2501 BATEMAN | SWF/LF, WMUDS/SWAT | Higher | 773, 0.146, SW |
| D19 | L P D AUTO WRECKING | 845 ALPHA ST | RCRA-SQG, FINDS, HAZNET, ECHO | Higher | 926, 0.175, SW |
| E20 | VERNON PAVING CO | 2600 BUENA VISTA | LUST, HIST UST | Higher | 965, 0.183, South |
| E21 | | 2600 BUENA VISTA ST | AST | Higher | 965, 0.183, South |
| E22 | SULLY MILLER | 2600 BUENA VISTA AVE | RCRA-SQG, FINDS, ECHO | Higher | 965, 0.183, South |
| E23 | VERNON ASPHALT MATER | 2600 S BUENA VISTA S | SWEEPS UST | Higher | 965, 0.183, South |
| E24 | VERNON ASPHALT MATER | 2600 AVENIDA BARBOSA | LUST, EMI, LOS ANGELES CO. HMS | Higher | 965, 0.183, South |
| E25 | VERNON ASPHALT MATER | 2600 BUENA VISTA | EMI, ENF, HIST CORTESE, WDS | Higher | 965, 0.183, South |
| E26 | UNITED READY MIXED C | 2620 BUENA VISTA | UST | Higher | 976, 0.185, South |
| E27 | UNITED READY MIX | 2620 BUENA VISTA ST | SWEEPS UST, HIST UST, EMI, LA Co. Site Mitigation | Higher | 976, 0.185, South |
| E28 | | 2620 BUENA VISTA ST | AST | Higher | 976, 0.185, South |
| 29 | ARROW AUTO SALVAGE | 797 ALPHA ST | RCRA NonGen / NLR, FINDS, ECHO | Higher | 1117, 0.212, SW |
| 30 | UNITED ROCK PRODUCTS | | US MINES | Higher | 1196, 0.227, SSE |
| F31 | UNITED ROCK PRODUCTS | 1245 ARROW HWY | SWF/LF, LDS, ENF, NPDES | Higher | 1853, 0.351, South |
| F32 | TBD | 1245 E ARROW HWY | SWF/LF, LUST, HIST UST, NPDES, LA Co. Site... | Higher | 1853, 0.351, South |
| 33 | CHEVRON #9-4104 | 1815 BUENA VISTA ST | LUST, HIST CORTESE | Higher | 2051, 0.388, NNE |
| 34 | MEAD WRECKING CO. #3 | 1215 DUARTE ROAD | SWF/LF, WMUDS/SWAT | Higher | 2138, 0.405, NNE |
| 35 | PURSOIL INC | 1810 SHAMROCK AVE | LUST, HIST CORTESE | Higher | 2158, 0.409, NW |
| 36 | SANTA FE DAM | | ENVIROSTOR | Higher | 2338, 0.443, SE |
| 37 | CONRAC CORPORATION | 1724 S. MOUNTAIN AVE | SLIC, HIST UST, LOS ANGELES CO. HMS, WIP | Higher | 2491, 0.472, NNW |
| 38 | GRIFFITH COMPANY | 1380 ARROW HWY | LUST, HIST CORTESE | Higher | 2561, 0.485, SSE |

## MAPPED SITES SUMMARY

Target Property Address:
1137 MERIDIAN STREET
DUARTE, CA 91010

Click on Map ID to see full detail.

| MAP ID | SITE NAME | ADDRESS | DATABASE ACRONYMS | RELATIVE ELEVATION | DIST (ft. & mi.) DIRECTION |
|---|---|---|---|---|---|
| 39 | KENNEDY CO | 1600 SOUTH SHAMROCK | HWP | Higher | 3208, 0.608, NW |
| G40 | AVERY DENNISON | 1620 CALIFORNIA AVE | RCRA-SQG, LUST, SWEEPS UST, HIST UST, CA FID UST,... | Higher | 3496, 0.662, NW |
| G41 | AVERY | 1616 S.CALIF. AVE. | Notify 65 | Higher | 3496, 0.662, NW |
| 42 | USF DISTRIBUTION SER | 600 LIVE OAK AVE | ENVIROSTOR, LOS ANGELES CO. HMS, NPDES | Higher | 3669, 0.695, SW |
| 43 | MERCURY RECOVERY SER | 2021 S MYRTLE | HWP | Higher | 4055, 0.768, WNW |
| 44 | CHEM ARROW CORP. | 13643 LIVE OAK | ENF, Notify 65 | Higher | 4218, 0.799, SSE |
| 45 | GE AVIATION SYSTEMS | 1700 BUSINESS CENTER | ENVIROSTOR, VCP, NPDES | Higher | 4263, 0.807, NE |
| H46 | ABCO METAL FINISHING | 1617-1621 S. MYRTLE | Notify 65 | Higher | 4672, 0.885, WNW |
| H47 | ABCO METAL FINISHING | 1617-1621 SOUTH MYRT | ENVIROSTOR | Higher | 4672, 0.885, WNW |
| 48 | SAN GABRIEL RIVER IM | | ENVIROSTOR | Higher | 4924, 0.933, SSE |
| 49 | WESTERN EMULSION CO. | 284 LIVE OAK | Notify 65 | Higher | 5099, 0.966, SW |

# EXECUTIVE SUMMARY

**TARGET PROPERTY SEARCH RESULTS**

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

| Site | Database(s) | EPA ID |
|---|---|---|
| UNITED ROCK PRODUCTS<br>1137 MERIDIAN STREET<br>IRWINDALE, CA 91706 | SWF/LF<br>Database: LOS ANGELES CO. LF, Date of Government Version: 04/18/2016<br>Database: SWF/LF (SWIS), Date of Government Version: 05/16/2016<br>Facility ID: 19-AA-0020<br>Site ID: 2146<br>Status: Closed<br>Operational Status: Closed<br>Regulation Status: Exempt<br>LDS<br>Global Id: L10001370669<br>Status: Open - Operating<br>ENF<br>Status: Historical<br>Status: Active<br>Facility Id: 269739 | N/A |
| LIVINGSTON-GRAHAM IR<br>1137 MERIDIAN ST.<br>IRWINDALE, CA | RGA LF<br>Facility ID: 19-AA-0020 | N/A |
| UNITED ROCK PIT # 3<br>1137 MERIDIAN HWY.<br>IRWINDALE, CA | RGA LF<br>Facility ID: 19-AA-0020 | N/A |
| LIVINGSTON-GRAHAM IN<br>1137 MERIDIAN ST<br>DUARTE, CA 91010 | LOS ANGELES CO. HMS<br>Facility ID: 000733-I00740 | N/A |
| IRWINDALE SITE<br>1137 MERIDIAN ST<br>IRWINDALE, CA 91706 | WMUDS/SWAT<br>WDS<br>Facility Status: A<br>Facility Id: 4B190319003 | N/A |

# EXECUTIVE SUMMARY

**DATABASES WITH NO MAPPED SITES**

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

**STANDARD ENVIRONMENTAL RECORDS**

***Federal NPL site list***

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

***Federal Delisted NPL site list***

Delisted NPL ---------- National Priority List Deletions

***Federal CERCLIS list***

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

***Federal RCRA CORRACTS facilities list***

CORRACTS ---------- Corrective Action Report

***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

***Federal RCRA generators list***

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

***Federal institutional controls / engineering controls registries***

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

***Federal ERNS list***

ERNS ---------- Emergency Response Notification System

***State- and tribal - equivalent NPL***

RESPONSE ---------- State Response Sites

***State and tribal leaking storage tank lists***

INDIAN LUST ---- Leaking Underground Storage Tanks on Indian Land

***State and tribal registered storage tank lists***

FEMA UST ---- Underground Storage Tank Listing
INDIAN UST ---- Underground Storage Tanks on Indian Land

***State and tribal voluntary cleanup sites***

INDIAN VCP ---- Voluntary Cleanup Priority Listing

***State and tribal Brownfields sites***

BROWNFIELDS ---- Considered Brownfieds Sites Listing

**ADDITIONAL ENVIRONMENTAL RECORDS**

***Local Brownfield lists***

US BROWNFIELDS ---- A Listing of Brownfields Sites

***Local Lists of Landfill / Solid Waste Disposal Sites***

HAULERS ---- Registered Waste Tire Haulers Listing
INDIAN ODI ---- Report on the Status of Open Dumps on Indian Lands
ODI ---- Open Dump Inventory
DEBRIS REGION 9 ---- Torres Martinez Reservation Illegal Dump Site Locations

***Local Lists of Hazardous waste / Contaminated Sites***

US HIST CDL ---- Delisted National Clandestine Laboratory Register
HIST Cal-Sites ---- Historical Calsites Database
SCH ---- School Property Evaluation Program
CDL ---- Clandestine Drug Labs
Toxic Pits ---- Toxic Pits Cleanup Act Sites
US CDL ---- National Clandestine Laboratory Register

***Local Lists of Registered Storage Tanks***

CA FID UST ---- Facility Inventory Database

***Local Land Records***

LIENS ---- Environmental Liens Listing
LIENS 2 ---- CERCLA Lien Information
DEED ---- Deed Restriction Listing

***Records of Emergency Release Reports***

HMIRS ---- Hazardous Materials Information Reporting System
CHMIRS ---- California Hazardous Material Incident Report System

| | |
|---|---|
| MCS | Military Cleanup Sites Listing |
| SPILLS 90 | SPILLS 90 data from FirstSearch |

***Other Ascertainable Records***

| | |
|---|---|
| FUDS | Formerly Used Defense Sites |
| DOD | Department of Defense Sites |
| SCRD DRYCLEANERS | State Coalition for Remediation of Drycleaners Listing |
| US FIN ASSUR | Financial Assurance Information |
| EPA WATCH LIST | EPA WATCH LIST |
| 2020 COR ACTION | 2020 Corrective Action Program List |
| TSCA | Toxic Substances Control Act |
| TRIS | Toxic Chemical Release Inventory System |
| SSTS | Section 7 Tracking Systems |
| ROD | Records Of Decision |
| RMP | Risk Management Plans |
| RAATS | RCRA Administrative Action Tracking System |
| PRP | Potentially Responsible Parties |
| PADS | PCB Activity Database System |
| ICIS | Integrated Compliance Information System |
| FTTS | FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) |
| MLTS | Material Licensing Tracking System |
| COAL ASH DOE | Steam-Electric Plant Operation Data |
| COAL ASH EPA | Coal Combustion Residues Surface Impoundments List |
| PCB TRANSFORMER | PCB Transformer Registration Database |
| RADINFO | Radiation Information Database |
| HIST FTTS | FIFRA/TSCA Tracking System Administrative Case Listing |
| DOT OPS | Incident and Accident Data |
| CONSENT | Superfund (CERCLA) Consent Decrees |
| INDIAN RESERV | Indian Reservations |
| FUSRAP | Formerly Utilized Sites Remedial Action Program |
| UMTRA | Uranium Mill Tailings Sites |
| LEAD SMELTERS | Lead Smelter Sites |
| US AIRS | Aerometric Information Retrieval System Facility Subsystem |
| FINDS | Facility Index System/Facility Registry System |
| UXO | Unexploded Ordnance Sites |
| DOCKET HWC | Hazardous Waste Compliance Docket Listing |
| CA BOND EXP. PLAN | Bond Expenditure Plan |
| Cortese | "Cortese" Hazardous Waste & Substances Sites List |
| CUPA Listings | CUPA Resources List |
| DRYCLEANERS | Cleaner Facilities |
| EMI | Emissions Inventory Data |
| Financial Assurance | Financial Assurance Information Listing |
| HAZNET | Facility and Manifest Data |
| HWT | Registered Hazardous Waste Transporter Database |
| MWMP | Medical Waste Management Program Listing |
| NPDES | NPDES Permits Listing |
| PEST LIC | Pesticide Regulation Licenses Listing |
| PROC | Certified Processors Database |
| LA Co. Site Mitigation | Site Mitigation List |
| UIC | UIC Listing |
| WASTEWATER PITS | Oil Wastewater Pits Listing |
| WIP | Well Investigation Program Case List |
| ICE | ICE |

# EXECUTIVE SUMMARY

ECHO---------- Enforcement & Compliance History Information
FUELS PROGRAM---------- EPA Fuels Program Registered Listing

**EDR HIGH RISK HISTORICAL RECORDS**

***EDR Exclusive Records***

EDR MGP---------- EDR Proprietary Manufactured Gas Plants
EDR Hist Cleaner---------- EDR Exclusive Historic Dry Cleaners

**EDR RECOVERED GOVERNMENT ARCHIVES**

***Exclusive Recovered Govt. Archives***

RGA LUST---------- Recovered Government Archive Leaking Underground Storage Tank

**SURROUNDING SITES: SEARCH RESULTS**

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

**STANDARD ENVIRONMENTAL RECORDS**

***Federal RCRA generators list***

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 06/21/2016 has revealed that there are 3 RCRA-SQG sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***SOUTHWEST PRODUCTION*** | ***2240 BUENA VISTA*** | ***E 0 - 1/8 (0.053 mi.)*** | ***B11*** | ***23*** |
| ***L P D AUTO WRECKING*** | ***845 ALPHA ST*** | ***SW 1/8 - 1/4 (0.175 mi.)*** | ***D19*** | ***40*** |
| ***SULLY MILLER*** | ***2600 BUENA VISTA AVE*** | ***S 1/8 - 1/4 (0.183 mi.)*** | ***E22*** | ***44*** |

***State- and tribal - equivalent CERCLIS***

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 05/02/2016 has revealed that there are 7 ENVIROSTOR sites within approximately 1 mile of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***ALPHA II/IRWINDALE***<br>Facility Id: 19750076<br>Status: No Further Action | ***2432-2536 BATEMAN AV*** | ***SW 0 - 1/8 (0.045 mi.)*** | ***9*** | ***19*** |
| ***SOUTHWEST PRODUCTION***<br>Facility Id: 19340773<br>Status: No Further Action | ***2240 BUENA VISTA*** | ***E 0 - 1/8 (0.053 mi.)*** | ***B11*** | ***23*** |
| SANTA FE DAM<br>Facility Id: 80000471<br>Status: Inactive - Needs Evaluation | | SE 1/4 - 1/2 (0.443 mi.) | 36 | 86 |
| ***USF DISTRIBUTION SER***<br>Facility Id: 19490215<br>Status: Refer: RWQCB | ***600 LIVE OAK AVE*** | ***SW 1/2 - 1 (0.695 mi.)*** | ***42*** | ***110*** |
| ***GE AVIATION SYSTEMS***<br>Facility Id: 71002242<br>Status: No Further Action | ***1700 BUSINESS CENTER*** | ***NE 1/2 - 1 (0.807 mi.)*** | ***45*** | ***117*** |
| ABCO METAL FINISHING<br>Facility Id: 19340734<br>Status: Refer: Other Agency | 1617-1621 SOUTH MYRT | WNW 1/2 - 1 (0.885 mi.) | H47 | 122 |
| SAN GABRIEL RIVER IM<br>Facility Id: 80000462<br>Status: Inactive - Needs Evaluation | | SSE 1/2 - 1 (0.933 mi.) | 48 | 123 |

***State and tribal landfill and/or solid waste disposal site lists***

SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Integrated Waste Management Board's Solid Waste Information System (SWIS) database.

A review of the SWF/LF list, as provided by EDR, has revealed that there are 5 SWF/LF sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ALPHA INVESTMENT ASS<br>Database: SWF/LF (SWIS), Date of Government Version: 05/16/2016 | 2501-59 BATEMAN | SSW 0 - 1/8 (0.125 mi.) | 14 | 33 |

Facility ID: 19-AA-0028
Operational Status: Closed
Regulation Status: Pre-regulations

***ALPHA INVESTMENT ASS*** ***2501 BATEMAN*** ***SW 1/8 - 1/4 (0.146 mi.)*** ***D18*** ***38***
Database: LOS ANGELES CO. LF, Date of Government Version: 04/18/2016
Site ID: 1871
Status: Closed

***UNITED ROCK PRODUCTS*** ***1245 ARROW HWY*** ***S 1/4 - 1/2 (0.351 mi.)*** ***F31*** ***67***
Database: LOS ANGELES CO. LF, Date of Government Version: 04/18/2016
Site ID: 567
Site ID: 1264
Status: Active
Status: Closed

***TBD*** ***1245 E ARROW HWY*** ***S 1/4 - 1/2 (0.351 mi.)*** ***F32*** ***74***
Database: SWF/LF (SWIS), Date of Government Version: 05/16/2016
Facility ID: 19-AA-0046
Operational Status: Active
Regulation Status: Notification

***MEAD WRECKING CO. #3*** ***1215 DUARTE ROAD*** ***NNE 1/4 - 1/2 (0.405 mi.)*** ***34*** ***82***
Database: LOS ANGELES CO. LF, Date of Government Version: 04/18/2016
Site ID: 1985
Status: Closed

***State and tribal leaking storage tank lists***

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, has revealed that there are 7 LUST sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***SOUTHWEST PRODUCTION*** | ***2240 BUENA VISTA*** | ***E 0 - 1/8 (0.053 mi.)*** | ***B11*** | ***23*** |
| Database: LUST, Date of Government Version: 06/13/2016<br>Database: LUST REG 4, Date of Government Version: 09/07/2004<br>Status: Completed - Case Closed<br>Facility Id: R-03582<br>Status: Case Closed<br>Global Id: T0603704618<br>Global ID: T0603704618 | | | | |
| ***VERNON PAVING CO*** | ***2600 BUENA VISTA*** | ***S 1/8 - 1/4 (0.183 mi.)*** | ***E20*** | ***41*** |
| Database: LUST, Date of Government Version: 06/13/2016<br>Status: Completed - Case Closed<br>Global Id: T0603704474 | | | | |
| ***VERNON ASPHALT MATER*** | ***2600 AVENIDA BARBOSA*** | ***S 1/8 - 1/4 (0.183 mi.)*** | ***E24*** | ***47*** |
| Database: LUST REG 4, Date of Government Version: 09/07/2004<br>Facility Id: I-21368<br>Status: Case Closed<br>Global ID: T0603704474 | | | | |
| ***TBD*** | ***1245 E ARROW HWY*** | ***S 1/4 - 1/2 (0.351 mi.)*** | ***F32*** | ***74*** |
| Database: LUST, Date of Government Version: 06/13/2016 | | | | |

Status: Open - Eligible for Closure
Global Id: T0603717924

***CHEVRON #9-4104*** ***1815 BUENA VISTA ST*** ***NNE 1/4 - 1/2 (0.388 mi.)*** ***33*** ***79***
Database: LUST, Date of Government Version: 06/13/2016
Database: LUST REG 4, Date of Government Version: 09/07/2004
Status: Completed - Case Closed
Facility Id: I-10657
Status: Case Closed
Global Id: T0603703645
Global ID: T0603703645

***PURSOIL INC*** ***1810 SHAMROCK AVE*** ***NW 1/4 - 1/2 (0.409 mi.)*** ***35*** ***84***
Database: LUST, Date of Government Version: 06/13/2016
Database: LUST REG 4, Date of Government Version: 09/07/2004
Status: Completed - Case Closed
Facility Id: R-15821
Status: Case Closed
Global Id: T0603705267
Global ID: T0603705267

***GRIFFITH COMPANY*** ***1380 ARROW HWY*** ***SSE 1/4 - 1/2 (0.485 mi.)*** ***38*** ***88***
Database: LUST, Date of Government Version: 06/13/2016
Database: LUST REG 4, Date of Government Version: 09/07/2004
Status: Completed - Case Closed
Facility Id: I-13024
Status: Case Closed
Global Id: T0603704025
Global ID: T0603704025

SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the SLIC list, as provided by EDR, has revealed that there are 2 SLIC sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***ALDON CONCRETE PRODU*** | ***2455 BUENA VISTA ST*** | ***S 1/8 - 1/4 (0.138 mi.)*** | ***C17*** | ***37*** |
| Database: SLIC, Date of Government Version: 06/13/2016<br>Database: SLIC REG 4, Date of Government Version: 11/17/2004<br>Facility Status: Open - Inactive<br>Facility Status: Site Assessment<br>Global Id: SLT4L5071828 | | | | |
| ***CONRAC CORPORATION*** | ***1724 S. MOUNTAIN AVE*** | ***NNW 1/4 - 1/2 (0.472 mi.)*** | ***37*** | ***87*** |
| Database: SLIC, Date of Government Version: 06/13/2016<br>Facility Status: Open - Inactive<br>Global Id: SL603798694 | | | | |

***State and tribal registered storage tank lists***

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there is 1 UST site within

approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| UNITED READY MIXED C<br>Database: UST, Date of Government Version: 06/13/2016<br>Facility Id: 32454 | 2620 BUENA VISTA | S 1/8 - 1/4 (0.185 mi.) | E26 | 57 |

AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the AST list, as provided by EDR, and dated 07/06/2016 has revealed that there are 2 AST sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| Not reported | 2600 BUENA VISTA ST | S 1/8 - 1/4 (0.183 mi.) | E21 | 44 |
| Not reported | 2620 BUENA VISTA ST | S 1/8 - 1/4 (0.185 mi.) | E28 | 59 |

***State and tribal voluntary cleanup sites***

VCP: Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

A review of the VCP list, as provided by EDR, and dated 05/02/2016 has revealed that there are 2 VCP sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***ALPHA II/IRWINDALE***<br>Status: No Further Action<br>Facility Id: 19750076 | ***2432-2536 BATEMAN AV*** | ***SW 0 - 1/8 (0.045 mi.)*** | ***9*** | ***19*** |
| ***SOUTHWEST PRODUCTION***<br>Status: No Further Action<br>Facility Id: 19340773 | ***2240 BUENA VISTA*** | ***E 0 - 1/8 (0.053 mi.)*** | ***B11*** | ***23*** |

**ADDITIONAL ENVIRONMENTAL RECORDS**

***Local Lists of Landfill / Solid Waste Disposal Sites***

WMUDS/SWAT: The Waste Management Unit Database System is used for program tracking and inventory of waste management units. The source is the State Water Resources Control Board.

A review of the WMUDS/SWAT list, as provided by EDR, and dated 04/01/2000 has revealed that there are 2 WMUDS/SWAT sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***ALPHA INVESTMENT ASS*** | ***2501 BATEMAN*** | ***SW 1/8 - 1/4 (0.146 mi.)*** | ***D18*** | ***38*** |
| ***MEAD WRECKING CO. #3*** | ***1215 DUARTE ROAD*** | ***NNE 1/4 - 1/2 (0.405 mi.)*** | ***34*** | ***82*** |

SWRCY: A listing of recycling facilities in California.

A review of the SWRCY list, as provided by EDR, and dated 06/13/2016 has revealed that there is 1 SWRCY site within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***SA RECYCLING LLC*** Cert Id: RC14410 | ***2495 BUENA VISTA*** | ***S 1/8 - 1/4 (0.133 mi.)*** | ***C16*** | ***34*** |

***Local Lists of Hazardous waste / Contaminated Sites***

AOCONCERN: San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

A review of the AOCONCERN list, as provided by EDR, and dated 03/30/2009 has revealed that there is 1 AOCONCERN site within approximately 1 mile of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| SAN GABRIEL VALLEY | | W 1/2 - 1 (0.785 mi.) | 0 | 17 |

***Local Lists of Registered Storage Tanks***

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 6 SWEEPS UST sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| IRWINDALE IRON & MET<br>Status: A<br>Tank Status: A<br>Comp Number: 13384 | 2401 BUENA VISTA AVE | ESE 0 - 1/8 (0.003 mi.) | 7 | 18 |
| AIRCO DUARTE<br>Status: A<br>Tank Status: A<br>Comp Number: 9566 | 2250 BUENA VISTA ST | E 0 - 1/8 (0.036 mi.) | B8 | 18 |
| ***SOUTHWEST PRODUCTS C***<br>Comp Number: 3582 | ***2240 BUENA VISTA ST*** | ***E 0 - 1/8 (0.053 mi.)*** | ***B12*** | ***31*** |
| IRWINDALE IRON & MET<br>Status: A<br>Comp Number: 14207 | 2495 BUENA VISTA AVE | S 1/8 - 1/4 (0.133 mi.) | C15 | 33 |
| VERNON ASPHALT MATER<br>Status: A<br>Tank Status: A<br>Comp Number: 2904 | 2600 S BUENA VISTA S | S 1/8 - 1/4 (0.183 mi.) | E23 | 46 |
| ***UNITED READY MIX*** | ***2620 BUENA VISTA ST*** | ***S 1/8 - 1/4 (0.185 mi.)*** | ***E27*** | ***57*** |

Status: A
Tank Status: A
Comp Number: 2906

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 3 HIST UST sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***SOUTHWEST PRODUCTION***<br>Facility Id: 00000008102 | ***2240 BUENA VISTA*** | ***E 0 - 1/8 (0.053 mi.)*** | ***B11*** | ***23*** |
| ***VERNON PAVING CO***<br>Facility Id: 00000003497<br>Facility Id: 00000003499 | ***2600 BUENA VISTA*** | ***S 1/8 - 1/4 (0.183 mi.)*** | ***E20*** | ***41*** |
| ***UNITED READY MIX***<br>Facility Id: 00000020472 | ***2620 BUENA VISTA ST*** | ***S 1/8 - 1/4 (0.185 mi.)*** | ***E27*** | ***57*** |

***Other Ascertainable Records***

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 06/21/2016 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***ARROW AUTO SALVAGE*** | ***797 ALPHA ST*** | ***SW 1/8 - 1/4 (0.212 mi.)*** | ***29*** | ***60*** |

US MINES: Mines Master Index File. The source of this database is the Dept. of Labor, Mine Safety and Health Administration.

A review of the US MINES list, as provided by EDR, has revealed that there is 1 US MINES site within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| UNITED ROCK PRODUCTS<br>Database: US MINES, Date of Government Version: 02/09/2016 | | SSE 1/8 - 1/4 (0.227 mi.) | 30 | 61 |

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 5 HIST CORTESE sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***SOUTHWEST PRODUCTION*** Reg Id: R-03582 | ***2240 BUENA VISTA*** | ***E 0 - 1/8 (0.053 mi.)*** | ***B11*** | ***23*** |
| ***VERNON ASPHALT MATER*** Reg Id: I-21368 | ***2600 BUENA VISTA*** | ***S 1/8 - 1/4 (0.183 mi.)*** | ***E25*** | ***52*** |
| ***CHEVRON #9-4104*** Reg Id: I-10657 | ***1815 BUENA VISTA ST*** | ***NNE 1/4 - 1/2 (0.388 mi.)*** | ***33*** | ***79*** |
| ***PURSOIL INC*** Reg Id: R-15821 | ***1810 SHAMROCK AVE*** | ***NW 1/4 - 1/2 (0.409 mi.)*** | ***35*** | ***84*** |
| ***GRIFFITH COMPANY*** Reg Id: I-13024 | ***1380 ARROW HWY*** | ***SSE 1/4 - 1/2 (0.485 mi.)*** | ***38*** | ***88*** |

HWP: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

A review of the HWP list, as provided by EDR, and dated 05/23/2016 has revealed that there are 2 HWP sites within approximately 1 mile of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| KENNEDY CO<br>EPA Id: CAD000062729<br>Cleanup Status: CLOSED | 1600 SOUTH SHAMROCK | NW 1/2 - 1 (0.608 mi.) | 39 | 91 |
| MERCURY RECOVERY SER<br>EPA Id: CAL000043715<br>Cleanup Status: CLOSED | 2021 S MYRTLE | WNW 1/2 - 1 (0.768 mi.) | 43 | 114 |

MINES: A listing of mine site locations from the Office of Mine Reclamation.

A review of the MINES list, as provided by EDR, and dated 06/13/2016 has revealed that there is 1 MINES site within approximately 0.001 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| UNITED ROCK PROD. PI | 1245 EAST ARROW HIGH | 0 - 1/8 (0.000 mi.) | 6 | 17 |

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 09/10/2015 has revealed that there are 5 Notify 65 sites within approximately 1 mile of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***AVERY DENNISON*** | ***1620 CALIFORNIA AVE*** | ***NW 1/2 - 1 (0.662 mi.)*** | ***G40*** | ***92*** |
| AVERY | 1616 S.CALIF. AVE. | NW 1/2 - 1 (0.662 mi.) | G41 | 110 |
| ***CHEM ARROW CORP.*** | ***13643 LIVE OAK*** | ***SSE 1/2 - 1 (0.799 mi.)*** | ***44*** | ***115*** |
| ABCO METAL FINISHING | 1617-1621 S. MYRTLE | WNW 1/2 - 1 (0.885 mi.) | H46 | 122 |
| WESTERN EMULSION CO. | 284 LIVE OAK | SW 1/2 - 1 (0.966 mi.) | 49 | 124 |

**EDR HIGH RISK HISTORICAL RECORDS**

***EDR Exclusive Records***

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 2 EDR Hist Auto sites within approximately 0.125 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| Not reported | 2136 CITRUS VIEW AV | W 0 - 1/8 (0.049 mi.) | 10 | 23 |
| WESTERN TEXACO | 700 W EL SUR ST | W 0 - 1/8 (0.113 mi.) | 13 | 32 |

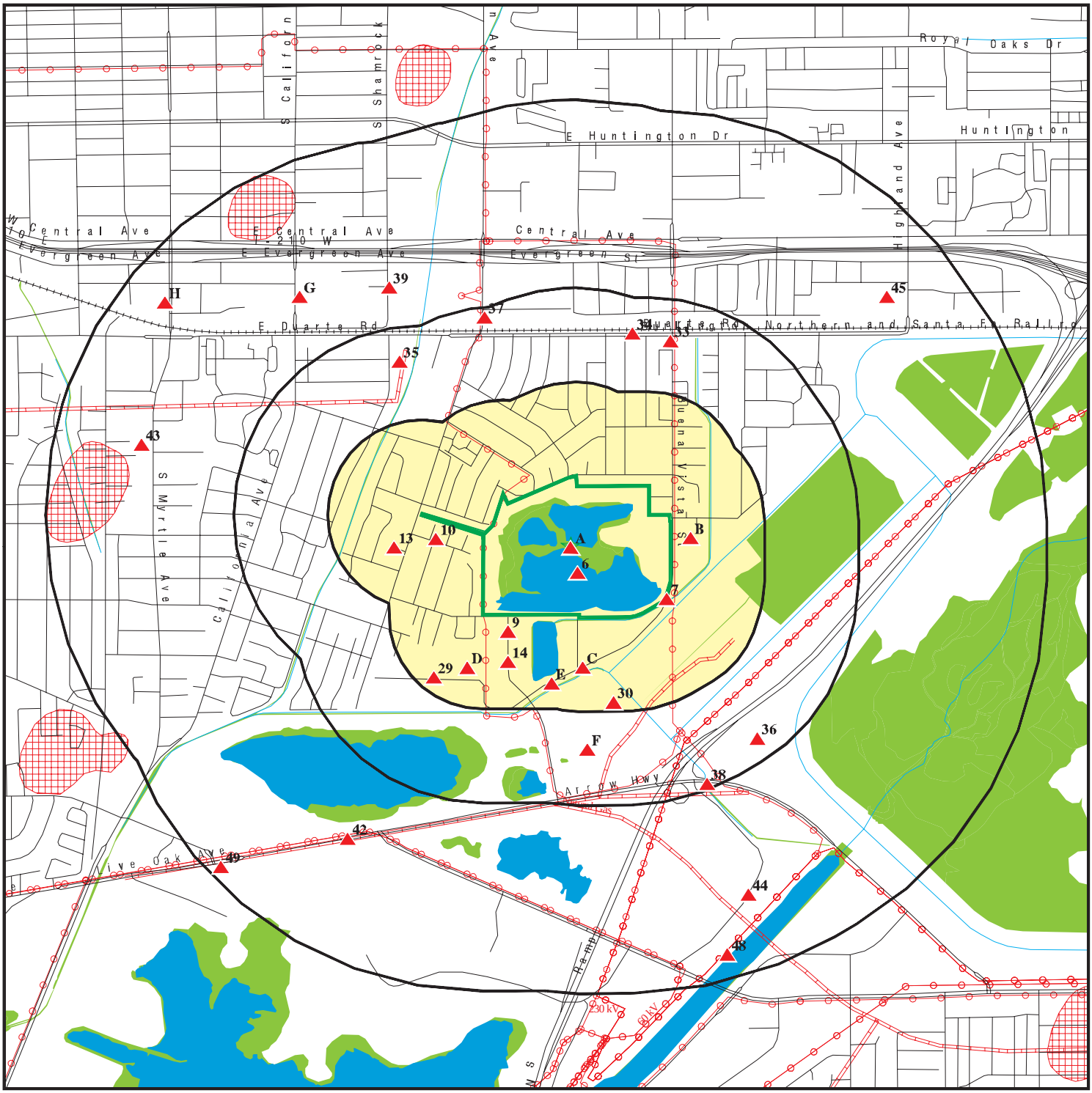
Database: EDR Hist Auto, Date of Government Version: 02/20/2007

# EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

| Site Name | Database(s) |
|---|---|
| VALLEY PARK CORP DUMP | SWF/LF |
| THE PARKS AT MONROVIA STATION SQUA | ENVIROSTOR, VCP |

# OVERVIEW MAP - 4730719.2S




Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

Pipelines

100-year flood zone

500-year flood zone

National Wetland Inventory

State Wetlands

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

| | | | |
|---|---|---|---|
| SITE NAME: | LACDPW - Irwindale Quarry | CLIENT: | Leighton Consulting |
| ADDRESS: | 1137 Meridian Street<br>Duarte CA 91010 | CONTACT: | Meredith Church |
| | | INQUIRY #: | 4730719.2s |
| LAT/LONG: | 34.12403 / 117.982261 | DATE: | September 20, 2016 8:38 am |

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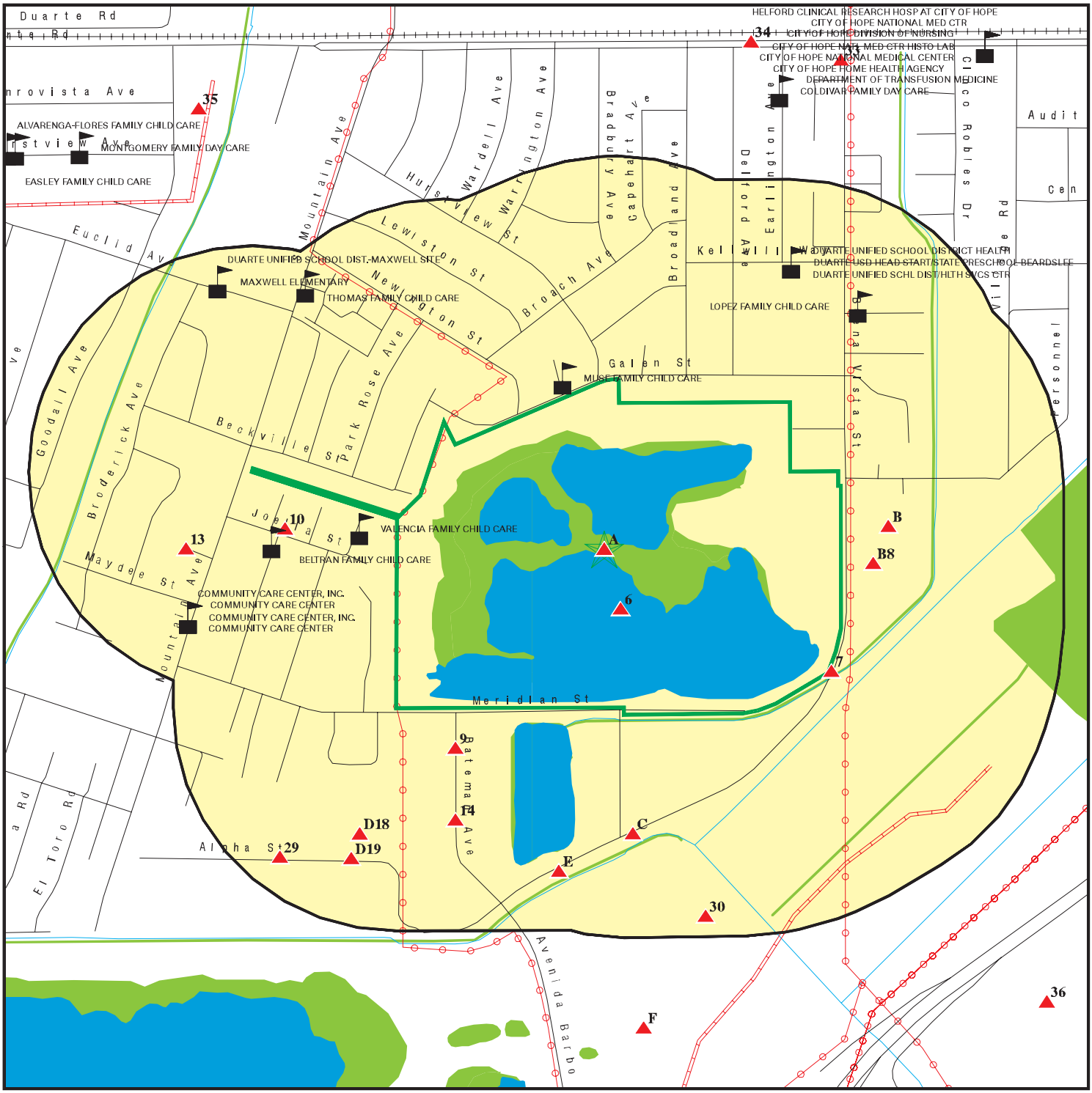
# DETAIL MAP - 4730719.2S




- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

| | | | |
|---|---|---|---|
| SITE NAME: | LACDPW - Irwindale Quarry | CLIENT: | Leighton Consulting |
| ADDRESS: | 1137 Meridian Street<br>Duarte CA 91010 | CONTACT: | Meredith Church |
| LAT/LONG: | 34.12403 / 117.982261 | INQUIRY #: | 4730719.2s |
| | | DATE: | September 20, 2016 8:39 am |

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# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| **STANDARD ENVIRONMENTAL RECORDS** | | | | | | | | |
| ***Federal NPL site list*** | | | | | | | | |
| NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| Proposed NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| NPL LIENS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ***Federal Delisted NPL site list*** | | | | | | | | |
| Delisted NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Federal CERCLIS list*** | | | | | | | | |
| FEDERAL FACILITY | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| SEMS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Federal CERCLIS NFRAP site list*** | | | | | | | | |
| SEMS-ARCHIVE | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Federal RCRA CORRACTS facilities list*** | | | | | | | | |
| CORRACTS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Federal RCRA non-CORRACTS TSD facilities list*** | | | | | | | | |
| RCRA-TSDF | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Federal RCRA generators list*** | | | | | | | | |
| RCRA-LQG | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| RCRA-SQG | 0.250 | | 1 | 2 | NR | NR | NR | 3 |
| RCRA-CESQG | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| ***Federal institutional controls / engineering controls registries*** | | | | | | | | |
| LUCIS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| US ENG CONTROLS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| US INST CONTROL | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Federal ERNS list*** | | | | | | | | |
| ERNS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ***State- and tribal - equivalent NPL*** | | | | | | | | |
| RESPONSE | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***State- and tribal - equivalent CERCLIS*** | | | | | | | | |
| ENVIROSTOR | 1.000 | | 2 | 0 | 1 | 4 | NR | 7 |
| ***State and tribal landfill and/or solid waste disposal site lists*** | | | | | | | | |
| SWF/LF | 0.500 | 1 | 1 | 1 | 3 | NR | NR | 6 |
| ***State and tribal leaking storage tank lists*** | | | | | | | | |
| LUST | 0.500 | | 1 | 2 | 4 | NR | NR | 7 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| INDIAN LUST | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| SLIC | 0.500 | | 0 | 1 | 1 | NR | NR | 2 |
| ***State and tribal registered storage tank lists*** | | | | | | | | |
| FEMA UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| UST | 0.250 | | 0 | 1 | NR | NR | NR | 1 |
| AST | 0.250 | | 0 | 2 | NR | NR | NR | 2 |
| INDIAN UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| ***State and tribal voluntary cleanup sites*** | | | | | | | | |
| VCP | 0.500 | | 2 | 0 | 0 | NR | NR | 2 |
| INDIAN VCP | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***State and tribal Brownfields sites*** | | | | | | | | |
| BROWNFIELDS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| **ADDITIONAL ENVIRONMENTAL RECORDS** | | | | | | | | |
| ***Local Brownfield lists*** | | | | | | | | |
| US BROWNFIELDS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Local Lists of Landfill / Solid Waste Disposal Sites*** | | | | | | | | |
| WMUDS/SWAT | 0.500 | 1 | 0 | 1 | 1 | NR | NR | 3 |
| SWRCY | 0.500 | | 0 | 1 | 0 | NR | NR | 1 |
| HAULERS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| INDIAN ODI | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ODI | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| DEBRIS REGION 9 | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Local Lists of Hazardous waste / Contaminated Sites*** | | | | | | | | |
| US HIST CDL | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| AOCONCERN | 1.000 | | 0 | 0 | 0 | 1 | NR | 1 |
| HIST Cal-Sites | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| SCH | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| CDL | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| Toxic Pits | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| US CDL | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ***Local Lists of Registered Storage Tanks*** | | | | | | | | |
| SWEEPS UST | 0.250 | | 3 | 3 | NR | NR | NR | 6 |
| HIST UST | 0.250 | | 1 | 2 | NR | NR | NR | 3 |
| CA FID UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| ***Local Land Records*** | | | | | | | | |
| LIENS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| LIENS 2 | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| DEED | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Records of Emergency Release Reports*** | | | | | | | | |
| HMIRS | 0.001 | | 0 | NR | NR | NR | NR | 0 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| CHMIRS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| LDS | 0.001 | 1 | 0 | NR | NR | NR | NR | 1 |
| MCS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| SPILLS 90 | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ***Other Ascertainable Records*** | | | | | | | | |
| RCRA NonGen / NLR | 0.250 | | 0 | 1 | NR | NR | NR | 1 |
| FUDS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| DOD | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| SCRD DRYCLEANERS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| US FIN ASSUR | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| EPA WATCH LIST | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| 2020 COR ACTION | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| TSCA | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| TRIS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| SSTS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ROD | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| RMP | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| RAATS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PRP | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PADS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ICIS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| FTTS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| MLTS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| COAL ASH DOE | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| COAL ASH EPA | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| PCB TRANSFORMER | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| RADINFO | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| HIST FTTS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| DOT OPS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| CONSENT | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| INDIAN RESERV | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| FUSRAP | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| UMTRA | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| LEAD SMELTERS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| US AIRS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| US MINES | 0.250 | | 0 | 1 | NR | NR | NR | 1 |
| FINDS | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| UXO | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| DOCKET HWC | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| CA BOND EXP. PLAN | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| Cortese | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| CUPA Listings | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| DRYCLEANERS | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| EMI | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| ENF | 0.001 | 1 | 0 | NR | NR | NR | NR | 1 |
| Financial Assurance | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| HAZNET | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| HIST CORTESE | 0.500 | | 1 | 1 | 3 | NR | NR | 5 |
| LOS ANGELES CO. HMS | 0.001 | 1 | 0 | NR | NR | NR | NR | 1 |
| HWP | 1.000 | | 0 | 0 | 0 | 2 | NR | 2 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| HWT | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| MINES | 0.001 | | 1 | NR | NR | NR | NR | 1 |
| MWMP | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| NPDES | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PEST LIC | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| PROC | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| Notify 65 | 1.000 | | 0 | 0 | 0 | 5 | NR | 5 |
| LA Co. Site Mitigation | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| UIC | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| WASTEWATER PITS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| WDS | 0.001 | 1 | 0 | NR | NR | NR | NR | 1 |
| WIP | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| ICE | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ECHO | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| FUELS PROGRAM | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| **EDR HIGH RISK HISTORICAL RECORDS** | | | | | | | | |
| ***EDR Exclusive Records*** | | | | | | | | |
| EDR MGP | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| EDR Hist Auto | 0.125 | | 2 | NR | NR | NR | NR | 2 |
| EDR Hist Cleaner | 0.125 | | 0 | NR | NR | NR | NR | 0 |
| **EDR RECOVERED GOVERNMENT ARCHIVES** | | | | | | | | |
| ***Exclusive Recovered Govt. Archives*** | | | | | | | | |
| RGA LF | 0.001 | 2 | 0 | NR | NR | NR | NR | 2 |
| RGA LUST | 0.001 | | 0 | NR | NR | NR | NR | 0 |
| - Totals -- | | 8 | 15 | 19 | 13 | 12 | 0 | 67 |

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

**A1** **UNITED ROCK PRODUCTS PIT NO. 3** **SWF/LF** **S109286713**
**Target** **1137 MERIDIAN STREET** **LDS** **N/A**
**Property** **IRWINDALE, CA 91706** **ENF**

**Site 1 of 5 in cluster A**

**Actual:**
**245 ft.**

SWF/LF (SWIS):

| | |
|---|---|
| Region: | STATE |
| Facility ID: | 19-AA-0020 |
| Lat/Long: | 34.124240 / -117.98222 |
| Owner Name: | United Rock, Inc. |
| Owner Telephone: | 6263584558 |
| Owner Address: | Russ Caruso, GM |
| Owner Address2: | 1245 Arrow Highway |
| Owner City,St,Zip: | Irwindale, CA 91706 |
| Operational Status: | Closed |
| Operator: | United Rock Products Corp. |
| Operator Phone: | 6263584558 |
| Operator Address: | Frank Keohane VP |
| Operator Address2: | 1245 Arrow Highway |
| Operator City,St,Zip: | Irwindale, CA 91706 |
| Permit Date: | Not reported |
| Permit Status: | Not reported |
| Permitted Acreage: | Not reported |
| Activity: | Inert Waste Disposal Site |
| Regulation Status: | Exempt |
| Landuse Name: | Industrial |
| GIS Source: | Map |
| Category: | Disposal |
| Unit Number: | 01 |
| Inspection Frequency: | Annual |
| Accepted Waste: | Not reported |
| Closure Date: | Not reported |
| Closure Type: | Not reported |
| Disposal Acreage: | Not reported |
| SWIS Num: | 19-AA-0020 |
| Waste Discharge Requirement Num: | Not reported |
| Program Type: | Not reported |
| Permitted Throughput with Units: | Not reported |
| Actual Throughput with Units: | Not reported |
| Permitted Capacity with Units: | Not reported |
| Remaining Capacity: | Not reported |
| Remaining Capacity with Units: | Not reported |
| Lat/Long: | 34.124240 / -117.98222 |

LOS ANGELES CO. LF:

| | |
|---|---|
| Site ID: | 2146 |
| Alt. Address: | Not reported |
| Site Contact: | Not reported |
| Site Contact Phone: | Not reported |
| Site Email: | Not reported |
| Site Website: | Not reported |
| Site Type: | Municipal Solid Waste Landfill |
| Site SWIS Number: | 19-AA-0020 |
| Beginning Operation Date: | 1973 |
| Ending Operation Date: | 1975 |
| Local Enforcement Agency: | Not reported |
| Maximun Depth Fill(Ft): | Not reported |
| Permitted Capacity: | Not reported |

**UNITED ROCK PRODUCTS PIT NO. 3 (Continued)** **S109286713**

| | |
|---|---|
| Present Use: | Gravel Mining |
| Remaining Capacity(Million): | Not reported |
| Status: | Closed |
| Waste Accepted: | Not reported |
| Hours of Operation: | Not reported |
| Disposal Area (Acre): | 2 |

Detail As Of 01/2014:

| | |
|---|---|
| Operator Name: | Unknown |
| Operator Address: | Not reported |
| Operator City/State/Zip: | Not reported |
| Operator Contact: | Not reported |
| Operator Telephone: | Not reported |
| Operator Email: | Not reported |
| Owner Name: | United Rock Products Corporation |
| Owner Address: | 1245 East Arrow Highway |
| Owner City/State/Zip: | Irwindale, CA 91010 |
| Owner Contact: | Not reported |
| Owner Telephone: | Not reported |
| Owner Email: | Not reported |

LDS:

| | |
|---|---|
| Global Id: | L10001370669 |
| Latitude: | 34.12324 |
| Longitude: | -117.9819 |
| Case Type: | Land Disposal Site |
| Status: | Open - Operating |
| Status Date: | 09/19/2001 |
| Lead Agency: | LOS ANGELES RWQCB (REGION 4) |
| Caseworker: | WY |
| Local Agency: | Not reported |
| RB Case Number: | 4B190319003 |
| LOC Case Number: | Not reported |
| File Location: | Regional Board |
| Potential Media Affect: | Not reported |
| EDR Link ID: | L10001370669 |
| Potential Contaminants of Concern: | Not reported |
| Site History: | Not reported |

Click here to access the California GeoTracker records for this facility:

ENF:

| | |
|---|---|
| Region: | 4 |
| Facility Id: | 269739 |
| Agency Name: | United Rock Products Corporation |
| Place Type: | Waste Management Unit |
| Place Subtype: | Land fill |
| Facility Type: | All other facilities |
| Agency Type: | Privately-Owned Business |
| # Of Agencies: | 1 |
| Place Latitude: | Not reported |
| Place Longitude: | Not reported |
| SIC Code 1: | 4953 |
| SIC Desc 1: | Refuse Systems |
| SIC Code 2: | Not reported |

**UNITED ROCK PRODUCTS PIT NO. 3 (Continued)** **S109286713**

| | |
|---|---|
| SIC Desc 2: | Not reported |
| SIC Code 3: | Not reported |
| SIC Desc 3: | Not reported |
| NAICS Code 1: | Not reported |
| NAICS Desc 1: | Not reported |
| NAICS Code 2: | Not reported |
| NAICS Desc 2: | Not reported |
| NAICS Code 3: | Not reported |
| NAICS Desc 3: | Not reported |
| # Of Places: | 1 |
| Source Of Facility: | Reg Meas |
| Design Flow: | 0 |
| Threat To Water Quality: | 3 |
| Complexity: | C |
| Pretreatment: | X - Facility is not a POTW |
| Facility Waste Type: | Inert solid wastes |
| Facility Waste Type 2: | Not reported |
| Facility Waste Type 3: | Not reported |
| Facility Waste Type 4: | Not reported |
| Program: | LFOPER |
| Program Category1: | LNDISP |
| Program Category2: | LNDISP |
| # Of Programs: | 1 |
| WDID: | 4B190319003 |
| Reg Measure Id: | 148462 |
| Reg Measure Type: | WDR |
| Region: | 4 |
| Order #: | 01-131 |
| Npdes# CA#: | Not reported |
| Major-Minor: | Not reported |
| Npdes Type: | Not reported |
| Reclamation: | N - No |
| Dredge Fill Fee: | Not reported |
| 301H: | Not reported |
| Application Fee Amt Received: | Not reported |
| Status: | Active |
| Status Date: | 11/13/2015 |
| Effective Date: | 09/19/2001 |
| Expiration/Review Date: | 09/19/2016 |
| Termination Date: | Not reported |
| WDR Review - Amend: | Not reported |
| WDR Review - Revise/Renew: | Not reported |
| WDR Review - Rescind: | Not reported |
| WDR Review - No Action Required: | Not reported |
| WDR Review - Pending: | Not reported |
| WDR Review - Planned: | Not reported |
| Status Enrollee: | N |
| Individual/General: | I |
| Fee Code: | 59 - Land Disposal Site not paying tipping fee |
| Direction/Voice: | Passive |
| Enforcement Id(EID): | 228621 |
| Region: | 4 |
| Order / Resolution Number: | Staff phoned discharger |
| Enforcement Action Type: | Oral Communication |
| Effective Date: | 12/21/2000 |
| Adoption/Issuance Date: | Not reported |
| Achieve Date: | Not reported |

**UNITED ROCK PRODUCTS PIT NO. 3 (Continued)** **S109286713**

| | |
|---|---|
| Termination Date: | 12/21/2000 |
| ACL Issuance Date: | Not reported |
| EPL Issuance Date: | Not reported |
| Status: | Historical |
| Title: | Board staff phoned discharger 12/21/00 about noncompliance with WDRs. |
| Description: | Board staff phoned discharger 12/21/00 about noncompliance with WDRs. |
| Program: | LFNONOPER |
| Latest Milestone Completion Date: | Not reported |
| # Of Programs1: | 1 |
| Total Assessment Amount: | $0.00 |
| Initial Assessed Amount: | $0.00 |
| Liability $ Amount: | $0.00 |
| Project $ Amount: | $0.00 |
| Liability $ Paid: | $0.00 |
| Project $ Completed: | $0.00 |
| Total $ Paid/Completed Amount: | $0.00 |
| | |
| Region: | 4 |
| Facility Id: | 269739 |
| Agency Name: | United Rock Products Corporation |
| Place Type: | Waste Management Unit |
| Place Subtype: | Land fill |
| Facility Type: | All other facilities |
| Agency Type: | Privately-Owned Business |
| # Of Agencies: | 1 |
| Place Latitude: | Not reported |
| Place Longitude: | Not reported |
| SIC Code 1: | 4953 |
| SIC Desc 1: | Refuse Systems |
| SIC Code 2: | Not reported |
| SIC Desc 2: | Not reported |
| SIC Code 3: | Not reported |
| SIC Desc 3: | Not reported |
| NAICS Code 1: | Not reported |
| NAICS Desc 1: | Not reported |
| NAICS Code 2: | Not reported |
| NAICS Desc 2: | Not reported |
| NAICS Code 3: | Not reported |
| NAICS Desc 3: | Not reported |
| # Of Places: | 1 |
| Source Of Facility: | Reg Meas |
| Design Flow: | 0 |
| Threat To Water Quality: | 3 |
| Complexity: | C |
| Pretreatment: | X - Facility is not a POTW |
| Facility Waste Type: | Inert solid wastes |
| Facility Waste Type 2: | Not reported |
| Facility Waste Type 3: | Not reported |
| Facility Waste Type 4: | Not reported |
| Program: | LFOPER |
| Program Category1: | LNDISP |
| Program Category2: | LNDISP |
| # Of Programs: | 1 |
| WDID: | 4B190319003 |
| Reg Measure Id: | 148462 |
| Reg Measure Type: | WDR |

**UNITED ROCK PRODUCTS PIT NO. 3 (Continued)** **S109286713**

| | |
|---|---|
| Region: | 4 |
| Order #: | 01-131 |
| Npdes# CA#: | Not reported |
| Major-Minor: | Not reported |
| Npdes Type: | Not reported |
| Reclamation: | N - No |
| Dredge Fill Fee: | Not reported |
| 301H: | Not reported |
| Application Fee Amt Received: | Not reported |
| Status: | Active |
| Status Date: | 11/13/2015 |
| Effective Date: | 09/19/2001 |
| Expiration/Review Date: | 09/19/2016 |
| Termination Date: | Not reported |
| WDR Review - Amend: | Not reported |
| WDR Review - Revise/Renew: | Not reported |
| WDR Review - Rescind: | Not reported |
| WDR Review - No Action Required: | Not reported |
| WDR Review - Pending: | Not reported |
| WDR Review - Planned: | Not reported |
| Status Enrollee: | N |
| Individual/General: | I |
| Fee Code: | 59 - Land Disposal Site not paying tipping fee |
| Direction/Voice: | Passive |
| Enforcement Id(EID): | 228620 |
| Region: | 4 |
| Order / Resolution Number: | NOV |
| Enforcement Action Type: | Notice of Violation |
| Effective Date: | 01/29/2001 |
| Adoption/Issuance Date: | Not reported |
| Achieve Date: | Not reported |
| Termination Date: | 01/29/2001 |
| ACL Issuance Date: | Not reported |
| EPL Issuance Date: | Not reported |
| Status: | Historical |
| Title: | NOV sent 1/29/01 for noncompliance with WDRs. |
| Description: | NOV sent 1/29/01 for noncompliance with WDRs. |
| Program: | LFNONOPER |
| Latest Milestone Completion Date: | Not reported |
| # Of Programs1: | 1 |
| Total Assessment Amount: | $0.00 |
| Initial Assessed Amount: | $0.00 |
| Liability $ Amount: | $0.00 |
| Project $ Amount: | $0.00 |
| Liability $ Paid: | $0.00 |
| Project $ Completed: | $0.00 |
| Total $ Paid/Completed Amount: | $0.00 |

| | |
|---|---|
| Region: | 4 |
| Facility Id: | 269739 |
| Agency Name: | United Rock Products Corporation |
| Place Type: | Waste Management Unit |
| Place Subtype: | Land fill |
| Facility Type: | All other facilities |
| Agency Type: | Privately-Owned Business |
| # Of Agencies: | 1 |
| Place Latitude: | Not reported |

**UNITED ROCK PRODUCTS PIT NO. 3 (Continued)** **S109286713**

| | |
|---|---|
| Place Longitude: | Not reported |
| SIC Code 1: | 4953 |
| SIC Desc 1: | Refuse Systems |
| SIC Code 2: | Not reported |
| SIC Desc 2: | Not reported |
| SIC Code 3: | Not reported |
| SIC Desc 3: | Not reported |
| NAICS Code 1: | Not reported |
| NAICS Desc 1: | Not reported |
| NAICS Code 2: | Not reported |
| NAICS Desc 2: | Not reported |
| NAICS Code 3: | Not reported |
| NAICS Desc 3: | Not reported |
| # Of Places: | 1 |
| Source Of Facility: | Reg Meas |
| Design Flow: | 0 |
| Threat To Water Quality: | 3 |
| Complexity: | C |
| Pretreatment: | X - Facility is not a POTW |
| Facility Waste Type: | Inert solid wastes |
| Facility Waste Type 2: | Not reported |
| Facility Waste Type 3: | Not reported |
| Facility Waste Type 4: | Not reported |
| Program: | LFOPER |
| Program Category1: | LNDISP |
| Program Category2: | LNDISP |
| # Of Programs: | 1 |
| WDID: | 4B190319003 |
| Reg Measure Id: | 148462 |
| Reg Measure Type: | WDR |
| Region: | 4 |
| Order #: | 01-131 |
| Npdes# CA#: | Not reported |
| Major-Minor: | Not reported |
| Npdes Type: | Not reported |
| Reclamation: | N - No |
| Dredge Fill Fee: | Not reported |
| 301H: | Not reported |
| Application Fee Amt Received: | Not reported |
| Status: | Active |
| Status Date: | 11/13/2015 |
| Effective Date: | 09/19/2001 |
| Expiration/Review Date: | 09/19/2016 |
| Termination Date: | Not reported |
| WDR Review - Amend: | Not reported |
| WDR Review - Revise/Renew: | Not reported |
| WDR Review - Rescind: | Not reported |
| WDR Review - No Action Required: | Not reported |
| WDR Review - Pending: | Not reported |
| WDR Review - Planned: | Not reported |
| Status Enrollee: | N |
| Individual/General: | I |
| Fee Code: | 59 - Land Disposal Site not paying tipping fee |
| Direction/Voice: | Passive |
| Enforcement Id(EID): | 228253 |
| Region: | 4 |
| Order / Resolution Number: | Notice of Noncompliance |

**UNITED ROCK PRODUCTS PIT NO. 3 (Continued)** **S109286713**

| | |
|---|---|
| Enforcement Action Type: | Staff Enforcement Letter |
| Effective Date: | 12/26/2000 |
| Adoption/Issuance Date: | Not reported |
| Achieve Date: | Not reported |
| Termination Date: | 12/26/2000 |
| ACL Issuance Date: | Not reported |
| EPL Issuance Date: | Not reported |
| Status: | Historical |
| Title: | Notice of Noncompliance sent 12/26/00 for 9 overdue DMRs. |
| Description: | Notice of Noncompliance sent 12/26/00 for 9 overdue DMRs. |
| Program: | LFNONOPER |
| Latest Milestone Completion Date: | Not reported |
| # Of Programs1: | 1 |
| Total Assessment Amount: | $0.00 |
| Initial Assessed Amount: | $0.00 |
| Liability $ Amount: | $0.00 |
| Project $ Amount: | $0.00 |
| Liability $ Paid: | $0.00 |
| Project $ Completed: | $0.00 |
| Total $ Paid/Completed Amount: | $0.00 |

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**A2** **LIVINGSTON-GRAHAM IRWINDALE, MERIDIAN ST** **RGA LF** **S114729824**
**Target Property** **1137 MERIDIAN ST.** **N/A**
**IRWINDALE, CA**

**Site 2 of 5 in cluster A**

**Actual: 245 ft.**

RGA LF:

| | | |
|---|---|---|
| 2005 | LIVINGSTON-GRAHAM IRWINDALE, MERIDIAN ST | 1137 MERIDIAN ST. |
| 2004 | LIVINGSTON-GRAHAM IRWINDALE, MERIDIAN ST | 1137 MERIDIAN ST. |
| 2003 | LIVINGSTON-GRAHAM IRWINDALE, MERIDIAN ST | 1137 MERIDIAN ST. |
| 2002 | LIVINGSTON-GRAHAM IRWINDALE, MERIDIAN ST | 1137 MERIDIAN ST. |
| 2001 | LIVINGSTON-GRAHAM IRWINDALE, MERIDIAN ST | 1137 MERIDIAN ST. |
| 2000 | LIVINGSTON-GRAHAM IRWINDALE, MERIDIAN ST | 1137 MERIDIAN ST. |
| 1999 | LIVINGSTON-GRAHAM IRWINDALE, MERIDIAN ST | 1137 MERIDIAN ST. |
| 1998 | LIVINGSTON-GRAHAM IRWINDALE, MERIDIAN ST | 1137 MERIDIAN ST. |

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**A3** **UNITED ROCK PIT # 3** **RGA LF** **S114733805**
**Target Property** **1137 MERIDIAN HWY.** **N/A**
**IRWINDALE, CA**

**Site 3 of 5 in cluster A**

**Actual: 245 ft.**

RGA LF:

| | | |
|---|---|---|
| 2012 | UNITED ROCK PIT # 3 | 1137 MERIDIAN HWY. |
| 2011 | UNITED ROCK PIT # 3 | 1137 MERIDIAN HWY. |
| 2008 | UNITED ROCK PIT # 3 | 1137 MERIDIAN HWY. |
| 2007 | UNITED ROCK PIT # 3 | 1137 MERIDIAN HWY. |
| 2006 | UNITED ROCK PIT # 3 | 1137 MERIDIAN HWY. |

**A4** **LIVINGSTON-GRAHAM INC** **LOS ANGELES CO. HMS** **U003057167**
**Target** **1137 MERIDIAN ST** **N/A**
**Property** **DUARTE, CA 91010**

**Site 4 of 5 in cluster A**

**Actual:**
**245 ft.**

LOS ANGELES CO. HMS:
Region: LA
Permit Category: I
Facility Id: 000733-I00740
Facility Type: 08
Facility Status: Closed
Area: 3S
Permit Number: 000005016
Permit Status: Closed

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**A5** **IRWINDALE SITE** **WMUDS/SWAT** **S103441727**
**Target** **1137 MERIDIAN ST** **WDS** **N/A**
**Property** **IRWINDALE, CA 91706**

**Site 5 of 5 in cluster A**

**Actual:**
**245 ft.**

WMUDS/SWAT:
Edit Date: 19950207
Complexity: Category B - Any facility having a physical, chemical, or biological waste treatment system (except for septic systems with subsurface disposal), or any Class II or III disposal site, or facilities without treatment systems that are complex, such as marinas with petroleum products, solid wastes, and sewage pump out facilities.
Primary Waste: SLDWST
Primary Waste Type: Inert/Influent or Solid Wastes that do not contain soluble pollutants or organic wastes and have little adverse impact on water quality. Such wastes could cause turbidity and siltation. Uncontaminated soils, rubble and concrete are examples of this category.
Secondary Waste: Not reported
Secondary Waste Type: Not reported
Base Meridian: SB
NPID: Not reported
Tonnage: 500
Regional Board ID: 72-124
Municipal Solid Waste: False
Superorder: False
Open To Public: False
Waste List: False
Agency Type: Private
Agency Name: UNITED ROCK PRODUCTS CORP.
Agency Department: PROPERTY MANAGER
Agency Address: 1245 E. ARROW HWY.
Agency City,St,Zip: IRWINDALE CA 91706
Agency Contact: ARNOLD BRINK
Agency Telephone: 8183584558
Land Owner Name: AMERICAN CEMENT (HPE REALTY)
Land Owner Address: 610 NEWPORT CENTER DR.
Land Owner City,St,Zip: NEWPORT BEACH, CA 92660
Land Owner Contact: Not reported
Land Owner Phone: Not reported
Region: 4
Facility Type: Other - Does not fall into the category of Municipal/Domestic, Industrial, Agricultural or Solid Waste (Class I, II or III)
Facility Description: Not reported

**IRWINDALE SITE (Continued)** **S103441727**

Facility Telephone: 8183584558
SWAT Facility Name: LIVINGSTON-GRAHAM
Primary SIC: 4953
Secondary SIC: Not reported
Comments: CAP: < 50,000 CUYDS.
Last Facility Editors: CDCCDCCDC
Waste Discharge System: True
Solid Waste Assessment Test Program: True
Toxic Pits Cleanup Act Program: False
Resource Conservation Recovery Act: False
Department of Defence: False
Solid Waste Assessment Test Program: LIVINGSTON-GRAHAM, INC.
Threat to Water Quality: Moderate Threat to Water Quality. A violation could have a major adverse impact on receiving biota, can cause aesthetic impairment to a significant human population, or render unusable a potential domestic or municipal water supply. Awsthetic impairment would include nuisance from a waste treatment facility.
Sub Chapter 15: True
Regional Board Project Officer: Not reported
Number of WMUDS at Facility: 1
Section Range: 01S11W
RCRA Facility: No
Waste Discharge Requirements: I
Self-Monitoring Rept. Frequency: Quarterly Submittal
Waste Discharge System ID: 4B190319003
Solid Waste Information ID: 19-AA-0044

WDS:
Facility ID: Los Angeles River 190319003
Facility Type: Other - Does not fall into the category of Municipal/Domestic, Industrial, Agricultural or Solid Waste (Class I, II or III)
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number: Not reported
Subregion: 4
Facility Telephone: 8183584558
Facility Contact: Arnold Brink
Agency Name: UNITED ROCK PRODUCTS CORP.
Agency Address: 1245 E. Arrow Highway
Agency City,St,Zip: Irwindale 91706
Agency Contact: Arnold Brink
Agency Telephone: 6263584558
Agency Type: Private
SIC Code: 4953
SIC Code 2: Not reported
Primary Waste Type: Inert/Influent or Solid Wastes that do not contain soluble pollutants or organic wastes and have little adverse impact on water quality. Such wastes could cause turbidity and siltation. Uncontaminated soils, rubble and concrete are examples of this category.
Primary Waste: SLDWST
Waste Type2: Not reported
Waste2: Solid Wastes
Primary Waste Type: Inert/Influent or Solid Wastes that do not contain soluble pollutants or organic wastes and have little adverse impact on water quality. Such wastes could cause turbidity and siltation. Uncontaminated soils, rubble and concrete are examples of this category.
Secondary Waste: Not reported

**IRWINDALE SITE (Continued)** **S103441727**

Secondary Waste Type: Not reported
Design Flow: 0
Baseline Flow: 0
Reclamation: No reclamation requirements associated with this facility.
POTW: The facility is not a POTW.
Treat To Water: Moderate Threat to Water Quality. A violation could have a major adverse impact on receiving biota, can cause aesthetic impairment to a significant human population, or render unusable a potential domestic or municipal water supply. Awsthetic impairment would include nuisance from a waste treatment facility.
Complexity: Category B - Any facility having a physical, chemical, or biological waste treatment system (except for septic systems with subsurface disposal), or any Class II or III disposal site, or facilities without treatment systems that are complex, such as marinas with petroleum products, solid wastes, and sewage pump out facilities.

---

**Areas of Concern**
**West**
**1/2-1**
**4147 ft.**

**SAN GABRIEL VALLEY** **AOCONCERN** **CCA0000001** **N/A**

**LOS ANGELES (County), CA**

AOCONCERN:
area where VOC contamination is at or above the MCL as designated by region 9 EPA office

---

**6**
**< 1/8**
**1 ft.**

**UNITED ROCK PROD. PIT III** **MINES** **S117662397**
**1245 EAST ARROW HIGHWAY** **N/A**
**, CA**

**Relative: Higher**

**Actual: 249 ft.**

MINES:

| | |
|---|---|
| Latitude: | 34.123056 |
| Longitude: | -117.981944 |
| Lead Agency identification code: | 19.2 |
| Lead Agency name: | City of Irwindale |
| Year of the operator supplied annual report: | 2014 |
| Type of report submitted by operator: | 2 |
| Number of acres disturbed by the mine: | 91 |
| Status of mining operation: | ACTIVE |
| Status of mine reclamation: | RECLAMATION NOT STARTED |
| Mine operator: | UNITED ROCK PRODUCTS CORPORATION |
| Operator Address: | 1245 E. ARROW HIGHWAY |
| Operator City, State, Zip: | IRWINDALE, CA 91706 |
| Operator County: | Not reported |
| Mine owner: | IRWINDALE RECLAMATION AUTHORITY |
| Owner Address: | 5050 N IRNWINDALE AVE |
| Owner City, State, Zip: | IRWINDALE, CA 91706 |
| Owner County: | Not reported |
| Reclamation plan identification number: | Not reported |
| Primary product produced by the mine: | SAND AND GRAVEL |
| Other products produced by the mine: | Not reported |
| Type of mining utilized by mine: | OPEN PIT |
| Conditional use permit identification number: | 1494 |
| Number of acres permitted for mining disturbance: | 100 |

**UNITED ROCK PROD. PIT III (Continued)** **S117662397**

Total amount of funds posted by the mine for reclamation: $4,900,000.00
Financial Assurance Cost Estimate for reclamation: $5,000,000.00

---

**7**
**ESE**
**< 1/8**
**0.003 mi.**
**16 ft.**

**IRWINDALE IRON & METAL** **SWEEPS UST** **S106927552**
**2401 BUENA VISTA AVE** **N/A**
**IRWINDALE, CA**

**Relative:**
**Higher**

**Actual:**
**433 ft.**

SWEEPS UST:

| | |
|---|---|
| Status: | Active |
| Comp Number: | 13384 |
| Number: | 9 |
| Board Of Equalization: | 44-010151 |
| Referral Date: | 06-30-89 |
| Action Date: | Not reported |
| Created Date: | 06-30-89 |
| Owner Tank Id: | Not reported |
| SWRCB Tank Id: | 19-000-013384-000001 |
| Tank Status: | A |
| Capacity: | Not reported |
| Active Date: | 06-30-89 |
| Tank Use: | UNKNOWN |
| STG: | W |
| Content: | Not reported |
| Number Of Tanks: | 1 |

---

**B8**
**East**
**< 1/8**
**0.036 mi.**
**192 ft.**

**AIRCO DUARTE** **SWEEPS UST** **S106922470**
**2250 BUENA VISTA ST** **N/A**
**DUARTE, CA 90638**

**Site 1 of 3 in cluster B**

**Relative:**
**Higher**

**Actual:**
**425 ft.**

SWEEPS UST:

| | |
|---|---|
| Status: | Active |
| Comp Number: | 9566 |
| Number: | 1 |
| Board Of Equalization: | Not reported |
| Referral Date: | 02-04-92 |
| Action Date: | 02-04-92 |
| Created Date: | 06-30-89 |
| Owner Tank Id: | Not reported |
| SWRCB Tank Id: | 19-000-009566-000001 |
| Tank Status: | A |
| Capacity: | Not reported |
| Active Date: | 06-30-89 |
| Tank Use: | UNKNOWN |
| STG: | W |
| Content: | Not reported |
| Number Of Tanks: | 1 |

**9**
**SW**
**< 1/8**
**0.045 mi.**
**236 ft.**

**ALPHA II/IRWINDALE**
**2432-2536 BATEMAN AVENUE**
**IRWINDALE, CA 91706**

**ENVIROSTOR**
**VCP**

**S101481055**
**N/A**

**Relative:**
**Higher**

**Actual:**
**416 ft.**

ENVIROSTOR:

| | |
|---|---|
| Facility ID: | 19750076 |
| Status: | No Further Action |
| Status Date: | 02/10/1997 |
| Site Code: | 300365 |
| Site Type: | Voluntary Cleanup |
| Site Type Detailed: | Voluntary Cleanup |
| Acres: | 16 |
| NPL: | NO |
| Regulatory Agencies: | DTSC |
| Lead Agency: | DTSC |
| Program Manager: | Not reported |
| Supervisor: | Allan Plaza |
| Division Branch: | Cleanup Chatsworth |
| Assembly: | 48 |
| Senate: | 22 |
| Special Program: | Voluntary Cleanup Program |
| Restricted Use: | NO |
| Site Mgmt Req: | NONE SPECIFIED |
| Funding: | Responsible Party |
| Latitude: | 34.11694 |
| Longitude: | -117.9669 |
| APN: | NONE SPECIFIED |
| Past Use: | AGRICULTURAL - ROW CROPS, JUNKYARD, MAINTENANCE / CLEANING |
| Potential COC: | * HALOGENATED SOLVENTS * HYDROCARBON SOLVENTS * OTHER ORGANIC SOLIDS * OXYGENATED SOLVENTS * OFF-SPECIFICATION, AGED, OR SURPLUS ORGANICS * UNSPECIFIED OIL CONTAINING WASTE * UNSPECIFIED SOLVENT MIXTURES * WASTE OIL & MIXED OIL * OFF-SPECIFICATION, AGED, OR SURPLUS INORGANICS * ORGANIC LIQUIDS (NONSOLVENTS) WITH HALOGENS * PHARMACEUTICAL WASTE * UNSPECIFIED ORGANIC LIQUID MIXTURE * AUTO SHREDDER WASTE Lead |
| Confirmed COC: | NONE SPECIFIED |
| Potential Description: | SOIL |
| Alias Name: | ALPHA II |
| Alias Type: | Alternate Name |
| Alias Name: | ALPHA II SITE |
| Alias Type: | Alternate Name |
| Alias Name: | ICRA PROPERTIES |
| Alias Type: | Alternate Name |
| Alias Name: | IRWINDALE BUENA VISTA INDUSTRIAL PARK |
| Alias Type: | Alternate Name |
| Alias Name: | IRWINDALE COMMUNITY REDEVELOPMENT AGENCY |
| Alias Type: | Alternate Name |
| Alias Name: | 110033614140 |
| Alias Type: | EPA (FRS #) |
| Alias Name: | 300365 |
| Alias Type: | Project Code (Site Code) |
| Alias Name: | 19750076 |
| Alias Type: | Envirostor ID Number |

Completed Info:

| | |
|---|---|
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |
| Completed Document Type: | Preliminary Endangerment Assessment Report |

**ALPHA II/IRWINDALE (Continued)** **S101481055**

| | |
|---|---|
| Completed Date: | 02/10/1997 |
| Comments: | DTSC has completed the review of the supplemental information for the PEA. Based upon DTSC's review of the provided information, DTSC concurred with the Addendum to the PEA recommendation that no further action is warranted at the site. |
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |
| Completed Document Type: | Preliminary Endangerment Assessment Report |
| Completed Date: | 09/30/1993 |
| Comments: | On September 30, 1993, DTSC completed review of the PEA. Based on the information provided in the PEA, the Site exhibits elevated levels of PCBs and Cadmium that pose a potential threat to human health and/or the environment. Therefore, DTSC determined that "Further Action" is warranted at the site. |
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |
| Completed Document Type: | Site Screening |
| Completed Date: | 06/24/1993 |
| Comments: | On June 22, 1993, DTSC received a Notice of Intent to initiate a PEA. The Site consists of 11 Parcels of land and approximately 16 acres. The past uses of the Site included automobile wrecking yards, a used car lot, an auto salvage yard, and an auto repair lot. Currently the Site belongs to Irwindale Community Redevelopment Agency. The Site was contaminated with waste oil and lead. RP states that the site was remediated including the removal of site structures and scrap, excavation and removal of soils with concentrations exceeding 1,000 ppm TPH and lead. RP intented to submit a PEA to ensure NFA at the site. |
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |
| Completed Document Type: | Voluntary Cleanup Agreement |
| Completed Date: | 08/20/1996 |
| Comments: | The Voluntary Cleanup Agreement was amended to provide additional DTSC review and comment of documents added to the Scope of Work. |
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |
| Completed Document Type: | Voluntary Cleanup Agreement |
| Completed Date: | 11/30/1995 |
| Comments: | DTSC entered into a Voluntary Cleanup Agreement to review a Preliminary Endangerment Assessment addendum document including a revised Human Health Screening Evaluation for the Alpha II Site. |
| Future Area Name: | Not reported |
| Future Sub Area Name: | Not reported |
| Future Document Type: | Not reported |
| Future Due Date: | Not reported |
| Schedule Area Name: | Not reported |
| Schedule Sub Area Name: | Not reported |
| Schedule Document Type: | Not reported |
| Schedule Due Date: | Not reported |
| Schedule Revised Date: | Not reported |

**ALPHA II/IRWINDALE (Continued)** **S101481055**

VCP:

| | |
|---|---|
| Facility ID: | 19750076 |
| Site Type: | Voluntary Cleanup |
| Site Type Detail: | Voluntary Cleanup |
| Site Mgmt. Req.: | NONE SPECIFIED |
| Acres: | 16 |
| National Priorities List: | NO |
| Cleanup Oversight Agencies: | DTSC |
| Lead Agency: | DTSC |
| Lead Agency Description: | * DTSC |
| Project Manager: | Not reported |
| Supervisor: | Allan Plaza |
| Division Branch: | Cleanup Chatsworth |
| Site Code: | 300365 |
| Assembly: | 48 |
| Senate: | 22 |
| Special Programs Code: | Voluntary Cleanup Program |
| Status: | No Further Action |
| Status Date: | 02/10/1997 |
| Restricted Use: | NO |
| Funding: | Responsible Party |
| Lat/Long: | 34.11694 / -117.9669 |
| APN: | NONE SPECIFIED |
| Past Use: | AGRICULTURAL - ROW CROPS, JUNKYARD, MAINTENANCE / CLEANING |
| Potential COC: | 10003, 10009, 10064, 10067, 10100, 10196, 10198, 10199, 20009, 20010, 20014, 20017, 20019, 30013 |
| Confirmed COC: | NONE SPECIFIED |
| Potential Description: | SOIL |
| Alias Name: | ALPHA II |
| Alias Type: | Alternate Name |
| Alias Name: | ALPHA II SITE |
| Alias Type: | Alternate Name |
| Alias Name: | ICRA PROPERTIES |
| Alias Type: | Alternate Name |
| Alias Name: | IRWINDALE BUENA VISTA INDUSTRIAL PARK |
| Alias Type: | Alternate Name |
| Alias Name: | IRWINDALE COMMUNITY REDEVELOPMENT AGENCY |
| Alias Type: | Alternate Name |
| Alias Name: | 110033614140 |
| Alias Type: | EPA (FRS #) |
| Alias Name: | 300365 |
| Alias Type: | Project Code (Site Code) |
| Alias Name: | 19750076 |
| Alias Type: | Envirostor ID Number |

Completed Info:

| | |
|---|---|
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |
| Completed Document Type: | Preliminary Endangerment Assessment Report |
| Completed Date: | 02/10/1997 |
| Comments: | DTSC has completed the review of the supplemental information for the PEA. Based upon DTSC's review of the provided information, DTSC concurred with the Addendum to the PEA recommendation that no further action is warranted at the site. |
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |

**ALPHA II/IRWINDALE (Continued)** **S101481055**

| | |
|---|---|
| Completed Document Type: | Preliminary Endangerment Assessment Report |
| Completed Date: | 09/30/1993 |
| Comments: | On September 30, 1993, DTSC completed review of the PEA. Based on the information provided in the PEA, the Site exhibits elevated levels of PCBs and Cadmium that pose a potential threat to human health and/or the environment. Therefore, DTSC determined that "Further Action" is warranted at the site. |
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |
| Completed Document Type: | Site Screening |
| Completed Date: | 06/24/1993 |
| Comments: | On June 22, 1993, DTSC received a Notice of Intent to initiate a PEA. The Site consists of 11 Parcels of land and approximately 16 acres. The past uses of the Site included automobile wrecking yards, a used car lot, an auto salvage yard, and an auto repair lot. Currently the Site belongs to Irwindale Community Redevelopment Agency. The Site was contaminated with waste oil and lead. RP states that the site was remediated including the removal of site structures and scrap, excavation and removal of soils with concentrations exceeding 1,000 ppm TPH and lead. RP intented to submit a PEA to ensure NFA at the site. |
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |
| Completed Document Type: | Voluntary Cleanup Agreement |
| Completed Date: | 08/20/1996 |
| Comments: | The Voluntary Cleanup Agreement was amended to provide additional DTSC review and comment of documents added to the Scope of Work. |
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |
| Completed Document Type: | Voluntary Cleanup Agreement |
| Completed Date: | 11/30/1995 |
| Comments: | DTSC entered into a Voluntary Cleanup Agreement to review a Preliminary Endangerment Assessment addendum document including a revised Human Health Screening Evaluation for the Alpha II Site. |
| Future Area Name: | Not reported |
| Future Sub Area Name: | Not reported |
| Future Document Type: | Not reported |
| Future Due Date: | Not reported |
| Schedule Area Name: | Not reported |
| Schedule Sub Area Name: | Not reported |
| Schedule Document Type: | Not reported |
| Schedule Due Date: | Not reported |
| Schedule Revised Date: | Not reported |

**10**
**West**
**< 1/8**
**0.049 mi.**
**257 ft.**

**2136 CITRUS VIEW AVE**
**DUARTE, CA 91010**

**EDR Hist Auto** **1015325704**
**N/A**

**Relative:**
**Higher**

**Actual:**
**412 ft.**

EDR Historical Auto Stations:
Name: JAVIER AUTO ELECTRIC & ME
Year: 2007
Address: 2136 CITRUS VIEW AVE

---

**B11**
**East**
**< 1/8**
**0.053 mi.**
**282 ft.**

**Site 2 of 3 in cluster B**

**Relative:**
**Higher**

**Actual:**
**425 ft.**

**SOUTHWEST PRODUCTIONS CO**
**2240 BUENA VISTA**
**IRWINDALE, CA 91706**

**RCRA-SQG** **1000411027**
**ENVIROSTOR** **CAD981992498**
**LUST**
**VCP**
**HIST UST**
**FINDS**
**EMI**
**HIST CORTESE**
**LA Co. Site Mitigation**
**ECHO**

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: SOUTHWEST PRODUCTIONS CO
Facility address: 2240 BUENA VISTA
IRWINDALE, CA 91706
EPA ID: CAD981992498
Mailing address: PO BOX 1028
MONROVIA, CA 91016
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: KENT J HACKMAN
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported

**SOUTHWEST PRODUCTIONS CO (Continued)** **1000411027**

Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 02/17/1987
Site name: SOUTHWEST PRODUCTIONS CO
Classification: Large Quantity Generator

Violation Status: No violations found

ENVIROSTOR:
Facility ID: 19340773
Status: No Further Action
Status Date: 02/04/1998
Site Code: 300694
Site Type: Voluntary Cleanup
Site Type Detailed: Voluntary Cleanup
Acres: 8
NPL: NO
Regulatory Agencies: DTSC
Lead Agency: DTSC
Program Manager: Safouh Sayed
Supervisor: Emad Yemut
Division Branch: Cleanup Cypress
Assembly: 48
Senate: 22
Special Program: Voluntary Cleanup Program
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 34.12442
Longitude: -117.9766
APN: NONE SPECIFIED
Past Use: NONE
Potential COC: Benzene
Confirmed COC: NONE SPECIFIED
Potential Description: SOIL

**SOUTHWEST PRODUCTIONS CO (Continued)** **1000411027**

Alias Name: SOUTHWEST PRODUCTS
Alias Type: Alternate Name
Alias Name: UNION BANK OF CALIFORNIA
Alias Type: Alternate Name
Alias Name: 110002769442
Alias Type: EPA (FRS #)
Alias Name: 300694
Alias Type: Project Code (Site Code)
Alias Name: 19340773
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 06/29/1998
Comments: The Preliminary Endangerment Assessment is approved. The PEA indicates that levels of TPH encountered at the site are well below the concentrations considered acceptable in soils above groundwater. VOCS were not detected, and soils containing greater than 50 mg/kg of lead have been excavated and removed from the site. Therefore, DTSC determines that "No Further Action" is required.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 02/04/1998
Comments: DTSC and Union Bank of California (site owner through foreclosure entered into a Voluntary Cleanup Agreement (VCA) for a Preliminar Endangerment Assessment (PEA) for the former Southwest Products, site in Irwindale.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

LUST:
Region: STATE
Global Id: T0603704618
Latitude: 34.124423
Longitude: -117.976665
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 07/25/1994
Lead Agency: LOS ANGELES COUNTY
Case Worker: JOA
Local Agency: LOS ANGELES COUNTY
RB Case Number: R-03582
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Soil

**SOUTHWEST PRODUCTIONS CO (Continued)** **1000411027**

Potential Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0603704618
Contact Type: Local Agency Caseworker
Contact Name: JOHN AWUJO
Organization Name: LOS ANGELES COUNTY
Address: 900 S FREMONT AVE
City: ALHAMBRA
Email: jawujo@dpw.lacounty.gov
Phone Number: 6264583507

Global Id: T0603704618
Contact Type: Regional Board Caseworker
Contact Name: YUE RONG
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: 320 W. 4TH ST., SUITE 200
City: Los Angeles
Email: yrong@waterboards.ca.gov
Phone Number: Not reported

Status History:
Global Id: T0603704618
Status: Completed - Case Closed
Status Date: 07/25/1994

Global Id: T0603704618
Status: Open - Case Begin Date
Status Date: 08/21/1992

Global Id: T0603704618
Status: Open - Site Assessment
Status Date: 02/23/1993

Regulatory Activities:
Global Id: T0603704618
Action Type: Other
Date: 08/21/1992
Action: Leak Discovery

Global Id: T0603704618
Action Type: Other
Date: 02/22/1993
Action: Leak Reported

LUST REG 4:
Region: 4
Regional Board: 04
County: Los Angeles
Facility Id: R-03582
Status: Case Closed
Substance: Waste Oil

**SOUTHWEST PRODUCTIONS CO (Continued)** **1000411027**

| | | |
|---|---|---|
| Substance Quantity: | Not reported | |
| Local Case No: | Not reported | |
| Case Type: | Soil | |
| Abatement Method Used at the Site: | | Not reported |
| Global ID: | T0603704618 | |
| W Global ID: | Not reported | |
| Staff: | UNK | |
| Local Agency: | 19000 | |
| Cross Street: | Not reported | |
| Enforcement Type: | Not reported | |
| Date Leak Discovered: | 8/21/1992 | |
| Date Leak First Reported: | | 2/22/1993 |
| Date Leak Record Entered: | 2/20/1993 | |
| Date Confirmation Began: | Not reported | |
| Date Leak Stopped: | Not reported | |
| Date Case Last Changed on Database: | | 5/22/1995 |
| Date the Case was Closed: | | 7/25/1994 |
| How Leak Discovered: | Tank Closure | |
| How Leak Stopped: | Not reported | |
| Cause of Leak: | UNK | |
| Leak Source: | UNK | |
| Operator: | Not reported | |
| Water System: | Not reported | |
| Well Name: | Not reported | |
| Approx. Dist To Production Well (ft): | | 4028.72744875125911759150527 03 |
| Source of Cleanup Funding: | | UNK |
| Preliminary Site Assessment Workplan Submitted: | | 2/23/1993 |
| Preliminary Site Assessment Began: | | Not reported |
| Pollution Characterization Began: | | Not reported |
| Remediation Plan Submitted: | | Not reported |
| Remedial Action Underway: | | Not reported |
| Post Remedial Action Monitoring Began: | | Not reported |
| Enforcement Action Date: | | Not reported |
| Historical Max MTBE Date: | | Not reported |
| Hist Max MTBE Conc in Groundwater: | | Not reported |
| Hist Max MTBE Conc in Soil: | | Not reported |
| Significant Interim Remedial Action Taken: | | Not reported |
| GW Qualifier: | Not reported | |
| Soil Qualifier: | Not reported | |
| Organization: | Not reported | |
| Owner Contact: | Not reported | |
| Responsible Party: | SOUTHWEST PROCUCTS | |
| RP Address: | 2240 BUENA VISTA, IRWINDALE, CA 91016 | |
| Program: | LUST | |
| Lat/Long: | 34.1433158 / -1 | |
| Local Agency Staff: | Not reported | |
| Beneficial Use: | Not reported | |
| Priority: | Not reported | |
| Cleanup Fund Id: | Not reported | |
| Suspended: | Not reported | |
| Assigned Name: | Not reported | |
| Summary: | TRPH=4710 PPM | |

VCP:

| | |
|---|---|
| Facility ID: | 19340773 |
| Site Type: | Voluntary Cleanup |
| Site Type Detail: | Voluntary Cleanup |

**SOUTHWEST PRODUCTIONS CO (Continued)** **1000411027**

| | |
|---|---|
| Site Mgmt. Req.: | NONE SPECIFIED |
| Acres: | 8 |
| National Priorities List: | NO |
| Cleanup Oversight Agencies: | DTSC |
| Lead Agency: | DTSC |
| Lead Agency Description: | * DTSC |
| Project Manager: | Safouh Sayed |
| Supervisor: | Emad Yemut |
| Division Branch: | Cleanup Cypress |
| Site Code: | 300694 |
| Assembly: | 48 |
| Senate: | 22 |
| Special Programs Code: | Voluntary Cleanup Program |
| Status: | No Further Action |
| Status Date: | 02/04/1998 |
| Restricted Use: | NO |
| Funding: | Responsible Party |
| Lat/Long: | 34.12442 / -117.9766 |
| APN: | NONE SPECIFIED |
| Past Use: | NONE |
| Potential COC: | 30003 |
| Confirmed COC: | NONE SPECIFIED |
| Potential Description: | SOIL |
| Alias Name: | SOUTHWEST PRODUCTS |
| Alias Type: | Alternate Name |
| Alias Name: | UNION BANK OF CALIFORNIA |
| Alias Type: | Alternate Name |
| Alias Name: | 110002769442 |
| Alias Type: | EPA (FRS #) |
| Alias Name: | 300694 |
| Alias Type: | Project Code (Site Code) |
| Alias Name: | 19340773 |
| Alias Type: | Envirostor ID Number |

Completed Info:

| | |
|---|---|
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |
| Completed Document Type: | Preliminary Endangerment Assessment Report |
| Completed Date: | 06/29/1998 |
| Comments: | The Preliminary Endangerment Assessment is approved. The PEA indicates that levels of TPH encountered at the site are well below the concentrations considered acceptable in soils above groundwater. VOCS were not detected, and soils containing greater than 50 mg/kg of lead have been excavated and removed from the site. Therefore, DTSC determines that "No Further Action" is required. |

| | |
|---|---|
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |
| Completed Document Type: | Voluntary Cleanup Agreement |
| Completed Date: | 02/04/1998 |
| Comments: | DTSC and Union Bank of California (site owner through foreclosure entered into a Voluntary Cleanup Agreement (VCA) for a Preliminar Endangerment Assessment (PEA) for the former Southwest Products, site in Irwindale. |

| | |
|---|---|
| Future Area Name: | Not reported |
| Future Sub Area Name: | Not reported |
| Future Document Type: | Not reported |

**SOUTHWEST PRODUCTIONS CO (Continued)** **1000411027**

Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

HIST UST:
File Number: 000287AF
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000287AF.pdf
Region: STATE
Facility ID: 00000008102
Facility Type: Other
Other Type: MANUFACTURER
Contact Name: K. V. HACKMAN
Telephone: 8183580181
Owner Name: SOUTHWEST PRODUCTS CO
Owner Address: P.O. BOX 1028
Owner City,St,Zip: MONROVIA, CA 91016
Total Tanks: 0002

Tank Num: 001
Container Num: I
Year Installed: 1979
Tank Capacity: 00001116
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: .125
Leak Detection: Visual

Tank Num: 002
Container Num: 2
Year Installed: 1979
Tank Capacity: 00002475
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: .300
Leak Detection: Visual

Click here for Geo Tracker PDF:

FINDS:

Registry ID: 110002769442

Environmental Interest/Information System
California Department of Toxic Substances Control EnviroStor System (DTSC-EnviroStor) is an online search and Geographic Information System (GIS) tool for identifying sites that have known contamination or sites for which there may be reasons to investigate further. The EnviroStor database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites.

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART)

**SOUTHWEST PRODUCTIONS CO (Continued)** **1000411027**

provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS AIR POLLUTANT MAJOR

EMI:

| | |
|---|---|
| Year: | 1990 |
| County Code: | 19 |
| Air Basin: | SC |
| Facility ID: | 51799 |
| Air District Name: | SC |
| SIC Code: | 3599 |
| Air District Name: | SOUTH COAST AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 0 |
| Reactive Organic Gases Tons/Yr: | 0 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

HIST CORTESE:

| | |
|---|---|
| Region: | CORTESE |
| Facility County Code: | 19 |
| Reg By: | LTNKA |
| Reg Id: | R-03582 |

LA Co. Site Mitigation:

| | |
|---|---|
| Facility ID: | FA0006022 |
| Site ID: | SD0010375 |
| Jurisdiction: | State |
| Case ID: | RO0010375 |
| Abated: | Yes |
| Assigned To: | LR |
| Entered Date: | 05/11/2004 |
| Abated Date: | 09/22/1992 |

ECHO:

| | |
|---|---|
| Envid: | 1000411027 |
| Registry ID: | 110002769442 |
| DFR URL: | http://echo.epa.gov/detailed_facility_report?fid=110002769442 |

**B12** **SOUTHWEST PRODUCTS CO** **SWEEPS UST** **U002279059**
**East** **2240 BUENA VISTA ST** **LOS ANGELES CO. HMS** **N/A**
**< 1/8** **IRWINDALE, CA 91706**
**0.053 mi.**
**282 ft.** **Site 3 of 3 in cluster B**

**Relative:**
**Higher**

**Actual:**
**425 ft.**

SWEEPS UST:

| | |
|---|---|
| Status: | Not reported |
| Comp Number: | 3582 |
| Number: | Not reported |
| Board Of Equalization: | 44-007741 |
| Referral Date: | Not reported |
| Action Date: | Not reported |
| Created Date: | Not reported |
| Owner Tank Id: | Not reported |
| SWRCB Tank Id: | 19-000-003582-000001 |
| Tank Status: | Not reported |
| Capacity: | 3008 |
| Active Date: | Not reported |
| Tank Use: | OIL |
| STG: | WASTE |
| Content: | Not reported |
| Number Of Tanks: | 2 |

| | |
|---|---|
| Status: | Not reported |
| Comp Number: | 3582 |
| Number: | Not reported |
| Board Of Equalization: | 44-007741 |
| Referral Date: | Not reported |
| Action Date: | Not reported |
| Created Date: | Not reported |
| Owner Tank Id: | Not reported |
| SWRCB Tank Id: | 19-000-003582-000002 |
| Tank Status: | Not reported |
| Capacity: | 1690 |
| Active Date: | Not reported |
| Tank Use: | OIL |
| STG: | WASTE |
| Content: | Not reported |
| Number Of Tanks: | Not reported |

LOS ANGELES CO. HMS:

| | |
|---|---|
| Region: | LA |
| Permit Category: | T |
| Facility Id: | 003463-003582 |
| Facility Type: | 0 |
| Facility Status: | Removed |
| Area: | 3S |
| Permit Number: | 00000331T |
| Permit Status: | Removed |

| | |
|---|---|
| Region: | LA |
| Permit Category: | Not reported |
| Facility Id: | 003463-032602 |
| Facility Type: | Not reported |
| Facility Status: | OPEN |
| Area: | 3S |
| Permit Number: | Not reported |
| Permit Status: | Not reported |

**SOUTHWEST PRODUCTS CO (Continued)** **U002279059**

Region: LA
Permit Category: Not reported
Facility Id: 003463-045928
Facility Type: Not reported
Facility Status: OPEN
Area: 3S
Permit Number: Not reported
Permit Status: Not reported

Region: LA
Permit Category: I
Facility Id: 003463-I03582
Facility Type: 09
Facility Status: Closed
Area: 3S
Permit Number: 000008193
Permit Status: Removed

Region: LA
Permit Category: I
Facility Id: 003463-I03582
Facility Type: 01
Facility Status: Closed
Area: 3S
Permit Number: 000011454
Permit Status: Closed

Region: LA
Permit Category: I
Facility Id: 003463-I03582
Facility Type: 01
Facility Status: Closed
Area: 3S
Permit Number: 000012938
Permit Status: Removed

---

**13**
**West**
**< 1/8**
**0.113 mi.**
**596 ft.**

**WESTERN TEXACO** **EDR Hist Auto** **1009014724**
**700 W EL SUR ST** **N/A**
**GLENDALE, CA**

**Relative:**
**Higher**

**Actual:**
**408 ft.**

EDR Historical Auto Stations:
Name: WESTERN TEXACO
Year: 1967
Type: GASOLINE STATIONS

**14**
**SSW**
**< 1/8**
**0.125 mi.**
**660 ft.**

**ALPHA INVESTMENT ASSOCIATES** — **SWF/LF** — **S106079127**
**2501-59 BATEMAN** — **N/A**
**IRWINDALE, CA**

**Relative:**
**Higher**

**Actual:**
**415 ft.**

SWF/LF (SWIS):

| | |
|---|---|
| Region: | STATE |
| Facility ID: | 19-AA-0028 |
| Lat/Long: | 34.141670 / -118.00667 |
| Owner Name: | Irwindale City |
| Owner Telephone: | 8189623381 |
| Owner Address: | Not reported |
| Owner Address2: | 5050 N. Irwindale Ave. |
| Owner City,St,Zip: | Irwindale, CA 91706 |
| Operational Status: | Closed |
| Operator: | Alpha Investments Inc |
| Operator Phone: | Not reported |
| Operator Address: | Not reported |
| Operator Address2: | P O Box 2450 |
| Operator City,St,Zip: | Newport Beach, CA 92660 |
| Permit Date: | Not reported |
| Permit Status: | Not reported |
| Permitted Acreage: | $0.00 |
| Activity: | Solid Waste Disposal Site |
| Regulation Status: | Pre-regulations |
| Landuse Name: | Commercial |
| GIS Source: | Map |
| Category: | Disposal |
| Unit Number: | 01 |
| Inspection Frequency: | Annual |
| Accepted Waste: | Not reported |
| Closure Date: | 12/31/1983 |
| Closure Type: | Estimated |
| Disposal Acreage: | $0.00 |
| SWIS Num: | 19-AA-0028 |
| Waste Discharge Requirement Num: | Not reported |
| Program Type: | Not reported |
| Permitted Throughput with Units: | Not reported |
| Actual Throughput with Units: | Not reported |
| Permitted Capacity with Units: | Not reported |
| Remaining Capacity: | Not reported |
| Remaining Capacity with Units: | Not reported |
| Lat/Long: | 34.141670 / -118.00667 |

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**C15**
**South**
**1/8-1/4**
**0.133 mi.**
**701 ft.**

**IRWINDALE IRON & METAL** — **SWEEPS UST** — **S106927553**
**2495 BUENA VISTA AVE** — **N/A**
**IRWINDALE, CA**

**Site 1 of 3 in cluster C**

**Relative:**
**Higher**

**Actual:**
**404 ft.**

SWEEPS UST:

| | |
|---|---|
| Status: | Active |
| Comp Number: | 14207 |
| Number: | 9 |
| Board Of Equalization: | Not reported |
| Referral Date: | 06-30-89 |
| Action Date: | Not reported |
| Created Date: | 06-30-89 |
| Owner Tank Id: | Not reported |

**IRWINDALE IRON & METAL (Continued)** **S106927553**

| | |
|---|---|
| SWRCB Tank Id: | Not reported |
| Tank Status: | Not reported |
| Capacity: | Not reported |
| Active Date: | Not reported |
| Tank Use: | Not reported |
| STG: | Not reported |
| Content: | Not reported |
| Number Of Tanks: | Not reported |

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**C16** **SA RECYCLING LLC** **SWRCY S108220538**
**South** **2495 BUENA VISTA** **NPDES N/A**
**1/8-1/4** **IRWINDALE, CA 91010** **LA Co. Site Mitigation**
**0.133 mi.**
**701 ft.** **Site 2 of 3 in cluster C**

**Relative:**
**Higher**

**Actual:**
**404 ft.**

SWRCY:

| | |
|---|---|
| Reg Id: | 41357 |
| Cert Id: | RC14410 |
| Mailing Address: | 2411 N Glassell |
| Mailing City: | Orange |
| Mailing State: | CA |
| Mailing Zip Code: | 92865 |
| Website: | Not reported |
| Email: | tjohnson@sarecycling.com |
| Phone Number: | (626) 359-5815 |
| Grand Father: | N |
| Rural: | N |
| Operation Begin Date: | 08/03/2009 |
| Aluminium: | Y |
| Glass: | Y |
| Plastic: | Y |
| Bimetal: | Y |
| Agency: | N/A |
| Monday Hours Of Operation: | 7:00 am - 4:00 pm |
| Tuesday Hours Of Operation: | 7:00 am - 4:00 pm |
| Wednesday Hours Of Operation: | 7:00 am - 4:00 pm |
| Thursday Hours Of Operation: | 7:00 am - 4:00 pm |
| Friday Hours Of Operation: | 7:00 am - 4:00 pm |
| Saturday Hours Of Operation: | 7:00 am - 4:00 pm |
| Sunday Hours Of Operation: | CLOSED |
| Organization ID: | 41342 |
| Organization Name: | SA Recycling LLC |

NPDES:

| | |
|---|---|
| Npdes Number: | Not reported |
| Facility Status: | Not reported |
| Agency Id: | Not reported |
| Region: | 4 |
| Regulatory Measure Id: | 331038 |
| Order No: | Not reported |
| Regulatory Measure Type: | Industrial |
| Place Id: | Not reported |
| WDID: | 4 19I021107 |
| Program Type: | Not reported |
| Adoption Date Of Regulatory Measure: | Not reported |
| Effective Date Of Regulatory Measure: | Not reported |
| Expiration Date Of Regulatory Measure: | Not reported |

**SA RECYCLING LLC (Continued)** **S108220538**

| | |
|---|---|
| Termination Date Of Regulatory Measure: | Not reported |
| Discharge Name: | Not reported |
| Discharge Address: | Not reported |
| Discharge City: | Not reported |
| Discharge State: | Not reported |
| Discharge Zip: | Not reported |
| RECEIVED DATE: | 5/9/2008 |
| PROCESSED DATE: | 9/5/2007 |
| STATUS CODE NAME: | Active |
| STATUS DATE: | 9/5/2007 |
| PLACE SIZE: | 4 |
| PLACE SIZE UNIT: | 52 |
| FACILITY CONTACT NAME: | Kubilay Karul |
| FACILITY CONTACT TITLE: | Not reported |
| FACILITY CONTACT PHONE: | 626-359-5815 |
| FACILITY CONTACT PHONE EXT: | Not reported |
| FACILITY CONTACT EMAIL: | kkarul@sarecycling.com |
| OPERATOR NAME: | SA Recycling LLC |
| OPERATOR ADDRESS: | 2495 Buena Vista St |
| OPERATOR CITY: | Irwindale |
| OPERATOR STATE: | California |
| OPERATOR ZIP: | 91706 |
| OPERATOR CONTACT NAME: | Kubilay Karul |
| OPERATOR CONTACT TITLE: | Not reported |
| OPERATOR CONTACT PHONE: | 626-359-5815 |
| OPERATOR CONTACT PHONE EXT: | Not reported |
| OPERATOR CONTACT EMAIL: | kkarul@sarecycling.com |
| OPERATOR TYPE: | Private Business |
| DEVELOPER NAME: | Not reported |
| DEVELOPER ADDRESS: | Not reported |
| DEVELOPER CITY: | Not reported |
| DEVELOPER STATE: | California |
| DEVELOPER ZIP: | Not reported |
| DEVELOPER CONTACT NAME: | Not reported |
| DEVELOPER CONTACT TITLE: | Not reported |
| CONSTYPE LINEAR UTILITY IND: | Not reported |
| EMERGENCY PHONE NO: | Not reported |
| EMERGENCY PHONE EXT: | Not reported |
| CONSTYPE ABOVE GROUND IND: | Not reported |
| CONSTYPE BELOW GROUND IND: | Not reported |
| CONSTYPE CABLE LINE IND: | Not reported |
| CONSTYPE COMM LINE IND: | Not reported |
| CONSTYPE COMMERTIAL IND: | Not reported |
| CONSTYPE ELECTRICAL LINE IND: | Not reported |
| CONSTYPE GAS LINE IND: | Not reported |
| CONSTYPE INDUSTRIAL IND: | Not reported |
| CONSTYPE OTHER DESRIPTION: | Not reported |
| CONSTYPE OTHER IND: | Not reported |
| CONSTYPE RECONS IND: | Not reported |
| CONSTYPE RESIDENTIAL IND: | Not reported |
| CONSTYPE TRANSPORT IND: | Not reported |
| CONSTYPE UTILITY DESCRIPTION: | Not reported |
| CONSTYPE UTILITY IND: | Not reported |
| CONSTYPE WATER SEWER IND: | Not reported |
| DIR DISCHARGE USWATER IND: | Not reported |
| RECEIVING WATER NAME: | San Gabriel River |
| CERTIFIER NAME: | Not reported |

**SA RECYCLING LLC (Continued)** **S108220538**

| | |
|---|---|
| CERTIFIER TITLE: | Not reported |
| CERTIFICATION DATE: | Not reported |
| PRIMARY SIC: | 5093-Scrap and Waste Materials |
| SECONDARY SIC: | 5015-Motor Vehicle Parts, Used |
| TERTIARY SIC: | Not reported |
| | |
| Npdes Number: | CAS000001 |
| Facility Status: | Active |
| Agency Id: | 0 |
| Region: | 4 |
| Regulatory Measure Id: | 331038 |
| Order No: | 97-03-DWQ |
| Regulatory Measure Type: | Enrollee |
| Place Id: | Not reported |
| WDID: | 4 19I021107 |
| Program Type: | Industrial |
| Adoption Date Of Regulatory Measure: | Not reported |
| Effective Date Of Regulatory Measure: | 09/05/2007 |
| Expiration Date Of Regulatory Measure: | Not reported |
| Termination Date Of Regulatory Measure: | Not reported |
| Discharge Name: | SA Recycling LLC |
| Discharge Address: | 2411 n Glassell Street |
| Discharge City: | Orange |
| Discharge State: | California |
| Discharge Zip: | 92865 |
| RECEIVED DATE: | Not reported |
| PROCESSED DATE: | Not reported |
| STATUS CODE NAME: | Not reported |
| STATUS DATE: | Not reported |
| PLACE SIZE: | Not reported |
| PLACE SIZE UNIT: | Not reported |
| FACILITY CONTACT NAME: | Not reported |
| FACILITY CONTACT TITLE: | Not reported |
| FACILITY CONTACT PHONE: | Not reported |
| FACILITY CONTACT PHONE EXT: | Not reported |
| FACILITY CONTACT EMAIL: | Not reported |
| OPERATOR NAME: | Not reported |
| OPERATOR ADDRESS: | Not reported |
| OPERATOR CITY: | Not reported |
| OPERATOR STATE: | Not reported |
| OPERATOR ZIP: | Not reported |
| OPERATOR CONTACT NAME: | Not reported |
| OPERATOR CONTACT TITLE: | Not reported |
| OPERATOR CONTACT PHONE: | Not reported |
| OPERATOR CONTACT PHONE EXT: | Not reported |
| OPERATOR CONTACT EMAIL: | Not reported |
| OPERATOR TYPE: | Not reported |
| DEVELOPER NAME: | Not reported |
| DEVELOPER ADDRESS: | Not reported |
| DEVELOPER CITY: | Not reported |
| DEVELOPER STATE: | Not reported |
| DEVELOPER ZIP: | Not reported |
| DEVELOPER CONTACT NAME: | Not reported |
| DEVELOPER CONTACT TITLE: | Not reported |
| CONSTYPE LINEAR UTILITY IND: | Not reported |
| EMERGENCY PHONE NO: | Not reported |
| EMERGENCY PHONE EXT: | Not reported |

**SA RECYCLING LLC (Continued)** **S108220538**

| | |
|---|---|
| CONSTYPE ABOVE GROUND IND: | Not reported |
| CONSTYPE BELOW GROUND IND: | Not reported |
| CONSTYPE CABLE LINE IND: | Not reported |
| CONSTYPE COMM LINE IND: | Not reported |
| CONSTYPE COMMERTIAL IND: | Not reported |
| CONSTYPE ELECTRICAL LINE IND: | Not reported |
| CONSTYPE GAS LINE IND: | Not reported |
| CONSTYPE INDUSTRIAL IND: | Not reported |
| CONSTYPE OTHER DESRIPTION: | Not reported |
| CONSTYPE OTHER IND: | Not reported |
| CONSTYPE RECONS IND: | Not reported |
| CONSTYPE RESIDENTIAL IND: | Not reported |
| CONSTYPE TRANSPORT IND: | Not reported |
| CONSTYPE UTILITY DESCRIPTION: | Not reported |
| CONSTYPE UTILITY IND: | Not reported |
| CONSTYPE WATER SEWER IND: | Not reported |
| DIR DISCHARGE USWATER IND: | Not reported |
| RECEIVING WATER NAME: | Not reported |
| CERTIFIER NAME: | Not reported |
| CERTIFIER TITLE: | Not reported |
| CERTIFICATION DATE: | Not reported |
| PRIMARY SIC: | Not reported |
| SECONDARY SIC: | Not reported |
| TERTIARY SIC: | Not reported |

LA Co. Site Mitigation:

| | |
|---|---|
| Facility ID: | Not reported |
| Site ID: | SD0000303 |
| Jurisdiction: | State |
| Case ID: | RO0001304 |
| Abated: | Yes |
| Assigned To: | Richard Clark |
| Entered Date: | 12/30/2009 |
| Abated Date: | 03/14/2011 |

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**C17** **ALDON CONCRETE PRODUCTS** **SLIC** **S104536272**
**South** **2455 BUENA VISTA ST** **LA Co. Site Mitigation** **N/A**
**1/8-1/4** **IRWINDALE, CA 91010**
**0.138 mi.**
**729 ft.** **Site 3 of 3 in cluster C**

**Relative:**
**Higher**

**Actual:**
**405 ft.**

SLIC:

| | |
|---|---|
| Region: | STATE |
| **Facility Status:** | **Open - Inactive** |
| Status Date: | 01/29/2015 |
| Global Id: | SLT4L5071828 |
| Lead Agency: | LOS ANGELES RWQCB (REGION 4) |
| Lead Agency Case Number: | Not reported |
| Latitude: | 34.1134405094578 |
| Longitude: | -117.964745022699 |
| Case Type: | Cleanup Program Site |
| Case Worker: | Not reported |
| Local Agency: | Not reported |
| RB Case Number: | 0507 |
| File Location: | Not reported |
| Potential Media Affected: | Not reported |
| Potential Contaminants of Concern: | Not reported |

**ALDON CONCRETE PRODUCTS (Continued)** **S104536272**

Site History: Not reported

Click here to access the California GeoTracker records for this facility:

SLIC REG 4:
Region: 4
Facility Status: Site Assessment
SLIC: 0507
Substance: TPH
Staff: Not reported

LA Co. Site Mitigation:
Facility ID: Not reported
Site ID: SD0010521
Jurisdiction: County
Case ID: RO0000324
Abated: Yes
Assigned To: Shahin Nourishad
Entered Date: 05/11/2004
Abated Date: 06/01/1995

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**D18** **ALPHA INVESTMENT ASSOC** **SWF/LF** **S101310334**
**SW** **2501 BATEMAN** **WMUDS/SWAT** **N/A**
**1/8-1/4** **IRWINDALE, CA 91706**
**0.146 mi.**
**773 ft.** **Site 1 of 2 in cluster D**

**Relative: Higher**

**Actual: 352 ft.**

LOS ANGELES CO. LF:
Site ID: 1871
Alt. Address: 2559 Bateman Avenue, Irwindale, CA
Site Contact: Not reported
Site Contact Phone: Not reported
Site Email: Not reported
Site Website: Not reported
Site Type: Municipal Solid Waste Landfill
Site SWIS Number: 19-AA-0028
Beginning Operation Date: 1940
Ending Operation Date: Dec-83
Local Enforcement Agency: County Public Health
Maximun Depth Fill(Ft): 125
Permitted Capacity: Not reported
Present Use: Commercial
Remaining Capacity(Million): Not reported
Status: Closed
Waste Accepted: Inert
Hours of Operation: Not reported
Disposal Area (Acre): 32

Detail As Of 01/2014:
Operator Name: Alpha Investments, Inc.
Operator Address: 2501 Bateman
Operator City/State/Zip: IRVINDALE, CA 91706
Operator Contact: Not reported
Operator Telephone: Not reported
Operator Email: Not reported
Owner Name: City of Irwindale
Owner Address: 5050 North Irwindale Ave

**ALPHA INVESTMENT ASSOC (Continued)** **S101310334**

Owner City/State/Zip: Irwindale, CA 91706
Owner Contact: Not reported
Owner Telephone: (818) 962-3381
Owner Email: Not reported

WMUDS/SWAT:
Edit Date: 19950207
Complexity: Not reported
Primary Waste: Not reported
Primary Waste Type: Not reported
Secondary Waste: Not reported
Secondary Waste Type: Not reported
Base Meridian: SB
NPID: Not reported
Tonnage: 200
Regional Board ID: 62-08
Municipal Solid Waste: False
Superorder: False
Open To Public: False
Waste List: False
Agency Type: Not reported
Agency Name: ALPHA INVESTMENT ASSOC
Agency Department: Not reported
Agency Address: PO BOX 2460
Agency City,St,Zip: NEWPORT BEACH 92660
Agency Contact: Not reported
Agency Telephone: Not reported
Land Owner Name: NU-WAY INDUSTRIES
Land Owner Address: P.O. BOX 3088
Land Owner City,St,Zip: ARCADIA, CA 91006
Land Owner Contact: J. EARL GARRETT, PRESIDENT
Land Owner Phone: 8183591175
Region: 4
Facility Type: Not reported
Facility Description: Not reported
Facility Telephone: Not reported
SWAT Facility Name: ALPHA INVESTMENT ASSOC
Primary SIC: Not reported
Secondary SIC: Not reported
Comments: Not reported
Last Facility Editors: CDCCDCJHM
Waste Discharge System: False
Solid Waste Assessment Test Program: True
Toxic Pits Cleanup Act Program: False
Resource Conservation Recovery Act: False
Department of Defence: False
Solid Waste Assessment Test Program: ALPHA INVESTMENT ASSOC
Threat to Water Quality: Not reported
Sub Chapter 15: False
Regional Board Project Officer: Not reported
Number of WMUDS at Facility: 1
Section Range: Not reported
RCRA Facility: Not reported
Waste Discharge Requirements: Not reported
Self-Monitoring Rept. Frequency: Not reported
Waste Discharge System ID: 4 190043NUR
Solid Waste Information ID: 19-AA-0028

**D19**
**SW**
**1/8-1/4**
**0.175 mi.**
**926 ft.**

**L P D AUTO WRECKING**
**845 ALPHA ST**
**DUARTE, CA 91010**

**Site 2 of 2 in cluster D**

**RCRA-SQG**
**FINDS**
**HAZNET**
**ECHO**

**1000818787**
**CAD983646993**

**Relative:**
**Higher**

**Actual:**
**312 ft.**

RCRA-SQG:

| | |
|---|---|
| Date form received by agency: | 08/26/1992 |
| Facility name: | L P D AUTO WRECKING |
| Facility address: | 845 ALPHA ST<br>DUARTE, CA 91010 |
| EPA ID: | CAD983646993 |
| Mailing address: | ALPHA ST<br>DUARTE, CA 91010 |
| Contact: | JOHN TA |
| Contact address: | 845 ALPHA ST<br>DUARTE, CA 91010 |
| Contact country: | US |
| Contact telephone: | (818) 359-8945 |
| Contact email: | Not reported |
| EPA Region: | 09 |
| Classification: | Small Small Quantity Generator |
| Description: | Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time |

Owner/Operator Summary:

| | |
|---|---|
| Owner/operator name: | ROBERT AND MARIE ZIMBA |
| Owner/operator address: | 845 ALPHA ST<br>DUARTE, CA 91010 |
| Owner/operator country: | Not reported |
| Owner/operator telephone: | (818) 359-8945 |
| Legal status: | Private |
| Owner/Operator Type: | Owner |
| Owner/Op start date: | Not reported |
| Owner/Op end date: | Not reported |

Handler Activities Summary:

| | |
|---|---|
| U.S. importer of hazardous waste: | No |
| Mixed waste (haz. and radioactive): | No |
| Recycler of hazardous waste: | No |
| Transporter of hazardous waste: | No |
| Treater, storer or disposer of HW: | No |
| Underground injection activity: | No |
| On-site burner exemption: | No |
| Furnace exemption: | No |
| Used oil fuel burner: | No |
| Used oil processor: | No |
| User oil refiner: | No |
| Used oil fuel marketer to burner: | No |
| Used oil Specification marketer: | No |
| Used oil transfer facility: | No |
| Used oil transporter: | No |

Violation Status: No violations found

**L P D AUTO WRECKING (Continued)** **1000818787**

FINDS:

Registry ID: 110002883693

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZNET:

| | |
|---|---|
| envid: | 1000818787 |
| Year: | 1999 |
| GEPAID: | CAD983646993 |
| Contact: | ROBERT AND MARIE ZIMBA |
| Telephone: | 8183598945 |
| Mailing Name: | Not reported |
| Mailing Address: | 845 ALPHA ST |
| Mailing City,St,Zip: | DUARTE, CA 910103585 |
| Gen County: | Not reported |
| TSD EPA ID: | CAD000088252 |
| TSD County: | Not reported |
| Waste Category: | Other organic solids |
| Disposal Method: | Transfer Station |
| Tons: | .3000 |
| Cat Decode: | Other organic solids |
| Method Decode: | Transfer Station |
| Facility County: | Los Angeles |

ECHO:

| | |
|---|---|
| Envid: | 1000818787 |
| Registry ID: | 110002883693 |
| DFR URL: | http://echo.epa.gov/detailed_facility_report?fid=110002883693 |

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**E20** **VERNON PAVING CO** **LUST** **U001568827**
**South** **2600 BUENA VISTA** **HIST UST** **N/A**
**1/8-1/4** **IRWINDALE, CA 91706**
**0.183 mi.**
**965 ft.** **Site 1 of 9 in cluster E**

**Relative:**
**Higher**

**Actual:**
**404 ft.**

LUST:

| | |
|---|---|
| Region: | STATE |
| Global Id: | T0603704474 |
| Latitude: | 34.1176467 |
| Longitude: | -117.9848087 |
| Case Type: | LUST Cleanup Site |
| Status: | Completed - Case Closed |
| Status Date: | 10/15/1996 |
| Lead Agency: | LOS ANGELES RWQCB (REGION 4) |
| Case Worker: | YR |
| Local Agency: | LOS ANGELES COUNTY |
| RB Case Number: | I-21368 |
| LOC Case Number: | Not reported |

**VERNON PAVING CO (Continued)** **U001568827**

File Location: Not reported
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: Diesel
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0603704474
Contact Type: Local Agency Caseworker
Contact Name: JOHN AWUJO
Organization Name: LOS ANGELES COUNTY
Address: 900 S FREMONT AVE
City: ALHAMBRA
Email: jawujo@dpw.lacounty.gov
Phone Number: 6264583507

Global Id: T0603704474
Contact Type: Regional Board Caseworker
Contact Name: YUE RONG
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: 320 W. 4TH ST., SUITE 200
City: Los Angeles
Email: yrong@waterboards.ca.gov
Phone Number: Not reported

Status History:
Global Id: T0603704474
Status: Completed - Case Closed
Status Date: 10/15/1996

Global Id: T0603704474
Status: Open - Case Begin Date
Status Date: 03/18/1994

Global Id: T0603704474
Status: Open - Site Assessment
Status Date: 05/01/1996

Regulatory Activities:
Global Id: T0603704474
Action Type: Other
Date: 03/18/1994
Action: Leak Discovery

Global Id: T0603704474
Action Type: Other
Date: 03/29/1994
Action: Leak Reported

HIST UST:
File Number: 00028568
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00028568.pdf
Region: STATE
Facility ID: 00000003497

**VERNON PAVING CO (Continued)** **U001568827**

| | |
|---|---|
| Facility Type: | Other |
| Other Type: | ASPHALT PLANT |
| Contact Name: | GEORGE RONEY |
| Telephone: | 2136810297 |
| Owner Name: | VERNON PAVING CO. |
| Owner Address: | 2544 WOODLAND DRIVE |
| Owner City,St,Zip: | ANAHEIM, CA 92801 |
| Total Tanks: | 0001 |
| | |
| Tank Num: | 001 |
| Container Num: | SGD-1 |
| Year Installed: | 1966 |
| Tank Capacity: | 00004400 |
| Tank Used for: | PRODUCT |
| Type of Fuel: | DIESEL |
| Container Construction Thickness: | 1/4 |
| Leak Detection: | Stock Inventor |
| | |
| Tank Num: | 001 |
| Container Num: | SGD-1 |
| Year Installed: | 1966 |
| Tank Capacity: | 00004400 |
| Tank Used for: | PRODUCT |
| Type of Fuel: | DIESEL |
| Container Construction Thickness: | 1/4 |
| Leak Detection: | Stock Inventor |
| | |
| Tank Num: | 001 |
| Container Num: | D-1 |
| Year Installed: | 1971 |
| Tank Capacity: | 00010000 |
| Tank Used for: | PRODUCT |
| Type of Fuel: | DIESEL |
| Container Construction Thickness: | Not reported |
| Leak Detection: | Stock Inventor |
| | |
| Tank Num: | 001 |
| Container Num: | D-1 |
| Year Installed: | 1971 |
| Tank Capacity: | 00010000 |
| Tank Used for: | PRODUCT |
| Type of Fuel: | DIESEL |
| Container Construction Thickness: | Not reported |
| Leak Detection: | Stock Inventor |
| | |
| Tank Num: | 002 |
| Container Num: | G-1 |
| Year Installed: | 1971 |
| Tank Capacity: | 00010000 |
| Tank Used for: | PRODUCT |
| Type of Fuel: | REGULAR |
| Container Construction Thickness: | Not reported |
| Leak Detection: | Stock Inventor |
| | |
| Tank Num: | 002 |
| Container Num: | G-1 |
| Year Installed: | 1971 |

**VERNON PAVING CO (Continued)** **U001568827**

| | |
|---|---|
| Tank Capacity: | 00010000 |
| Tank Used for: | PRODUCT |
| Type of Fuel: | REGULAR |
| Container Construction Thickness: | Not reported |
| Leak Detection: | Stock Inventor |

Click here for Geo Tracker PDF:

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**E21** **AST** **A100344860**
**South** **2600 BUENA VISTA ST** **N/A**
**1/8-1/4** **IRWINDALE, CA**
**0.183 mi.**
**965 ft.** **Site 2 of 9 in cluster E**

**Relative:**
**Higher**

**Actual:**
**404 ft.**

AST:

| | |
|---|---|
| Certified Unified Program Agencies: | Los Angeles County |
| Owner: | SULLY-MILLER CONTRACTING COMPANY |
| Total Gallons: | 3702 |
| CERSID: | Not reported |
| Facility ID: | Not reported |
| Business Name: | Not reported |
| Phone: | Not reported |
| Fax: | Not reported |
| Mailing Address: | Not reported |
| Mailing Address City: | Not reported |
| Mailing Address State: | Not reported |
| Mailing Address Zip Code: | Not reported |
| Operator Name: | Not reported |
| Operator Phone: | Not reported |
| Owner Phone: | Not reported |
| Owner Mail Address: | Not reported |
| Owner State: | Not reported |
| Owner Zip Code: | Not reported |
| Owner Country: | Not reported |
| Property Owner Name: | Not reported |
| Property Owner Phone: | Not reported |
| Property Owner Mailing Address: | Not reported |
| Property Owner City: | Not reported |
| Property Owner Stat : | Not reported |
| Property Owner Zip Code: | Not reported |
| Property Owner Country: | Not reported |
| EPAID: | Not reported |

---

**E22** **SULLY MILLER** **RCRA-SQG** **1000591048**
**South** **2600 BUENA VISTA AVE** **FINDS** **CAD075300871**
**1/8-1/4** **IRWINDALE, CA 91706** **ECHO**
**0.183 mi.**
**965 ft.** **Site 3 of 9 in cluster E**

**Relative:**
**Higher**

**Actual:**
**404 ft.**

RCRA-SQG:

| | |
|---|---|
| Date form received by agency: | 03/07/2000 |
| Facility name: | SULLY MILLER |
| Facility address: | 2600 BUENA VISTA AVE<br>IRWINDALE, CA 91706 |
| EPA ID: | CAD075300871 |
| Mailing address: | 1100 E ORANGETHORPE STE 200 |

**SULLY MILLER (Continued)** **1000591048**

ANAHEIM, CA 92801
Contact: MARVIN TORRES
Contact address: 2600 BUENA VISTA AVE
IRWINDALE, CA 91706
Contact country: US
Contact telephone: (626) 599-1713
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: SULLY MILLER CONTRACTING CO
Owner/operator address: 1100 E ORANGETHORPE STE 200
ANAHEIM, CA 92801
Owner/operator country: Not reported
Owner/operator telephone: (714) 578-9600
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D039
. Waste name: TETRACHLOROETHYLENE

Violation Status: No violations found

FINDS:

Registry ID: 110002657839

Environmental Interest/Information System
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

**SULLY MILLER (Continued)** **1000591048**

HAZARDOUS AIR POLLUTANT MAJOR

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:
Envid: 1000591048
Registry ID: 110002657839
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110002657839

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**E23** **VERNON ASPHALT MATERIALS** **SWEEPS UST** **S106934076**
**South** **2600 S BUENA VISTA ST** **N/A**
**1/8-1/4** **IRWINDALE, CA**
**0.183 mi.**
**965 ft.** **Site 4 of 9 in cluster E**

**Relative:**
**Higher**

**Actual:**
**404 ft.**

SWEEPS UST:
Status: Active
Comp Number: 2904
Number: 9
Board Of Equalization: 44-007679
Referral Date: 06-30-89
Action Date: Not reported
Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-002904-000003
Tank Status: A
Capacity: Not reported
Active Date: 06-30-89
Tank Use: UNKNOWN
STG: W
Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 2904
Number: 9
Board Of Equalization: 44-007679
Referral Date: 06-30-89
Action Date: Not reported
Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-002904-000001
Tank Status: A
Capacity: Not reported
Active Date: 06-30-89
Tank Use: UNKNOWN
STG: W
Content: Not reported
Number Of Tanks: 3

Status: Active

**VERNON ASPHALT MATERIALS (Continued)** **S106934076**

| | |
|---|---|
| Comp Number: | 2904 |
| Number: | 9 |
| Board Of Equalization: | 44-007679 |
| Referral Date: | 06-30-89 |
| Action Date: | Not reported |
| Created Date: | 06-30-89 |
| Owner Tank Id: | Not reported |
| SWRCB Tank Id: | 19-000-002904-000002 |
| Tank Status: | A |
| Capacity: | Not reported |
| Active Date: | 06-30-89 |
| Tank Use: | UNKNOWN |
| STG: | W |
| Content: | Not reported |
| Number Of Tanks: | Not reported |

---

**E24**
**South**
**1/8-1/4**
**0.183 mi.**
**965 ft.**

**VERNON ASPHALT MATERIALS** **LUST U003057858**
**2600 AVENIDA BARBOSA** **EMI N/A**
**IRWINDALE, CA 91010** **LOS ANGELES CO. HMS**

**Site 5 of 9 in cluster E**

**Relative:**
**Higher**

**Actual:**
**404 ft.**

LUST REG 4:

| | | |
|---|---|---|
| Region: | 4 | |
| Regional Board: | 04 | |
| County: | Los Angeles | |
| Facility Id: | I-21368 | |
| Status: | Case Closed | |
| Substance: | Diesel | |
| Substance Quantity: | Not reported | |
| Local Case No: | Not reported | |
| Case Type: | Groundwater | |
| Abatement Method Used at the Site: | | Excavate and Treat |
| Global ID: | T0603704474 | |
| W Global ID: | Not reported | |
| Staff: | UNK | |
| Local Agency: | 19000 | |
| Cross Street: | ALPHA ST | |
| Enforcement Type: | Not reported | |
| Date Leak Discovered: | 3/18/1994 | |
| Date Leak First Reported: | | 3/29/1994 |
| Date Leak Record Entered: | 6/7/1995 | |
| Date Confirmation Began: | Not reported | |
| Date Leak Stopped: | Not reported | |
| Date Case Last Changed on Database: | | 5/1/1996 |
| Date the Case was Closed: | | 10/15/1996 |
| How Leak Discovered: | Tank Closure | |
| How Leak Stopped: | Not reported | |
| Cause of Leak: | UNK | |
| Leak Source: | UNK | |
| Operator: | Not reported | |
| Water System: | Not reported | |
| Well Name: | Not reported | |
| Approx. Dist To Production Well (ft): | | 4751.07850402023404062894319 34 |
| Source of Cleanup Funding: | | UNK |
| Preliminary Site Assessment Workplan Submitted: | | 5/1/1996 |
| Preliminary Site Assessment Began: | | Not reported |
| Pollution Characterization Began: | | Not reported |

**VERNON ASPHALT MATERIALS (Continued)** **U003057858**

Remediation Plan Submitted: Not reported
Remedial Action Underway: Not reported
Post Remedial Action Monitoring Began: Not reported
Enforcement Action Date: Not reported
Historical Max MTBE Date: Not reported
Hist Max MTBE Conc in Groundwater: Not reported
Hist Max MTBE Conc in Soil: Not reported
Significant Interim Remedial Action Taken: Yes
GW Qualifier: Not reported
Soil Qualifier: Not reported
Organization: Not reported
Owner Contact: Not reported
Responsible Party: SULLY MILLER CONTRACTING CO
RP Address: 3600 BUENA VISTA ST., IRWINDALE CA 91706
Program: LUST
Lat/Long: 34.1176467 / -1
Local Agency Staff: Not reported
Beneficial Use: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Assigned Name: Not reported
Summary: TPH 11000 PPM; BTEX ND/ND/.32/2 PPM

EMI:

Year: 2002
County Code: 19
Air Basin: SC
Facility ID: 105277
Air District Name: SC
SIC Code: 2951
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 1
Reactive Organic Gases Tons/Yr: 1
Carbon Monoxide Emissions Tons/Yr: 1
NOX - Oxides of Nitrogen Tons/Yr: 3
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 3
Part. Matter 10 Micrometers and Smllr Tons/Yr: 2

Year: 2003
County Code: 19
Air Basin: SC
Facility ID: 105277
Air District Name: SC
SIC Code: 2951
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 1
Reactive Organic Gases Tons/Yr: 1
Carbon Monoxide Emissions Tons/Yr: 1
NOX - Oxides of Nitrogen Tons/Yr: 3
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 3

**VERNON ASPHALT MATERIALS (Continued)** **U003057858**

Part. Matter 10 Micrometers and Smllr Tons/Yr:2

| | |
|---|---|
| Year: | 2004 |
| County Code: | 19 |
| Air Basin: | SC |
| Facility ID: | 105277 |
| Air District Name: | SC |
| SIC Code: | 2951 |
| Air District Name: | SOUTH COAST AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 0.9755118 |
| Reactive Organic Gases Tons/Yr: | 0.73 |
| Carbon Monoxide Emissions Tons/Yr: | 1.400096 |
| NOX - Oxides of Nitrogen Tons/Yr: | 2.911199 |
| SOX - Oxides of Sulphur Tons/Yr: | 0.022697 |
| Particulate Matter Tons/Yr: | 2.9556334 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 1.55 |

| | |
|---|---|
| Year: | 2005 |
| County Code: | 19 |
| Air Basin: | SC |
| Facility ID: | 105277 |
| Air District Name: | SC |
| SIC Code: | 2951 |
| Air District Name: | SOUTH COAST AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | .756515 |
| Reactive Organic Gases Tons/Yr: | .6517232185 |
| Carbon Monoxide Emissions Tons/Yr: | 4.65211 |
| NOX - Oxides of Nitrogen Tons/Yr: | 1.77854 |
| SOX - Oxides of Sulphur Tons/Yr: | .014545 |
| Particulate Matter Tons/Yr: | 5.132015 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 2.51612274 |

| | |
|---|---|
| Year: | 2006 |
| County Code: | 19 |
| Air Basin: | SC |
| Facility ID: | 105277 |
| Air District Name: | SC |
| SIC Code: | 2951 |
| Air District Name: | SOUTH COAST AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 1.748950895990721887 |
| Reactive Organic Gases Tons/Yr: | 1.529 |
| Carbon Monoxide Emissions Tons/Yr: | 4.503 |
| NOX - Oxides of Nitrogen Tons/Yr: | 1.22 |
| SOX - Oxides of Sulphur Tons/Yr: | .013 |
| Particulate Matter Tons/Yr: | 17.759 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 10.669189 |

| | |
|---|---|
| Year: | 2007 |
| County Code: | 19 |
| Air Basin: | SC |
| Facility ID: | 105277 |

**VERNON ASPHALT MATERIALS (Continued)** **U003057858**

| | |
|---|---|
| Air District Name: | SC |
| SIC Code: | 2951 |
| Air District Name: | SOUTH COAST AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 1.746541205986665067 |
| Reactive Organic Gases Tons/Yr: | 1.529 |
| Carbon Monoxide Emissions Tons/Yr: | 4.503 |
| NOX - Oxides of Nitrogen Tons/Yr: | 1.22 |
| SOX - Oxides of Sulphur Tons/Yr: | .013 |
| Particulate Matter Tons/Yr: | 17.759 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 10.669189 |

| | |
|---|---|
| Year: | 2008 |
| County Code: | 19 |
| Air Basin: | SC |
| Facility ID: | 105277 |
| Air District Name: | SC |
| SIC Code: | 2951 |
| Air District Name: | SOUTH COAST AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 1.354164621437050077 |
| Reactive Organic Gases Tons/Yr: | 1.1800208 |
| Carbon Monoxide Emissions Tons/Yr: | 3.860256 |
| NOX - Oxides of Nitrogen Tons/Yr: | 1.380092601643010056 |
| SOX - Oxides of Sulphur Tons/Yr: | .01069925 |
| Particulate Matter Tons/Yr: | 10.40002632435 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 5.34863424224 |

| | |
|---|---|
| Year: | 2012 |
| County Code: | 19 |
| Air Basin: | SC |
| Facility ID: | 105277 |
| Air District Name: | SC |
| SIC Code: | 2951 |
| Air District Name: | SOUTH COAST AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 0.86270197163 |
| Reactive Organic Gases Tons/Yr: | 0.6916591 |
| Carbon Monoxide Emissions Tons/Yr: | 3.24768 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0.959 |
| SOX - Oxides of Sulphur Tons/Yr: | 0.01039 |
| Particulate Matter Tons/Yr: | 7.3025598 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 4.072214158 |

| | |
|---|---|
| Year: | 2013 |
| County Code: | 19 |
| Air Basin: | SC |
| Facility ID: | 105277 |
| Air District Name: | SC |
| SIC Code: | 2951 |
| Air District Name: | SOUTH COAST AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 1.0198531553 |

**VERNON ASPHALT MATERIALS (Continued)** **U003057858**

| | |
|---|---|
| Reactive Organic Gases Tons/Yr: | 0.81616 |
| Carbon Monoxide Emissions Tons/Yr: | 3.76176 |
| NOX - Oxides of Nitrogen Tons/Yr: | 1.12399 |
| SOX - Oxides of Sulphur Tons/Yr: | 0.0122 |
| Particulate Matter Tons/Yr: | 8.048210002 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 4.439490972 |

| | |
|---|---|
| Year: | 2014 |
| County Code: | 19 |
| Air Basin: | SC |
| Facility ID: | 105277 |
| Air District Name: | SC |
| SIC Code: | 2951 |
| Air District Name: | SOUTH COAST AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 0.8789105074 |
| Reactive Organic Gases Tons/Yr: | 0.8721 |
| Carbon Monoxide Emissions Tons/Yr: | 3.09275 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0.98927 |
| SOX - Oxides of Sulphur Tons/Yr: | 0.01038 |
| Particulate Matter Tons/Yr: | 7.56201 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 3.03248801 |

| | |
|---|---|
| Year: | 2015 |
| County Code: | 19 |
| Air Basin: | SC |
| Facility ID: | 105277 |
| Air District Name: | SC |
| SIC Code: | 2951 |
| Air District Name: | SOUTH COAST AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 0.8789105074 |
| Reactive Organic Gases Tons/Yr: | 0.8721 |
| Carbon Monoxide Emissions Tons/Yr: | 3.09275 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0.98927 |
| SOX - Oxides of Sulphur Tons/Yr: | 0.01038 |
| Particulate Matter Tons/Yr: | 7.56201 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 3.03248801 |

LOS ANGELES CO. HMS:

| | |
|---|---|
| Region: | LA |
| Permit Category: | T |
| Facility Id: | 001427-002904 |
| Facility Type: | 0 |
| Facility Status: | Closed |
| Area: | 3S |
| Permit Number: | 00003377T |
| Permit Status: | Closed |

| | |
|---|---|
| Region: | LA |
| Permit Category: | T |
| Facility Id: | 001427-021368 |
| Facility Type: | 0 |
| Facility Status: | Removed |
| Area: | 3S |

**VERNON ASPHALT MATERIALS (Continued)** **U003057858**

Permit Number: 000078599
Permit Status: Removed

Region: LA
Permit Category: T
Facility Id: 001427-024914
Facility Type: 1
Facility Status: Closed
Area: 3S
Permit Number: 000192025
Permit Status: Closed

Region: LA
Permit Category: I
Facility Id: 001427-038676
Facility Type: 09
Facility Status: Permit
Area: 3S
Permit Number: 000395919
Permit Status: Permit

Region: LA
Permit Category: S
Facility Id: 001427-047863
Facility Type: S6
Facility Status: Closed
Area: 3S
Permit Number: CGI012229
Permit Status: Closed

Region: LA
Permit Category: I
Facility Id: 001427-I02904
Facility Type: 00
Facility Status: Closed
Area: 3S
Permit Number: 000004255
Permit Status: Closed

---

**E25** **VERNON ASPHALT MATERIALS CO** **EMI** **S100853424**
**South** **2600 BUENA VISTA** **ENF** **N/A**
**1/8-1/4** **IRWINDALE, CA 91706** **HIST CORTESE**
**0.183 mi.** **WDS**
**965 ft.** **Site 6 of 9 in cluster E**

**Relative:**
**Higher**

**Actual:**
**404 ft.**

EMI:

| | |
|---|---|
| Year: | 1990 |
| County Code: | 19 |
| Air Basin: | SC |
| Facility ID: | 12524 |
| Air District Name: | SC |
| SIC Code: | 2951 |
| Air District Name: | SOUTH COAST AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 0 |
| Reactive Organic Gases Tons/Yr: | 0 |
| Carbon Monoxide Emissions Tons/Yr: | 1 |

**VERNON ASPHALT MATERIALS CO (Continued)** **S100853424**

| | |
|---|---|
| NOX - Oxides of Nitrogen Tons/Yr: | 3 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 1 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 1 |

| | |
|---|---|
| Year: | 1993 |
| County Code: | 19 |
| Air Basin: | SC |
| Facility ID: | 12524 |
| Air District Name: | SC |
| SIC Code: | 2951 |
| Air District Name: | SOUTH COAST AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 1 |
| Reactive Organic Gases Tons/Yr: | 0 |
| Carbon Monoxide Emissions Tons/Yr: | 1 |
| NOX - Oxides of Nitrogen Tons/Yr: | 4 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 2 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 2 |

| | |
|---|---|
| Year: | 1995 |
| County Code: | 19 |
| Air Basin: | SC |
| Facility ID: | 12524 |
| Air District Name: | SC |
| SIC Code: | 2951 |
| Air District Name: | SOUTH COAST AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 1 |
| Reactive Organic Gases Tons/Yr: | 0 |
| Carbon Monoxide Emissions Tons/Yr: | 1 |
| NOX - Oxides of Nitrogen Tons/Yr: | 4 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 2 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 2 |

ENF:

| | |
|---|---|
| Region: | 4 |
| Facility Id: | 233019 |
| Agency Name: | Blue Diamond Materials |
| Place Type: | Manufacturing |
| Place Subtype: | Manufacturing NEC |
| Facility Type: | Municipal/Domestic |
| Agency Type: | Privately-Owned Business |
| # Of Agencies: | 1 |
| Place Latitude: | 34.1175 |
| Place Longitude: | -117.98333 |
| SIC Code 1: | 2951 |
| SIC Desc 1: | Asphalt Paving Mixtures and Blocks |
| SIC Code 2: | Not reported |
| SIC Desc 2: | Not reported |
| SIC Code 3: | Not reported |
| SIC Desc 3: | Not reported |
| NAICS Code 1: | Not reported |

**VERNON ASPHALT MATERIALS CO (Continued)** **S100853424**

| | |
|---|---|
| NAICS Desc 1: | Not reported |
| NAICS Code 2: | Not reported |
| NAICS Desc 2: | Not reported |
| NAICS Code 3: | Not reported |
| NAICS Desc 3: | Not reported |
| # Of Places: | 1 |
| Source Of Facility: | Reg Meas |
| Design Flow: | 0.00075 |
| Threat To Water Quality: | 3 |
| Complexity: | C |
| Pretreatment: | X - Facility is not a POTW |
| Facility Waste Type: | Domestic wastewater |
| Facility Waste Type 2: | Not reported |
| Facility Waste Type 3: | Not reported |
| Facility Waste Type 4: | Not reported |
| Program: | WDRMUNIOWTS |
| Program Category1: | WDR |
| Program Category2: | WDR |
| # Of Programs: | 1 |
| WDID: | 4B197000036 |
| Reg Measure Id: | 194154 |
| Reg Measure Type: | Enrollee |
| Region: | 4 |
| Order #: | 2012-0032 |
| Npdes# CA#: | Not reported |
| Major-Minor: | Not reported |
| Npdes Type: | Not reported |
| Reclamation: | N - No |
| Dredge Fill Fee: | Not reported |
| 301H: | Not reported |
| Application Fee Amt Received: | 400 |
| Status: | Historical |
| Status Date: | 11/20/2015 |
| Effective Date: | 05/05/2003 |
| Expiration/Review Date: | 12/31/2012 |
| Termination Date: | 11/20/2015 |
| WDR Review - Amend: | Not reported |
| WDR Review - Revise/Renew: | Not reported |
| WDR Review - Rescind: | Not reported |
| WDR Review - No Action Required: | Not reported |
| WDR Review - Pending: | Not reported |
| WDR Review - Planned: | Not reported |
| Status Enrollee: | Y |
| Individual/General: | I |
| Fee Code: | 58 - Non15 Based on (TTWQ)/CPLX) |
| Direction/Voice: | Passive |
| Enforcement Id(EID): | 387433 |
| Region: | 4 |
| Order / Resolution Number: | NOV |
| Enforcement Action Type: | Notice of Violation |
| Effective Date: | 07/13/2012 |
| Adoption/Issuance Date: | 07/13/2012 |
| Achieve Date: | Not reported |
| Termination Date: | Not reported |
| ACL Issuance Date: | Not reported |
| EPL Issuance Date: | Not reported |
| Status: | Historical |

**VERNON ASPHALT MATERIALS CO (Continued)** **S100853424**

| | |
|---|---|
| Title: | NOV 07/13/2012 for Blue Diamond Materials |
| Description: | NOV issued on 07/13/12 for Failure to Submit Monitoring Reports |
| Program: | WDRMUNIOTH |
| Latest Milestone Completion Date: | 2012-08-13 |
| # Of Programs1: | 1 |
| Total Assessment Amount: | $0.00 |
| Initial Assessed Amount: | $0.00 |
| Liability $ Amount: | $0.00 |
| Project $ Amount: | $0.00 |
| Liability $ Paid: | $0.00 |
| Project $ Completed: | $0.00 |
| Total $ Paid/Completed Amount: | $0.00 |

HIST CORTESE:

| | |
|---|---|
| Region: | CORTESE |
| Facility County Code: | 19 |
| Reg By: | LTNKA |
| Reg Id: | I-21368 |

WDS:

| | |
|---|---|
| Facility ID: | 4 19I012229 |
| Facility Type: | Municipal/Domestic - Facility that treats sewage or a mixture of predominantly sewage and other waste from districts, municipalities, communities, hospitals, schools, and publicly or privately owned systems (excluding individual subsurface leaching systems disposing of less than 1,000 gallons per day). |
| Facility Status: | Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements. |
| NPDES Number: | CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board |
| Subregion: | 4 |
| Facility Telephone: | 7145789600 |
| Facility Contact: | James Copley |
| Agency Name: | BLUE DIAMOND/SULLY-MILLER |
| Agency Address: | Not reported |
| Agency City,St,Zip: | 0 |
| Agency Contact: | Not reported |
| Agency Telephone: | Not reported |
| Agency Type: | Private |
| SIC Code: | 2951 |
| SIC Code 2: | Not reported |
| Primary Waste Type: | Designated/Influent or Solid Wastes that pose a significant threat to water quality because of their high concentrations (E.G., BOD, Hardness, TRF, Chloride). 'Manageable' hazardous wastes (E.G., inorganic salts and heavy metals) are included in this category. |
| Primary Waste: | STORMS |
| Waste Type2: | Not reported |
| Waste2: | Stormwater Runoff |
| Primary Waste Type: | Designated/Influent or Solid Wastes that pose a significant threat to water quality because of their high concentrations (E.G., BOD, Hardness, TRF, Chloride). 'Manageable' hazardous wastes (E.G., inorganic salts and heavy metals) are included in this category. |
| Secondary Waste: | Not reported |
| Secondary Waste Type: | Not reported |
| Design Flow: | 0 |

**VERNON ASPHALT MATERIALS CO (Continued)** **S100853424**

| | |
|---|---|
| Baseline Flow: | 0 |
| Reclamation: | No reclamation requirements associated with this facility. |
| POTW: | The facility is not a POTW. |
| Treat To Water: | Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality. |
| Complexity: | Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds. |
| Facility ID: | Los Angeles River 197000036 |
| Facility Type: | Municipal/Domestic - Facility that treats sewage or a mixture of predominantly sewage and other waste from districts, municipalities, communities, hospitals, schools, and publicly or privately owned systems (excluding individual subsurface leaching systems disposing of less than 1,000 gallons per day). |
| Facility Status: | Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements. |
| NPDES Number: | Not reported |
| Subregion: | 4 |
| Facility Telephone: | 7145789600 |
| Facility Contact: | James Copley |
| Agency Name: | BLUE DIAMOND/SULLY-MILLER |
| Agency Address: | Not reported |
| Agency City,St,Zip: | 0 |
| Agency Contact: | Not reported |
| Agency Telephone: | Not reported |
| Agency Type: | Private |
| SIC Code: | 0 |
| SIC Code 2: | Not reported |
| Primary Waste Type: | Designated/Influent or Solid Wastes that pose a significant threat to water quality because of their high concentrations (E.G., BOD, Hardness, TRF, Chloride). 'Manageable' hazardous wastes (E.G., inorganic salts and heavy metals) are included in this category. |
| Primary Waste: | DOMEST |
| Waste Type2: | Not reported |
| Waste2: | Domestic Sewage |
| Primary Waste Type: | Designated/Influent or Solid Wastes that pose a significant threat to water quality because of their high concentrations (E.G., BOD, Hardness, TRF, Chloride). 'Manageable' hazardous wastes (E.G., inorganic salts and heavy metals) are included in this category. |
| Secondary Waste: | Not reported |
| Secondary Waste Type: | Not reported |
| Design Flow: | 0 |
| Baseline Flow: | 0 |
| Reclamation: | No reclamation requirements associated with this facility. |
| POTW: | The facility is not a POTW. |
| Treat To Water: | Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher |

**VERNON ASPHALT MATERIALS CO (Continued)** **S100853424**

Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.

Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

---

**E26**
**South**
**1/8-1/4**
**0.185 mi.**
**976 ft.**

**Relative:**
**Higher**

**Actual:**
**404 ft.**

**UNITED READY MIXED CONCRETE CO** **UST** **U003976617**
**2620 BUENA VISTA** **N/A**
**IRWINDALE, CA 91706**

**Site 7 of 9 in cluster E**

UST:
Facility ID: 32454
Permitting Agency: LOS ANGELES COUNTY
Latitude: 34.08554
Longitude: -117.96913

---

**E27**
**South**
**1/8-1/4**
**0.185 mi.**
**976 ft.**

**Relative:**
**Higher**

**Actual:**
**404 ft.**

**UNITED READY MIX** **SWEEPS UST** **U001566493**
**2620 BUENA VISTA ST** **HIST UST** **N/A**
**IRWINDALE, CA 91010** **EMI**
**LA Co. Site Mitigation**

**Site 8 of 9 in cluster E**

SWEEPS UST:
Status: Active
Comp Number: 2906
Number: 1
Board Of Equalization: Not reported
Referral Date: 03-16-90
Action Date: 03-16-90
Created Date: 03-16-90
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-002906-000001
Tank Status: A
Capacity: 12000
Active Date: 03-16-90
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: 2

Status: Active
Comp Number: 2906
Number: 1
Board Of Equalization: Not reported
Referral Date: 03-16-90
Action Date: 03-16-90
Created Date: 03-16-90
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-002906-000002
Tank Status: A
Capacity: 12000

**UNITED READY MIX (Continued)** **U001566493**

Active Date: 03-16-90
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

HIST UST:
File Number: 000283F3
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000283F3.pdf
Region: STATE
Facility ID: 00000020472
Facility Type: Other
Other Type: CONCRETE PLANT
Contact Name: KENNEDY, BEN
Telephone: 2135641866
Owner Name: UNITED CONCRETE COMPANIES
Owner Address: 4988 FIRESTONE BLVD.
Owner City,St,Zip: SOUTH GATE, CA 90280
Total Tanks: 0002

Tank Num: 001
Container Num: 1
Year Installed: 1983
Tank Capacity: 00012000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor, Vapor Sniff Well

Tank Num: 002
Container Num: 2
Year Installed: 1983
Tank Capacity: 00012000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor, Vapor Sniff Well

Click here for Geo Tracker PDF:

EMI:
Year: 2014
County Code: 19
Air Basin: SC
Facility ID: 129214
Air District Name: SC
SIC Code: 3273
Air District Name: SOUTH COAST AQMD
Community Health Air Pollution Info System: Not reported
Consolidated Emission Reporting Rule: Not reported
Total Organic Hydrocarbon Gases Tons/Yr: 4.4286387764
Reactive Organic Gases Tons/Yr: 3.60144
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 2.77253

**UNITED READY MIX (Continued)** **U001566493**

Part. Matter 10 Micrometers and Smllr Tons/Yr:1.1094208

| | |
|---|---|
| Year: | 2015 |
| County Code: | 19 |
| Air Basin: | SC |
| Facility ID: | 129214 |
| Air District Name: | SC |
| SIC Code: | 3273 |
| Air District Name: | SOUTH COAST AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 4.4286387764 |
| Reactive Organic Gases Tons/Yr: | 3.60144 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 2.77253 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 1.1094208 |

LA Co. Site Mitigation:

| | |
|---|---|
| Facility ID: | FA0006023 |
| Site ID: | SD0010449 |
| Jurisdiction: | State |
| Case ID: | RO0010449 |
| Abated: | Yes |
| Assigned To: | Kim Clark |
| Entered Date: | 05/11/2004 |
| Abated Date: | 06/05/1996 |

---

**E28** **AST** **A100344863**
**South** **2620 BUENA VISTA ST** **N/A**
**1/8-1/4** **IRWINDALE, CA**
**0.185 mi.**
**976 ft.** **Site 9 of 9 in cluster E**

**Relative:**
**Higher**

**Actual:**
**404 ft.**

AST:

| | |
|---|---|
| Certified Unified Program Agencies: | Los Angeles County |
| Owner: | NATIONAL READY MIXED CONCRETE |
| Total Gallons: | 3700 |
| CERSID: | Not reported |
| Facility ID: | Not reported |
| Business Name: | Not reported |
| Phone: | Not reported |
| Fax: | Not reported |
| Mailing Address: | Not reported |
| Mailing Address City: | Not reported |
| Mailing Address State: | Not reported |
| Mailing Address Zip Code: | Not reported |
| Operator Name: | Not reported |
| Operator Phone: | Not reported |
| Owner Phone: | Not reported |
| Owner Mail Address: | Not reported |
| Owner State: | Not reported |
| Owner Zip Code: | Not reported |
| Owner Country: | Not reported |
| Property Owner Name: | Not reported |
| Property Owner Phone: | Not reported |

**(Continued)** **A100344863**

| | |
|---|---|
| Property Owner Mailing Address: | Not reported |
| Property Owner City: | Not reported |
| Property Owner Stat : | Not reported |
| Property Owner Zip Code: | Not reported |
| Property Owner Country: | Not reported |
| EPAID: | Not reported |

---

**29** **ARROW AUTO SALVAGE** **RCRA NonGen / NLR** **1000985032**
**SW** **797 ALPHA ST** **FINDS** **CAR000001412**
**1/8-1/4** **DUARTE, CA 91010** **ECHO**
**0.212 mi.**
**1117 ft.**

**Relative:**
**Higher**

**Actual:**
**294 ft.**

RCRA NonGen / NLR:

| | |
|---|---|
| Date form received by agency: | 03/21/1995 |
| Facility name: | ARROW AUTO SALVAGE |
| Facility address: | 797 ALPHA ST<br>DUARTE, CA 91010 |
| EPA ID: | CAR000001412 |
| Mailing address: | ALPHA ST<br>DUARTE, CA 91010 |
| Contact: | MICHAEL LUU |
| Contact address: | 797 ALPHA ST<br>DUARTE, CA 91010 |
| Contact country: | US |
| Contact telephone: | (818) 359-8327 |
| Contact email: | Not reported |
| EPA Region: | 09 |
| Classification: | Non-Generator |
| Description: | Handler: Non-Generators do not presently generate hazardous waste |

Owner/Operator Summary:

| | |
|---|---|
| Owner/operator name: | MICHAEL LUU |
| Owner/operator address: | 797 ALPHA ST<br>DUARTE, CA 91010 |
| Owner/operator country: | Not reported |
| Owner/operator telephone: | (818) 359-8327 |
| Legal status: | Private |
| Owner/Operator Type: | Owner |
| Owner/Op start date: | Not reported |
| Owner/Op end date: | Not reported |

Handler Activities Summary:

| | |
|---|---|
| U.S. importer of hazardous waste: | No |
| Mixed waste (haz. and radioactive): | No |
| Recycler of hazardous waste: | No |
| Transporter of hazardous waste: | Yes |
| Treater, storer or disposer of HW: | No |
| Underground injection activity: | No |
| On-site burner exemption: | No |
| Furnace exemption: | No |
| Used oil fuel burner: | No |
| Used oil processor: | No |
| User oil refiner: | No |
| Used oil fuel marketer to burner: | No |
| Used oil Specification marketer: | No |
| Used oil transfer facility: | No |

**ARROW AUTO SALVAGE (Continued)** **1000985032**

Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002905054

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:
Envid: 1000985032
Registry ID: 110002905054
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110002905054

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**30** **UNITED ROCK PRODUCTS CORP** **US MINES** **1011127260**
**SSE** **N/A**
**1/8-1/4** **LOS ANGELES (County), CA**
**0.227 mi.**
**1196 ft.**

**Relative:**
**Higher**

**Actual:**
**410 ft.**

US MINES:
Mine ID: 0401763
SIC code(s): 144200 000000 000000 000000 000000 000000
Entity name: IRWINDALE PLANT
Company: UNITED ROCK PRODUCTS CORP
Status: 1
Status date: 19730124
Operation Class: non-Coal Mining
Number of shops: 0
Number of plants: 0
Latitude: 34 07 05
Longitude: 117 58 49

Violations Details:
Violation Number: 7980026
Date Issued: 12/31/2008
Mine Status: Active
Status Date: 01/24/1973
Action Type: 104(a)
Date Abated: 12/31/2008
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 150.00
Paid Penalty: 150.00
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 150.00
Year: 2008

**UNITED ROCK PRODUCTS CORP (Continued)** **1011127260**

Violation Number: 7980025
Date Issued: 12/30/2008
Mine Status: Active
Status Date: 01/24/1973
Action Type: 104(a)
Date Abated: 12/31/2008
Citation/Order: Citation
Sig and Sub Designation: Y
Proposed Penalty: 873.00
Paid Penalty: 873.00
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 873.00
Year: 2008

Violation Number: 7980024
Date Issued: 12/30/2008
Mine Status: Active
Status Date: 01/24/1973
Action Type: 104(a)
Date Abated: 12/31/2008
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 392.00
Paid Penalty: 392.00
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 392.00
Year: 2008

Violation Number: 6431226
Date Issued: 12/19/2007
Mine Status: Active
Status Date: 01/24/1973
Action Type: 104(a)
Date Abated: 12/19/2007
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 207.00
Paid Penalty: 166.00
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 166.00
Year: 2007

Violation Number: 6431228
Date Issued: 12/19/2007
Mine Status: Active
Status Date: 01/24/1973
Action Type: 104(a)
Date Abated: 12/19/2007
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 207.00
Paid Penalty: 166.00
Assessment Status code: Closed
Assess. Case Status code: Proposed

**UNITED ROCK PRODUCTS CORP (Continued)** **1011127260**

Assessment Amount: 166.00
Year: 2007

Violation Number: 6431227
Date Issued: 12/19/2007
Mine Status: Active
Status Date: 01/24/1973
Action Type: 104(a)
Date Abated: 12/19/2007
Citation/Order: Citation
Sig and Sub Designation: Y
Proposed Penalty: 1,026.00
Paid Penalty: 821.00
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 821.00
Year: 2007

Violation Number: 6431221
Date Issued: 12/18/2007
Mine Status: Active
Status Date: 01/24/1973
Action Type: 104(a)
Date Abated: 12/18/2007
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 362.00
Paid Penalty: 290.00
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 290.00
Year: 2007

Violation Number: 6431220
Date Issued: 12/18/2007
Mine Status: Active
Status Date: 01/24/1973
Action Type: 104(a)
Date Abated: 12/19/2007
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 100.00
Paid Penalty: 100.00
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 100.00
Year: 2007

Violation Number: 6431225
Date Issued: 12/18/2007
Mine Status: Active
Status Date: 01/24/1973
Action Type: 104(a)
Date Abated: 12/19/2007
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 100.00

**UNITED ROCK PRODUCTS CORP (Continued)** **1011127260**

Paid Penalty: 100.00
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 100.00
Year: 2007

Violation Number: 6431224
Date Issued: 12/18/2007
Mine Status: Active
Status Date: 01/24/1973
Action Type: 104(a)
Date Abated: 12/19/2007
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 362.00
Paid Penalty: 121.00
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 121.00
Year: 2007

Violation Number: 6431223
Date Issued: 12/18/2007
Mine Status: Active
Status Date: 01/24/1973
Action Type: 104(a)
Date Abated: 12/19/2007
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 362.00
Paid Penalty: 290.00
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 290.00
Year: 2007

Violation Number: 6431222
Date Issued: 12/18/2007
Mine Status: Active
Status Date: 01/24/1973
Action Type: 104(a)
Date Abated: 12/18/2007
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 108.00
Paid Penalty: 108.00
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 108.00
Year: 2007

Violation Number: 6431219
Date Issued: 12/17/2007
Mine Status: Active
Status Date: 01/24/1973
Action Type: 104(a)
Date Abated: 12/17/2007

**UNITED ROCK PRODUCTS CORP (Continued)** **1011127260**

Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 100.00
Paid Penalty: 100.00
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 100.00
Year: 2007

Violation Number: 8788107
Date Issued: 12/16/2015
Mine Status: Active
Status Date: 01/24/1973
Action Type: 104(a)
Date Abated: 12/16/2015
Citation/Order: Citation
Sig and Sub Designation: Y
Proposed Penalty: 108.00
Paid Penalty: 0.00
Assessment Status code: Received
Assess. Case Status code: Proposed
Assessment Amount: 108.00
Year: 2015

Violation Number: 8788106
Date Issued: 12/16/2015
Mine Status: Active
Status Date: 01/24/1973
Action Type: 104(a)
Date Abated: 12/16/2015
Citation/Order: Citation
Sig and Sub Designation: Y
Proposed Penalty: 540.00
Paid Penalty: 0.00
Assessment Status code: Received
Assess. Case Status code: Proposed
Assessment Amount: 540.00
Year: 2015

Violation Number: 8781921
Date Issued: 12/16/2014
Mine Status: Active
Status Date: 01/24/1973
Action Type: 104(a)
Date Abated: 12/16/2014
Citation/Order: Citation
Sig and Sub Designation: Y
Proposed Penalty: 162.00
Paid Penalty: 162.00
Assessment Status code: Closed
Assess. Case Status code: Proposed
Assessment Amount: 162.00
Year: 2014

Violation Number: 8788105
Date Issued: 12/15/2015
Mine Status: Active

**UNITED ROCK PRODUCTS CORP (Continued)** **1011127260**

Status Date: 01/24/1973
Action Type: 104(a)
Date Abated: 02/10/2016
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 100.00
Paid Penalty: 0.00
Assessment Status code: Received
Assess. Case Status code: Proposed
Assessment Amount: 100.00
Year: 2015

Violation Number: 8788103
Date Issued: 12/15/2015
Mine Status: Active
Status Date: 01/24/1973
Action Type: 104(a)
Date Abated: 12/15/2015
Citation/Order: Citation
Sig and Sub Designation: Y
Proposed Penalty: 243.00
Paid Penalty: 0.00
Assessment Status code: Received
Assess. Case Status code: Proposed
Assessment Amount: 243.00
Year: 2015

Violation Number: 8788102
Date Issued: 12/15/2015
Mine Status: Active
Status Date: 01/24/1973
Action Type: 104(a)
Date Abated: Not reported
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 100.00
Paid Penalty: 0.00
Assessment Status code: Received
Assess. Case Status code: Proposed
Assessment Amount: 100.00
Year: 2015

Violation Number: 8788101
Date Issued: 12/15/2015
Mine Status: Active
Status Date: 01/24/1973
Action Type: 104(a)
Date Abated: Not reported
Citation/Order: Citation
Sig and Sub Designation: N
Proposed Penalty: 100.00
Paid Penalty: 0.00
Assessment Status code: Received
Assess. Case Status code: Proposed
Assessment Amount: 100.00
Year: 2015

**UNITED ROCK PRODUCTS CORP (Continued)** **1011127260**

Click this hyperlink while viewing on your computer to access
278 additional US_MINES: record(s) in the EDR Site Report.

**F31** **UNITED ROCK PRODUCTS** **SWF/LF** **S109286647**
**South** **1245 ARROW HWY** **LDS** **N/A**
**1/4-1/2** **IRWINDALE, CA 91706** **ENF**
**0.351 mi.** **NPDES**
**1853 ft.** **Site 1 of 2 in cluster F**

**Relative:**
**Higher**

**Actual:**
**418 ft.**

LOS ANGELES CO. LF:

| | |
|---|---|
| Site ID: | 567 |
| Alt. Address: | Not reported |
| Site Contact: | Not reported |
| Site Contact Phone: | (626) 739-1141 |
| Site Email: | rcaruso@sully.miller.com |
| Site Website: | Not reported |
| Site Type: | Inert Debris Engineered Fill Operation |
| Site SWIS Number: | 19-AA-0046 |
| Beginning Operation Date: | 1900 |
| Ending Operation Date: | Not reported |
| Local Enforcement Agency: | County Public Health |
| Maximun Depth Fill(Ft): | Not reported |
| Permitted Capacity: | Not reported |
| Present Use: | Open Space |
| Remaining Capacity(Million): | Not reported |
| Status: | Active |
| Waste Accepted: | Inert; |
| Hours of Operation: | Not reported |
| Disposal Area (Acre): | Not reported |

Detail As Of 01/2014:

| | |
|---|---|
| Operator Name: | United Rock Products Pit No. 2 |
| Operator Address: | 1245 East Arrow Highway |
| Operator City/State/Zip: | Irwindale, CA 91706 |
| Operator Contact: | Frank Keohane |
| Operator Telephone: | (626) 739-1140 |
| Operator Email: | rcaruso@sully-miller.com |
| Owner Name: | Sully Miller Contraction CO. |
| Owner Address: | 3000 East South Street |
| Owner City/State/Zip: | Long Beach, CA 90805 |
| Owner Contact: | Not reported |
| Owner Telephone: | (213) 153-3550 |
| Owner Email: | Not reported |

| | |
|---|---|
| Site ID: | 1264 |
| Alt. Address: | Not reported |
| Site Contact: | Not reported |
| Site Contact Phone: | (626) 739-1141 |
| Site Email: | Not reported |
| Site Website: | Not reported |
| Site Type: | Inert Debris Engineered Fill Operation |
| Site SWIS Number: | Not reported |
| Beginning Operation Date: | Not reported |
| Ending Operation Date: | Not reported |
| Local Enforcement Agency: | County Public Health |
| Maximun Depth Fill(Ft): | Not reported |
| Permitted Capacity: | Not reported |
| Present Use: | Open Space |

**UNITED ROCK PRODUCTS (Continued)** **S109286647**

| | |
|---|---|
| Remaining Capacity(Million): | Not reported |
| Status: | Closed |
| Waste Accepted: | Inert; |
| Hours of Operation: | Not reported |
| Disposal Area (Acre): | Not reported |

Detail As Of 01/2014:

| | |
|---|---|
| Operator Name: | United Rock Products |
| Operator Address: | 1100 E. Orangethorpe AVE. STE. 200 |
| Operator City/State/Zip: | Anaheim, CA 92801 |
| Operator Contact: | Not reported |
| Operator Telephone: | Not reported |
| Operator Email: | Not reported |
| Owner Name: | Sully Miller Contraction CO. |
| Owner Address: | 3000 East South Street |
| Owner City/State/Zip: | Long Beach, CA 90805 |
| Owner Contact: | Not reported |
| Owner Telephone: | (213) 153-3550 |
| Owner Email: | Not reported |

LDS:

| | |
|---|---|
| Global Id: | L10006439432 |
| Latitude: | 34.11542 |
| Longitude: | -117.9908 |
| Case Type: | Land Disposal Site |
| Status: | Open - Operating |
| Status Date: | 05/31/2016 |
| Lead Agency: | LOS ANGELES RWQCB (REGION 4) |
| Caseworker: | WY |
| Local Agency: | Not reported |
| RB Case Number: | 4B190319006 |
| LOC Case Number: | Not reported |
| File Location: | Regional Board |
| Potential Media Affect: | Not reported |
| EDR Link ID: | L10006439432 |
| Potential Contaminants of Concern: | Not reported |
| Site History: | Not reported |

Click here to access the California GeoTracker records for this facility:

ENF:

| | |
|---|---|
| Region: | 4 |
| Facility Id: | 269740 |
| Agency Name: | California Earth Transport, Inc. |
| Place Type: | Waste Management Unit |
| Place Subtype: | Land fill |
| Facility Type: | All other facilities |
| Agency Type: | Privately-Owned Business |
| # Of Agencies: | 1 |
| Place Latitude: | 34.11459 |
| Place Longitude: | -117.980381 |
| SIC Code 1: | 4953 |
| SIC Desc 1: | Refuse Systems |
| SIC Code 2: | Not reported |
| SIC Desc 2: | Not reported |

**UNITED ROCK PRODUCTS (Continued)** **S109286647**

| | |
|---|---|
| SIC Code 3: | Not reported |
| SIC Desc 3: | Not reported |
| NAICS Code 1: | Not reported |
| NAICS Desc 1: | Not reported |
| NAICS Code 2: | Not reported |
| NAICS Desc 2: | Not reported |
| NAICS Code 3: | Not reported |
| NAICS Desc 3: | Not reported |
| # Of Places: | 1 |
| Source Of Facility: | Reg Meas |
| Design Flow: | Not reported |
| Threat To Water Quality: | 3 |
| Complexity: | C |
| Pretreatment: | X - Facility is not a POTW |
| Facility Waste Type: | Inert solid wastes |
| Facility Waste Type 2: | Not reported |
| Facility Waste Type 3: | Not reported |
| Facility Waste Type 4: | Not reported |
| Program: | LFOPER |
| Program Category1: | LNDISP |
| Program Category2: | LNDISP |
| # Of Programs: | 1 |
| WDID: | 4B190319005 |
| Reg Measure Id: | 142122 |
| Reg Measure Type: | WDR |
| Region: | 4 |
| Order #: | 01-179 |
| Npdes# CA#: | Not reported |
| Major-Minor: | Not reported |
| Npdes Type: | Not reported |
| Reclamation: | N - No |
| Dredge Fill Fee: | Not reported |
| 301H: | Not reported |
| Application Fee Amt Received: | 4000 |
| Status: | Active |
| Status Date: | 04/08/2016 |
| Effective Date: | 12/13/2001 |
| Expiration/Review Date: | 12/13/2016 |
| Termination Date: | Not reported |
| WDR Review - Amend: | Not reported |
| WDR Review - Revise/Renew: | Not reported |
| WDR Review - Rescind: | Not reported |
| WDR Review - No Action Required: | Not reported |
| WDR Review - Pending: | Not reported |
| WDR Review - Planned: | Not reported |
| Status Enrollee: | N |
| Individual/General: | I |
| Fee Code: | 59 - Land Disposal Site not paying tipping fee |
| Direction/Voice: | Passive |
| Enforcement Id(EID): | 248607 |
| Region: | 4 |
| Order / Resolution Number: | NOV |
| Enforcement Action Type: | Notice of Violation |
| Effective Date: | 07/12/2002 |
| Adoption/Issuance Date: | Not reported |
| Achieve Date: | Not reported |
| Termination Date: | 07/12/2002 |

**UNITED ROCK PRODUCTS (Continued)** **S109286647**

| | |
|---|---|
| ACL Issuance Date: | Not reported |
| EPL Issuance Date: | Not reported |
| Status: | Historical |
| Title: | NOV sent 7/12/02 for violation of Order No. 01-179. |
| Description: | NOV sent 7/12/02 for violation of Order No. 01-179. |
| Program: | LNDISPOTH |
| Latest Milestone Completion Date: | Not reported |
| # Of Programs1: | 1 |
| Total Assessment Amount: | $0.00 |
| Initial Assessed Amount: | $0.00 |
| Liability $ Amount: | $0.00 |
| Project $ Amount: | $0.00 |
| Liability $ Paid: | $0.00 |
| Project $ Completed: | $0.00 |
| Total $ Paid/Completed Amount: | $0.00 |

NPDES:

| | |
|---|---|
| Npdes Number: | Not reported |
| Facility Status: | Not reported |
| Agency Id: | Not reported |
| Region: | 4 |
| Regulatory Measure Id: | 188689 |
| Order No: | Not reported |
| Regulatory Measure Type: | Industrial |
| Place Id: | Not reported |
| WDID: | 4 19I000779 |
| Program Type: | Not reported |
| Adoption Date Of Regulatory Measure: | Not reported |
| Effective Date Of Regulatory Measure: | Not reported |
| Expiration Date Of Regulatory Measure: | Not reported |
| Termination Date Of Regulatory Measure: | Not reported |
| Discharge Name: | Not reported |
| Discharge Address: | Not reported |
| Discharge City: | Not reported |
| Discharge State: | Not reported |
| Discharge Zip: | Not reported |
| RECEIVED DATE: | 5/9/2008 |
| PROCESSED DATE: | 3/20/1992 |
| STATUS CODE NAME: | Active |
| STATUS DATE: | 3/20/1992 |
| PLACE SIZE: | 350 |
| PLACE SIZE UNIT: | 52 |
| FACILITY CONTACT NAME: | Arnold Brink |
| FACILITY CONTACT TITLE: | Not reported |
| FACILITY CONTACT PHONE: | 6263584558 |
| FACILITY CONTACT PHONE EXT: | Not reported |
| FACILITY CONTACT EMAIL: | Not reported |
| OPERATOR NAME: | United Concrete Co |
| OPERATOR ADDRESS: | 1245 Arrow Hwy |
| OPERATOR CITY: | Irwindale |
| OPERATOR STATE: | California |
| OPERATOR ZIP: | 91706 |
| OPERATOR CONTACT NAME: | Arnold Brink |
| OPERATOR CONTACT TITLE: | Not reported |
| OPERATOR CONTACT PHONE: | 626-358-4558 |
| OPERATOR CONTACT PHONE EXT: | Not reported |
| OPERATOR CONTACT EMAIL: | Not reported |

**UNITED ROCK PRODUCTS (Continued)** **S109286647**

| | |
|---|---|
| OPERATOR TYPE: | Private Business |
| DEVELOPER NAME: | Not reported |
| DEVELOPER ADDRESS: | Not reported |
| DEVELOPER CITY: | Not reported |
| DEVELOPER STATE: | California |
| DEVELOPER ZIP: | Not reported |
| DEVELOPER CONTACT NAME: | Not reported |
| DEVELOPER CONTACT TITLE: | Not reported |
| CONSTYPE LINEAR UTILITY IND: | Not reported |
| EMERGENCY PHONE NO: | 626-358-4558 |
| EMERGENCY PHONE EXT: | Not reported |
| CONSTYPE ABOVE GROUND IND: | Not reported |
| CONSTYPE BELOW GROUND IND: | Not reported |
| CONSTYPE CABLE LINE IND: | Not reported |
| CONSTYPE COMM LINE IND: | Not reported |
| CONSTYPE COMMERTIAL IND: | Not reported |
| CONSTYPE ELECTRICAL LINE IND: | Not reported |
| CONSTYPE GAS LINE IND: | Not reported |
| CONSTYPE INDUSTRIAL IND: | Not reported |
| CONSTYPE OTHER DESRIPTION: | Not reported |
| CONSTYPE OTHER IND: | Not reported |
| CONSTYPE RECONS IND: | Not reported |
| CONSTYPE RESIDENTIAL IND: | Not reported |
| CONSTYPE TRANSPORT IND: | Not reported |
| CONSTYPE UTILITY DESCRIPTION: | Not reported |
| CONSTYPE UTILITY IND: | Not reported |
| CONSTYPE WATER SEWER IND: | Not reported |
| DIR DISCHARGE USWATER IND: | Not reported |
| RECEIVING WATER NAME: | Not reported |
| CERTIFIER NAME: | Not reported |
| CERTIFIER TITLE: | Not reported |
| CERTIFICATION DATE: | Not reported |
| PRIMARY SIC: | 1442-Construction Sand and Gravel |
| SECONDARY SIC: | 3273-Ready-Mixed Concrete |
| TERTIARY SIC: | 2951-Asphalt Paving Mixtures and Blocks |
| | |
| Npdes Number: | Not reported |
| Facility Status: | Not reported |
| Agency Id: | Not reported |
| Region: | 4 |
| Regulatory Measure Id: | 190847 |
| Order No: | Not reported |
| Regulatory Measure Type: | Industrial |
| Place Id: | Not reported |
| WDID: | 4 19I015081 |
| Program Type: | Not reported |
| Adoption Date Of Regulatory Measure: | Not reported |
| Effective Date Of Regulatory Measure: | Not reported |
| Expiration Date Of Regulatory Measure: | Not reported |
| Termination Date Of Regulatory Measure: | Not reported |
| Discharge Name: | Not reported |
| Discharge Address: | Not reported |
| Discharge City: | Not reported |
| Discharge State: | Not reported |
| Discharge Zip: | Not reported |
| RECEIVED DATE: | 5/9/2008 |
| PROCESSED DATE: | 5/6/1999 |

**UNITED ROCK PRODUCTS (Continued)** **S109286647**

| | |
|---|---|
| STATUS CODE NAME: | Active |
| STATUS DATE: | 5/6/1999 |
| PLACE SIZE: | 5 |
| PLACE SIZE UNIT: | 52 |
| FACILITY CONTACT NAME: | Mike Serrao |
| FACILITY CONTACT TITLE: | Not reported |
| FACILITY CONTACT PHONE: | 626-983-0161 |
| FACILITY CONTACT PHONE EXT: | Not reported |
| FACILITY CONTACT EMAIL: | Not reported |
| OPERATOR NAME: | Blue Diamond Materials |
| OPERATOR ADDRESS: | 1100 E Orangethorpe Ave #25 |
| OPERATOR CITY: | Anaheim |
| OPERATOR STATE: | California |
| OPERATOR ZIP: | 92801 |
| OPERATOR CONTACT NAME: | Pete Pouwels |
| OPERATOR CONTACT TITLE: | Not reported |
| OPERATOR CONTACT PHONE: | 714-578-9600 |
| OPERATOR CONTACT PHONE EXT: | Not reported |
| OPERATOR CONTACT EMAIL: | Not reported |
| OPERATOR TYPE: | Private Business |
| DEVELOPER NAME: | Not reported |
| DEVELOPER ADDRESS: | Not reported |
| DEVELOPER CITY: | Not reported |
| DEVELOPER STATE: | California |
| DEVELOPER ZIP: | Not reported |
| DEVELOPER CONTACT NAME: | Not reported |
| DEVELOPER CONTACT TITLE: | Not reported |
| CONSTYPE LINEAR UTILITY IND: | Not reported |
| EMERGENCY PHONE NO: | 626-983-0161 |
| EMERGENCY PHONE EXT: | Not reported |
| CONSTYPE ABOVE GROUND IND: | Not reported |
| CONSTYPE BELOW GROUND IND: | Not reported |
| CONSTYPE CABLE LINE IND: | Not reported |
| CONSTYPE COMM LINE IND: | Not reported |
| CONSTYPE COMMERTIAL IND: | Not reported |
| CONSTYPE ELECTRICAL LINE IND: | Not reported |
| CONSTYPE GAS LINE IND: | Not reported |
| CONSTYPE INDUSTRIAL IND: | Not reported |
| CONSTYPE OTHER DESRIPTION: | Not reported |
| CONSTYPE OTHER IND: | Not reported |
| CONSTYPE RECONS IND: | Not reported |
| CONSTYPE RESIDENTIAL IND: | Not reported |
| CONSTYPE TRANSPORT IND: | Not reported |
| CONSTYPE UTILITY DESCRIPTION: | Not reported |
| CONSTYPE UTILITY IND: | Not reported |
| CONSTYPE WATER SEWER IND: | Not reported |
| DIR DISCHARGE USWATER IND: | Not reported |
| RECEIVING WATER NAME: | Los Angeles River |
| CERTIFIER NAME: | Not reported |
| CERTIFIER TITLE: | Not reported |
| CERTIFICATION DATE: | Not reported |
| PRIMARY SIC: | 2951-Asphalt Paving Mixtures and Blocks |
| SECONDARY SIC: | Not reported |
| TERTIARY SIC: | Not reported |
| | |
| Npdes Number: | CAS000001 |
| Facility Status: | Active |

**UNITED ROCK PRODUCTS (Continued)** **S109286647**

| | |
|---|---|
| Agency Id: | 0 |
| Region: | 4 |
| Regulatory Measure Id: | 188689 |
| Order No: | 97-03-DWQ |
| Regulatory Measure Type: | Enrollee |
| Place Id: | Not reported |
| WDID: | 4 19I000779 |
| Program Type: | Industrial |
| Adoption Date Of Regulatory Measure: | Not reported |
| Effective Date Of Regulatory Measure: | 03/20/1992 |
| Expiration Date Of Regulatory Measure: | Not reported |
| Termination Date Of Regulatory Measure: | Not reported |
| Discharge Name: | United Rock Products |
| Discharge Address: | 135 S State College Blvd |
| Discharge City: | Brea |
| Discharge State: | California |
| Discharge Zip: | 92821 |
| RECEIVED DATE: | Not reported |
| PROCESSED DATE: | Not reported |
| STATUS CODE NAME: | Not reported |
| STATUS DATE: | Not reported |
| PLACE SIZE: | Not reported |
| PLACE SIZE UNIT: | Not reported |
| FACILITY CONTACT NAME: | Not reported |
| FACILITY CONTACT TITLE: | Not reported |
| FACILITY CONTACT PHONE: | Not reported |
| FACILITY CONTACT PHONE EXT: | Not reported |
| FACILITY CONTACT EMAIL: | Not reported |
| OPERATOR NAME: | Not reported |
| OPERATOR ADDRESS: | Not reported |
| OPERATOR CITY: | Not reported |
| OPERATOR STATE: | Not reported |
| OPERATOR ZIP: | Not reported |
| OPERATOR CONTACT NAME: | Not reported |
| OPERATOR CONTACT TITLE: | Not reported |
| OPERATOR CONTACT PHONE: | Not reported |
| OPERATOR CONTACT PHONE EXT: | Not reported |
| OPERATOR CONTACT EMAIL: | Not reported |
| OPERATOR TYPE: | Not reported |
| DEVELOPER NAME: | Not reported |
| DEVELOPER ADDRESS: | Not reported |
| DEVELOPER CITY: | Not reported |
| DEVELOPER STATE: | Not reported |
| DEVELOPER ZIP: | Not reported |
| DEVELOPER CONTACT NAME: | Not reported |
| DEVELOPER CONTACT TITLE: | Not reported |
| CONSTYPE LINEAR UTILITY IND: | Not reported |
| EMERGENCY PHONE NO: | Not reported |
| EMERGENCY PHONE EXT: | Not reported |
| CONSTYPE ABOVE GROUND IND: | Not reported |
| CONSTYPE BELOW GROUND IND: | Not reported |
| CONSTYPE CABLE LINE IND: | Not reported |
| CONSTYPE COMM LINE IND: | Not reported |
| CONSTYPE COMMERTIAL IND: | Not reported |
| CONSTYPE ELECTRICAL LINE IND: | Not reported |
| CONSTYPE GAS LINE IND: | Not reported |
| CONSTYPE INDUSTRIAL IND: | Not reported |

**UNITED ROCK PRODUCTS (Continued)** **S109286647**

| | |
|---|---|
| CONSTYPE OTHER DESRIPTION: | Not reported |
| CONSTYPE OTHER IND: | Not reported |
| CONSTYPE RECONS IND: | Not reported |
| CONSTYPE RESIDENTIAL IND: | Not reported |
| CONSTYPE TRANSPORT IND: | Not reported |
| CONSTYPE UTILITY DESCRIPTION: | Not reported |
| CONSTYPE UTILITY IND: | Not reported |
| CONSTYPE WATER SEWER IND: | Not reported |
| DIR DISCHARGE USWATER IND: | Not reported |
| RECEIVING WATER NAME: | Not reported |
| CERTIFIER NAME: | Not reported |
| CERTIFIER TITLE: | Not reported |
| CERTIFICATION DATE: | Not reported |
| PRIMARY SIC: | Not reported |
| SECONDARY SIC: | Not reported |
| TERTIARY SIC: | Not reported |

---

**F32** **TBD** **SWF/LF** **S106103077**
**South** **1245 E ARROW HWY** **LUST** **N/A**
**1/4-1/2** **IRWINDALE, CA 91706** **HIST UST**
**0.351 mi.** **NPDES**
**1853 ft.** **Site 2 of 2 in cluster F** **LA Co. Site Mitigation**
**WDS**

**Relative:**
**Higher**

**Actual:**
**418 ft.**

SWF/LF (SWIS):

| | |
|---|---|
| Region: | STATE |
| Facility ID: | 19-AA-0046 |
| Lat/Long: | 34.117120 / -117.98117 |
| Owner Name: | United Rock, Inc. |
| Owner Telephone: | 6263584558 |
| Owner Address: | Russ Caruso, GM |
| Owner Address2: | 1245 Arrow Highway |
| Owner City,St,Zip: | Irwindale, CA 91706 |
| Operational Status: | Active |
| Operator: | United Rock, Inc. |
| Operator Phone: | 6263584558 |
| Operator Address: | Russ Caruso, GM |
| Operator Address2: | 1245 Arrow Highway |
| Operator City,St,Zip: | Irwindale, CA 91706 |
| Permit Date: | 10/19/2012 |
| Permit Status: | Notification |
| Permitted Acreage: | $134.00 |
| Activity: | Inert Debris ENG Fill Operation |
| Regulation Status: | Notification |
| Landuse Name: | Not reported |
| GIS Source: | Map |
| Category: | Disposal |
| Unit Number: | 01 |
| Inspection Frequency: | Quarterly |
| Accepted Waste: | Inert |
| Closure Date: | 12/31/2061 |
| Closure Type: | Estimated |
| Disposal Acreage: | $134.00 |
| SWIS Num: | 19-AA-0046 |
| Waste Discharge Requirement Num: | Not reported |
| Program Type: | Not reported |
| Permitted Throughput with Units: | 1200000 |
| Actual Throughput with Units: | Tons/year |

**TBD (Continued)** **S106103077**

Permitted Capacity with Units: 1200000
Remaining Capacity: Not reported
Remaining Capacity with Units: Tons/year
Lat/Long: 34.117120 / -117.98117

LUST:
Region: STATE
Global Id: T0603717924
Latitude: 34.1164945883574
Longitude: -117.978122234344
Case Type: LUST Cleanup Site
Status: Open - Eligible for Closure
Status Date: 08/20/2015
Lead Agency: LOS ANGELES RWQCB (REGION 4)
Case Worker: AJL
Local Agency: LOS ANGELES COUNTY
RB Case Number: R-03962
LOC Case Number: 003831-003962
File Location: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Diesel, Waste Oil / Motor / Hydraulic / Lubricating
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0603717924
Contact Type: Local Agency Caseworker
Contact Name: KATTYA BATRES RINZE
Organization Name: LOS ANGELES COUNTY
Address: 900 SOUTH FREMONT AVE
City: ALHAMBRA
Email: gbatres@dpw.lacounty.gov
Phone Number: Not reported

Global Id: T0603717924
Contact Type: Regional Board Caseworker
Contact Name: AHMAD J. LAMAA
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: 320 West 4th Street Suite 200
City: Los Angeles
Email: alamaa@waterboards.ca.gov
Phone Number: Not reported

Status History:
Global Id: T0603717924
Status: Open - Case Begin Date
Status Date: 08/15/2006

Global Id: T0603717924
Status: Open - Eligible for Closure
Status Date: 01/17/2013

Global Id: T0603717924
Status: Open - Eligible for Closure
Status Date: 08/19/2015

**TBD (Continued)** **S106103077**

Global Id: T0603717924
Status: Open - Eligible for Closure
Status Date: 08/20/2015

Global Id: T0603717924
Status: Open - Site Assessment
Status Date: 06/07/2007

Regulatory Activities:
Global Id: T0603717924
Action Type: RESPONSE
Date: 09/02/2015
Action: Request for Closure - Regulator Responded

Global Id: T0603717924
Action Type: ENFORCEMENT
Date: 05/08/2015
Action: Notification - Public Participation Document

Global Id: T0603717924
Action Type: ENFORCEMENT
Date: 08/19/2015
Action: State Water Board Closure Order

Global Id: T0603717924
Action Type: Other
Date: 08/15/2006
Action: Leak Discovery

Global Id: T0603717924
Action Type: RESPONSE
Date: 11/30/2011
Action: Other Report / Document

Global Id: T0603717924
Action Type: Other
Date: 12/15/2006
Action: Leak Reported

Global Id: T0603717924
Action Type: ENFORCEMENT
Date: 10/18/2011
Action: Staff Letter

Global Id: T0603717924
Action Type: REMEDIATION
Date: 06/07/2007
Action: Not reported

Global Id: T0603717924
Action Type: ENFORCEMENT
Date: 06/30/2011
Action: Referral to Regional Board

HIST UST:

**TBD (Continued)** **S106103077**

| | |
|---|---|
| File Number: | 000267B3 |
| URL: | http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000267B3.pdf |
| Region: | Not reported |
| Facility ID: | Not reported |
| Facility Type: | Not reported |
| Other Type: | Not reported |
| Contact Name: | Not reported |
| Telephone: | Not reported |
| Owner Name: | Not reported |
| Owner Address: | Not reported |
| Owner City,St,Zip: | Not reported |
| Total Tanks: | Not reported |
| | |
| Tank Num: | Not reported |
| Container Num: | Not reported |
| Year Installed: | Not reported |
| Tank Capacity: | Not reported |
| Tank Used for: | Not reported |
| Type of Fuel: | Not reported |
| Container Construction Thickness: | Not reported |
| Leak Detection: | Not reported |

Click here for Geo Tracker PDF:

NPDES:

| | |
|---|---|
| Npdes Number: | CAS000001 |
| Facility Status: | Active |
| Agency Id: | 0 |
| Region: | 4 |
| Regulatory Measure Id: | 190847 |
| Order No: | 97-03-DWQ |
| Regulatory Measure Type: | Enrollee |
| Place Id: | Not reported |
| WDID: | 4 19I015081 |
| Program Type: | Industrial |
| Adoption Date Of Regulatory Measure: | Not reported |
| Effective Date Of Regulatory Measure: | 05/06/1999 |
| Expiration Date Of Regulatory Measure: | Not reported |
| Termination Date Of Regulatory Measure: | Not reported |
| Discharge Name: | Sully Miller Blue Diamond Materials |
| Discharge Address: | 135 S State College Blvd |
| Discharge City: | Brea |
| Discharge State: | California |
| Discharge Zip: | 92821 |
| RECEIVED DATE: | Not reported |
| PROCESSED DATE: | Not reported |
| STATUS CODE NAME: | Not reported |
| STATUS DATE: | Not reported |
| PLACE SIZE: | Not reported |
| PLACE SIZE UNIT: | Not reported |
| FACILITY CONTACT NAME: | Not reported |
| FACILITY CONTACT TITLE: | Not reported |
| FACILITY CONTACT PHONE: | Not reported |
| FACILITY CONTACT PHONE EXT: | Not reported |
| FACILITY CONTACT EMAIL: | Not reported |
| OPERATOR NAME: | Not reported |
| OPERATOR ADDRESS: | Not reported |

**TBD (Continued)** **S106103077**

| | |
|---|---|
| OPERATOR CITY: | Not reported |
| OPERATOR STATE: | Not reported |
| OPERATOR ZIP: | Not reported |
| OPERATOR CONTACT NAME: | Not reported |
| OPERATOR CONTACT TITLE: | Not reported |
| OPERATOR CONTACT PHONE: | Not reported |
| OPERATOR CONTACT PHONE EXT: | Not reported |
| OPERATOR CONTACT EMAIL: | Not reported |
| OPERATOR TYPE: | Not reported |
| DEVELOPER NAME: | Not reported |
| DEVELOPER ADDRESS: | Not reported |
| DEVELOPER CITY: | Not reported |
| DEVELOPER STATE: | Not reported |
| DEVELOPER ZIP: | Not reported |
| DEVELOPER CONTACT NAME: | Not reported |
| DEVELOPER CONTACT TITLE: | Not reported |
| CONSTYPE LINEAR UTILITY IND: | Not reported |
| EMERGENCY PHONE NO: | Not reported |
| EMERGENCY PHONE EXT: | Not reported |
| CONSTYPE ABOVE GROUND IND: | Not reported |
| CONSTYPE BELOW GROUND IND: | Not reported |
| CONSTYPE CABLE LINE IND: | Not reported |
| CONSTYPE COMM LINE IND: | Not reported |
| CONSTYPE COMMERTIAL IND: | Not reported |
| CONSTYPE ELECTRICAL LINE IND: | Not reported |
| CONSTYPE GAS LINE IND: | Not reported |
| CONSTYPE INDUSTRIAL IND: | Not reported |
| CONSTYPE OTHER DESRIPTION: | Not reported |
| CONSTYPE OTHER IND: | Not reported |
| CONSTYPE RECONS IND: | Not reported |
| CONSTYPE RESIDENTIAL IND: | Not reported |
| CONSTYPE TRANSPORT IND: | Not reported |
| CONSTYPE UTILITY DESCRIPTION: | Not reported |
| CONSTYPE UTILITY IND: | Not reported |
| CONSTYPE WATER SEWER IND: | Not reported |
| DIR DISCHARGE USWATER IND: | Not reported |
| RECEIVING WATER NAME: | Not reported |
| CERTIFIER NAME: | Not reported |
| CERTIFIER TITLE: | Not reported |
| CERTIFICATION DATE: | Not reported |
| PRIMARY SIC: | Not reported |
| SECONDARY SIC: | Not reported |
| TERTIARY SIC: | Not reported |

LA Co. Site Mitigation:

| | |
|---|---|
| Facility ID: | FA0003185 |
| Site ID: | SD0011715 |
| Jurisdiction: | Not reported |
| Case ID: | RO0011715 |
| Abated: | Yes |
| Assigned To: | Not reported |
| Entered Date: | Not reported |
| Abated Date: | 06/28/1990 |

WDS:

| | |
|---|---|
| Facility ID: | 4 19I015081 |

**TBD (Continued)** **S106103077**

| | |
|---|---|
| Facility Type: | Other - Does not fall into the category of Municipal/Domestic, Industrial, Agricultural or Solid Waste (Class I, II or III) |
| Facility Status: | Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements. |
| NPDES Number: | CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board |
| Subregion: | 4 |
| Facility Telephone: | Not reported |
| Facility Contact: | Not reported |
| Agency Name: | BLUE DIAMOND/SULLY-MILLER |
| Agency Address: | Not reported |
| Agency City,St,Zip: | 0 |
| Agency Contact: | Not reported |
| Agency Telephone: | Not reported |
| Agency Type: | Private |
| SIC Code: | 2951 |
| SIC Code 2: | Not reported |
| Primary Waste Type: | Designated/Influent or Solid Wastes that pose a significant threat to water quality because of their high concentrations (E.G., BOD, Hardness, TRF, Chloride). 'Manageable' hazardous wastes (E.G., inorganic salts and heavy metals) are included in this category. |
| Primary Waste: | STORMS |
| Waste Type2: | Not reported |
| Waste2: | Stormwater Runoff |
| Primary Waste Type: | Designated/Influent or Solid Wastes that pose a significant threat to water quality because of their high concentrations (E.G., BOD, Hardness, TRF, Chloride). 'Manageable' hazardous wastes (E.G., inorganic salts and heavy metals) are included in this category. |
| Secondary Waste: | Not reported |
| Secondary Waste Type: | Not reported |
| Design Flow: | 0 |
| Baseline Flow: | 0 |
| Reclamation: | No reclamation requirements associated with this facility. |
| POTW: | The facility is not a POTW. |
| Treat To Water: | Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality. |
| Complexity: | Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds. |

---

**33** **CHEVRON #9-4104** **LUST** **S102427244**
**NNE** **1815 BUENA VISTA ST** **HIST CORTESE** **N/A**
**1/4-1/2** **DUARTE, CA 91010**
**0.388 mi.**
**2051 ft.**

**Relative:**
**Higher**

**Actual:**
**458 ft.**

LUST:

| | |
|---|---|
| Region: | STATE |
| Global Id: | T0603703645 |
| Latitude: | 34.1318821 |
| Longitude: | -117.9775708 |

**CHEVRON #9-4104 (Continued)** **S102427244**

| | |
|---|---|
| Case Type: | LUST Cleanup Site |
| Status: | Completed - Case Closed |
| Status Date: | 10/29/1990 |
| Lead Agency: | LOS ANGELES COUNTY |
| Case Worker: | JOA |
| Local Agency: | LOS ANGELES COUNTY |
| RB Case Number: | I-10657 |
| LOC Case Number: | Not reported |
| File Location: | Not reported |
| Potential Media Affect: | Soil |
| Potential Contaminants of Concern: | Waste Oil / Motor / Hydraulic / Lubricating |
| Site History: | Not reported |

Click here to access the California GeoTracker records for this facility:

Contact:

| | |
|---|---|
| Global Id: | T0603703645 |
| Contact Type: | Local Agency Caseworker |
| Contact Name: | JOHN AWUJO |
| Organization Name: | LOS ANGELES COUNTY |
| Address: | 900 S FREMONT AVE |
| City: | ALHAMBRA |
| Email: | jawujo@dpw.lacounty.gov |
| Phone Number: | 6264583507 |

| | |
|---|---|
| Global Id: | T0603703645 |
| Contact Type: | Regional Board Caseworker |
| Contact Name: | YUE RONG |
| Organization Name: | LOS ANGELES RWQCB (REGION 4) |
| Address: | 320 W. 4TH ST., SUITE 200 |
| City: | Los Angeles |
| Email: | yrong@waterboards.ca.gov |
| Phone Number: | Not reported |

Status History:

| | |
|---|---|
| Global Id: | T0603703645 |
| Status: | Completed - Case Closed |
| Status Date: | 10/29/1990 |

| | |
|---|---|
| Global Id: | T0603703645 |
| Status: | Open - Case Begin Date |
| Status Date: | 04/24/1990 |

Regulatory Activities:

| | |
|---|---|
| Global Id: | T0603703645 |
| Action Type: | Other |
| Date: | 05/17/1990 |
| Action: | Leak Reported |

| | |
|---|---|
| Global Id: | T0603703645 |
| Action Type: | Other |
| Date: | 04/24/1990 |
| Action: | Leak Discovery |

| | |
|---|---|
| Global Id: | T0603703645 |
| Action Type: | Other |
| Date: | 04/24/1990 |

**CHEVRON #9-4104 (Continued)** **S102427244**

Action: Leak Stopped

LUST REG 4:

| | | |
|---|---|---|
| Region: | 4 | |
| Regional Board: | 04 | |
| County: | Los Angeles | |
| Facility Id: | I-10657 | |
| Status: | Case Closed | |
| Substance: | Waste Oil | |
| Substance Quantity: | Not reported | |
| Local Case No: | Not reported | |
| Case Type: | Soil | |
| Abatement Method Used at the Site: | | Not reported |
| Global ID: | T0603703645 | |
| W Global ID: | Not reported | |
| Staff: | UNK | |
| Local Agency: | 19000 | |
| Cross Street: | DUARTE RD | |
| Enforcement Type: | Not reported | |
| Date Leak Discovered: | 4/24/1990 | |
| Date Leak First Reported: | | 5/17/1990 |
| Date Leak Record Entered: | 5/24/1990 | |
| Date Confirmation Began: | Not reported | |
| Date Leak Stopped: | 4/24/1990 | |
| Date Case Last Changed on Database: | | 2/4/1991 |
| Date the Case was Closed: | | 10/29/1990 |
| How Leak Discovered: | Tank Closure | |
| How Leak Stopped: | Not reported | |
| Cause of Leak: | UNK | |
| Leak Source: | UNK | |
| Operator: | UHDEN, ROGER | |
| Water System: | Not reported | |
| Well Name: | Not reported | |
| Approx. Dist To Production Well (ft): | | 1280.215347745608396722314141 4 |
| Source of Cleanup Funding: | | UNK |
| Preliminary Site Assessment Workplan Submitted: | | Not reported |
| Preliminary Site Assessment Began: | | Not reported |
| Pollution Characterization Began: | | Not reported |
| Remediation Plan Submitted: | | Not reported |
| Remedial Action Underway: | | Not reported |
| Post Remedial Action Monitoring Began: | | Not reported |
| Enforcement Action Date: | | Not reported |
| Historical Max MTBE Date: | | Not reported |
| Hist Max MTBE Conc in Groundwater: | | Not reported |
| Hist Max MTBE Conc in Soil: | | Not reported |
| Significant Interim Remedial Action Taken: | | Not reported |
| GW Qualifier: | Not reported | |
| Soil Qualifier: | Not reported | |
| Organization: | Not reported | |
| Owner Contact: | Not reported | |
| Responsible Party: | CHEVRON U.S.A. | |
| RP Address: | P.O. BOX 2833 LA HABRA, 90632 | |
| Program: | LUST | |
| Lat/Long: | 34.1317502 / -1 | |
| Local Agency Staff: | Not reported | |
| Beneficial Use: | Not reported | |

**CHEVRON #9-4104 (Continued)** **S102427244**

Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Assigned Name: Not reported
Summary: OLD CASE #052590-13

HIST CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: LTNKA
Reg Id: I-10657

---

**34** **MEAD WRECKING CO. #313** **SWF/LF** **S104156323**
**NNE** **1215 DUARTE ROAD** **WMUDS/SWAT** **N/A**
**1/4-1/2** **DUARTE, CA**
**0.405 mi.**
**2138 ft.**

**Relative:**
**Higher**

**Actual:**
**460 ft.**

LOS ANGELES CO. LF:
Site ID: 1985
Alt. Address: 1727 South Buena Vista Street, Duarte, CA
Site Contact: Not reported
Site Contact Phone: Not reported
Site Email: Not reported
Site Website: Not reported
Site Type: Municipal Solid Waste Landfill
Site SWIS Number: 19-AA-5331
Beginning Operation Date: Not reported
Ending Operation Date: 1970
Local Enforcement Agency: Not reported
Maximun Depth Fill(Ft): Not reported
Permitted Capacity: Not reported
Present Use: Residential
Remaining Capacity(Million): Not reported
Status: Closed
Waste Accepted: Inert
Hours of Operation: Not reported
Disposal Area (Acre): 2

Detail As Of 01/2014:
Operator Name: Unknown
Operator Address: Not reported
Operator City/State/Zip: Not reported
Operator Contact: Not reported
Operator Telephone: Not reported
Operator Email: Not reported
Owner Name: Glasteel Industrial
Owner Address: P.O. Box Drawer A
Owner City/State/Zip: Collierviller, CA 38017
Owner Contact: Not reported
Owner Telephone: (818) 796-4051
Owner Email: Not reported

WMUDS/SWAT:
Edit Date: Not reported
Complexity: Not reported
Primary Waste: Not reported

**MEAD WRECKING CO. #313 (Continued)** **S104156323**

| | |
|---|---|
| Primary Waste Type: | Not reported |
| Secondary Waste: | Not reported |
| Secondary Waste Type: | Not reported |
| Base Meridian: | Not reported |
| NPID: | Not reported |
| Tonnage: | 0 |
| Regional Board ID: | Not reported |
| Municipal Solid Waste: | False |
| Superorder: | False |
| Open To Public: | False |
| Waste List: | False |
| Agency Type: | Not reported |
| Agency Name: | MEAD WRECKING COMPANT |
| Agency Department: | Not reported |
| Agency Address: | Not reported |
| Agency City,St,Zip: | Not reported |
| Agency Contact: | Not reported |
| Agency Telephone: | Not reported |
| Land Owner Name: | Not reported |
| Land Owner Address: | Not reported |
| Land Owner City,St,Zip: | CA |
| Land Owner Contact: | Not reported |
| Land Owner Phone: | Not reported |
| Region: | 4 |
| Facility Type: | Not reported |
| Facility Description: | Not reported |
| Facility Telephone: | Not reported |
| SWAT Facility Name: | Not reported |
| Primary SIC: | Not reported |
| Secondary SIC: | Not reported |
| Comments: | Not reported |
| Last Facility Editors: | Not reported |
| Waste Discharge System: | False |
| Solid Waste Assessment Test Program: | True |
| Toxic Pits Cleanup Act Program: | False |
| Resource Conservation Recovery Act: | False |
| Department of Defence: | False |
| Solid Waste Assessment Test Program: | MEAD WRECKING COMPANT |
| Threat to Water Quality: | Not reported |
| Sub Chapter 15: | False |
| Regional Board Project Officer: | R_N |
| Number of WMUDS at Facility: | 1 |
| Section Range: | Not reported |
| RCRA Facility: | Not reported |
| Waste Discharge Requirements: | Not reported |
| Self-Monitoring Rept. Frequency: | Not reported |
| Waste Discharge System ID: | 4 190099NUR |
| Solid Waste Information ID: | Not reported |

**35**
**NW**
**1/4-1/2**
**0.409 mi.**
**2158 ft.**

**PURSOIL INC**
**1810 SHAMROCK AVE**
**MONROVIA, CA 91016**

**LUST**
**HIST CORTESE**

**S102435526**
**N/A**

**Relative:**
**Higher**

**Actual:**
**446 ft.**

LUST:

| | |
|---|---|
| Region: | STATE |
| Global Id: | T0603705267 |
| Latitude: | 34.1314377 |
| Longitude: | -117.990675 |
| Case Type: | LUST Cleanup Site |
| Status: | Completed - Case Closed |
| Status Date: | 01/03/1991 |
| Lead Agency: | LOS ANGELES COUNTY |
| Case Worker: | JOA |
| Local Agency: | LOS ANGELES COUNTY |
| RB Case Number: | R-15821 |
| LOC Case Number: | Not reported |
| File Location: | Not reported |
| Potential Media Affect: | Soil |
| Potential Contaminants of Concern: | Aviation |
| Site History: | Not reported |

Click here to access the California GeoTracker records for this facility:

Contact:

| | |
|---|---|
| Global Id: | T0603705267 |
| Contact Type: | Local Agency Caseworker |
| Contact Name: | JOHN AWUJO |
| Organization Name: | LOS ANGELES COUNTY |
| Address: | 900 S FREMONT AVE |
| City: | ALHAMBRA |
| Email: | jawujo@dpw.lacounty.gov |
| Phone Number: | 6264583507 |

| | |
|---|---|
| Global Id: | T0603705267 |
| Contact Type: | Regional Board Caseworker |
| Contact Name: | YUE RONG |
| Organization Name: | LOS ANGELES RWQCB (REGION 4) |
| Address: | 320 W. 4TH ST., SUITE 200 |
| City: | Los Angeles |
| Email: | yrong@waterboards.ca.gov |
| Phone Number: | Not reported |

Status History:

| | |
|---|---|
| Global Id: | T0603705267 |
| Status: | Completed - Case Closed |
| Status Date: | 01/03/1991 |

| | |
|---|---|
| Global Id: | T0603705267 |
| Status: | Open - Case Begin Date |
| Status Date: | 01/03/1991 |

Regulatory Activities:

| | |
|---|---|
| Global Id: | T0603705267 |
| Action Type: | Other |
| Date: | 01/03/1991 |
| Action: | Leak Reported |

**PURSOIL INC (Continued)** **S102435526**

LUST REG 4:

| | | |
|---|---|---|
| Region: | 4 | |
| Regional Board: | 04 | |
| County: | Los Angeles | |
| Facility Id: | R-15821 | |
| Status: | Case Closed | |
| Substance: | 1 | |
| Substance Quantity: | Not reported | |
| Local Case No: | Not reported | |
| Case Type: | Soil | |
| Abatement Method Used at the Site: | | Not reported |
| Global ID: | T0603705267 | |
| W Global ID: | Not reported | |
| Staff: | UNK | |
| Local Agency: | 19000 | |
| Cross Street: | Not reported | |
| Enforcement Type: | Not reported | |
| Date Leak Discovered: | Not reported | |
| Date Leak First Reported: | | 1/3/1991 |
| Date Leak Record Entered: | 5/3/1996 | |
| Date Confirmation Began: | Not reported | |
| Date Leak Stopped: | Not reported | |
| Date Case Last Changed on Database: | | 1/3/1991 |
| Date the Case was Closed: | | 1/3/1991 |
| How Leak Discovered: | Not reported | |
| How Leak Stopped: | Not reported | |
| Cause of Leak: | Not reported | |
| Leak Source: | Not reported | |
| Operator: | Not reported | |
| Water System: | Not reported | |
| Well Name: | Not reported | |
| Approx. Dist To Production Well (ft): | | 2354.2396009292035595958088825 |
| Source of Cleanup Funding: | | Not reported |
| Preliminary Site Assessment Workplan Submitted: | | Not reported |
| Preliminary Site Assessment Began: | | Not reported |
| Pollution Characterization Began: | | Not reported |
| Remediation Plan Submitted: | | Not reported |
| Remedial Action Underway: | | Not reported |
| Post Remedial Action Monitoring Began: | | Not reported |
| Enforcement Action Date: | | Not reported |
| Historical Max MTBE Date: | | Not reported |
| Hist Max MTBE Conc in Groundwater: | | Not reported |
| Hist Max MTBE Conc in Soil: | | Not reported |
| Significant Interim Remedial Action Taken: | | Not reported |
| GW Qualifier: | Not reported | |
| Soil Qualifier: | Not reported | |
| Organization: | Not reported | |
| Owner Contact: | Not reported | |
| Responsible Party: | PURSOIL INC | |
| RP Address: | 1810 SHAMROCK S MONROVIA CA 91016 | |
| Program: | LUST | |
| Lat/Long: | 34.1315482 / -1 | |
| Local Agency Staff: | Not reported | |
| Beneficial Use: | Not reported | |
| Priority: | Not reported | |
| Cleanup Fund Id: | Not reported | |
| Suspended: | Not reported | |

**PURSOIL INC (Continued)** **S102435526**

Assigned Name: Not reported
Summary: Not reported

HIST CORTESE:
Region: CORTESE
Facility County Code: 19
Reg By: LTNKA
Reg Id: R-15821

---

**36**
**SE**
**1/4-1/2**
**0.443 mi.**
**2338 ft.**

**Relative:**
**Higher**

**Actual:**
**435 ft.**

**SANTA FE DAM** **ENVIROSTOR** **S107737276**
**N/A**

**AZUSA, CA**

ENVIROSTOR:
Facility ID: 80000471
Status: Inactive - Needs Evaluation
Status Date: 07/01/2005
Site Code: Not reported
Site Type: Military Evaluation
Site Type Detailed: FUDS
Acres: Not reported
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Not reported
Supervisor: Douglas Bautista
Division Branch: Cleanup Cypress
Assembly: 48
Senate: 22
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: DERA
Latitude: 34.11666
Longitude: -117.9736
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CA99799F562000
Alias Type: Federal Facility ID
Alias Name: J09CA0618
Alias Type: INPR
Alias Name: 80000471
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Inventory Project Report (INPR)
Completed Date: 09/16/1993
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported

**SANTA FE DAM (Continued)** **S107737276**

Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

---

**37**
**NNW**
**1/4-1/2**
**0.472 mi.**
**2491 ft.**

**CONRAC CORPORATION**
**1724 S. MOUNTAIN AVE.**
**DUARTE, CA 91010**

**SLIC** **S105033065**
**HIST UST** **N/A**
**LOS ANGELES CO. HMS**
**WIP**

**Relative:**
**Higher**

**Actual:**
**465 ft.**

SLIC:

| | |
|---|---|
| Region: | STATE |
| **Facility Status:** | **Open - Inactive** |
| Status Date: | 10/29/2014 |
| Global Id: | SL603798694 |
| Lead Agency: | LOS ANGELES RWQCB (REGION 4) |
| Lead Agency Case Number: | Not reported |
| Latitude: | 34.133252 |
| Longitude: | -117.985466 |
| Case Type: | Cleanup Program Site |
| Case Worker: | GJH |
| Local Agency: | Not reported |
| RB Case Number: | 106.2075 |
| File Location: | Not reported |
| Potential Media Affected: | Aquifer used for drinking water supply |
| Potential Contaminants of Concern: | Not reported |
| Site History: | Not reported |

Click here to access the California GeoTracker records for this facility:

HIST UST:

| | |
|---|---|
| File Number: | 0002736D |
| URL: | http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002736D.pdf |
| Region: | Not reported |
| Facility ID: | Not reported |
| Facility Type: | Not reported |
| Other Type: | Not reported |
| Contact Name: | Not reported |
| Telephone: | Not reported |
| Owner Name: | Not reported |
| Owner Address: | Not reported |
| Owner City,St,Zip: | Not reported |
| Total Tanks: | Not reported |
| | |
| Tank Num: | Not reported |
| Container Num: | Not reported |
| Year Installed: | Not reported |
| Tank Capacity: | Not reported |
| Tank Used for: | Not reported |
| Type of Fuel: | Not reported |
| Container Construction Thickness: | Not reported |
| Leak Detection: | Not reported |

**CONRAC CORPORATION (Continued)** **S105033065**

Click here for Geo Tracker PDF:

LOS ANGELES CO. HMS:
Region: LA
Permit Category: T
Facility Id: 003853-003984
Facility Type: 0
Facility Status: Closed
Area: 3R
Permit Number: 000117923
Permit Status: Closed

Region: LA
Permit Category: I
Facility Id: 003853-I03984
Facility Type: 01
Facility Status: Closed
Area: 3R
Permit Number: 000001916
Permit Status: Closed

WIP:
Region: 4
File Number: 106.2075
**File Status: Backlog**
Staff: UNIDENTIFIED
Facility Suite: Not reported

---

**38** **GRIFFITH COMPANY** **LUST S102430984**
**SSE** **1380 ARROW HWY** **HIST CORTESE N/A**
**1/4-1/2** **IRWINDALE, CA 91706**
**0.485 mi.**
**2561 ft.**

**Relative:**
**Higher**

**Actual:**
**404 ft.**

LUST:
Region: STATE
Global Id: T0603704025
Latitude: 34.1149293
Longitude: -117.9751355
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 08/28/1991
Lead Agency: LOS ANGELES COUNTY
Case Worker: JOA
Local Agency: LOS ANGELES COUNTY
RB Case Number: I-13024
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0603704025
Contact Type: Local Agency Caseworker

**GRIFFITH COMPANY (Continued)** **S102430984**

Contact Name: JOHN AWUJO
Organization Name: LOS ANGELES COUNTY
Address: 900 S FREMONT AVE
City: ALHAMBRA
Email: jawujo@dpw.lacounty.gov
Phone Number: 6264583507

Global Id: T0603704025
Contact Type: Regional Board Caseworker
Contact Name: YUE RONG
Organization Name: LOS ANGELES RWQCB (REGION 4)
Address: 320 W. 4TH ST., SUITE 200
City: Los Angeles
Email: yrong@waterboards.ca.gov
Phone Number: Not reported

Status History:
Global Id: T0603704025
Status: Completed - Case Closed
Status Date: 08/28/1991

Global Id: T0603704025
Status: Open - Case Begin Date
Status Date: 01/09/1991

Regulatory Activities:
Global Id: T0603704025
Action Type: Other
Date: 01/09/1991
Action: Leak Discovery

Global Id: T0603704025
Action Type: Other
Date: 02/14/1991
Action: Leak Reported

Global Id: T0603704025
Action Type: Other
Date: 01/09/1991
Action: Leak Stopped

LUST REG 4:
Region: 4
Regional Board: 04
County: Los Angeles
Facility Id: I-13024
Status: Case Closed
Substance: Gasoline
Substance Quantity: Not reported
Local Case No: Not reported
Case Type: Soil
Abatement Method Used at the Site: Not reported
Global ID: T0603704025
W Global ID: Not reported
Staff: UNK

**GRIFFITH COMPANY (Continued)** **S102430984**

| | | |
|---|---|---|
| Local Agency: | 19000 | |
| Cross Street: | LIVE OAK | |
| Enforcement Type: | Not reported | |
| Date Leak Discovered: | 1/9/1991 | |
| Date Leak First Reported: | | 2/14/1991 |
| Date Leak Record Entered: | 4/5/1991 | |
| Date Confirmation Began: | Not reported | |
| Date Leak Stopped: | 1/9/1991 | |
| Date Case Last Changed on Database: | | 4/18/1991 |
| Date the Case was Closed: | | 8/28/1991 |
| How Leak Discovered: | Tank Closure | |
| How Leak Stopped: | Not reported | |
| Cause of Leak: | UNK | |
| Leak Source: | UNK | |
| Operator: | DIAZ, VINCE | |
| Water System: | Not reported | |
| Well Name: | Not reported | |
| Approx. Dist To Production Well (ft): | | 4105.2546766631749022536493909 |
| Source of Cleanup Funding: | | UNK |
| Preliminary Site Assessment Workplan Submitted: | | Not reported |
| Preliminary Site Assessment Began: | | Not reported |
| Pollution Characterization Began: | | Not reported |
| Remediation Plan Submitted: | | Not reported |
| Remedial Action Underway: | | Not reported |
| Post Remedial Action Monitoring Began: | | Not reported |
| Enforcement Action Date: | | Not reported |
| Historical Max MTBE Date: | | Not reported |
| Hist Max MTBE Conc in Groundwater: | | Not reported |
| Hist Max MTBE Conc in Soil: | | Not reported |
| Significant Interim Remedial Action Taken: | | Not reported |
| GW Qualifier: | Not reported | |
| Soil Qualifier: | Not reported | |
| Organization: | Not reported | |
| Owner Contact: | Not reported | |
| Responsible Party: | GRIFFITH CO. | |
| RP Address: | 12200 BLOOMFIELD AVE., SANTA FE SPRINGS, 90670 | |
| Program: | LUST | |
| Lat/Long: | 34.1144959 / -1 | |
| Local Agency Staff: | Not reported | |
| Beneficial Use: | Not reported | |
| Priority: | Not reported | |
| Cleanup Fund Id: | Not reported | |
| Suspended: | Not reported | |
| Assigned Name: | Not reported | |
| Summary: | Not reported | |

HIST CORTESE:

| | |
|---|---|
| Region: | CORTESE |
| Facility County Code: | 19 |
| Reg By: | LTNKA |
| Reg Id: | I-13024 |

**39**
**NW**
**1/2-1**
**0.608 mi.**
**3208 ft.**

**KENNEDY CO** **HWP** **S109467255**
**1600 SOUTH SHAMROCK AVE.** **N/A**
**MONROVIA, CA 91016**

**Relative:**
**Higher**

**Actual:**
**472 ft.**

HWP:

| | |
|---|---|
| EPA Id: | CAD000062729 |
| Cleanup Status: | CLOSED |
| Latitude: | 34.13412 |
| Longitude: | -117.9905 |
| Facility Type: | Historical - Non-Operating |
| Facility Size: | Not reported |
| Team: | Not reported |
| Supervisor: | Not reported |
| Site Code: | Not reported |
| Assembly District: | 41 |
| Senate District: | 25 |
| Public Information Officer: | Not reported |
| Public Information Officer: | Not reported |

Activities:

| | |
|---|---|
| EPA Id: | CAD000062729 |
| Facility Type: | Historical - Non-Operating |
| Unit Names: | OTHRTRT1, TANKSTR1 |
| Event Description: | New Operating Permit - APPLICATION PART A RECEIVED |
| Actual Date: | 11/19/1980 |

| | |
|---|---|
| EPA Id: | CAD000062729 |
| Facility Type: | Historical - Non-Operating |
| Unit Names: | OTHRTRT1, TANKSTR1 |
| Event Description: | New Operating Permit - FINAL PERMIT - WITHDRAWAL REQUEST RECEIVED |
| Actual Date: | 10/21/1982 |

| | |
|---|---|
| EPA Id: | CAD000062729 |
| Facility Type: | Historical - Non-Operating |
| Unit Names: | OTHRTRT1, TANKSTR1 |
| Event Description: | New Operating Permit - FINAL PERMIT - WITHDRAWAL REQUEST ACKNOWLEDGED |
| Actual Date: | 10/29/1982 |

Closure:

| | |
|---|---|
| EPA Id: | CAD000062729 |
| Facility Type: | Historical - Non-Operating |
| Unit Names: | CONTAIN1, CONTAIN2, OTHRTRT1, TANKSTR1 |
| Event Description: | Closure Final - RECEIVE CLOSURE CERTIFICATION |
| Actual Date: | 09/29/1995 |

| | |
|---|---|
| EPA Id: | CAD000062729 |
| Facility Type: | Historical - Non-Operating |
| Unit Names: | CONTAIN1, CONTAIN2, OTHRTRT1, TANKSTR1 |
| Event Description: | Closure Final - ISSUE CLOSURE VERIFICATION |
| Actual Date: | 09/29/1995 |

**G40** **AVERY DENNISON** **RCRA-SQG** **1000372430**
**NW** **1620 CALIFORNIA AVE** **LUST** **CAD057339640**
**1/2-1** **MONROVIA, CA 91016** **SWEEPS UST**
**0.662 mi.** **HIST UST**
**3496 ft.** **Site 1 of 2 in cluster G** **CA FID UST**
**CHMIRS**
**Relative:** **EMI**
**Higher** **ENF**
**HIST CORTESE**
**Actual:** **LOS ANGELES CO. HMS**
**461 ft.** **Notify 65**
**WIP**

RCRA-SQG:
Date form received by agency: 03/04/1999
Facility name: AVERY DENNISON
Facility address: 1620 CALIFORNIA AVE
MONROVIA, CA 91016
EPA ID: CAD057339640
Contact: KELLI KIMBERLY
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: (909) 948-3250
Contact email: Not reported
EPA Region: 09
Land type: Private
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 09/01/1996
Site name: AVERY DENNISON
Classification: Large Quantity Generator

Date form received by agency: 09/01/1996
Site name: AVERY DENNISON

**AVERY DENNISON (Continued)** **1000372430**

Classification: Small Quantity Generator

Date form received by agency: 03/22/1996
Site name: AVERY DENNISON
Classification: Large Quantity Generator

Date form received by agency: 03/01/1996
Site name: AVERY DENNISON CORP., FASSON ROLL DIV
Classification: Large Quantity Generator

Date form received by agency: 03/31/1994
Site name: AVERY DENNISON CORP., FASSON ROLL DIV
Classification: Large Quantity Generator

Date form received by agency: 02/29/1992
Site name: AVERY-DENNISON
Classification: Large Quantity Generator

Date form received by agency: 04/12/1990
Site name: AVERY LABEL
Classification: Large Quantity Generator

Facility Has Received Notices of Violations:
Regulation violated: FR - 262.30-34.C
Area of violation: Generators - General
Date violation determined: 02/22/1994
Date achieved compliance: 04/14/1994
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/28/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 268.7
Area of violation: LDR - General
Date violation determined: 02/22/1994
Date achieved compliance: 04/14/1994
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/28/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.50-60
Area of violation: Generators - General
Date violation determined: 02/22/1994
Date achieved compliance: 04/14/1994
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL

**AVERY DENNISON (Continued)** **1000372430**

Enforcement action date: 02/28/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.10-12.A
Area of violation: Generators - General
Date violation determined: 01/10/1994
Date achieved compliance: 01/10/1999
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 01/10/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 01/10/1999
Evaluation lead agency: State Contractor/Grantee

Evaluation date: 01/10/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 04/14/1994
Evaluation lead agency: EPA

Evaluation date: 01/10/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: LDR - General
Date achieved compliance: 04/14/1994
Evaluation lead agency: EPA

LUST:
Region: STATE
Global Id: T0603700157
Latitude: 34.133961
Longitude: -117.994914
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 11/25/1996
Lead Agency: LOS ANGELES RWQCB (REGION 4)
Case Worker: WIP
Local Agency: LOS ANGELES COUNTY
RB Case Number: 106.2012
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Aquifer used for drinking water supply
Potential Contaminants of Concern: * Solvents

**AVERY DENNISON (Continued)** **1000372430**

Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

| | |
|---|---|
| Global Id: | T0603700157 |
| Contact Type: | Local Agency Caseworker |
| Contact Name: | JOHN AWUJO |
| Organization Name: | LOS ANGELES COUNTY |
| Address: | 900 S FREMONT AVE |
| City: | ALHAMBRA |
| Email: | jawujo@dpw.lacounty.gov |
| Phone Number: | 6264583507 |

| | |
|---|---|
| Global Id: | T0603700157 |
| Contact Type: | Regional Board Caseworker |
| Contact Name: | WELL INVESTIGATION PROGRAM |
| Organization Name: | LOS ANGELES RWQCB (REGION 4) |
| Address: | 320 W. 4TH ST., SUITE 200 |
| City: | LOS ANGELES |
| Email: | Not reported |
| Phone Number: | Not reported |

Status History:

| | |
|---|---|
| Global Id: | T0603700157 |
| Status: | Completed - Case Closed |
| Status Date: | 11/25/1996 |

| | |
|---|---|
| Global Id: | T0603700157 |
| Status: | Open - Case Begin Date |
| Status Date: | 10/04/1989 |

| | |
|---|---|
| Global Id: | T0603700157 |
| Status: | Open - Site Assessment |
| Status Date: | 10/30/1990 |

Regulatory Activities:

| | |
|---|---|
| Global Id: | T0603700157 |
| Action Type: | Other |
| Date: | 10/04/1989 |
| Action: | Leak Discovery |

| | |
|---|---|
| Global Id: | T0603700157 |
| Action Type: | Other |
| Date: | 10/30/1990 |
| Action: | Leak Reported |

LUST REG 4:

| | |
|---|---|
| Region: | 4 |
| Regional Board: | 04 |
| County: | Los Angeles |
| Facility Id: | 106.2012 |
| Status: | Case Closed |
| Substance: | Solvents |
| Substance Quantity: | Not reported |

**AVERY DENNISON (Continued)** **1000372430**

| | | |
|---|---|---|
| Local Case No: | Not reported | |
| Case Type: | Specific tank leak that has contaminated an aquifer used for drinking water | |
| Abatement Method Used at the Site: | | Not reported |
| Global ID: | T0603700157 | |
| W Global ID: | Not reported | |
| Staff: | WIP | |
| Local Agency: | 19000 | |
| Cross Street: | DUARTE RD. | |
| Enforcement Type: | Not reported | |
| Date Leak Discovered: | 10/4/1989 | |
| Date Leak First Reported: | | 10/30/1990 |
| Date Leak Record Entered: | 12/5/1990 | |
| Date Confirmation Began: | Not reported | |
| Date Leak Stopped: | Not reported | |
| Date Case Last Changed on Database: | | 11/25/1996 |
| Date the Case was Closed: | | 11/25/1996 |
| How Leak Discovered: | OM | |
| How Leak Stopped: | Not reported | |
| Cause of Leak: | UNK | |
| Leak Source: | UNK | |
| Operator: | VERSHEL, RICHARD B. | |
| Water System: | Not reported | |
| Well Name: | Not reported | |
| Approx. Dist To Production Well (ft): | | 1551.335714865533452250328642 |
| Source of Cleanup Funding: | | UNK |
| Preliminary Site Assessment Workplan Submitted: | | Not reported |
| Preliminary Site Assessment Began: | | 10/30/1990 |
| Pollution Characterization Began: | | Not reported |
| Remediation Plan Submitted: | | Not reported |
| Remedial Action Underway: | | Not reported |
| Post Remedial Action Monitoring Began: | | Not reported |
| Enforcement Action Date: | | Not reported |
| Historical Max MTBE Date: | | Not reported |
| Hist Max MTBE Conc in Groundwater: | | Not reported |
| Hist Max MTBE Conc in Soil: | | Not reported |
| Significant Interim Remedial Action Taken: | | Not reported |
| GW Qualifier: | Not reported | |
| Soil Qualifier: | Not reported | |
| Organization: | Not reported | |
| Owner Contact: | Not reported | |
| Responsible Party: | AVERY DENNISON/FASSON | |
| RP Address: | 1620 S. CALIFORNIA AVE., MONROVIA, CA 91016-4622 | |
| Program: | LUST | |
| Lat/Long: | 34.133961 / -1 | |
| Local Agency Staff: | Not reported | |
| Beneficial Use: | Not reported | |
| Priority: | Not reported | |
| Cleanup Fund Id: | Not reported | |
| Suspended: | Not reported | |
| Assigned Name: | Not reported | |
| Summary: | REMEDIATION AT THE SITE IS ONGOING. | |

SWEEPS UST:

| | |
|---|---|
| Status: | Active |
| Comp Number: | 10025 |
| Number: | 9 |
| Board Of Equalization: | 44-008686 |

**AVERY DENNISON (Continued)** **1000372430**

Referral Date: 06-30-89
Action Date: Not reported
Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-010025-000001
Tank Status: A
Capacity: Not reported
Active Date: 06-30-89
Tank Use: UNKNOWN
STG: W
Content: Not reported
Number Of Tanks: 11

Status: Active
Comp Number: 10025
Number: 9
Board Of Equalization: 44-008686
Referral Date: 06-30-89
Action Date: Not reported
Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-010025-000002
Tank Status: A
Capacity: Not reported
Active Date: 06-30-89
Tank Use: UNKNOWN
STG: W
Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 10025
Number: 9
Board Of Equalization: 44-008686
Referral Date: 06-30-89
Action Date: Not reported
Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-010025-000003
Tank Status: A
Capacity: Not reported
Active Date: 06-30-89
Tank Use: UNKNOWN
STG: W
Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 10025
Number: 9
Board Of Equalization: 44-008686
Referral Date: 06-30-89
Action Date: Not reported
Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-010025-000004
Tank Status: A

**AVERY DENNISON (Continued)** **1000372430**

Capacity: Not reported
Active Date: 06-30-89
Tank Use: UNKNOWN
STG: W
Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 10025
Number: 9
Board Of Equalization: 44-008686
Referral Date: 06-30-89
Action Date: Not reported
Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-010025-000005
Tank Status: A
Capacity: Not reported
Active Date: 06-30-89
Tank Use: UNKNOWN
STG: W
Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 10025
Number: 9
Board Of Equalization: 44-008686
Referral Date: 06-30-89
Action Date: Not reported
Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-010025-000006
Tank Status: A
Capacity: Not reported
Active Date: 06-30-89
Tank Use: UNKNOWN
STG: W
Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 10025
Number: 9
Board Of Equalization: 44-008686
Referral Date: 06-30-89
Action Date: Not reported
Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-010025-000007
Tank Status: A
Capacity: Not reported
Active Date: 06-30-89
Tank Use: UNKNOWN
STG: W
Content: Not reported
Number Of Tanks: Not reported

**AVERY DENNISON (Continued)** **1000372430**

Status: Active
Comp Number: 10025
Number: 9
Board Of Equalization: 44-008686
Referral Date: 06-30-89
Action Date: Not reported
Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-010025-000008
Tank Status: A
Capacity: Not reported
Active Date: 06-30-89
Tank Use: UNKNOWN
STG: W
Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 10025
Number: 9
Board Of Equalization: 44-008686
Referral Date: 06-30-89
Action Date: Not reported
Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-010025-000009
Tank Status: A
Capacity: Not reported
Active Date: 06-30-89
Tank Use: UNKNOWN
STG: W
Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 10025
Number: 9
Board Of Equalization: 44-008686
Referral Date: 06-30-89
Action Date: Not reported
Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-010025-000010
Tank Status: A
Capacity: Not reported
Active Date: 06-30-89
Tank Use: UNKNOWN
STG: W
Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 10025
Number: 9
Board Of Equalization: 44-008686
Referral Date: 06-30-89
Action Date: Not reported

**AVERY DENNISON (Continued)** **1000372430**

Created Date: 06-30-89
Owner Tank Id: Not reported
SWRCB Tank Id: 19-000-010025-000011
Tank Status: A
Capacity: Not reported
Active Date: 06-30-89
Tank Use: UNKNOWN
STG: W
Content: Not reported
Number Of Tanks: Not reported

HIST UST:
File Number: 00026620
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00026620.pdf
Region: STATE
Facility ID: 00000029259
Facility Type: Other
Other Type: MFG. FACILITY
Contact Name: Not reported
Telephone: 8183577031
Owner Name: AVERY LABEL
Owner Address: 1616 SOUTH CALIFORNIA AVE.
Owner City,St,Zip: MONROVIA, CA 91016
Total Tanks: 0012

Tank Num: 001
Container Num: TANK #2
Year Installed: Not reported
Tank Capacity: 00030000
Tank Used for: PRODUCT
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: TAND #1
Year Installed: Not reported
Tank Capacity: 00030000
Tank Used for: PRODUCT
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 003
Container Num: TANK #4
Year Installed: Not reported
Tank Capacity: 00004000
Tank Used for: PRODUCT
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 004
Container Num: TANK #6
Year Installed: Not reported
Tank Capacity: 00004000
Tank Used for: PRODUCT

**AVERY DENNISON (Continued)** **1000372430**

| | |
|---|---|
| Type of Fuel: | Not reported |
| Container Construction Thickness: | Not reported |
| Leak Detection: | Stock Inventor |
| | |
| Tank Num: | 005 |
| Container Num: | TANK #3 |
| Year Installed: | Not reported |
| Tank Capacity: | 00030000 |
| Tank Used for: | PRODUCT |
| Type of Fuel: | Not reported |
| Container Construction Thickness: | Not reported |
| Leak Detection: | Stock Inventor |
| | |
| Tank Num: | 006 |
| Container Num: | TANK #5 |
| Year Installed: | Not reported |
| Tank Capacity: | 00004000 |
| Tank Used for: | PRODUCT |
| Type of Fuel: | Not reported |
| Container Construction Thickness: | Not reported |
| Leak Detection: | Stock Inventor |
| | |
| Tank Num: | 007 |
| Container Num: | 7 |
| Year Installed: | Not reported |
| Tank Capacity: | 00000000 |
| Tank Used for: | PRODUCT |
| Type of Fuel: | DIESEL |
| Container Construction Thickness: | Not reported |
| Leak Detection: | Not reported |
| | |
| Tank Num: | 008 |
| Container Num: | 8 |
| Year Installed: | Not reported |
| Tank Capacity: | 00000000 |
| Tank Used for: | WASTE |
| Type of Fuel: | Not reported |
| Container Construction Thickness: | Not reported |
| Leak Detection: | None |
| | |
| Tank Num: | 009 |
| Container Num: | T-9 |
| Year Installed: | Not reported |
| Tank Capacity: | 00010850 |
| Tank Used for: | PRODUCT |
| Type of Fuel: | Not reported |
| Container Construction Thickness: | X |
| Leak Detection: | Visual, Stock Inventor |
| | |
| Tank Num: | 010 |
| Container Num: | T-10 |
| Year Installed: | Not reported |
| Tank Capacity: | 00010850 |
| Tank Used for: | PRODUCT |
| Type of Fuel: | Not reported |
| Container Construction Thickness: | Not reported |
| Leak Detection: | Visual, Stock Inventor |

**AVERY DENNISON (Continued)** **1000372430**

Tank Num: 011
Container Num: T-11
Year Installed: Not reported
Tank Capacity: 00010850
Tank Used for: PRODUCT
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Visual, Stock Inventor

Tank Num: 012
Container Num: T-7
Year Installed: Not reported
Tank Capacity: 00006000
Tank Used for: PRODUCT
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Visual, Stock Inventor

Click here for Geo Tracker PDF:

CA FID UST:
Facility ID: 19002860
Regulated By: UTNKA
Regulated ID: 00029259
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 8180000000
Mail To: Not reported
Mailing Address: 1616 S CALIFORNIA AVE
Mailing Address 2: Not reported
Mailing City,St,Zip: MONROVIA
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

CHMIRS:
OES Incident Number: 7682
OES notification: Not reported
OES Date: 4/20/1993
OES Time: 08:00:00 AM
**Date Completed: Not reported**
Property Use: Not reported
Agency Id Number: Not reported
Agency Incident Number: Not reported
Time Notified: Not reported
Time Completed: Not reported
Surrounding Area: Not reported
Estimated Temperature: Not reported
Property Management: Not reported
More Than Two Substances Involved?: Not reported
Resp Agncy Personel # Of Decontaminated: Not reported
Responding Agency Personel # Of Injuries: Not reported

**AVERY DENNISON (Continued)** **1000372430**

| | |
|---|---|
| Responding Agency Personel # Of Fatalities: | Not reported |
| Others Number Of Decontaminated: | Not reported |
| Others Number Of Injuries: | Not reported |
| Others Number Of Fatalities: | Not reported |
| Vehicle Make/year: | Not reported |
| Vehicle License Number: | Not reported |
| Vehicle State: | Not reported |
| Vehicle Id Number: | Not reported |
| CA DOT PUC/ICC Number: | Not reported |
| Company Name: | Not reported |
| Reporting Officer Name/ID: | Not reported |
| Report Date: | Not reported |
| Facility Telephone: | Not reported |
| Waterway Involved: | NO |
| Waterway: | Not reported |
| Spill Site: | Not reported |
| Cleanup By: | NO EXTERNAL CLEAN UP |
| Containment: | Not reported |
| What Happened: | Not reported |
| Type: | CHEMICAL |
| Measure: | Not reported |
| Other: | Not reported |
| Date/Time: | Not reported |
| Year: | 1993 |
| Agency: | AVERY LABE CO. |
| Incident Date: | 1324 |
| Admin Agency: | Not reported |
| Amount: | 40 GAL |
| Contained: | NO |
| Site Type: | S/S |
| E Date: | Not reported |
| Substance: | NAPHA / SOLVENT |
| Unknown: | Not reported |
| Substance #2: | Not reported |
| Substance #3: | Not reported |
| Evacuations: | UNKNOWN |
| Number of Injuries: | UNKNOWN |
| Number of Fatalities: | UNKNOWN |
| #1 Pipeline: | Not reported |
| #2 Pipeline: | Not reported |
| #3 Pipeline: | Not reported |
| #1 Vessel >= 300 Tons: | Not reported |
| #2 Vessel >= 300 Tons: | Not reported |
| #3 Vessel >= 300 Tons: | Not reported |
| Evacs: | Not reported |
| Injuries: | Not reported |
| Fatals: | Not reported |
| Comments: | Not reported |
| Description: | SPILLES IN PLANT, ALL CONTAINED IN PLANT |

EMI:

| | |
|---|---|
| Year: | 1987 |
| County Code: | 19 |
| Air Basin: | SC |
| Facility ID: | 19532 |
| Air District Name: | SC |
| SIC Code: | 2671 |

**AVERY DENNISON (Continued)** **1000372430**

| | |
|---|---|
| Air District Name: | SOUTH COAST AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 428 |
| Reactive Organic Gases Tons/Yr: | 423 |
| Carbon Monoxide Emissions Tons/Yr: | 1 |
| NOX - Oxides of Nitrogen Tons/Yr: | 16 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 1 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 1 |

| | |
|---|---|
| Year: | 1990 |
| County Code: | 19 |
| Air Basin: | SC |
| Facility ID: | 19532 |
| Air District Name: | SC |
| SIC Code: | 2671 |
| Air District Name: | SOUTH COAST AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 360 |
| Reactive Organic Gases Tons/Yr: | 355 |
| Carbon Monoxide Emissions Tons/Yr: | 4 |
| NOX - Oxides of Nitrogen Tons/Yr: | 11 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 1 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 1 |

| | |
|---|---|
| Year: | 1993 |
| County Code: | 19 |
| Air Basin: | SC |
| Facility ID: | 19532 |
| Air District Name: | SC |
| SIC Code: | 2671 |
| Air District Name: | SOUTH COAST AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 23 |
| Reactive Organic Gases Tons/Yr: | 4 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

| | |
|---|---|
| Year: | 1995 |
| County Code: | 19 |
| Air Basin: | SC |
| Facility ID: | 19532 |
| Air District Name: | SC |
| SIC Code: | 2671 |
| Air District Name: | SOUTH COAST AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 23 |
| Reactive Organic Gases Tons/Yr: | 4 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |

**AVERY DENNISON (Continued)** **1000372430**

| | |
|---|---|
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

| | |
|---|---|
| Year: | 1996 |
| County Code: | 19 |
| Air Basin: | SC |
| Facility ID: | 107522 |
| Air District Name: | SC |
| SIC Code: | 2891 |
| Air District Name: | SOUTH COAST AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 0 |
| Reactive Organic Gases Tons/Yr: | 0 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

| | |
|---|---|
| Year: | 1997 |
| County Code: | 19 |
| Air Basin: | SC |
| Facility ID: | 107522 |
| Air District Name: | SC |
| SIC Code: | 2759 |
| Air District Name: | SOUTH COAST AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 1 |
| Reactive Organic Gases Tons/Yr: | 1 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

| | |
|---|---|
| Year: | 1998 |
| County Code: | 19 |
| Air Basin: | SC |
| Facility ID: | 107522 |
| Air District Name: | SC |
| SIC Code: | 2759 |
| Air District Name: | SOUTH COAST AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 1 |
| Reactive Organic Gases Tons/Yr: | 1 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

| | |
|---|---|
| Year: | 1999 |

**AVERY DENNISON (Continued)** **1000372430**

| | |
|---|---|
| County Code: | 19 |
| Air Basin: | SC |
| Facility ID: | 107522 |
| Air District Name: | SC |
| SIC Code: | 2759 |
| Air District Name: | SOUTH COAST AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 1 |
| Reactive Organic Gases Tons/Yr: | 1 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

| | |
|---|---|
| Year: | 2000 |
| County Code: | 19 |
| Air Basin: | SC |
| Facility ID: | 107522 |
| Air District Name: | SC |
| SIC Code: | 2759 |
| Air District Name: | SOUTH COAST AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 1 |
| Reactive Organic Gases Tons/Yr: | 1 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

| | |
|---|---|
| Year: | 2001 |
| County Code: | 19 |
| Air Basin: | SC |
| Facility ID: | 107522 |
| Air District Name: | SC |
| SIC Code: | 2759 |
| Air District Name: | SOUTH COAST AQMD |
| Community Health Air Pollution Info System: | Not reported |
| Consolidated Emission Reporting Rule: | Not reported |
| Total Organic Hydrocarbon Gases Tons/Yr: | 1 |
| Reactive Organic Gases Tons/Yr: | 1 |
| Carbon Monoxide Emissions Tons/Yr: | 0 |
| NOX - Oxides of Nitrogen Tons/Yr: | 0 |
| SOX - Oxides of Sulphur Tons/Yr: | 0 |
| Particulate Matter Tons/Yr: | 0 |
| Part. Matter 10 Micrometers and Smllr Tons/Yr: | 0 |

ENF:

| | |
|---|---|
| Region: | 4 |
| Facility Id: | 206869 |
| Agency Name: | Avery Dennison |
| Place Type: | Facility |
| Place Subtype: | Not reported |
| Facility Type: | Not reported |

**AVERY DENNISON (Continued)** **1000372430**

| | |
|---|---|
| Agency Type: | Privately-Owned Business |
| # Of Agencies: | 1 |
| Place Latitude: | 34.13402 |
| Place Longitude: | -117.995035 |
| SIC Code 1: | Not reported |
| SIC Desc 1: | Not reported |
| SIC Code 2: | Not reported |
| SIC Desc 2: | Not reported |
| SIC Code 3: | Not reported |
| SIC Desc 3: | Not reported |
| NAICS Code 1: | Not reported |
| NAICS Desc 1: | Not reported |
| NAICS Code 2: | Not reported |
| NAICS Desc 2: | Not reported |
| NAICS Code 3: | Not reported |
| NAICS Desc 3: | Not reported |
| # Of Places: | 1 |
| Source Of Facility: | Reg Meas |
| Design Flow: | Not reported |
| Threat To Water Quality: | Not reported |
| Complexity: | Not reported |
| Pretreatment: | Not reported |
| Facility Waste Type: | Not reported |
| Facility Waste Type 2: | Not reported |
| Facility Waste Type 3: | Not reported |
| Facility Waste Type 4: | Not reported |
| Program: | WIP |
| Program Category1: | MONITORING |
| Program Category2: | MONITORING |
| # Of Programs: | 1 |
| WDID: | 4WIP1062012 |
| Reg Measure Id: | 155113 |
| Reg Measure Type: | Unregulated |
| Region: | 4 |
| Order #: | Not reported |
| Npdes# CA#: | Not reported |
| Major-Minor: | Not reported |
| Npdes Type: | Not reported |
| Reclamation: | Not reported |
| Dredge Fill Fee: | Not reported |
| 301H: | Not reported |
| Application Fee Amt Received: | Not reported |
| Status: | Historical |
| Status Date: | 06/17/2005 |
| Effective Date: | Not reported |
| Expiration/Review Date: | Not reported |
| Termination Date: | Not reported |
| WDR Review - Amend: | Not reported |
| WDR Review - Revise/Renew: | Not reported |
| WDR Review - Rescind: | Not reported |
| WDR Review - No Action Required: | Not reported |
| WDR Review - Pending: | Not reported |
| WDR Review - Planned: | Not reported |
| Status Enrollee: | N |
| Individual/General: | Not reported |
| Fee Code: | Not reported |
| Direction/Voice: | Passive |

**AVERY DENNISON (Continued)** **1000372430**

| | |
|---|---|
| Enforcement Id(EID): | 225980 |
| Region: | 4 |
| Order / Resolution Number: | LT910613 |
| Enforcement Action Type: | 13267 Letter |
| Effective Date: | 06/13/1991 |
| Adoption/Issuance Date: | Not reported |
| Achieve Date: | Not reported |
| Termination Date: | Not reported |
| ACL Issuance Date: | Not reported |
| EPL Issuance Date: | Not reported |
| Status: | Historical |
| Title: | Enforcement - 4WIP1062012 |
| Description: | Not reported |
| Program: | WIP |
| Latest Milestone Completion Date: | Not reported |
| # Of Programs1: | 1 |
| Total Assessment Amount: | $0.00 |
| Initial Assessed Amount: | $0.00 |
| Liability $ Amount: | $0.00 |
| Project $ Amount: | $0.00 |
| Liability $ Paid: | $0.00 |
| Project $ Completed: | $0.00 |
| Total $ Paid/Completed Amount: | $0.00 |

HIST CORTESE:

| | |
|---|---|
| Region: | CORTESE |
| Facility County Code: | 19 |
| Reg By: | LTNKA |
| Reg Id: | 106.2012 |

LOS ANGELES CO. HMS:

| | |
|---|---|
| Region: | LA |
| Permit Category: | T |
| Facility Id: | 010156-010025 |
| Facility Type: | 0 |
| Facility Status: | Closed |
| Area: | 3G |
| Permit Number: | 00001462T |
| Permit Status: | Closed |

NOTIFY 65:

| | |
|---|---|
| Date Reported: | Not reported |
| Staff Initials: | Not reported |
| Board File Number: | Not reported |
| Facility Type: | Not reported |
| Discharge Date: | Not reported |
| Issue Date: | Not reported |
| Incident Description: | Not reported |

| | |
|---|---|
| Date Reported: | Not reported |
| Staff Initials: | Not reported |
| Board File Number: | Not reported |
| Facility Type: | Not reported |
| Discharge Date: | Not reported |
| Issue Date: | Not reported |
| Incident Description: | Not reported |

**AVERY DENNISON (Continued)** **1000372430**

Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

**AVERY DENNISON (Continued)** **1000372430**

WIP:
Region: 4
File Number: 106.2012
**File Status: Historical**
Staff: ESOLOMON
Facility Suite: Not reported

---

**G41** **AVERY** **Notify 65** **S100178073**
**NW** **1616 S.CALIF. AVE.** **N/A**
**1/2-1** **MONROVIA, CA**
**0.662 mi.**
**3496 ft.** **Site 2 of 2 in cluster G**

**Relative: Higher**

**Actual: 461 ft.**

NOTIFY 65:
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

---

**42** **USF DISTRIBUTION SERVICES INC** **ENVIROSTOR** **S103978949**
**SW** **600 LIVE OAK AVE** **LOS ANGELES CO. HMS** **N/A**
**1/2-1** **IRWINDALE, CA 91706** **NPDES**
**0.695 mi.**
**3669 ft.**

**Relative: Higher**

**Actual: 342 ft.**

ENVIROSTOR:
Facility ID: 19490215
Status: Refer: RWQCB
Status Date: 06/05/1996
Site Code: Not reported
Site Type: Historical
Site Type Detailed: * Historical
Acres: Not reported
NPL: NO
Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Sayareh Amirebrahimi
Division Branch: Cleanup Chatsworth
Assembly: 48
Senate: 22
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 34.11128
Longitude: -117.9918
APN: 8532004023
Past Use: NONE SPECIFIED
Potential COC: Asbestos Containing Materials (ACM
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: NU WAY LANDFILL - 1969/1986

**USF DISTRIBUTION SERVICES INC (Continued)** **S103978949**

Alias Type: Alternate Name
Alias Name: PACIFIC ROCK AND GRAVEL COMPANY (FORMER)
Alias Type: Alternate Name
Alias Name: SUPERIOR FAST FREIGHT (1986 - PRESENT)
Alias Type: Alternate Name
Alias Name: 8532004023
Alias Type: APN
Alias Name: 19490215
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 07/30/1991
Comments: Facility identified from RP notification.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 03/10/1992
Comments: The Dept completed the review of PEA on October 9, 1991 and requested additional information within 30 days of the correspondance. The Dept did not recieve any reply until March 10, 1992. The Dept notified the RP that the PEA was considered to be completed and recommended further action.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 08/01/1991
Comments: The 22-acre site was formerly a part of Nu-way Inert Landfill, which originally convered 86 acres, EPA id #CAD099990947. The site was not permitted to receive haz wastes, but it accepted auto shredder wastes and asbestos. Three 20,000 gallon USTs on the site to store gasoline and diesel fuel. Recent trenching operation discovered buried asbestos on-site. The trenching operation probably disturbed the asbestos and is a potential for release to soil, water, and air. A medium priority PEA recommended because of potential release of asbestos. Also, the nearby 890 E. and 400 E Live Oak Ave sites were contaminated with asbestos and metals.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

LOS ANGELES CO. HMS:
Region: LA
Permit Category: Not reported
Facility Id: 014917-054836
Facility Type: Not reported

**USF DISTRIBUTION SERVICES INC (Continued)** **S103978949**

Facility Status: OPEN
Area: 3S
Permit Number: Not reported
Permit Status: Not reported

NPDES:

| | |
|---|---|
| Npdes Number: | Not reported |
| Facility Status: | Not reported |
| Agency Id: | Not reported |
| Region: | 4 |
| Regulatory Measure Id: | 191634 |
| Order No: | Not reported |
| Regulatory Measure Type: | Industrial |
| Place Id: | Not reported |
| WDID: | 4 19I018479 |
| Program Type: | Not reported |
| Adoption Date Of Regulatory Measure: | Not reported |
| Effective Date Of Regulatory Measure: | Not reported |
| Expiration Date Of Regulatory Measure: | Not reported |
| Termination Date Of Regulatory Measure: | Not reported |
| Discharge Name: | Not reported |
| Discharge Address: | Not reported |
| Discharge City: | Not reported |
| Discharge State: | Not reported |
| Discharge Zip: | Not reported |
| RECEIVED DATE: | 5/9/2008 |
| PROCESSED DATE: | 11/24/2003 |
| STATUS CODE NAME: | Active |
| STATUS DATE: | 11/24/2003 |
| PLACE SIZE: | 20 |
| PLACE SIZE UNIT: | 52 |
| FACILITY CONTACT NAME: | TONY Rambaud |
| FACILITY CONTACT TITLE: | Not reported |
| FACILITY CONTACT PHONE: | 6263594500 |
| FACILITY CONTACT PHONE EXT: | Not reported |
| FACILITY CONTACT EMAIL: | Not reported |
| OPERATOR NAME: | USF Distribution Services Inc |
| OPERATOR ADDRESS: | 600 Live Oak Ave |
| OPERATOR CITY: | Baldwin Park |
| OPERATOR STATE: | California |
| OPERATOR ZIP: | 91706 |
| OPERATOR CONTACT NAME: | TONY Rambaud |
| OPERATOR CONTACT TITLE: | Not reported |
| OPERATOR CONTACT PHONE: | 626-359-4500 |
| OPERATOR CONTACT PHONE EXT: | Not reported |
| OPERATOR CONTACT EMAIL: | Not reported |
| OPERATOR TYPE: | Private Business |
| DEVELOPER NAME: | Not reported |
| DEVELOPER ADDRESS: | Not reported |
| DEVELOPER CITY: | Not reported |
| DEVELOPER STATE: | California |
| DEVELOPER ZIP: | Not reported |
| DEVELOPER CONTACT NAME: | Not reported |
| DEVELOPER CONTACT TITLE: | Not reported |
| CONSTYPE LINEAR UTILITY IND: | Not reported |
| EMERGENCY PHONE NO: | 626-359-4500 |
| EMERGENCY PHONE EXT: | Not reported |

**USF DISTRIBUTION SERVICES INC (Continued)** **S103978949**

| | |
|---|---|
| CONSTYPE ABOVE GROUND IND: | Not reported |
| CONSTYPE BELOW GROUND IND: | Not reported |
| CONSTYPE CABLE LINE IND: | Not reported |
| CONSTYPE COMM LINE IND: | Not reported |
| CONSTYPE COMMERTIAL IND: | Not reported |
| CONSTYPE ELECTRICAL LINE IND: | Not reported |
| CONSTYPE GAS LINE IND: | Not reported |
| CONSTYPE INDUSTRIAL IND: | Not reported |
| CONSTYPE OTHER DESRIPTION: | Not reported |
| CONSTYPE OTHER IND: | Not reported |
| CONSTYPE RECONS IND: | Not reported |
| CONSTYPE RESIDENTIAL IND: | Not reported |
| CONSTYPE TRANSPORT IND: | Not reported |
| CONSTYPE UTILITY DESCRIPTION: | Not reported |
| CONSTYPE UTILITY IND: | Not reported |
| CONSTYPE WATER SEWER IND: | Not reported |
| DIR DISCHARGE USWATER IND: | Not reported |
| RECEIVING WATER NAME: | San Gabriel River |
| CERTIFIER NAME: | Tony Rambaud |
| CERTIFIER TITLE: | Service Center Manager |
| CERTIFICATION DATE: | 21-OCT-03 |
| PRIMARY SIC: | 4213-Trucking, Except Local |
| SECONDARY SIC: | Not reported |
| TERTIARY SIC: | Not reported |

| | |
|---|---|
| Npdes Number: | CAS000001 |
| Facility Status: | Active |
| Agency Id: | 0 |
| Region: | 4 |
| Regulatory Measure Id: | 191634 |
| Order No: | 97-03-DWQ |
| Regulatory Measure Type: | Enrollee |
| Place Id: | Not reported |
| WDID: | 4 19I018479 |
| Program Type: | Industrial |
| Adoption Date Of Regulatory Measure: | Not reported |
| Effective Date Of Regulatory Measure: | 11/24/2003 |
| Expiration Date Of Regulatory Measure: | Not reported |
| Termination Date Of Regulatory Measure: | Not reported |
| Discharge Name: | Neovia Logistics |
| Discharge Address: | 600 Live Oak Ave |
| Discharge City: | Baldwin Park |
| Discharge State: | California |
| Discharge Zip: | 91706 |
| RECEIVED DATE: | Not reported |
| PROCESSED DATE: | Not reported |
| STATUS CODE NAME: | Not reported |
| STATUS DATE: | Not reported |
| PLACE SIZE: | Not reported |
| PLACE SIZE UNIT: | Not reported |
| FACILITY CONTACT NAME: | Not reported |
| FACILITY CONTACT TITLE: | Not reported |
| FACILITY CONTACT PHONE: | Not reported |
| FACILITY CONTACT PHONE EXT: | Not reported |
| FACILITY CONTACT EMAIL: | Not reported |
| OPERATOR NAME: | Not reported |
| OPERATOR ADDRESS: | Not reported |

**USF DISTRIBUTION SERVICES INC (Continued)** **S103978949**

| | |
|---|---|
| OPERATOR CITY: | Not reported |
| OPERATOR STATE: | Not reported |
| OPERATOR ZIP: | Not reported |
| OPERATOR CONTACT NAME: | Not reported |
| OPERATOR CONTACT TITLE: | Not reported |
| OPERATOR CONTACT PHONE: | Not reported |
| OPERATOR CONTACT PHONE EXT: | Not reported |
| OPERATOR CONTACT EMAIL: | Not reported |
| OPERATOR TYPE: | Not reported |
| DEVELOPER NAME: | Not reported |
| DEVELOPER ADDRESS: | Not reported |
| DEVELOPER CITY: | Not reported |
| DEVELOPER STATE: | Not reported |
| DEVELOPER ZIP: | Not reported |
| DEVELOPER CONTACT NAME: | Not reported |
| DEVELOPER CONTACT TITLE: | Not reported |
| CONSTYPE LINEAR UTILITY IND: | Not reported |
| EMERGENCY PHONE NO: | Not reported |
| EMERGENCY PHONE EXT: | Not reported |
| CONSTYPE ABOVE GROUND IND: | Not reported |
| CONSTYPE BELOW GROUND IND: | Not reported |
| CONSTYPE CABLE LINE IND: | Not reported |
| CONSTYPE COMM LINE IND: | Not reported |
| CONSTYPE COMMERTIAL IND: | Not reported |
| CONSTYPE ELECTRICAL LINE IND: | Not reported |
| CONSTYPE GAS LINE IND: | Not reported |
| CONSTYPE INDUSTRIAL IND: | Not reported |
| CONSTYPE OTHER DESRIPTION: | Not reported |
| CONSTYPE OTHER IND: | Not reported |
| CONSTYPE RECONS IND: | Not reported |
| CONSTYPE RESIDENTIAL IND: | Not reported |
| CONSTYPE TRANSPORT IND: | Not reported |
| CONSTYPE UTILITY DESCRIPTION: | Not reported |
| CONSTYPE UTILITY IND: | Not reported |
| CONSTYPE WATER SEWER IND: | Not reported |
| DIR DISCHARGE USWATER IND: | Not reported |
| RECEIVING WATER NAME: | Not reported |
| CERTIFIER NAME: | Not reported |
| CERTIFIER TITLE: | Not reported |
| CERTIFICATION DATE: | Not reported |
| PRIMARY SIC: | Not reported |
| SECONDARY SIC: | Not reported |
| TERTIARY SIC: | Not reported |

---

**43**
**WNW**
**1/2-1**
**0.768 mi.**
**4055 ft.**

**MERCURY RECOVERY SERVICES** **HWP** **S100939920**
**2021 S MYRTLE** **N/A**
**MONROVIA, CA 91016**

**Relative:**
**Higher**

**Actual:**
**403 ft.**

HWP:

| | |
|---|---|
| EPA Id: | CAL000043715 |
| Cleanup Status: | CLOSED |
| Latitude: | 34.12824 |
| Longitude: | -118.0016 |
| Facility Type: | Historical - Non-Operating |
| Facility Size: | Not reported |
| Team: | Not reported |

**MERCURY RECOVERY SERVICES (Continued)** **S100939920**

| | |
|---|---|
| Supervisor: | Not reported |
| Site Code: | Not reported |
| Assembly District: | 41 |
| Senate District: | 25 |
| Public Information Officer: | Not reported |
| Public Information Officer: | Not reported |

Closure:

| | |
|---|---|
| EPA Id: | CAL000043715 |
| Facility Type: | Historical - Non-Operating |
| Unit Names: | TANKTRT1 |
| Event Description: | Closure Final - ISSUE CLOSURE VERIFICATION |
| Actual Date: | 03/26/1999 |

---

**44** **CHEM ARROW CORP.** **ENF** **S100178137**
**SSE** **13643 LIVE OAK** **Notify 65** **N/A**
**1/2-1** **IRWINDALE, CA 91706**
**0.799 mi.**
**4218 ft.**

**Relative:**
**Higher**

**Actual:**
**406 ft.**

ENF:

| | |
|---|---|
| Region: | 4 |
| Facility Id: | 214139 |
| Agency Name: | Chem Arrow Corporation |
| Place Type: | Facility |
| Place Subtype: | Not reported |
| Facility Type: | All other facilities |
| Agency Type: | Privately-Owned Business |
| # Of Agencies: | 1 |
| Place Latitude: | 34.110647 |
| Place Longitude: | -117.974021 |
| SIC Code 1: | Not reported |
| SIC Desc 1: | Not reported |
| SIC Code 2: | Not reported |
| SIC Desc 2: | Not reported |
| SIC Code 3: | Not reported |
| SIC Desc 3: | Not reported |
| NAICS Code 1: | Not reported |
| NAICS Desc 1: | Not reported |
| NAICS Code 2: | Not reported |
| NAICS Desc 2: | Not reported |
| NAICS Code 3: | Not reported |
| NAICS Desc 3: | Not reported |
| # Of Places: | 1 |
| Source Of Facility: | Reg Meas |
| Design Flow: | Not reported |
| Threat To Water Quality: | Not reported |
| Complexity: | Not reported |
| Pretreatment: | Not reported |
| Facility Waste Type: | Not reported |
| Facility Waste Type 2: | Not reported |
| Facility Waste Type 3: | Not reported |
| Facility Waste Type 4: | Not reported |
| Program: | AGT |
| Program Category1: | TANKS |
| Program Category2: | TANKS |
| # Of Programs: | 1 |

**CHEM ARROW CORP. (Continued)** **S100178137**

| | |
|---|---|
| WDID: | 4CUPA000247 |
| Reg Measure Id: | 171478 |
| Reg Measure Type: | Unregulated |
| Region: | 4 |
| Order #: | Not reported |
| Npdes# CA#: | Not reported |
| Major-Minor: | Not reported |
| Npdes Type: | Not reported |
| Reclamation: | Not reported |
| Dredge Fill Fee: | Not reported |
| 301H: | Not reported |
| Application Fee Amt Received: | Not reported |
| Status: | Never Active |
| Status Date: | 02/20/2013 |
| Effective Date: | Not reported |
| Expiration/Review Date: | Not reported |
| Termination Date: | Not reported |
| WDR Review - Amend: | Not reported |
| WDR Review - Revise/Renew: | Not reported |
| WDR Review - Rescind: | Not reported |
| WDR Review - No Action Required: | Not reported |
| WDR Review - Pending: | Not reported |
| WDR Review - Planned: | Not reported |
| Status Enrollee: | N |
| Individual/General: | I |
| Fee Code: | Not reported |
| Direction/Voice: | Passive |
| Enforcement Id(EID): | 245536 |
| Region: | 4 |
| Order / Resolution Number: | SEL |
| Enforcement Action Type: | Staff Enforcement Letter |
| Effective Date: | 08/07/2002 |
| Adoption/Issuance Date: | Not reported |
| Achieve Date: | Not reported |
| Termination Date: | 08/07/2002 |
| ACL Issuance Date: | Not reported |
| EPL Issuance Date: | Not reported |
| Status: | Historical |
| Title: | Enforcement - 4CUPA000247 |
| Description: | Notice of Noncompliance sent 8/7/02 for failure to have SPCC plan onsite. |
| Program: | AGT |
| Latest Milestone Completion Date: | Not reported |
| # Of Programs1: | 1 |
| Total Assessment Amount: | $0.00 |
| Initial Assessed Amount: | $0.00 |
| Liability $ Amount: | $0.00 |
| Project $ Amount: | $0.00 |
| Liability $ Paid: | $0.00 |
| Project $ Completed: | $0.00 |
| Total $ Paid/Completed Amount: | $0.00 |

NOTIFY 65:

| | |
|---|---|
| Date Reported: | Not reported |
| Staff Initials: | Not reported |
| Board File Number: | Not reported |
| Facility Type: | Not reported |

**CHEM ARROW CORP. (Continued)** **S100178137**

Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

---

**45**
**NE**
**1/2-1**
**0.807 mi.**
**4263 ft.**

**GE AVIATION SYSTEMS LLC**
**1700 BUSINESS CENTER DR**
**DUARTE, CA 91010**

**ENVIROSTOR** **U001566475**
**VCP** **N/A**
**NPDES**

**Relative:**
**Higher**

**Actual:**
**490 ft.**

ENVIROSTOR:

| | |
|---|---|
| Facility ID: | 71002242 |
| Status: | No Further Action |
| Status Date: | 08/07/2014 |
| Site Code: | 301656 |
| Site Type: | Voluntary Cleanup |
| Site Type Detailed: | Voluntary Cleanup |
| Acres: | 9 |
| NPL: | NO |
| Regulatory Agencies: | NONE SPECIFIED |
| Lead Agency: | NONE SPECIFIED |
| Program Manager: | Narine Aghakiant |
| Supervisor: | Allan Plaza |
| Division Branch: | Cleanup Chatsworth |
| Assembly: | 48 |
| Senate: | 25 |
| Special Program: | Voluntary Cleanup Program |
| Restricted Use: | NO |
| Site Mgmt Req: | NONE SPECIFIED |
| Funding: | Responsible Party |
| Latitude: | 34.13368 |
| Longitude: | -117.9689 |
| APN: | NONE SPECIFIED |
| Past Use: | MANUFACTURING - INDUSTRIAL MACHINERY |
| Potential COC: | TPH-diesel TPH-MOTOR OIL Tributyl phosphate |
| Confirmed COC: | Tributyl phosphate TPH-diesel TPH-MOTOR OIL |
| Potential Description: | SOIL |
| Alias Name: | DOWTY AEROSPACE LOS ANGELES |
| Alias Type: | Alternate Name |
| Alias Name: | CAD008503112 |
| Alias Type: | EPA Identification Number |
| Alias Name: | 110000476556 |
| Alias Type: | EPA (FRS #) |
| Alias Name: | 301656 |
| Alias Type: | Project Code (Site Code) |
| Alias Name: | Not reported |
| Alias Type: | Project Code (Site Code) |
| Alias Name: | 71002242 |
| Alias Type: | Envirostor ID Number |

Completed Info:

| | |
|---|---|
| Completed Area Name: | PROJECT WIDE |
| Completed Sub Area Name: | Not reported |
| Completed Document Type: | No Further Action Letter |
| Completed Date: | 07/17/2014 |
| Comments: | Not reported |
| Completed Area Name: | PROJECT WIDE |

**GE AVIATION SYSTEMS LLC (Continued)** **U001566475**

Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 04/29/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 07/17/2014
Comments: DTSC agrees with the Report request for No Further Action (NFA) determination

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

VCP:
Facility ID: 71002242
Site Type: Voluntary Cleanup
Site Type Detail: Voluntary Cleanup
Site Mgmt. Req.: NONE SPECIFIED
Acres: 9
National Priorities List: NO
Cleanup Oversight Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Lead Agency Description: Not reported
Project Manager: Narine Aghakiant
Supervisor: Allan Plaza
Division Branch: Cleanup Chatsworth
Site Code: 301656
Assembly: 48
Senate: 25
Special Programs Code: Voluntary Cleanup Program
Status: No Further Action
Status Date: 08/07/2014
Restricted Use: NO
Funding: Responsible Party
Lat/Long: 34.13368 / -117.9689
APN: NONE SPECIFIED
Past Use: MANUFACTURING - INDUSTRIAL MACHINERY
Potential COC: 30024, 3002502, 30559
Confirmed COC: 30559,30024,3002502
Potential Description: SOIL
Alias Name: DOWTY AEROSPACE LOS ANGELES
Alias Type: Alternate Name
Alias Name: CAD008503112
Alias Type: EPA Identification Number
Alias Name: 110000476556
Alias Type: EPA (FRS #)
Alias Name: 301656
Alias Type: Project Code (Site Code)

**GE AVIATION SYSTEMS LLC (Continued)** **U001566475**

Alias Name: Not reported
Alias Type: Project Code (Site Code)
Alias Name: 71002242
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: No Further Action Letter
Completed Date: 07/17/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 04/29/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 07/17/2014
Comments: DTSC agrees with the Report request for No Further Action (NFA) determination

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

NPDES:
Npdes Number: Not reported
Facility Status: Not reported
Agency Id: Not reported
Region: 4
Regulatory Measure Id: 343304
Order No: Not reported
Regulatory Measure Type: Industrial
Place Id: Not reported
WDID: 4 19I021513
Program Type: Not reported
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: Not reported
Expiration Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported
Discharge Name: Not reported
Discharge Address: Not reported
Discharge City: Not reported
Discharge State: Not reported
Discharge Zip: Not reported
RECEIVED DATE: 5/9/2008
PROCESSED DATE: 4/2/2008

**GE AVIATION SYSTEMS LLC (Continued)** **U001566475**

| | |
|---|---|
| STATUS CODE NAME: | Active |
| STATUS DATE: | 4/2/2008 |
| PLACE SIZE: | 7.5 |
| PLACE SIZE UNIT: | 52 |
| FACILITY CONTACT NAME: | Lisa Saylor |
| FACILITY CONTACT TITLE: | Not reported |
| FACILITY CONTACT PHONE: | 626-359-9211 |
| FACILITY CONTACT PHONE EXT: | Not reported |
| FACILITY CONTACT EMAIL: | lisa.saylor@GE.com |
| OPERATOR NAME: | GE Aviation Systems LLC |
| OPERATOR ADDRESS: | Not reported |
| OPERATOR CITY: | Not reported |
| OPERATOR STATE: | Not reported |
| OPERATOR ZIP: | Not reported |
| OPERATOR CONTACT NAME: | Not reported |
| OPERATOR CONTACT TITLE: | Not reported |
| OPERATOR CONTACT PHONE: | Not reported |
| OPERATOR CONTACT PHONE EXT: | Not reported |
| OPERATOR CONTACT EMAIL: | Not reported |
| OPERATOR TYPE: | Private Individual |
| DEVELOPER NAME: | Not reported |
| DEVELOPER ADDRESS: | Not reported |
| DEVELOPER CITY: | Not reported |
| DEVELOPER STATE: | California |
| DEVELOPER ZIP: | Not reported |
| DEVELOPER CONTACT NAME: | Not reported |
| DEVELOPER CONTACT TITLE: | Not reported |
| CONSTYPE LINEAR UTILITY IND: | Not reported |
| EMERGENCY PHONE NO: | Not reported |
| EMERGENCY PHONE EXT: | Not reported |
| CONSTYPE ABOVE GROUND IND: | Not reported |
| CONSTYPE BELOW GROUND IND: | Not reported |
| CONSTYPE CABLE LINE IND: | Not reported |
| CONSTYPE COMM LINE IND: | Not reported |
| CONSTYPE COMMERTIAL IND: | Not reported |
| CONSTYPE ELECTRICAL LINE IND: | Not reported |
| CONSTYPE GAS LINE IND: | Not reported |
| CONSTYPE INDUSTRIAL IND: | Not reported |
| CONSTYPE OTHER DESRIPTION: | Not reported |
| CONSTYPE OTHER IND: | Not reported |
| CONSTYPE RECONS IND: | Not reported |
| CONSTYPE RESIDENTIAL IND: | Not reported |
| CONSTYPE TRANSPORT IND: | Not reported |
| CONSTYPE UTILITY DESCRIPTION: | Not reported |
| CONSTYPE UTILITY IND: | Not reported |
| CONSTYPE WATER SEWER IND: | Not reported |
| DIR DISCHARGE USWATER IND: | Y |
| RECEIVING WATER NAME: | Unnamed tributary to Pacific Ocean |
| CERTIFIER NAME: | Not reported |
| CERTIFIER TITLE: | Not reported |
| CERTIFICATION DATE: | Not reported |
| PRIMARY SIC: | 3728-Aircraft Parts and Auxiliary Equipment, NEC |
| SECONDARY SIC: | Not reported |
| TERTIARY SIC: | Not reported |
| | |
| Npdes Number: | Not reported |
| Facility Status: | Not reported |

**GE AVIATION SYSTEMS LLC (Continued)** **U001566475**

| | |
|---|---|
| Agency Id: | Not reported |
| Region: | 4 |
| Regulatory Measure Id: | 191204 |
| Order No: | Not reported |
| Regulatory Measure Type: | Industrial |
| Place Id: | Not reported |
| WDID: | 4 19I016617 |
| Program Type: | Not reported |
| Adoption Date Of Regulatory Measure: | Not reported |
| Effective Date Of Regulatory Measure: | Not reported |
| Expiration Date Of Regulatory Measure: | Not reported |
| Termination Date Of Regulatory Measure: | 4/2/2008 |
| Discharge Name: | Not reported |
| Discharge Address: | Not reported |
| Discharge City: | Not reported |
| Discharge State: | Not reported |
| Discharge Zip: | Not reported |
| RECEIVED DATE: | 5/9/2008 |
| PROCESSED DATE: | 7/5/2001 |
| STATUS CODE NAME: | Terminated |
| STATUS DATE: | 4/2/2008 |
| PLACE SIZE: | 8 |
| PLACE SIZE UNIT: | 52 |
| FACILITY CONTACT NAME: | Tim Neumann |
| FACILITY CONTACT TITLE: | Not reported |
| FACILITY CONTACT PHONE: | 626-359-9211 |
| FACILITY CONTACT PHONE EXT: | Not reported |
| FACILITY CONTACT EMAIL: | Not reported |
| OPERATOR NAME: | Smiths Aerospace Actuation |
| OPERATOR ADDRESS: | 1700 Business Center Dr |
| OPERATOR CITY: | Duarte |
| OPERATOR STATE: | California |
| OPERATOR ZIP: | 91010 |
| OPERATOR CONTACT NAME: | Tim Neumann |
| OPERATOR CONTACT TITLE: | Not reported |
| OPERATOR CONTACT PHONE: | 626-359-9211 |
| OPERATOR CONTACT PHONE EXT: | Not reported |
| OPERATOR CONTACT EMAIL: | Not reported |
| OPERATOR TYPE: | Private Business |
| DEVELOPER NAME: | Not reported |
| DEVELOPER ADDRESS: | Not reported |
| DEVELOPER CITY: | Not reported |
| DEVELOPER STATE: | California |
| DEVELOPER ZIP: | Not reported |
| DEVELOPER CONTACT NAME: | Not reported |
| DEVELOPER CONTACT TITLE: | Not reported |
| CONSTYPE LINEAR UTILITY IND: | Not reported |
| EMERGENCY PHONE NO: | 626-359-9211 |
| EMERGENCY PHONE EXT: | Not reported |
| CONSTYPE ABOVE GROUND IND: | Not reported |
| CONSTYPE BELOW GROUND IND: | Not reported |
| CONSTYPE CABLE LINE IND: | Not reported |
| CONSTYPE COMM LINE IND: | Not reported |
| CONSTYPE COMMERTIAL IND: | Not reported |
| CONSTYPE ELECTRICAL LINE IND: | Not reported |
| CONSTYPE GAS LINE IND: | Not reported |
| CONSTYPE INDUSTRIAL IND: | Not reported |

**GE AVIATION SYSTEMS LLC (Continued)** **U001566475**

| | |
|---|---|
| CONSTYPE OTHER DESRIPTION: | Not reported |
| CONSTYPE OTHER IND: | Not reported |
| CONSTYPE RECONS IND: | Not reported |
| CONSTYPE RESIDENTIAL IND: | Not reported |
| CONSTYPE TRANSPORT IND: | Not reported |
| CONSTYPE UTILITY DESCRIPTION: | Not reported |
| CONSTYPE UTILITY IND: | Not reported |
| CONSTYPE WATER SEWER IND: | Not reported |
| DIR DISCHARGE USWATER IND: | Not reported |
| RECEIVING WATER NAME: | Pacific Ocean |
| CERTIFIER NAME: | Not reported |
| CERTIFIER TITLE: | Not reported |
| CERTIFICATION DATE: | Not reported |
| PRIMARY SIC: | 3728-Aircraft Parts and Auxiliary Equipment, NEC |
| SECONDARY SIC: | Not reported |
| TERTIARY SIC: | Not reported |

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**H46** **ABCO METAL FINISHING** **Notify 65** **S100185160**
**WNW** **1617-1621 S. MYRTLE AVE.** **N/A**
**1/2-1** **MONROVIA, CA**
**0.885 mi.**
**4672 ft.** **Site 1 of 2 in cluster H**

**Relative:**
**Higher**

**Actual:**
**447 ft.**

NOTIFY 65:

| | |
|---|---|
| Date Reported: | Not reported |
| Staff Initials: | Not reported |
| Board File Number: | Not reported |
| Facility Type: | Not reported |
| Discharge Date: | Not reported |
| Issue Date: | Not reported |
| Incident Description: | Not reported |

---

**H47** **ABCO METAL FINISHING** **ENVIROSTOR** **S101480823**
**WNW** **1617-1621 SOUTH MYRTLE AVE** **N/A**
**1/2-1** **MONROVIA, CA 91016**
**0.885 mi.**
**4672 ft.** **Site 2 of 2 in cluster H**

**Relative:**
**Higher**

**Actual:**
**447 ft.**

ENVIROSTOR:

| | |
|---|---|
| Facility ID: | 19340734 |
| Status: | Refer: Other Agency |
| Status Date: | 06/06/1995 |
| Site Code: | Not reported |
| Site Type: | Historical |
| Site Type Detailed: | * Historical |
| Acres: | Not reported |
| NPL: | NO |
| Regulatory Agencies: | NONE SPECIFIED |
| Lead Agency: | NONE SPECIFIED |
| Program Manager: | Not reported |
| Supervisor: | Referred - Not Assigned |
| Division Branch: | Cleanup Chatsworth |
| Assembly: | 41 |
| Senate: | 25 |
| Special Program: | * CERC2 |
| Restricted Use: | NO |

**ABCO METAL FINISHING (Continued)** **S101480823**

Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 34.13347
Longitude: -118.0011
APN: 8507003908
Past Use: NONE SPECIFIED
Potential COC: * LIQUIDS WITH PH <= 2 * CONTAMINATED SOIL * ACID SOLUTION 2>PH WITH METALS * UNSPECIFIED ACID SOLUTION Cadmium and compounds Cyanide (free Nickel
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: 8507003908
Alias Type: APN
Alias Name: CAD040363012
Alias Type: EPA Identification Number
Alias Name: 19340734
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Assessment Report
Completed Date: 12/30/1987
Comments: PRELIM ASSESS DONE DHS PENDING EPA/CO REPORTS

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 03/07/1985
Comments: FACILITY IDENTIFIED LA CO HLTH AND MONROVIA FIRE DEPT.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

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**48** **SAN GABRIEL RIVER IMP** **ENVIROSTOR** **S107737251**
**SSE** **N/A**
**1/2-1** **AZUSA, CA**
**0.933 mi.**
**4924 ft.**

**Relative:**
**Higher**

**Actual:**
**419 ft.**

ENVIROSTOR:
Facility ID: 80000462
Status: Inactive - Needs Evaluation
Status Date: 07/01/2005
Site Code: Not reported
Site Type: Military Evaluation
Site Type Detailed: FUDS
Acres: Not reported
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP

**SAN GABRIEL RIVER IMP (Continued)** **S107737251**

Program Manager: Not reported
Supervisor: Douglas Bautista
Division Branch: Cleanup Cypress
Assembly: 48
Senate: 22
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: DERA
Latitude: 34.10833
Longitude: -117.975
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CA99799F561100
Alias Type: Federal Facility ID
Alias Name: J09CA0609
Alias Type: INPR
Alias Name: 80000462
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Inventory Project Report (INPR)
Completed Date: 12/11/1991
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

---

**49**
**SW**
**1/2-1**
**0.966 mi.**
**5099 ft.**

**Relative:**
**Higher**

**Actual:**
**364 ft.**

**WESTERN EMULSION CO.** **Notify 65** **S100178032**
**284 LIVE OAK** **N/A**
**IRWINDALE, CA 91706**

NOTIFY 65:
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

Count: 2 records. ORPHAN SUMMARY

| City | EDR ID | Site Name | Site Address | Zip | Database(s) |
|---|---|---|---|---|---|
| MONROVIA | S117534663 | THE PARKS AT MONROVIA STATION SQUA | 204 & 200 WEST POMONA AVENUE A | 91016 | ENVIROSTOR, VCP |
| MONROVIA | S106843191 | VALLEY PARK CORP DUMP | 4414 E LIVE OAK AVE. | | SWF/LF |

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

**STANDARD ENVIRONMENTAL RECORDS**

***Federal NPL site list***

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

***Federal Delisted NPL site list***

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Quarterly

***Federal CERCLIS list***

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/13/2015
Date Data Arrived at EDR: 01/06/2016
Date Made Active in Reports: 05/20/2016
Number of Days to Update: 135

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 07/06/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 07/22/2016
Next Scheduled EDR Contact: 10/31/2016
Data Release Frequency: Quarterly

***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 07/22/2016
Next Scheduled EDR Contact: 10/31/2016
Data Release Frequency: Quarterly

***Federal RCRA CORRACTS facilities list***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/27/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/30/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Quarterly

***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/30/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Quarterly

***Federal RCRA generators list***

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/30/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/30/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/30/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Varies

***Federal institutional controls / engineering controls registries***

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 13

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/12/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 05/09/2016
Date Data Arrived at EDR: 06/01/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 93

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/31/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 05/09/2016
Date Data Arrived at EDR: 06/01/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 93

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/31/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

***Federal ERNS list***

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/28/2016
Date Data Arrived at EDR: 03/30/2016
Date Made Active in Reports: 05/20/2016
Number of Days to Update: 51

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 06/28/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Annually

***State- and tribal - equivalent NPL***

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 05/02/2016
Date Data Arrived at EDR: 05/04/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 48

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/02/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Quarterly

***State- and tribal - equivalent CERCLIS***

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 05/02/2016
Date Data Arrived at EDR: 05/04/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 48

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/02/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Quarterly

***State and tribal landfill and/or solid waste disposal site lists***

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/16/2016
Date Data Arrived at EDR: 05/18/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 34

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 08/16/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Quarterly

***State and tribal leaking storage tank lists***

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 06/13/2016
Date Data Arrived at EDR: 06/14/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 56

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 09/13/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Quarterly

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 12/11/2015
Date Data Arrived at EDR: 02/19/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 105

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/09/2015
Date Data Arrived at EDR: 02/12/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 112

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/13/2015
Date Data Arrived at EDR: 10/23/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 118
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 02/25/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/27/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/29/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 02/17/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/05/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 35
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 07/26/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Semi-Annually

SLIC: Statewide SLIC Cases
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 06/13/2016
Date Data Arrived at EDR: 06/14/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 56
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/13/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36
Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

***State and tribal registered storage tank lists***

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/13/2016
Date Data Arrived at EDR: 06/14/2016
Date Made Active in Reports: 08/08/2016
Number of Days to Update: 55
Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 09/14/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69
Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Quarterly

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/05/2015
Date Data Arrived at EDR: 11/13/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 52
Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/25/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37
Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 01/26/2016
Date Data Arrived at EDR: 02/05/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 119
Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67
Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/29/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/05/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 35

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 07/26/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Semi-Annually

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 12/03/2015
Date Data Arrived at EDR: 02/04/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 120

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014
Date Data Arrived at EDR: 11/25/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 65

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

***State and tribal voluntary cleanup sites***

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 07/01/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 05/02/2016
Date Data Arrived at EDR: 05/04/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 48

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/02/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Quarterly

***State and tribal Brownfields sites***

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 02/29/2016
Date Data Arrived at EDR: 03/07/2016
Date Made Active in Reports: 05/04/2016
Number of Days to Update: 58
Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 06/15/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Varies

**ADDITIONAL ENVIRONMENTAL RECORDS**

***Local Brownfield lists***

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/22/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 72
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/22/2016
Next Scheduled EDR Contact: 10/03/2016
Data Release Frequency: Semi-Annually

***Local Lists of Landfill / Solid Waste Disposal Sites***

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30
Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 08/03/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 06/13/2016
Date Data Arrived at EDR: 06/14/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 56
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/14/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 06/16/2016
Date Data Arrived at EDR: 06/16/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 54

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 08/10/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 08/05/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/20/2016
Next Scheduled EDR Contact: 10/07/2016
Data Release Frequency: No Update Planned

***Local Lists of Hazardous waste / Contaminated Sites***

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 05/04/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 07/13/2016
Number of Days to Update: 40

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/31/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 05/02/2016
Date Data Arrived at EDR: 05/04/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 48

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/02/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 05/10/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 38

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 08/15/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 05/04/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 07/13/2016
Number of Days to Update: 40

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/31/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Quarterly

***Local Lists of Registered Storage Tanks***

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 06/07/2016
Date Data Arrived at EDR: 06/09/2016
Date Made Active in Reports: 06/23/2016
Number of Days to Update: 14

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 09/12/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

***Local Land Records***

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/07/2016
Date Made Active in Reports: 07/20/2016
Number of Days to Update: 43

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 07/29/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 06/06/2016
Date Data Arrived at EDR: 06/07/2016
Date Made Active in Reports: 07/20/2016
Number of Days to Update: 43

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 09/07/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Semi-Annually

***Records of Emergency Release Reports***

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/24/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/02/2015
Number of Days to Update: 68

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 06/28/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 04/11/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 51

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 07/26/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 06/13/2016
Date Data Arrived at EDR: 06/14/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 56

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/13/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 06/13/2016
Date Data Arrived at EDR: 06/14/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 56

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/13/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

***Other Ascertainable Records***

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/30/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Varies

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 09/09/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/15/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/15/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/15/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 05/08/2016
Date Data Arrived at EDR: 05/18/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 107

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 08/08/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 09/06/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 06/24/2016
Next Scheduled EDR Contact: 10/03/2016
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 133

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/26/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/25/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/09/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/01/2016
Date Data Arrived at EDR: 05/26/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 99

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 07/25/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 08/12/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2016
Date Data Arrived at EDR: 04/28/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 127

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/15/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/23/2015
Date Data Arrived at EDR: 02/06/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 03/18/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 28

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 09/05/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 09/09/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 09/06/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 07/29/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/07/2015
Date Data Arrived at EDR: 07/09/2015
Date Made Active in Reports: 09/16/2015
Number of Days to Update: 69
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42
Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 08/02/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 04/06/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 149

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 07/15/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 09/30/2015
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 08/26/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/15/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 03/11/2016
Date Data Arrived at EDR: 03/15/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 80

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 07/26/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 09/09/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/07/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 148

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 07/08/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/27/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 69

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 06/22/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/27/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 69

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 06/22/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/09/2016
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 44

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 09/01/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/20/2015
Date Data Arrived at EDR: 09/09/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 55

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 09/07/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 67

Source: Department of Defense
Telephone: 571-373-0407
Last EDR Contact: 09/19/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 91

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 08/24/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 06/27/2016
Date Data Arrived at EDR: 06/28/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 51

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 06/28/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Quarterly

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 37

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 06/22/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 48

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 06/22/2016
Next Scheduled EDR Contact: 10/03/2016
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 05/25/2016
Date Data Arrived at EDR: 05/27/2016
Date Made Active in Reports: 07/20/2016
Number of Days to Update: 54

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/22/2016
Next Scheduled EDR Contact: 10/07/2016
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 04/25/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 53

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 07/20/2016
Next Scheduled EDR Contact: 10/07/2016
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 05/25/2016
Date Data Arrived at EDR: 06/01/2016
Date Made Active in Reports: 07/20/2016
Number of Days to Update: 49

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 08/10/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 10/14/2015
Date Made Active in Reports: 12/11/2015
Number of Days to Update: 58

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 07/15/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Annually

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 05/23/2016
Date Data Arrived at EDR: 05/25/2016
Date Made Active in Reports: 07/20/2016
Number of Days to Update: 56
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/23/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 07/11/2016
Date Data Arrived at EDR: 07/13/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 36
Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 07/13/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 06/13/2016
Date Data Arrived at EDR: 06/14/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 56
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 09/14/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Varies

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 05/25/2016
Date Data Arrived at EDR: 06/07/2016
Date Made Active in Reports: 07/20/2016
Number of Days to Update: 43
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 09/07/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 05/16/2016
Date Data Arrived at EDR: 05/18/2016
Date Made Active in Reports: 06/23/2016
Number of Days to Update: 36
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/16/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 06/06/2016
Date Data Arrived at EDR: 06/07/2016
Date Made Active in Reports: 07/20/2016
Number of Days to Update: 43
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 09/07/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 06/13/2016
Date Data Arrived at EDR: 06/14/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 56
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/14/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 09/10/2015
Date Data Arrived at EDR: 01/05/2016
Date Made Active in Reports: 02/12/2016
Number of Days to Update: 38
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 09/19/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 02/12/2016
Date Data Arrived at EDR: 03/16/2016
Date Made Active in Reports: 06/13/2016
Number of Days to Update: 89
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 09/14/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water board?s review found that more than one-third of the region?s active disposal pits are operating without permission.

Date of Government Version: 04/15/2015
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/23/2015
Number of Days to Update: 67
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 07/15/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Quarterly

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 06/24/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information
ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/20/2015
Date Data Arrived at EDR: 09/23/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 103

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 06/22/2016
Next Scheduled EDR Contact: 10/03/2016
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 05/24/2016
Date Data Arrived at EDR: 05/25/2016
Date Made Active in Reports: 07/13/2016
Number of Days to Update: 49

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 08/23/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Quarterly

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 05/23/2016
Date Data Arrived at EDR: 05/25/2016
Date Made Active in Reports: 07/20/2016
Number of Days to Update: 56

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 08/23/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Quarterly

**EDR HIGH RISK HISTORICAL RECORDS**

***EDR Exclusive Records***

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

**EDR RECOVERED GOVERNMENT ARCHIVES**

***Exclusive Recovered Govt. Archives***

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

**COUNTY RECORDS**

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 07/07/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 37

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 07/07/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 08/08/2016
Number of Days to Update: 27

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List
Cupa Facility List

Date of Government Version: 06/06/2016
Date Data Arrived at EDR: 06/09/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 12

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing
Cupa facility list.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 18

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 04/29/2016
Date Data Arrived at EDR: 05/03/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 45

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 06/27/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 05/25/2016
Date Data Arrived at EDR: 05/26/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 22

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 09/06/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 05/24/2016
Date Data Arrived at EDR: 05/26/2016
Date Made Active in Reports: 07/20/2016
Number of Days to Update: 55

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 08/01/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 04/08/2016
Date Data Arrived at EDR: 05/03/2016
Date Made Active in Reports: 06/22/2016
Number of Days to Update: 50

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 05/24/2016
Date Data Arrived at EDR: 05/26/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 75

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 07/13/2016
Date Data Arrived at EDR: 07/19/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 21

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 07/13/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/08/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 41

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 08/22/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 04/26/2016
Date Data Arrived at EDR: 04/28/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 50

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 07/20/2016
Next Scheduled EDR Contact: 10/07/2016
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 33

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 05/16/2016
Date Data Arrived at EDR: 05/20/2016
Date Made Active in Reports: 08/08/2016
Number of Days to Update: 80

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 08/03/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 05/25/2016
Date Data Arrived at EDR: 05/27/2016
Date Made Active in Reports: 06/22/2016
Number of Days to Update: 26

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 09/19/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 04/26/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 51

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 08/19/2016
Next Scheduled EDR Contact: 10/31/2016
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 09/19/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 07/05/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 37
Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/18/2016
Date Data Arrived at EDR: 04/20/2016
Date Made Active in Reports: 06/01/2016
Number of Days to Update: 42
Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 07/19/2016
Next Scheduled EDR Contact: 10/31/2016
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2016
Date Data Arrived at EDR: 01/26/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 56
Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 07/18/2016
Next Scheduled EDR Contact: 10/31/2016
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/29/2016
Date Data Arrived at EDR: 04/06/2016
Date Made Active in Reports: 06/13/2016
Number of Days to Update: 68
Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 07/13/2016
Next Scheduled EDR Contact: 10/31/2016
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 03/30/2015
Date Data Arrived at EDR: 04/02/2015
Date Made Active in Reports: 04/13/2015
Number of Days to Update: 11
Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 07/13/2016
Next Scheduled EDR Contact: 10/31/2016
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 11/04/2015
Date Data Arrived at EDR: 11/13/2015
Date Made Active in Reports: 12/17/2015
Number of Days to Update: 34
Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 07/25/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/23/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 28
Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 67

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 04/07/2016
Date Data Arrived at EDR: 04/26/2016
Date Made Active in Reports: 06/01/2016
Number of Days to Update: 36

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 06/30/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 06/15/2016
Date Data Arrived at EDR: 06/20/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 59

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List

CUPA Facility List

Date of Government Version: 05/25/2016
Date Data Arrived at EDR: 06/01/2016
Date Made Active in Reports: 06/22/2016
Number of Days to Update: 21

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 08/24/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/24/2016
Date Data Arrived at EDR: 06/27/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 43

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 08/22/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011
Date Data Arrived at EDR: 12/06/2011
Date Made Active in Reports: 02/07/2012
Number of Days to Update: 63
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/24/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/24/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 04/18/2016
Date Data Arrived at EDR: 05/06/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 42
Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 05/01/2016
Date Data Arrived at EDR: 05/17/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 35
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/08/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 05/01/2016
Date Data Arrived at EDR: 05/17/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 35
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/08/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 05/01/2016
Date Data Arrived at EDR: 05/11/2016
Date Made Active in Reports: 06/01/2016
Number of Days to Update: 21
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/09/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Quarterly

PLACER COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 06/16/2016
Date Data Arrived at EDR: 06/20/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 50

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/13/2016
Date Data Arrived at EDR: 04/15/2016
Date Made Active in Reports: 05/09/2016
Number of Days to Update: 24

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/19/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 07/13/2016
Date Data Arrived at EDR: 07/18/2016
Date Made Active in Reports: 08/08/2016
Number of Days to Update: 21

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/19/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 05/02/2016
Date Data Arrived at EDR: 07/06/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 43

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/06/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 05/02/2016
Date Data Arrived at EDR: 07/06/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 43

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/05/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 06/09/2016
Date Data Arrived at EDR: 06/10/2016
Date Made Active in Reports: 07/20/2016
Number of Days to Update: 40

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 08/08/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/23/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 23

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 06/02/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2015
Date Data Arrived at EDR: 11/07/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 58

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 07/20/2016
Next Scheduled EDR Contact: 10/07/2016
Data Release Frequency: Varies

Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 08/03/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010
Date Data Arrived at EDR: 03/10/2011
Date Made Active in Reports: 03/15/2011
Number of Days to Update: 5

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 08/03/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/16/2016
Date Data Arrived at EDR: 06/20/2016
Date Made Active in Reports: 08/08/2016
Number of Days to Update: 49

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 09/19/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 05/23/2016
Date Data Arrived at EDR: 05/24/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 28

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/07/2016
Date Made Active in Reports: 06/22/2016
Number of Days to Update: 15

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/12/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 06/09/2016
Date Data Arrived at EDR: 06/13/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 57

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/12/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 05/25/2016
Date Data Arrived at EDR: 05/26/2016
Date Made Active in Reports: 06/22/2016
Number of Days to Update: 27

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 08/24/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Annually

Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 05/26/2016
Date Data Arrived at EDR: 06/01/2016
Date Made Active in Reports: 07/20/2016
Number of Days to Update: 49

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 08/03/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List

CUPA facility listing.

Date of Government Version: 05/31/2016
Date Data Arrived at EDR: 06/02/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 19

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List

Cupa Facility List.

Date of Government Version: 06/14/2016
Date Data Arrived at EDR: 06/16/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 54

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 08/22/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/09/2016
Date Data Arrived at EDR: 06/13/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 57

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 09/12/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 06/09/2016
Date Data Arrived at EDR: 06/14/2016
Date Made Active in Reports: 08/08/2016
Number of Days to Update: 55

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 09/12/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 07/10/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 28

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 07/01/2016
Date Data Arrived at EDR: 07/05/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 44

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 06/24/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/07/2016
Date Made Active in Reports: 06/23/2016
Number of Days to Update: 16

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Semi-Annually

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 05/03/2016
Date Data Arrived at EDR: 05/10/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 38

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 08/03/2016
Next Scheduled EDR Contact: 10/07/2016
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 03/28/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 49

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 07/25/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/28/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/10/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Quarterly

Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 03/28/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/22/2016
Number of Days to Update: 54

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 07/25/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 05/26/2016
Date Data Arrived at EDR: 06/16/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 54

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/14/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 06/30/2016
Date Data Arrived at EDR: 07/05/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 35

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 06/30/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 04/29/2016
Date Data Arrived at EDR: 05/03/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 45

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Varies

**OTHER DATABASE(S)**

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/10/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 07/17/2015
Date Made Active in Reports: 08/12/2015
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 07/11/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 08/01/2016
Date Data Arrived at EDR: 08/03/2016
Date Made Active in Reports: 09/09/2016
Number of Days to Update: 37

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/03/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/24/2015
Date Made Active in Reports: 08/18/2015
Number of Days to Update: 25

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/18/2016
Next Scheduled EDR Contact: 10/31/2016
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/22/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 04/14/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 50

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/12/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: PennWell Corporation
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

**STREET AND ADDRESS INFORMATION**

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# GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

**TARGET PROPERTY ADDRESS**

LACDPW - IRWINDALE QUARRY
1137 MERIDIAN STREET
DUARTE, CA 91010

**TARGET PROPERTY COORDINATES**

| | |
|---|---|
| Latitude (North): | 34.12403 - 34° 7' 26.51'' |
| Longitude (West): | 117.982261 - 117° 58' 56.14'' |
| Universal Tranverse Mercator: | Zone 11 |
| UTM X (Meters): | 409418.7 |
| UTM Y (Meters): | 3776149.0 |
| Elevation: | 245 ft. above sea level |

**USGS TOPOGRAPHIC MAP**

| | |
|---|---|
| Target Property Map: | 5619056 BALDWIN PARK, CA |
| Version Date: | 2012 |
| Northeast Map: | 5630601 AZUSA, CA |
| Version Date: | 2012 |
| Southwest Map: | 5630799 EL MONTE, CA |
| Version Date: | 2012 |
| Northwest Map: | 5636853 MOUNT WILSON, CA |
| Version Date: | 2012 |

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**GROUNDWATER FLOW DIRECTION INFORMATION**

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

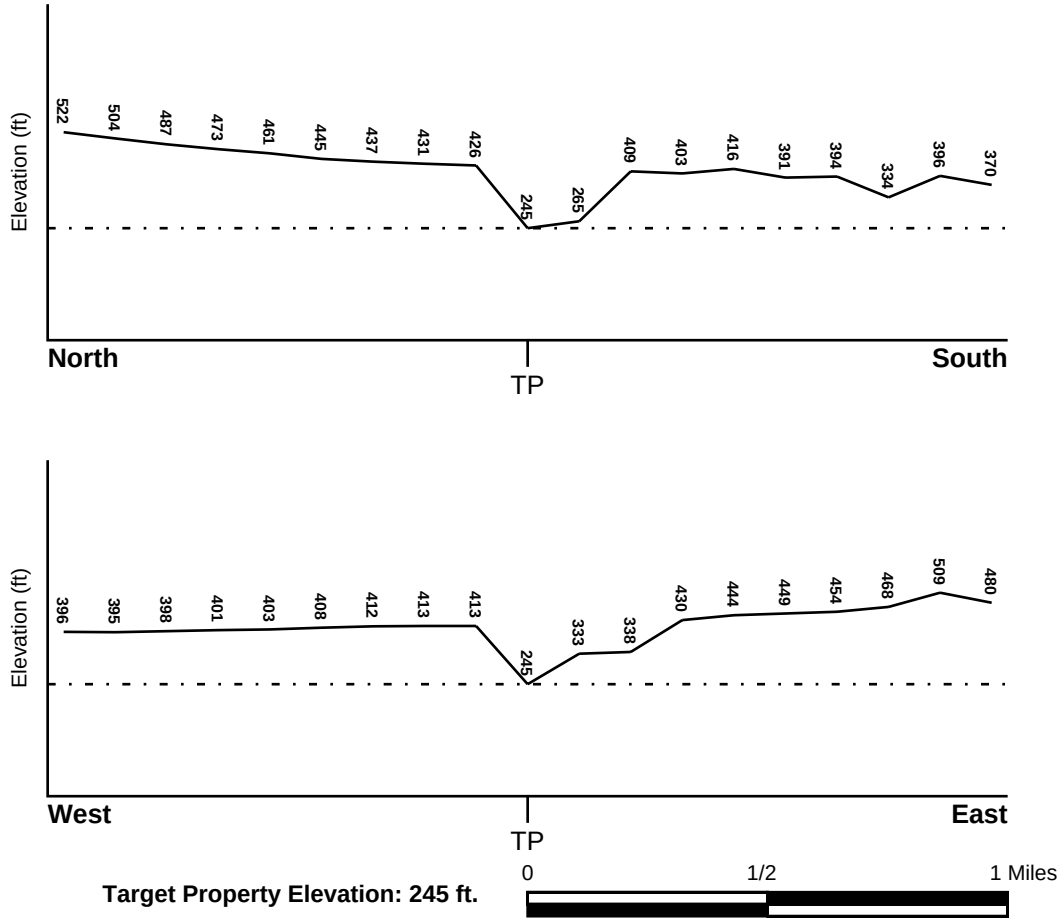
**TOPOGRAPHIC INFORMATION**

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

**TARGET PROPERTY TOPOGRAPHY**

General Topographic Gradient: General SW

**SURROUNDING TOPOGRAPHY: ELEVATION PROFILES**




Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**HYDROLOGIC INFORMATION**

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

**FEMA FLOOD ZONE**

| Flood Plain Panel at Target Property | FEMA Source Type |
|---|---|
| 06037C1700F | FEMA FIRM Flood data |

| Additional Panels in search area: | FEMA Source Type |
|---|---|
| 06037C1415F | FEMA FIRM Flood data |

**NATIONAL WETLAND INVENTORY**

| NWI Quad at Target Property | NWI Electronic Data Coverage |
|---|---|
| BALDWIN PARK | YES - refer to the Overview Map and Detail Map |

**HYDROGEOLOGIC INFORMATION**

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

***Site-Specific Hydrogeological Data*:***

| | |
|---|---|
| Search Radius: | 1.25 miles |
| Status: | Not found |

**AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

| MAP ID | LOCATION FROM TP | GENERAL DIRECTION GROUNDWATER FLOW |
|---|---|---|
| Not Reported | | |

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**GROUNDWATER FLOW VELOCITY INFORMATION**

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

**GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY**

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

**ROCK STRATIGRAPHIC UNIT**

| | |
|---|---|
| Era: | Cenozoic |
| System: | Quaternary |
| Series: | Quaternary |
| Code: | Q *(decoded above as Era, System & Series)* |

**GEOLOGIC AGE IDENTIFICATION**

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

**DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY**

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: URBAN LAND

Soil Surface Texture: variable

Hydrologic Group: Not reported

Soil Drainage Class: Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 10 inches

Depth to Bedrock Max: > 10 inches

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

| Soil Layer Information | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Boundary | | | Classification | | | |
| Layer | Upper | Lower | Soil Texture Class | AASHTO Group | Unified Soil | Permeability Rate (in/hr) | Soil Reaction (pH) |
| 1 | 0 inches | 6 inches | variable | Not reported | Not reported | Max: 0.00<br>Min: 0.00 | Max: 0.00<br>Min: 0.00 |

**OTHER SOIL TYPES IN AREA**

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures:
loam
clay
silt loam
loamy sand
sandy loam
fine sand
clay loam
gravelly - sandy loam
coarse sand
gravelly - sand
sand

Surficial Soil Types:
loam
clay
silt loam
loamy sand
sandy loam
fine sand
clay loam
gravelly - sandy loam
coarse sand
gravelly - sand
sand

Shallow Soil Types:
fine sandy loam
gravelly - loam
sand
silty clay

Deeper Soil Types:
stratified
clay loam
silty clay loam
gravelly - sandy loam
coarse sand
sand
weathered bedrock
very fine sandy loam

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

## WELL SEARCH DISTANCE INFORMATION

| DATABASE | SEARCH DISTANCE (miles) |
|---|---|
| Federal USGS | 1.000 |
| Federal FRDS PWS | Nearest PWS within 0.001 miles |
| State Database | 1.000 |

## FEDERAL USGS WELL INFORMATION

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| 1 | USGS40000141639 | 1/4 - 1/2 Mile WNW |
| 2 | USGS40000141696 | 1/4 - 1/2 Mile NE |

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| No PWS System Found | | |

Note: PWS System location is not always the same as well location.

## STATE DATABASE WELL INFORMATION

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| 3 | 437 | 1/2 - 1 Mile North |

# PHYSICAL SETTING SOURCE MAP - 4730719.2s




- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

| | |
|---|---|
| SITE NAME: LACDPW - Irwindale Quarry | CLIENT: Leighton Consulting |
| ADDRESS: 1137 Meridian Street<br>Duarte CA 91010 | CONTACT: Meredith Church |
| LAT/LONG: 34.12403 / 117.982261 | INQUIRY #: 4730719.2s<br>DATE: September 20, 2016 8:40 am |

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# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**1**
**WNW** **FED USGS** **USGS40000141639**
**1/4 - 1/2 Mile**
**Higher**

| | | | |
|---|---|---|---|
| Org. Identifier: | USGS-CA | | |
| Formal name: | USGS California Water Science Center | | |
| Monloc Identifier: | USGS-340735117591801 | | |
| Monloc name: | 001N011W36L001S | | |
| Monloc type: | Well | | |
| Monloc desc: | Not Reported | | |
| Huc code: | 18070106 | Drainagearea value: | Not Reported |
| Drainagearea Units: | Not Reported | Contrib drainagearea: | Not Reported |
| Contrib drainagearea units: | Not Reported | Latitude: | 34.1263962 |
| Longitude: | -117.9892322 | Sourcemap scale: | 24000 |
| Horiz Acc measure: | 1 | Horiz Acc measure units: | seconds |
| Horiz Collection method: | Interpolated from map | | |
| Horiz coord refsys: | NAD83 | Vert measure val: | Not Reported |
| Vert measure units: | Not Reported | Vertacc measure val: | Not Reported |
| Vert accmeasure units: | Not Reported | | |
| Vertcollection method: | Not Reported | | |
| Vert coord refsys: | Not Reported | Countrycode: | US |
| Aquifername: | California Coastal Basin aquifers | | |
| Formation type: | Not Reported | | |
| Aquifer type: | Not Reported | | |
| Construction date: | Not Reported | Welldepth: | 352 |
| Welldepth units: | ft | Wellholedepth: | 352 |
| Wellholedepth units: | ft | | |

Ground-water levels, Number of Measurements: 0

---

**2**
**NE** **FED USGS** **USGS40000141696**
**1/4 - 1/2 Mile**
**Higher**

| | | | |
|---|---|---|---|
| Org. Identifier: | USGS-CA | | |
| Formal name: | USGS California Water Science Center | | |
| Monloc Identifier: | USGS-340743117583201 | | |
| Monloc name: | 001N010W31M001S | | |
| Monloc type: | Well | | |
| Monloc desc: | GAMA ULAB FAST | | |
| Huc code: | 18070106 | Drainagearea value: | Not Reported |
| Drainagearea Units: | Not Reported | Contrib drainagearea: | Not Reported |
| Contrib drainagearea units: | Not Reported | Latitude: | 34.1285 |
| Longitude: | -117.9760833 | Sourcemap scale: | 24000 |
| Horiz Acc measure: | .5 | Horiz Acc measure units: | seconds |
| Horiz Collection method: | Global positioning system (GPS), uncorrected | | |
| Horiz coord refsys: | NAD83 | Vert measure val: | 448 |
| Vert measure units: | feet | Vertacc measure val: | 10 |
| Vert accmeasure units: | feet | | |
| Vertcollection method: | Interpolated from topographic map | | |
| Vert coord refsys: | NGVD29 | Countrycode: | US |
| Aquifername: | California Coastal Basin aquifers | | |
| Formation type: | Not Reported | | |

| | | | |
|---|---|---|---|
| Aquifer type: | Not Reported | | |
| Construction date: | 19520109 | Welldepth: | 600 |
| Welldepth units: | ft | Wellholedepth: | 600 |
| Wellholedepth units: | ft | | |

Ground-water levels, Number of Measurements: 0

---

**3**
**North**
**1/2 - 1 Mile**
**Higher**

**CA WELLS** **437**

**Water System Information:**

| | | | |
|---|---|---|---|
| Prime Station Code: | 01N/11W-36L01 S | User ID: | 4TH |
| FRDS Number: | 1910186006 | County: | Los Angeles |
| District Number: | 07 | Station Type: | WELL/AMBNT/MUN/INTAKE/SUPPLY |
| Water Type: | Well/Groundwater | Well Status: | Inactive Untreated |
| Source Lat/Long: | 340800.0 1175900.0 | Precision: | Undefined |
| Source Name: | MOUNTAIN AVENUE | | |
| System Number: | 1910186 | | |
| System Name: | CAL. AMERICAN WATER CO.-DUARTE | | |
| Organization That Operates System: | | | |
| | 2020 HUNTINGTON DRIVE | | |
| | SAN MARINO, CA 91108 | | |
| Pop Served: | 24666 | Connections: | 7029 |
| Area Served: | DUARTE | | |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
# RADON

**AREA RADON INFORMATION**

State Database: CA Radon

Radon Test Results

| Zipcode | Num Tests | > 4 pCi/L |
|---|---|---|
| 91010 | 13 | 0 |

Federal EPA Radon Zone for LOS ANGELES County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

---

Federal Area Radon Information for Zip Code: 91010

Number of sites tested: 1

| Area | Average Activity | % <4 pCi/L | % 4-20 pCi/L | % >20 pCi/L |
|---|---|---|---|---|
| Living Area - 1st Floor | -0.500 pCi/L | 100% | 0% | 0% |
| Living Area - 2nd Floor | Not Reported | Not Reported | Not Reported | Not Reported |
| Basement | Not Reported | Not Reported | Not Reported | Not Reported |

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

## HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

## HYDROGEOLOGIC INFORMATION

AQUIFLOW$^{R}$ Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

## OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

**STREET AND ADDRESS INFORMATION**

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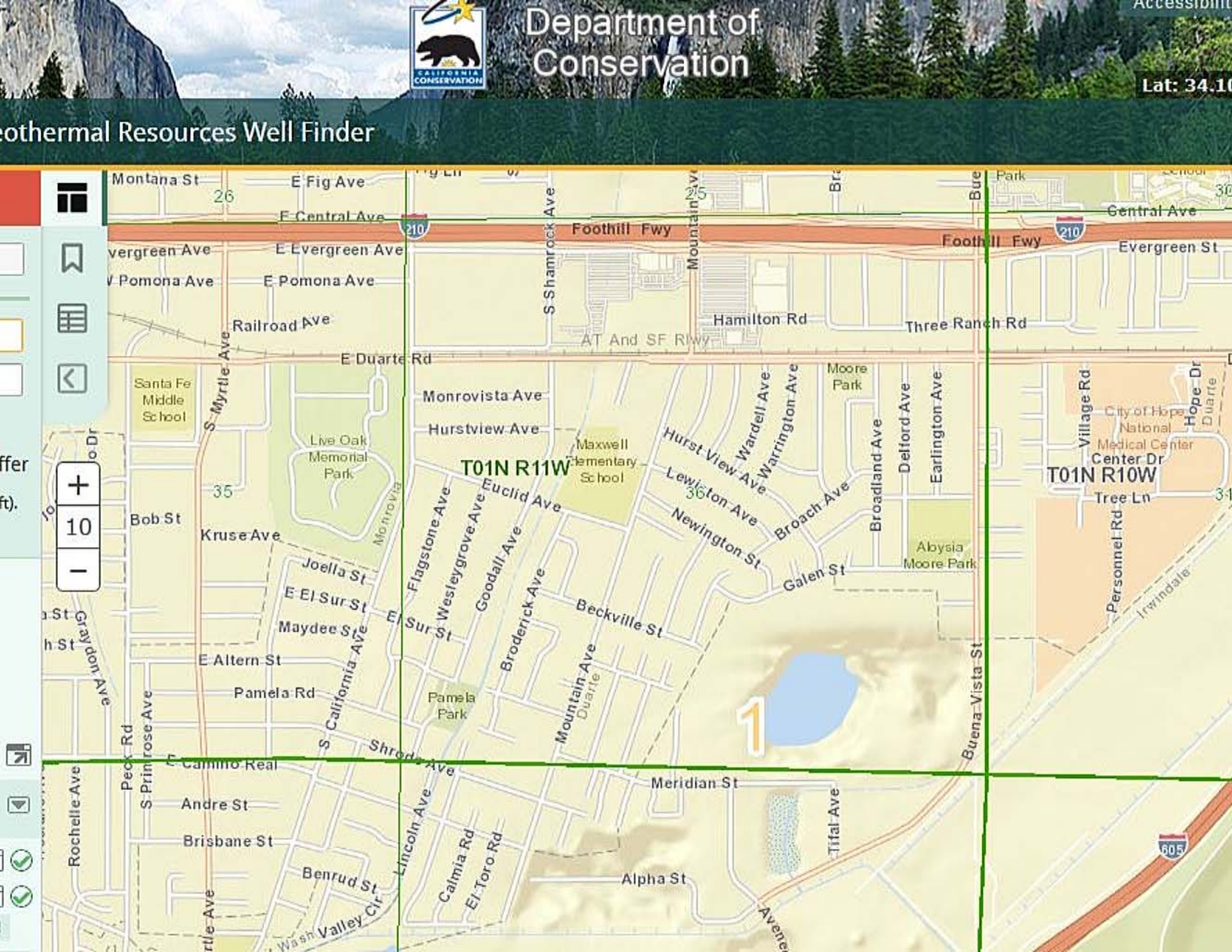
# Appendix F

# Regulatory Agency Records

# Division of Oil, Gas, and Geothermal Resources (DOGGR)


Department of Conservation
Accessibility
Lat: 34.10
eothermal Resources Well Finder
Montana St
E Fig Ave
E Central Ave
Foothill Fwy
Central Ave
Evergreen Ave
E Evergreen Ave
Evergreen St
Pomona Ave
E Pomona Ave
Railroad Ave
Hamilton Rd
Three Ranch Rd
AT And SF Rlwy
E Duarte Rd
Santa Fe Middle School
S Myrtle Ave
Monrovista Ave
Hurstview Ave
Live Oak Memorial Park
Maxwell Elementary School
T01N R11W
T01N R10W
Euclid Ave
Hurst View Ave
Wardell Ave
Warrington Ave
Moore Park
Broadland Ave
Delford Ave
Earlington Ave
Village Rd
City of Hope National Medical Center
Center Dr
Hope Dr
Duarte
Tree Ln
Bob St
Kruse Ave
Monrovia
Flagstone Ave
Wesleygrove Ave
Goodall Ave
Lewiston Ave
Newington St
Broach Ave
Aloysia Moore Park
Galen St
Personnel Rd
Irwindale
Joella St
E El Sur St
El Sur St
Maydee St
Beckville St
Broderick Ave
Graydon Ave
E Altern St
Pamela Rd
S California Ave
Pamela Park
Mountain Ave
Duarte
Buena Vista St
Shroda Ave
E Camino Real
Meridian St
Peck Rd
S Primrose Ave
Andre St
Brisbane St
Rochelle Ave
Lincoln Ave
Calmia Rd
El Toro Rd
Tifal Ave
Benrud St
Alpha St
Valley Cir
Wash
605
210
1
10
+
−

# Department of Water Resources

## Meredith Church

**From:** Van Raalte, Michael@DWR <Michael.VanRaalte@water.ca.gov>
**Sent:** Wednesday, September 14, 2016 8:39 AM
**To:** Meredith Church
**Subject:** RE: Well Completion Report Request
**Attachments:** WI card 01N11W36R001S.Redact.pdf; WI card 01N11W36R002S_Redacted.pdf; 36R1& 36R2 Location map.pdf

Hello Meredith,

There was no Well Completion Report found in the DWR archives for property you indicated. We do have a Well Index card for 01N11W36R001S and 36R002S. These two cards area attached as well as a map showing these well locations.

Sincerely,

Michael

*Michael Van Raalte*
Water Resources Technician II
California Department of Water Resources,
Groundwater Section, Southern Region
770 Fairmont Av, Suite 102
Glendale, CA 91203-1035
Email michael.vanraalte@water.ca.gov
Group email waterdata@water.ca.gov
Office - My Desk, 818-549-2307
Office General Number, 818-500-1645
Fax, 818-543-4604

---

**From:** Meredith Church [mailto:mchurch@leightongroup.com]
**Sent:** Tuesday, September 13, 2016 1:47 PM
**To:** DWR waterdata
**Subject:** Well Completion Report Request

Please see the attached well completion report request for any wells located at the United Rock Products Quarry, Pit No. 3, 1137 Meridian Street, Irwindale, CA, 91706. A map showing the site area as well as the records request form are attached. According to the Los Angeles County Department of Public Works well mapping program, Inactive well #4227B is located onsite. We would like records for this well, and also any other wells (if any) located onsite. Thank you!

**Meredith Church, PG**
**Associate Geologist**

**LEIGHTON**
**Solutions You Can Build On**
17781 Cowan
Irvine, CA 92614
(949) 681-4208 (Direct)
(949) 293-2519 (Cell)
(949) 477-4040 (Office)

# WELL INDEX

Region 4 County 70

Basin [redacted] U-05.D1

**Driller**

Name

Address

License No.

**Owner**

Name [redacted]

Address 1137 Meridian St.

Duarte, Calif.

Date Well Completed

Date Report Rec'd.

Log Obtained From

Remarks:

State Well No. 01N/11W-36 ~~R01~~ R02 ~~B&M~~ S

Location No. 04227 CD

Serial No.

Owner's No.

Other Nos.

Base Map Baldwin Park

Plotted 7/2/58 By ~~DD~~ 10/24/58 RGB

| Data Available | | Filed Under |
|---|---|---|
| Log | | |
| Water Analyses | | |
| Water Levels | 1 | ~~[illegible]~~ 1101 |
| Prod. Records | | |

Uses 4

DWR 104

50691 2-57 5M SPO

Well Condition 1 No MFA

Type of Power

Data Program

R.P. Elev. 0424.5 Ft. Other ☐

0424.0 Ft. G.S.

Well Depth 0219 Ft.

Aquifer

Period of Record

Begin 57 End

Agency Data Collected 1101

418' N. of Meridian St.;
605' E. of Tifal Ave.
12' S. & 65' W. of well # 4227B

11-19-57 PP

# WELL INDEX

Region 4 County 70
Basin [redacted] U-05.D1

**Driller**
Name ROSCOE MOSS CO.
Address 4360 WORTH ST.
LOS ANGELES
License No. 624

**Owner**
Name [redacted]
Address 1137 MERIDIAN ST.
DUARTE, CALIF.

Date Well Completed 08/10/57
Date Report Rec'd. 08/27/57
Log Obtained From DRILLER
Remarks:

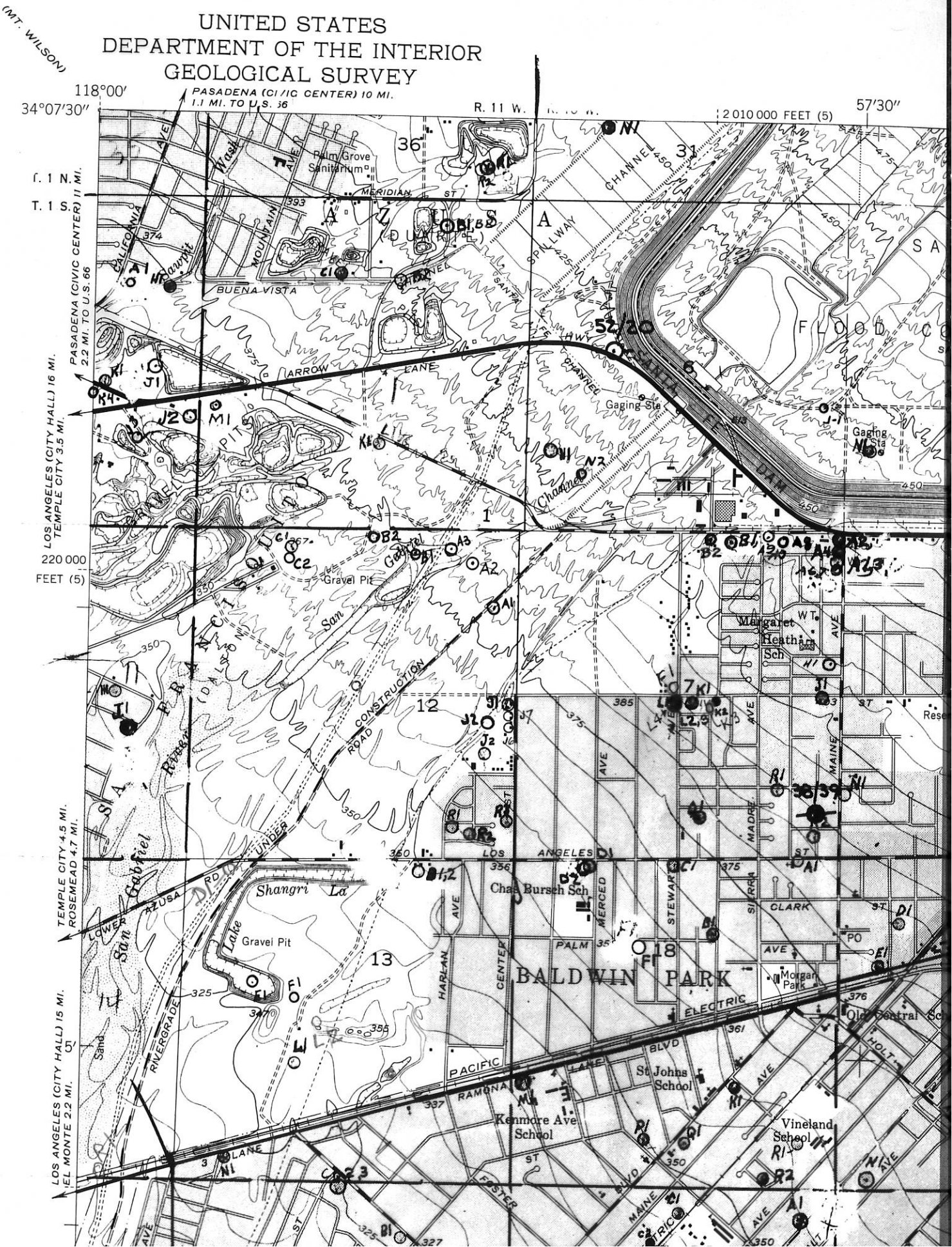
State Well No. 01N/11W-36R01 ~~SB~~ S B&M
Location No. 04227 B□
Serial No.
Owner's No.
Other Nos.
Base Map BALDWIN PARK 7½
Plotted 9/23/58 By EGLINTON

| Data Available | | Filed Under |
|---|---|---|
| Log | 2 | SWN |
| Water Analyses | 1, 3 | SWN |
| Water Levels | 1 | L.C.# |
| Prod. Records | | |
| Uses | 4 | |

DWR 104

50691 2-57 5M SPO

Well Condition 6 ~~1~~ 2
Type of Power ELECTRIC 125 HP
Data Program
R.P. Elev. X0425.0 Ft. Other □
X0425.0 Ft. G.S.
Well Depth 0300 Ft.
Aquifer
Period of Record
Begin 57 ~~58~~ End
Agency Data Collected ~~DWR~~ 1101 9/17/61 22108


UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
(MT. WILSON)
118°00'
34°07'30"
PASADENA (CIVIC CENTER) 10 MI.
1.1 MI. TO U.S. 66
R. 11 W.
2 010 000 FEET (5)
57'30"
T. 1 N.
T. 1 S.
PASADENA (CIVIC CENTER) 11 MI.
2.2 MI. TO U.S. 66
LOS ANGELES (CITY HALL) 16 MI.
TEMPLE CITY 3.5 MI.
220 000
FEET (5)
TEMPLE CITY 4.5 MI.
ROSEMEAD 4.7 MI.
LOS ANGELES (CITY HALL) 15 MI.
EL MONTE 2.2 MI.
Palm Grove Sanitarium
MERIDIAN ST
CALIFORNIA AVE
MOUNTAIN AVE
BUENA VISTA
ARROW LANE
SPILLWAY
CHANNEL
SANTA FE DAM
FLOOD C
Gaging Sta
Gravel Pit
San Gabriel River (DALTON CANYON)
CONSTRUCTION ROAD
LOWER AZUSA RD
RIVERGRADE
Shangri La
Lake
Sand
BALDWIN PARK
Chas Bursch Sch
Margaret Heatham Sch
St Johns School
Kennmore Ave School
Vineland School
Morgan Park
Old Central Sch
PACIFIC ELECTRIC BLVD
RAMONA
LOS ANGELES
CLARK
PALM
MAINE
MERCED
STEWART
SIERRA MADRE
HARLAN
CENTER
FOSTER
HOLT
PO

# National Pipeline Mapping System (NPMS)

https://www.npms.phmsa.dot.gov/PublicViewer/composite.jsf

# NPMS Public Map Viewer

ic Viewer Layer List

- [x] Gas Transmission Pipelines (scale dependent)
  - GAS
- [x] Hazardous Liquid Pipelines (scale dependent)
  - LIQUID
- [ ] LNG Plants (scale dependent)
- [ ] Breakout Tanks (scale dependent)
- [ ] Other Populated Areas (scale dependent)
- [ ] Highly Populated Areas (scale dependent)
- [ ] Roads, Railroads & Airports
  - [x] World Transportation
- [ ] Boundary Lines & Names
  - [x] World Boundaries and Places
- [ ] Shaded Relief
  - [x] World Shaded Relief
- [ ] Aerial
  - [x] World Imagery
- [x] Low Resolution 15m Imagery
- [x] High Resolution 60cm Imagery

se refer to the User Manual which is accessible via the link for guidance on this map application. If you need tional assistance, please contact the NPMS National ository staff at npms@dot.gov or 703-317-6294.

AK HI PR

View pipelines by ...





All Rights Reserved - PHMSA - Pipeline and Hazardous Materials Safety Administration - 2012

# Radon Information

| Zip Code | County | City | Num. of Tests | Num. Tests ≥4 pCi/L |
|---|---|---|---|---|
| 91701 | San Bernardino | Alta Loma | 32 | 0 |
| 91702 | Los Angeles | Azusa | 5 | 0 |
| 91706 | Los Angeles | Baldwin Park | 5 | 0 |

# South Coast Air Quality Management District (SCAQMD)

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again

| Facility ID | Facility Name | Facility Address | RECLAIM | Title V | Facility Status |
|---|---|---|---|---|---|
| 102274 | UNITED ROCK & CONCRETE CORPORATION | VARIOUS LOCATIONS IN SCAQMD , DIAMOND BAR, CA 91765 | | | ACTIVE |
| 67341 | UNITED ROCK & CONCRETE CORPORATION | 12976 E FIRESTONE BLVD , SANTA FE SPRINGS, CA 90670 | | | |
| 67342 | UNITED ROCK & CONCRETE CORPORATION | 4127 W MACARTHUR BLVD , SANTA ANA, CA 90805 | | | |
| 66241 | UNITED ROCK PRODUCTS 065341 | 1254 E ARROW HWY , IRWINDALE, CA 91706 | | | |
| 65341 | UNITED ROCK PRODUCTS CORPORATION | 1245 E ARROW HWY , IRWINDALE, CA 91706 | | | ACTIVE |
| 67343 | UNITED ROCK PRODUCTS CORPORATION | 1245 E ARROW HWY , IRWINDALE, CA 91706 | | | |

First Prev Page 1 of 1 (6 records) Next Last Page 1 Export To Excel

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**Facility Details**

| | |
|---|---|
| **Facility ID** | 65341 |
| **Company Name** | UNITED ROCK PRODUCTS CORPORATION |
| **Address** | 1245 E ARROW HWY |
| | IRWINDALE, CA 91706 |

**Status** ACTIVE

**Are there any back fees due?**

No.

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

## Equipment List

**Facility ID** 65341

**Company Name** UNITED ROCK PRODUCTS CORPORATION

**Address** 1245 E ARROW HWY

IRWINDALE, CA 91706

| Appl_Nbr | Permit_Nbr | Issued_Date | Permit_Status | Eq_Type | Equip_Description | Appl_Date | Appl_Status |
|---|---|---|---|---|---|---|---|
| 583442 | | | | Basic | AGGREGATE PRODUCTN/CRUSHING (<5000 TPD) | 3/22/2016 | ASSIGNED TO ENGINEER - CLASS III |
| 476557 | | | | Basic | Aggregate Crushing (<5000 tpd) | 12/21/2007 | APPLICATION CANCELLED |
| 459991 | N19018 | 9/12/2006 | INACTIVE | Basic | SERV STAT STORAGE & DISPENSING GASOLINE | 9/1/2006 | PERMIT TO OPERATE GRANTED |
| 438791 | F73758 | 2/15/2005 | ACTIVE | Basic | AGGREGATE PRODN/CRUSH >= 5000 TPD | 1/14/2005 | PERMIT TO OPERATE GRANTED |
| 430411 | F71629 | 11/2/2004 | ACTIVE | Basic | AGGREGATE CONVEYING | 5/25/2004 | PERMIT TO OPERATE GRANTED |
| 430413 | F71630 | 11/2/2004 | ACTIVE | Basic | AGGREGATE CONVEYING | 5/25/2004 | PERMIT TO OPERATE GRANTED |
| 430416 | F71631 | 11/2/2004 | ACTIVE | Basic | AGGREGATE CONVEYING | 5/25/2004 | PERMIT TO OPERATE GRANTED |
| 430417 | F71632 | 11/2/2004 | ACTIVE | Basic | AGGREGATE CONVEYING | 5/25/2004 | PERMIT TO OPERATE GRANTED |
| 430403 | F73756 | 2/15/2005 | ACTIVE | Basic | AGGREGATE PRODN/CRUSH >= 5000 TPD | 5/25/2004 | PERMIT TO OPERATE GRANTED |
| 430418 | F73757 | 2/15/2005 | ACTIVE | Basic | AGGREGATE PRODN/CRUSH >= 5000 TPD | 5/25/2004 | PERMIT TO OPERATE GRANTED |
| 428833 | F71627 | 11/2/2004 | ACTIVE | Basic | AGGREGATE SIZE CLASSIFICATION | 4/14/2004 | PERMIT TO OPERATE GRANTED |
| 428834 | F71628 | 11/2/2004 | ACTIVE | Basic | AGGREGATE SIZE CLASSIFICATION | 4/14/2004 | PERMIT TO OPERATE GRANTED |
| 279903 | | | | Basic | PLAN, RULE 403 COMPLIANCE | 3/29/1993 | BANKING/ PLAN GRANTED, NON BILLABLE |
| 231453 | M96595 | 9/13/1990 | INACTIVE | Basic | SERV STAT STORAGE & DISPENSING GASOLINE | 6/26/1990 | PERMIT TO OPERATE GRANTED |
| 231453 | M96595 | 9/13/1990 | INACTIVE | Control | AMINE TREATING gas treatment | 6/26/1990 | PERMIT TO OPERATE GRANTED |
| 186858 | D14490 | 3/24/1990 | INACTIVE | Basic | I C E (50-500 HP) N-EM PORT N-RENT DIESE | 4/24/1989 | PERMIT TO OPERATE GRANTED |
| 186859 | D14492 | 3/24/1990 | INACTIVE | Basic | I C E (50-500 HP) N-EM PORT N-RENT DIESE | 4/24/1989 | PERMIT TO OPERATE GRANTED |
| 186860 | D14493 | 5/31/1990 | INACTIVE | Basic | I C E (50-500 HP) N-EM PORT N-RENT DIESE | 4/24/1989 | PERMIT TO OPERATE GRANTED |
| 185072 | D08808 | 7/6/1989 | INACTIVE | Basic | AGGREGATE CONVEYING | 12/30/1988 | PERMIT TO OPERATE GRANTED |
| 185073 | D08809 | 7/6/1989 | INACTIVE | Basic | AGGREGATE CONVEYING | 12/30/1988 | PERMIT TO OPERATE GRANTED |
| 185075 | D08811 | 7/6/1989 | INACTIVE | Basic | AGGREGATE CONVEYING | 12/30/1988 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | PERMIT TO OPERATE GRANTED |
| 185076 | D08812 | 7/6/1989 | INACTIVE | Basic | AGGREGATE CONVEYING | 12/30/1988 | PERMIT TO OPERATE GRANTED |
| 185071 | D08807 | 7/6/1989 | INACTIVE | Basic | AGGREGATE PRODUCTION/CRUSHING | 12/30/1988 | PERMIT TO OPERATE GRANTED |
| 185074 | D08810 | 7/6/1989 | INACTIVE | Basic | AGGREGATE PRODUCTION/CRUSHING | 12/30/1988 | PERMIT TO OPERATE GRANTED |
| 185077 | D08813 | 7/6/1989 | INACTIVE | Basic | AGGREGATE PRODUCTION/CRUSHING | 12/30/1988 | PERMIT TO OPERATE GRANTED |

First Prev Page 1 of 2 (36 records) Next Last Page 1 Export To Excel

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | **Equipment List** | Compliance | Emissions | Hearing Board | Transportation

**Equipment List**

**Facility ID** 65341

**Company Name** UNITED ROCK PRODUCTS CORPORATION

**Address** 1245 E ARROW HWY

IRWINDALE, CA 91706

| Appl_Nbr | Permit_Nbr | Issued_Date | Permit_Status | Eq_Type | Equip_Description | Appl_Date | Appl_Status |
|---|---|---|---|---|---|---|---|
| 185087 | D16722 | 1/24/1990 | INACTIVE | Basic | CONCRETE BATCH EQUIPMENT | 12/30/1988 | PERMIT TO OPERATE GRANTED |
| 185089 | D16724 | 1/24/1990 | INACTIVE | Basic | STORAGE SILO CEMENT | 12/30/1988 | PERMIT TO OPERATE GRANTED |
| 185084 | D16721 | 1/24/1990 | INACTIVE | Basic | STORAGE TANK CEMENT | 12/30/1988 | PERMIT TO OPERATE GRANTED |
| 185088 | D16723 | 1/24/1990 | INACTIVE | Basic | STORAGE TANK CEMENT | 12/30/1988 | PERMIT TO OPERATE GRANTED |
| 185084 | D16721 | 1/24/1990 | INACTIVE | Control | BAGHOUSE, AMBIENT TEMP (>100-500 SQ FT) | 12/30/1988 | PERMIT TO OPERATE GRANTED |
| 185085 | D17134 | 1/31/1990 | INACTIVE | Control | BAGHOUSE, AMBIENT TEMP (>100-500 SQ FT) | 12/30/1988 | PERMIT TO OPERATE GRANTED |
| 185087 | D16722 | 1/24/1990 | INACTIVE | Control | BAGHOUSE, AMBIENT TEMP (>500 SQ FT) | 12/30/1988 | PERMIT TO OPERATE GRANTED |
| 185089 | D16724 | 1/24/1990 | INACTIVE | Control | BAGHOUSE, AMBIENT TEMP (>500 SQ FT) | 12/30/1988 | PERMIT TO OPERATE GRANTED |
| 185088 | D16723 | 1/24/1990 | INACTIVE | Control | DRY FILTER (>500 SQ FT) | 12/30/1988 | PERMIT TO OPERATE GRANTED |
| 185086 | | | | Basic | STORAGE TANK CEMENT | 12/30/1988 | APPLICATION CANCELLED |
| 185086 | | | | Control | BAGHOUSE | 12/30/1988 | APPLICATION CANCELLED |

First | Prev | Page 2 of 2 (36 records) | Next | Last | Page 2 | Export To Excel

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board

**Application Details**

Application/Tracking Number 231453

**Facility Information**

| | | | |
|---|---|---|---|
| Business Name | UNITED ROCK PRODUCTS CORPORATION | | |
| Facility ID | 65341 | Facility Status | ACTIVE |

**Application Information**

| | | | |
|---|---|---|---|
| Application Type | Alteration/Modification | Application Received | 6/26/1990 |
| Application Status | PERMIT TO OPERATE GRANTED | Application Deemed Complete | 9/13/1990 |
| Equipment Desc | SERV STAT STORAGE & DISPENSING GASOLINE; AMINE TREATING | | |
| Permit Number | M96595 | Permit Status | INACTIVE |

**Engineer Information**

| | | | |
|---|---|---|---|
| Engineer Assigned | | | |
| Engineer Phone | | Team Assigned | |

SOUTH COAST AQMD

# Facility INformation Detail (FIND)



**Compliance**

| | |
|---|---|
| **Facility ID** | 65341 |
| **Company Name** | UNITED ROCK PRODUCTS CORPORATION |
| **Address** | 1245 E ARROW HWY |
| | IRWINDALE, CA 91706 |

## Notices Of Violation

| Notice Number | Notice Issue Date | Violation Date | Disposition Date | Disposition |
|---|---|---|---|---|
| P53644 | 10/27/2009 | 10/27/2009 | 5/12/2011 | Closed Case |
| P34396 | 9/2/2003 | 5/30/2003 | 1/9/2008 | Closed Case |
| P34472 | 3/14/2002 | 3/14/2002 | 10/30/2002 | Closed Case |
| P63451 | 9/17/2015 | 9/17/2015 | | Void |

First Prev Page 1 of 1 (4 records) Next Last Page 1 Export To Excel

## Notices To Comply

| Notice Number | Violation Date | Re-Inspection Date | Status |
|---|---|---|---|
| C88688 | 9/2/2003 | 9/4/2003 | In Compliance |
| C88701 | 1/7/2004 | 1/21/2004 | In Compliance |
| E22207 | 8/2/2013 | 8/21/2013 | In Compliance |
| E24216 | 9/5/2014 | 9/10/2014 | In Compliance |
| E24217 | 9/10/2014 | 9/10/2014 | In Compliance |
| E29058 | 5/22/2015 | 6/12/2015 | In Compliance |

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SOUTH COAST AQMD

# Facility INformation Detail (FIND)

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**NOV/NC Details**

| Notice Number | P53644 | Violation Date | 10/27/2009 | Issue Date | 5/12/2011 | Notice Type | NOV |
|---|---|---|---|---|---|---|---|

| | |
|---|---|
| Facility ID | 65341 |
| Company Name | UNITED ROCK PRODUCTS CORPORATION |
| Address | 1245 E ARROW<br>IRWINDALE, CA 91706 |
| Violation Description | Exceeded character space. Please view the report tab. |
| Equipment Description | Pile-Driving Hammer |
| Follow Up Status | In Compliance |
| **Disposition** | Closed Case |
| Disposition Date | 5/12/2011 |

| Rule No. | Rule Description |
|---|---|
| 401 | Visible Emissions |

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**NOV/NC Details**

| Notice Number | P34396 | Violation Date | 5/30/2003 | Issue Date | 1/9/2008 | Notice Type | NOV |
|---|---|---|---|---|---|---|---|

| | |
|---|---|
| Facility ID | 65341 |
| Company Name | UNITED ROCK PRODUCTS CORPORATION |
| Address | 1245 E ARROW<br>IRWINDALE, CA 91706 |
| Violation Description | UNITED ROCK PRODUCTS CAUSING OR ALLOWING PM 10 LEVELS TO EXCEED 50 MICROGRAMS PER CUBIC METER FOR THE FOLLOWING DATE MAY 30, 2003. |
| Equipment Description | |
| Follow Up Status | |
| **Disposition** | Closed Case |
| Disposition Date | 1/9/2008 |

| Rule No. | Rule Description |
|---|---|
| 403 | Fugitive Dust |

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**NOV/NC Details**

| Notice Number | P34472 | Violation Date | 3/14/2002 | Issue Date | 10/30/2002 | Notice Type | NOV |
|---|---|---|---|---|---|---|---|

| | |
|---|---|
| Facility ID | 65341 |
| Company Name | UNITED ROCK PRODUCTS CORPORATION |
| Address | 1245 E ARROW<br>IRWINDALE, CA 91706 |
| Violation Description | FAILURE TO CONDUCT PHASE I AND II INITIAL REVERIFICATION TEST AS REQUIRED BY RULE 461. |
| Equipment Description | |
| Follow Up Status | In Compliance |
| **Disposition** | Closed Case |
| Disposition Date | 10/30/2002 |

| Rule No. | Rule Description |
|---|---|
| 461 | Gasoline Transfer and Dispensing |

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**NOV/NC Details**

| Notice Number | P63451 | Violation Date | 9/17/2015 | Issue Date | 12/31/9999 | Notice Type | NOV |
|---|---|---|---|---|---|---|---|

| | |
|---|---|
| Facility ID | 65341 |
| Company Name | UNITED ROCK PRODUCTS CORPORATION |
| Address | 1245 E ARROW<br>IRWINDALE, CA 91706 |
| Violation Description | |
| Equipment Description | |
| Follow Up Status | |
| **Disposition** | Void |
| Disposition Date | |

| Rule No. | Rule Description |
|---|---|

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**NOV/NC Details**

| Notice Number | C88688 | Violation Date | 9/2/2003 | Issue Date | 9/4/2003 | Notice Type | NC |
|---|---|---|---|---|---|---|---|

| | |
|---|---|
| Facility ID | 65341 |
| Company Name | UNITED ROCK PRODUCTS CORPORATION |
| Address | 1245 E ARROW<br>IRWINDALE, CA 91706 |
| Violation Description | PROVIDE COPIES OF PRODUCTION RECORDS FOR THE PERIOD OF MAY 2003-JULY 2003. |
| Equipment Description | |
| Status | In Compliance |
| Re-inspection Date | 9/4/2003 |

| Rule No. | Rule Description |
|---|---|
| 42303 | Supply Information, Plans, Specs, Etc. |

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**NOV/NC Details**

| Notice Number | C88701 | Violation Date | 1/7/2004 | Issue Date | 1/21/2004 | Notice Type | NC |
|---|---|---|---|---|---|---|---|

| | |
|---|---|
| Facility ID | 65341 |
| Company Name | UNITED ROCK PRODUCTS CORPORATION |
| Address | 1245 E ARROW<br>IRWINDALE, CA 91706 |
| Violation Description | PROVIDE PRODUCTION RECORDS FOR P/O D08807, D08808, D08809, D08810, D08811, D08812, D08813. PROVIDE OR ID LOCATION OF 3 ICE P/O D11493, D11492, D11490. |
| Equipment Description | |
| Status | In Compliance |
| Re-inspection Date | 1/21/2004 |

| Rule No. | Rule Description |
|---|---|
| 42303 | Supply Information, Plans, Specs, Etc. |

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**NOV/NC Details**

| Notice Number | E22207 | Violation Date | 8/2/2013 | Issue Date | 8/30/2013 | Notice Type | NC |
|---|---|---|---|---|---|---|---|

| | |
|---|---|
| Facility ID | 65341 |
| Company Name | UNITED ROCK PRODUCTS CORPORATION |
| Address | 1245 E ARROW<br>IRWINDALE, CA 91706 |
| Violation Description | Do not operate any portable internal combustion engine rated over 50 bhp without first obtaining a valid CARB Statewide registration or AQMD permit to operate |
| Equipment Description | (generator) John Deere, Model 4045TF150C, S/N PE4045T177157, EPA Family 1JDXL06.8014, 100 hp |
| Status | In Compliance |
| Re-inspection Date | 8/21/2013 |

| Rule No. | Rule Description |
|---|---|

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**NOV/NC Details**

| Notice Number | E24216 | Violation Date | 9/5/2014 | Issue Date | 9/10/2014 | Notice Type | NC |
|---|---|---|---|---|---|---|---|

| | |
|---|---|
| Facility ID | 65341 |
| Company Name | UNITED ROCK PRODUCTS CORPORATION |
| Address | 1245 ARROW<br>IRWINDALE, CA 91702 |
| Violation Description | 403 (d)(2) - provide and maintain proof of compliance with Rule 403 (d)(2) (BACT of Table 1 control measures) |
| Equipment Description | Aggregate Operations |
| Status | In Compliance |
| Re-inspection Date | 9/10/2014 |

| Rule No. | Rule Description |
|---|---|
| 403 | Fugitive Dust |

SOUTH COAST AQMD

# Facility INformation Detail (FIND)



**NOV/NC Details**

| Notice Number | E24217 | Violation Date | 9/10/2014 | Issue Date | 9/10/2014 | Notice Type | NC |
|---|---|---|---|---|---|---|---|

| | |
|---|---|
| Facility ID | 65341 |
| Company Name | UNITED ROCK PRODUCTS CORPORATION |
| Address | 1245 ARROW<br>IRWINDALE, CA 91702 |
| Violation Description | 1) Rule 1157 (d)(1)(d) - to provide and maintain proof of compliance with Rule 1157 (d)(1)(d). |
| Equipment Description | Aggregate operations |
| Status | In Compliance |
| Re-inspection Date | 9/10/2014 |

| Rule No. | Rule Description |
|---|---|
| 1157 | PM10 Emission Reductions from Aggregate and Related Operations |

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**NOV/NC Details**

| Notice Number | E29058 | Violation Date | 5/22/2015 | Issue Date | 6/12/2015 | Notice Type | NC |
|---|---|---|---|---|---|---|---|

| | |
|---|---|
| Facility ID | 65341 |
| Company Name | UNITED ROCK PRODUCTS CORPORATION |
| Address | 1245 E ARROW<br>IRWINDALE, CA 91706 |
| Violation Description | Maintian a track out device to the specifications of Rule 403(d)(5) |
| Equipment Description | |
| Status | In Compliance |
| Re-inspection Date | 6/12/2015 |

| Rule No. | Rule Description |
|---|---|
| 403 | Fugitive Dust |

SOUTH COAST AQMD

# Facility INformation Detail (FIND)



**Emissions**

| | |
|---|---|
| **Facility ID** | 65341 |
| **Company Name** | UNITED ROCK PRODUCTS CORPORATION |
| **Address** | 1245 E ARROW HWY |
| | IRWINDALE, CA 91706 |

**Select AER Year:** 2000

## Criteria Pollutants (Tons per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| CO | Carbon Monoxide | 0.000 |
| NOX | Nitrogen Oxides | 0.000 |
| ROG | Reactive Organic Gases | 0.083 |
| SOX | Sulfur Oxides | 0.000 |
| TSP | Total Suspended Particulates | 14.022 |

## Toxic Pollutants (Pounds per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| 71432 | Benzene | 2.785 |

Note - Data for 2007 represents the six-month transitional period, July through December 2007, when the rules requiring annual emissions reporting changed from a fiscal year to a calendar year basis.

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**Emissions**

**Facility ID** 65341

**Company Name** UNITED ROCK PRODUCTS CORPORATION

**Address** 1245 E ARROW HWY

IRWINDALE, CA 91706

**Select AER Year:** 2001

## Criteria Pollutants (Tons per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| CO | Carbon Monoxide | 0.000 |
| NOX | Nitrogen Oxides | 0.000 |
| ROG | Reactive Organic Gases | 0.071 |
| SOX | Sulfur Oxides | 0.000 |
| TSP | Total Suspended Particulates | 13.056 |

## Toxic Pollutants (Pounds per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| 95636 | 1,2,4TRIMEBENZE | 3.382 |
| 7440382 | Arsenic | 0.082 |
| 71432 | Benzene | 1.305 |
| 7440417 | Beryllium | 0.009 |
| 7440439 | Cadmium | 0.010 |
| 18540299 | Chromium (VI) | 0.003 |
| 7440508 | Copper | 0.476 |
| 7631869 | Crystalline silica | 3003.466 |
| 100414 | ETHYL BENZENE | 1.828 |
| 110543 | HEXANE | 1.305 |
| 7439921 | Lead (inorganic) | 0.210 |
| 108383 | M-XYLENE | 9.170 |
| 1634044 | ME T-BUTYLETHER | 15.662 |
| 7439965 | Manganese | 9.106 |
| 7439976 | Mercury | 0.003 |
| 7440020 | Nickel | 0.305 |
| 7782492 | Selenium | 0.011 |
| 108883 | Toluene | 9.140 |

Note - Data for 2007 represents the six-month transitional period, July through December 2007, when the rules requiring annual emissions reporting changed from a fiscal year to a calendar year basis.

SOUTH COAST AQMD

# Facility INformation Detail (FIND)



**Emissions**

**Facility ID** 65341

**Company Name** UNITED ROCK PRODUCTS CORPORATION

**Address** 1245 E ARROW HWY

IRWINDALE, CA 91706

**Select AER Year:** 2002

## Criteria Pollutants (Tons per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| CO | Carbon Monoxide | 2.021 |
| NOX | Nitrogen Oxides | 0.285 |
| ROG | Reactive Organic Gases | 0.183 |
| SOX | Sulfur Oxides | 0.006 |
| TSP | Total Suspended Particulates | 11.430 |

## Toxic Pollutants (Pounds per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| 106990 | 1,3-Butadiene | 1.135 |
| 7664417 | Ammonia | 0.800 |
| 7440382 | Arsenic | 0.073 |
| 71432 | Benzene | 5.101 |
| 7440417 | Beryllium | 0.007 |
| 7440439 | Cadmium | 0.010 |
| 18540299 | Chromium (VI) | 0.003 |
| 50000 | Formaldehyde | 5.178 |
| 7439921 | Lead (inorganic) | 0.191 |
| 91203 | Naphthalene | 0.163 |
| 7440020 | Nickel | 0.274 |
| 1151 | PAHs, total, with components not reported | 0.036 |

Note - Data for 2007 represents the six-month transitional period, July through December 2007, when the rules requiring annual emissions reporting changed from a fiscal year to a calendar year basis.

SOUTH COAST AQMD

# Facility INformation Detail (FIND)



**Emissions**

| | |
|---|---|
| **Facility ID** | 65341 |
| **Company Name** | UNITED ROCK PRODUCTS CORPORATION |
| **Address** | 1245 E ARROW HWY |
| | IRWINDALE, CA 91706 |

**Select AER Year:** 2003

## Criteria Pollutants (Tons per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| CO | Carbon Monoxide | 3.719 |
| NOX | Nitrogen Oxides | 0.889 |
| ROG | Reactive Organic Gases | 0.311 |
| SOX | Sulfur Oxides | 0.016 |
| TSP | Total Suspended Particulates | 10.579 |

## Toxic Pollutants (Pounds per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| 106990 | 1,3-Butadiene | 2.392 |
| 7664417 | Ammonia | 2.720 |
| 7440382 | Arsenic | 0.071 |
| 71432 | Benzene | 8.603 |
| 7440417 | Beryllium | 0.007 |
| 7440439 | Cadmium | 0.013 |
| 18540299 | Chromium (VI) | 0.003 |
| 50000 | Formaldehyde | 12.082 |
| 7439921 | Lead (inorganic) | 0.196 |
| 91203 | Naphthalene | 0.325 |
| 7440020 | Nickel | 0.271 |
| 1151 | PAHs, total, with components not reported | 0.123 |

Note - Data for 2007 represents the six-month transitional period, July through December 2007, when the rules requiring annual emissions reporting changed from a fiscal year to a calendar year basis.

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**Emissions**

| | |
|---|---|
| **Facility ID** | 65341 |
| **Company Name** | UNITED ROCK PRODUCTS CORPORATION |
| **Address** | 1245 E ARROW HWY |
| | IRWINDALE, CA 91706 |

**Select AER Year:** 2004

## Criteria Pollutants (Tons per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| CO | Carbon Monoxide | 18.842 |
| NOX | Nitrogen Oxides | 2.330 |
| ROG | Reactive Organic Gases | 1.159 |
| SOX | Sulfur Oxides | 0.052 |
| TSP | Total Suspended Particulates | 6.239 |

## Toxic Pollutants (Pounds per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| 106990 | 1,3-Butadiene | 10.312 |
| 7664417 | Ammonia | 6.335 |
| 7440382 | Arsenic | 0.051 |
| 71432 | Benzene | 37.924 |
| 7440417 | Beryllium | 0.004 |
| 7440439 | Cadmium | 0.016 |
| 18540299 | Chromium (VI) | 0.002 |
| 50000 | Formaldehyde | 45.946 |
| 7439921 | Lead (inorganic) | 0.162 |
| 91203 | Naphthalene | 1.501 |
| 7440020 | Nickel | 0.209 |
| 1151 | PAHs, total, with components not reported | 0.285 |

Note - Data for 2007 represents the six-month transitional period, July through December 2007, when the rules requiring annual emissions reporting changed from a fiscal year to a calendar year basis.

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | Compliance | **Emissions** | Hearing Board | Transportation

**Emissions**

| | |
|---|---|
| **Facility ID** | 65341 |
| **Company Name** | UNITED ROCK PRODUCTS CORPORATION |
| **Address** | 1245 E ARROW HWY |
| | IRWINDALE, CA 91706 |

**Select AER Year:** 2005

## Criteria Pollutants (Tons per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| CO | Carbon Monoxide | 4.921 |
| NOX | Nitrogen Oxides | 1.013 |
| ROG | Reactive Organic Gases | 0.318 |
| SOX | Sulfur Oxides | 0.019 |
| TSP | Total Suspended Particulates | 8.096 |

## Toxic Pollutants (Pounds per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| 106990 | 1,3-Butadiene | 3.030 |
| 7664417 | Ammonia | 3.055 |
| 7440382 | Arsenic | 0.059 |
| 71432 | Benzene | 9.842 |
| 7440417 | Beryllium | 0.005 |
| 7440439 | Cadmium | 0.012 |
| 18540299 | Chromium (VI) | 0.002 |
| 50000 | Formaldehyde | 14.844 |
| 7439921 | Lead (inorganic) | 0.166 |
| 91203 | Naphthalene | 0.419 |
| 7440020 | Nickel | 0.225 |
| 1151 | PAHs, total, with components not reported | 0.137 |

Note - Data for 2007 represents the six-month transitional period, July through December 2007, when the rules requiring annual emissions reporting changed from a fiscal year to a calendar year basis.

SOUTH COAST AQMD

# Facility INformation Detail (FIND)



**Emissions**

**Facility ID** 65341

**Company Name** UNITED ROCK PRODUCTS CORPORATION

**Address** 1245 E ARROW HWY

IRWINDALE, CA 91706

**Select AER Year:** 2006

## Criteria Pollutants (Tons per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| CO | Carbon Monoxide | 4.972 |
| NOX | Nitrogen Oxides | 1.248 |
| ROG | Reactive Organic Gases | 0.349 |
| SOX | Sulfur Oxides | 0.023 |
| TSP | Total Suspended Particulates | 26.342 |

## Toxic Pollutants (Pounds per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| 106990 | 1,3-Butadiene | 3.247 |
| 7664417 | Ammonia | 3.840 |
| 7440382 | Arsenic | 0.173 |
| 71432 | Benzene | 10.268 |
| 7440417 | Beryllium | 0.018 |
| 7440439 | Cadmium | 0.027 |
| 18540299 | Chromium (VI) | 0.008 |
| 50000 | Formaldehyde | 16.570 |
| 7439921 | Lead (inorganic) | 0.461 |
| 91203 | Naphthalene | 0.439 |
| 7440020 | Nickel | 0.646 |
| 1151 | PAHs, total, with components not reported | 0.173 |

Note - Data for 2007 represents the six-month transitional period, July through December 2007, when the rules requiring annual emissions reporting changed from a fiscal year to a calendar year basis.

SOUTH COAST AQMD

# Facility INformation Detail (FIND)



**Emissions**

| | |
|---|---|
| **Facility ID** | 65341 |
| **Company Name** | UNITED ROCK PRODUCTS CORPORATION |
| **Address** | 1245 E ARROW HWY |
| | IRWINDALE, CA 91706 |

**Select AER Year:** 2007

## Criteria Pollutants (Tons per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| CO | Carbon Monoxide | 1.579 |
| NOX | Nitrogen Oxides | 0.507 |
| ROG | Reactive Organic Gases | 0.118 |
| SOX | Sulfur Oxides | 0.009 |
| TSP | Total Suspended Particulates | 20.377 |

## Toxic Pollutants (Pounds per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| 106990 | 1,3-Butadiene | 1.123 |
| 7664417 | Ammonia | 1.609 |
| 7440382 | Arsenic | 0.122 |
| 71432 | Benzene | 3.297 |
| 7440417 | Beryllium | 0.014 |
| 7440439 | Cadmium | 0.018 |
| 18540299 | Chromium (VI) | 0.006 |
| 50000 | Formaldehyde | 6.041 |
| 7439921 | Lead (inorganic) | 0.343 |
| 91203 | Naphthalene | 0.147 |
| 7440020 | Nickel | 0.488 |
| 1151 | PAHs, total, with components not reported | 0.072 |

Note - Data for 2007 represents the six-month transitional period, July through December 2007, when the rules requiring annual emissions reporting changed from a fiscal year to a calendar year basis.

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**Emissions**

| | |
|---|---|
| **Facility ID** | 65341 |
| **Company Name** | UNITED ROCK PRODUCTS CORPORATION |
| **Address** | 1245 E ARROW HWY |
| | IRWINDALE, CA 91706 |

**Select AER Year:** 2008

## Criteria Pollutants (Tons per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| CO | Carbon Monoxide | 1.760 |
| NOX | Nitrogen Oxides | 0.797 |
| ROG | Reactive Organic Gases | 0.192 |
| SOX | Sulfur Oxides | 0.013 |
| TSP | Total Suspended Particulates | 29.663 |

## Toxic Pollutants (Pounds per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| 106990 | 1,3-Butadiene | 1.444 |
| 7664417 | Ammonia | 2.589 |
| 7440382 | Arsenic | 0.192 |
| 71432 | Benzene | 4.567 |
| 7440417 | Beryllium | 0.020 |
| 7440439 | Cadmium | 0.027 |
| 18540299 | Chromium (VI) | 0.009 |
| 50000 | Formaldehyde | 8.357 |
| 7439921 | Lead (inorganic) | 0.502 |
| 91203 | Naphthalene | 0.179 |
| 7440020 | Nickel | 0.713 |
| 1151 | PAHs, total, with components not reported | 0.116 |

Note - Data for 2007 represents the six-month transitional period, July through December 2007, when the rules requiring annual emissions reporting changed from a fiscal year to a calendar year basis.

SOUTH COAST AQMD

# Facility INformation Detail (FIND)



**Emissions**

**Facility ID** 65341

**Company Name** UNITED ROCK PRODUCTS CORPORATION

**Address** 1245 E ARROW HWY

IRWINDALE, CA 91706

**Select AER Year:** 2009

## Criteria Pollutants (Tons per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| CO | Carbon Monoxide | 1.491 |
| NOX | Nitrogen Oxides | 0.551 |
| ROG | Reactive Organic Gases | 0.171 |
| SOX | Sulfur Oxides | 0.009 |
| TSP | Total Suspended Particulates | 17.431 |

## Toxic Pollutants (Pounds per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| 106990 | 1,3-Butadiene | 1.121 |
| 7664417 | Ammonia | 1.770 |
| 7440382 | Arsenic | 0.113 |
| 71432 | Benzene | 4.135 |
| 7440417 | Beryllium | 0.012 |
| 7440439 | Cadmium | 0.016 |
| 18540299 | Chromium (VI) | 0.005 |
| 50000 | Formaldehyde | 6.213 |
| 7439921 | Lead (inorganic) | 0.297 |
| 91203 | Naphthalene | 0.144 |
| 7440020 | Nickel | 0.420 |
| 1151 | PAHs, total, with components not reported | 0.079 |

Note - Data for 2007 represents the six-month transitional period, July through December 2007, when the rules requiring annual emissions reporting changed from a fiscal year to a calendar year basis.

SOUTH COAST AQMD

# Facility INformation Detail (FIND)



**Emissions**

| | |
|---|---|
| **Facility ID** | 65341 |
| **Company Name** | UNITED ROCK PRODUCTS CORPORATION |
| **Address** | 1245 E ARROW HWY |
| | IRWINDALE, CA 91706 |

**Select AER Year:** 2010

## Criteria Pollutants (Tons per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| CO | Carbon Monoxide | 1.148 |
| NOX | Nitrogen Oxides | 0.640 |
| ROG | Reactive Organic Gases | 0.273 |
| SOX | Sulfur Oxides | 0.010 |
| TSP | Total Suspended Particulates | 20.906 |

## Toxic Pollutants (Pounds per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| 106990 | 1,3-Butadiene | 1.042 |
| 7664417 | Ammonia | 2.105 |
| 7440382 | Arsenic | 0.135 |
| 71432 | Benzene | 5.567 |
| 7440417 | Beryllium | 0.014 |
| 7440439 | Cadmium | 0.020 |
| 18540299 | Chromium (VI) | 0.006 |
| 50000 | Formaldehyde | 6.300 |
| 7439921 | Lead (inorganic) | 0.357 |
| 91203 | Naphthalene | 0.125 |
| 7440020 | Nickel | 0.502 |
| 1151 | PAHs, total, with components not reported | 0.094 |

Note - Data for 2007 represents the six-month transitional period, July through December 2007, when the rules requiring annual emissions reporting changed from a fiscal year to a calendar year basis.

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**Emissions**

| | |
|---|---|
| **Facility ID** | 65341 |
| **Company Name** | UNITED ROCK PRODUCTS CORPORATION |
| **Address** | 1245 E ARROW HWY |
| | IRWINDALE, CA 91706 |

**Select AER Year:** 2011

## Criteria Pollutants (Tons per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| CO | Carbon Monoxide | 1.151 |
| NOX | Nitrogen Oxides | 0.612 |
| ROG | Reactive Organic Gases | 0.153 |
| SOX | Sulfur Oxides | 0.010 |
| TSP | Total Suspended Particulates | 16.604 |

## Toxic Pollutants (Pounds per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| 106990 | 1,3-Butadiene | 1.021 |
| 7664417 | Ammonia | 2.009 |
| 7440382 | Arsenic | 0.108 |
| 71432 | Benzene | 3.419 |
| 7440417 | Beryllium | 0.011 |
| 7440439 | Cadmium | 0.016 |
| 18540299 | Chromium (VI) | 0.005 |
| 50000 | Formaldehyde | 6.110 |
| 7439921 | Lead (inorganic) | 0.287 |
| 91203 | Naphthalene | 0.124 |
| 7440020 | Nickel | 0.401 |
| 1151 | PAHs, total, with components not reported | 0.090 |

Note - Data for 2007 represents the six-month transitional period, July through December 2007, when the rules requiring annual emissions reporting changed from a fiscal year to a calendar year basis.

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**Emissions**

**Facility ID** 65341

**Company Name** UNITED ROCK PRODUCTS CORPORATION

**Address** 1245 E ARROW HWY

IRWINDALE, CA 91706

**Select AER Year:** 2012

## Criteria Pollutants (Tons per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| CO | Carbon Monoxide | 0.474 |
| NOX | Nitrogen Oxides | 0.292 |
| ROG | Reactive Organic Gases | 0.044 |
| SOX | Sulfur Oxides | 0.004 |
| TSP | Total Suspended Particulates | 15.588 |

## Toxic Pollutants (Pounds per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| 106990 | 1,3-Butadiene | 0.453 |
| 7664417 | Ammonia | 0.969 |
| 7440382 | Arsenic | 0.100 |
| 71432 | Benzene | 1.022 |
| 7440417 | Beryllium | 0.010 |
| 7440439 | Cadmium | 0.013 |
| 18540299 | Chromium (VI) | 0.004 |
| 50000 | Formaldehyde | 2.796 |
| 7439921 | Lead (inorganic) | 0.260 |
| 91203 | Naphthalene | 0.053 |
| 7440020 | Nickel | 0.372 |
| 1151 | PAHs, total, with components not reported | 0.043 |

Note - Data for 2007 represents the six-month transitional period, July through December 2007, when the rules requiring annual emissions reporting changed from a fiscal year to a calendar year basis.

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**Emissions**

| | |
|---|---|
| **Facility ID** | 65341 |
| **Company Name** | UNITED ROCK PRODUCTS CORPORATION |
| **Address** | 1245 E ARROW HWY |
| | IRWINDALE, CA 91706 |

**Select AER Year:** 2013

## Criteria Pollutants (Tons per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| CO | Carbon Monoxide | 0.504 |
| NOX | Nitrogen Oxides | 0.339 |
| ROG | Reactive Organic Gases | 0.048 |
| SOX | Sulfur Oxides | 0.005 |
| TSP | Total Suspended Particulates | 17.691 |

## Toxic Pollutants (Pounds per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| 106990 | 1,3-Butadiene | 0.506 |
| 7664417 | Ammonia | 1.129 |
| 7440382 | Arsenic | 0.114 |
| 71432 | Benzene | 1.098 |
| 7440417 | Beryllium | 0.012 |
| 7440439 | Cadmium | 0.015 |
| 18540299 | Chromium (VI) | 0.005 |
| 50000 | Formaldehyde | 3.176 |
| 7439921 | Lead (inorganic) | 0.295 |
| 91203 | Naphthalene | 0.059 |
| 7440020 | Nickel | 0.423 |
| 1151 | PAHs, total, with components not reported | 0.050 |

Note - Data for 2007 represents the six-month transitional period, July through December 2007, when the rules requiring annual emissions reporting changed from a fiscal year to a calendar year basis.

SOUTH COAST AQMD

# Facility INformation Detail (FIND)



**Emissions**

| | |
|---|---|
| **Facility ID** | 65341 |
| **Company Name** | UNITED ROCK PRODUCTS CORPORATION |
| **Address** | 1245 E ARROW HWY |
| | IRWINDALE, CA 91706 |

**Select AER Year:** 2014

## Criteria Pollutants (Tons per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| CO | Carbon Monoxide | 0.460 |
| NOX | Nitrogen Oxides | 0.315 |
| PM | Particulate Matter | 15.697 |
| SOX | Sulfur Oxides | 0.000 |
| VOC | Volatile Organic Compounds | 0.044 |

## Toxic Pollutants (Pounds per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| 106990 | 1,3-Butadiene | 0.466 |
| 7664417 | Ammonia | 1.040 |
| 7440382 | Arsenic | 0.101 |
| 71432 | Benzene | 1.003 |
| 7440417 | Beryllium | 0.010 |
| 7440439 | Cadmium | 0.014 |
| 18540299 | Chromium (VI) | 0.007 |
| 50000 | Formaldehyde | 2.934 |
| 7439921 | Lead (inorganic) | 0.262 |
| 7440020 | Nickel | 4.302 |
| 1151 | PAHs, total, with components not reported | 0.075 |

Note - Data for 2007 represents the six-month transitional period, July through December 2007, when the rules requiring annual emissions reporting changed from a fiscal year to a calendar year basis.

SOUTH COAST AQMD

# Facility INformation Detail (FIND)



**Emissions**

| | |
|---|---|
| **Facility ID** | 65341 |
| **Company Name** | UNITED ROCK PRODUCTS CORPORATION |
| **Address** | 1245 E ARROW HWY |
| | IRWINDALE, CA 91706 |

**Select AER Year:** 2015

## Criteria Pollutants (Tons per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| CO | Carbon Monoxide | 0.462 |
| NOX | Nitrogen Oxides | 0.326 |
| PM | Particulate Matter | 21.495 |
| SOX | Sulfur Oxides | 0.000 |
| VOC | Volatile Organic Compounds | 0.045 |

## Toxic Pollutants (Pounds per Year):

| Pollutant ID | Pollutant Description | Annual Emissions |
|---|---|---|
| 106990 | 1,3-Butadiene | 0.477 |
| 7664417 | Ammonia | 1.080 |
| 7440382 | Arsenic | 0.138 |
| 71432 | Benzene | 1.012 |
| 7440417 | Beryllium | 0.014 |
| 7440439 | Cadmium | 0.018 |
| 18540299 | Chromium (VI) | 0.006 |
| 50000 | Formaldehyde | 3.020 |
| 7439921 | Lead (inorganic) | 0.356 |
| 7440020 | Nickel | 0.511 |
| 1151 | PAHs, total, with components not reported | 0.077 |

Note - Data for 2007 represents the six-month transitional period, July through December 2007, when the rules requiring annual emissions reporting changed from a fiscal year to a calendar year basis.

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**Hearing Board**

| | |
|---|---|
| **Facility ID** | 65341 |
| **Company Name** | UNITED ROCK PRODUCTS CORPORATION |
| **Address** | 1245 E ARROW HWY |
| | IRWINDALE, CA 91706 |

View Hearing Board Documents

**Cases from Year 2003**

**This Facility has no Hearing Board Cases**

SOUTH COAST AQMD

# Facility INformation Detail (FIND)



## Facility Information

| | |
|---|---|
| **Facility ID** | 65341 |
| **Company Name** | UNITED ROCK PRODUCTS CORPORATION |
| **Address** | 1245 E ARROW HWY |
| | IRWINDALE, CA 91706 |

No Transportation Plan details exist for this facility.

## Registration Information

| | |
|---|---|
| Plan Sequence | Permanent Due Date |
| Program Year | Due Date |
| Program Type | Notification Date |
| Current Status | Current Status Date |

## Transportation Contact Information

| Plan Reviewer | Phone | Email |
|---|---|---|

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**Facility Details**

| | |
|---|---|
| **Facility ID** | 66241 |
| **Company Name** | UNITED ROCK PRODUCTS 065341 |
| **Address** | 1254 E ARROW HWY |
| | IRWINDALE, CA 91706 |

**Status** DUPLICATE

**Are there any back fees due?**

No.

| SIC Code | Description |
|---|---|
| 3273 | READY-MIXED CONCRETE |

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**Equipment List**

| | |
|---|---|
| **Facility ID** | 66241 |
| **Company Name** | UNITED ROCK PRODUCTS 065341 |
| **Address** | 1254 E ARROW HWY |
| | IRWINDALE, CA 91706 |

**No Equipment Listed**

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | **Compliance** | Emissions | Hearing Board | Transportation

**Compliance**

| | |
|---|---|
| **Facility ID** | 66241 |
| **Company Name** | UNITED ROCK PRODUCTS 065341 |
| **Address** | 1254 E ARROW HWY |
| | IRWINDALE, CA 91706 |

**Notices Of Violaton: NONE**

**Notices To Comply: NONE**

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | Compliance | Emissions | Hearing Board | Transportation

**Facility Details**

| | |
|---|---|
| **Facility ID** | 67343 |
| **Company Name** | UNITED ROCK PRODUCTS CORPORATION |
| **Address** | 1245 E ARROW HWY |
| | IRWINDALE, CA 91706 |
| **Status** | OUT OF BUSINESS |

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | **Equipment List** | Compliance | Emissions | Hearing Board | Transportation

**Equipment List**

| | |
|---|---|
| **Facility ID** | 67343 |
| **Company Name** | UNITED ROCK PRODUCTS CORPORATION |
| **Address** | 1245 E ARROW HWY |
| | IRWINDALE, CA 91706 |

**No Equipment Listed**

SOUTH COAST AQMD

# Facility INformation Detail (FIND)



**Facility Details**

| | |
|---|---|
| **Facility ID** | 102274 |
| **Company Name** | UNITED ROCK & CONCRETE CORPORATION |
| **Address** | VARIOUS LOCATIONS IN SCAQMD |
| | DIAMOND BAR, CA 91765 |

**Status** ACTIVE

**Are there any back fees due?**

No.

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | **Equipment List** | Compliance | Emissions | Hearing Board | Transportation

**Equipment List**

**Facility ID** 102274

**Company Name** UNITED ROCK & CONCRETE CORPORATION

**Address** VARIOUS LOCATIONS IN SCAQMD

DIAMOND BAR, CA 91765

| Appl_Nbr | Permit_Nbr | Issued_Date | Permit_Status | Eq_Type | Equip_Description | Appl_Date | Appl_Status |
|---|---|---|---|---|---|---|---|
| 295152 | | | | Basic | CONCRETE BATCH EQUIPMENT | 7/21/1994 | APPLICATION CANCELLED |
| 295155 | | | | Basic | STORAGE SILO CEMENT | 7/21/1994 | APPLICATION CANCELLED |
| 295153 | | | | Control | BAGHOUSE, AMBIENT TEMP (>100-500 SQ FT) | 7/21/1994 | APPLICATION CANCELLED |
| 295156 | | | | Control | BAGHOUSE, AMBIENT TEMP (>100-500 SQ FT) | 7/21/1994 | APPLICATION CANCELLED |
| 295154 | | | | Control | BAGHOUSE, AMBIENT TEMP (>500 SQ FT) | 7/21/1994 | APPLICATION CANCELLED |
| 295155 | | | | Control | DRY FILTER (>100-500 SQ FT) | 7/21/1994 | APPLICATION CANCELLED |

First Prev Page 1 of 1 (6 records) Next Last Page 1 Export To Excel

SOUTH COAST AQMD

# Facility INformation Detail (FIND)



**Compliance**

| | |
|---|---|
| **Facility ID** | 102274 |
| **Company Name** | UNITED ROCK & CONCRETE CORPORATION |
| **Address** | VARIOUS LOCATIONS IN SCAQMD |
| | DIAMOND BAR, CA 91765 |

**Notices Of Violaton: NONE**

**Notices To Comply: NONE**

SOUTH COAST AQMD

# Facility INformation Detail (FIND)

Search Again | Search Results | Facility Details | Equipment List | Compliance | **Emissions** | Hearing Board | Transportation

**Emissions**

| | |
|---|---|
| **Facility ID** | 102274 |
| **Company Name** | UNITED ROCK & CONCRETE CORPORATION |
| **Address** | VARIOUS LOCATIONS IN SCAQMD |
| | DIAMOND BAR, CA 91765 |

**Select AER Year:** 2015

## Criteria Pollutants: Not Available

## Toxic Pollutants: Not Available

Note - Data for 2007 represents the six-month transitional period, July through December 2007, when the rules requiring annual emissions reporting changed from a fiscal year to a calendar year basis.

ROUTING RECORD

| DATE | FROM | TO | ACTION |
|---|---|---|---|
| 3-14-89 | MGM | AA | CLASS III ✓ |
| 5/23/89 | AA | MGM | P/O |
| 6-14-89 | KAM | mGm | P/O |
| 6/14/89 | MGM | PMJ | P/O ✓ |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

REFERENCE TO OTHER APCD
RECORDS INCLUDING VARIANCES:

65341

ALPHA FILE

| NEWSOURCE | DATA ENTRY |
|---|---|
| ☐ PC | |
| ☑ PO | 6-16-89 |

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D08808
A/N 185072
Page 1

**This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.**

**Legal Owner**
**Or Operator:** UNITED ROCK PRODUCTS CORPORATION

ID 65341

**Equipment**
**located at:** 1245 EAST ARROW HIGHWAY, IRWINDALE, CALIFORNIA

**Equipment Description:**

CRUSHED AGGREGATE RECLAIMING, STORAGE AND LOADOUT SYSTEM CONSISTING OF:

1. BELT CONVEYOR NO. 27, RECLAIMING, 300 H.P. WITH A 1 H.P. DISCHARGE TURNHEAD.

2. SIX STORAGE BINS, NOS. 7 THROUGH 12; 200 TONS CAPACITY EACH, WITH PNEUMATICALLY OPERATED GATES.

3. FOUR AIR COMPRESSORS, TWO 20 H.P. AND TWO 15 H.P.

FILE COPY

**Conditions:**

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. NOT MORE THAN 8000 TONS OF AGGREGATE SHALL BE PROCESSED IN ANY ONE DAY.

4. AGGREGATE CHARGED AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Raquel Puerta/jas
July 6, 1989

UNITED ROCK PRODUCTS CORP.
ATTN: THOMAS S. TEDESCO
13131 LOS ANGELES ST.
IRWINDALE, CA. 91706

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
## 9150 Flair Drive El Monte, CA 91731

34055
13

APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE AND EXCAVATE AND
FOR PLANS REQUIRED BY THE EXECUTIVE OFFICER
FOR FEE INFORMATION AND SMALL BUSINESS EXEMPTION
SEE REVERSE SIDE

PLEASE TYPE OR PRINT

SCAQMD USE: SEC | TS | ID NUMBER 65341

1A. PERMIT TO BE ISSUED TO:
United Rock Products Corporation
BUSINESS LICENSE NAME OF ORGANIZATION THAT IS TO RECEIVE PERMIT

1 B.
NAME (OR NAMES) OF OWNER OR PRINCIPAL PARTNERS DOING BUSINESS AS (DBA) ABOVE ORGANIZATION

2 A. MAILING ADDRESS:
13131 Los Angeles Street (NUMBER STREET) | Irwindale (CITY OR COMMUNITY) | California (STATE)
2 B. 91706 (ZIP CODE)

3 A. EQUIPMENT LOCATION (IF SAME ENTER "SAME")
1245 East Arrow Highway (NUMBER STREET) | Irwindale (CITY OR COMMUNITY) | 91706 (ZIP)
3 B. Buena Vista Street (NEAREST INTERSECTING STREET)

4 A. CONTACT PERSON (INITIALS & NAME.)
Thomas S. Tedesco
4 B. CONTACT PHONE NO. (AREA & NO.):
(818 960-3948

5. EQUIPMENT. APPLICATION IS HEREBY MADE FOR PERMIT TO OPERATE THE FOLLOWING EQUIPMENT:
Crushed Aggregate Reclaiming, Storage and Loadout System

6. IF THIS EQUIPMENT HAD A PREVIOUS WRITTEN PERMIT, STATE NAME OF CORPORATION, COMPANY, OR INDIVIDUAL OWNER THAT OPERATED THIS EQUIPMENT, AND STATE PREVIOUS AIR POLLUTION CONTROL DISTRICT PERMIT NUMBER
Sully-Miller Contracting Company (NAME) | P69033 (PREVIOUS PERMIT NUMBER)

7 PERMIT APPLICATION FOR EQUIPMENT
- NEW CONSTRUCTION ☐
- ALTERATION ☐
- CHANGE OF LOCATION ☐
- REINSTATE NON—PAYMENT P O FEES DUE ☐
- CHANGE OF OWNERSHIP ☒ 4/
- EXISTING EQUIPMENT IN OPERATION WITHOUT PRIOR PERMIT ☐
- CHANGE OF CONDITIONS ☐

8.TYPE OF ORGANIZATION:
- CORPORATION ☒
- PARTNERSHIP ☐
- INDIVIDUAL OWNER ☐
- LOCAL GOV'T AGENCY ☐
- STATE AGENCY ☐
- FEDERAL AGENCY ☐
- UTILITY ☐

9. ESTIMATED COST OF EQUIPMENT OR ALTERATION
BASIC EQUIPMENT $ N/A
AIR POLLUTION CONTROL EQUIPMENT $ N/A

10. FOR THE NEW CONSTRUCTION, ALTERATION, TRANSFER OF OWNERSHIP OR LOCATION, WHAT IS
ESTIMATED STARTING DATE? 1 January 1989
ESTIMATED COMPLETION DATE? N/A

11. GENERAL NATURE OF BUSINESS
Mining and Sales of Aggregates

12. PRINCIPAL PRODUCT
Rock and Sand

13. DO YOU CLAIM CONFIDENTIALITY OF DATA?
YES ☐ NO ☒
IF YES STATE NATURE OF DATA ON SEPARATE SHEET

14.NORMAL OPERATING HOURS OF SUBJECT EQUIPMENT
HOURS/DAY 16
DAYS/WEEK 6
WEEKS/YEAR 52

15.HAS A CEQA DOCUMENT BEEN PREPARED FOR THIS PROJECT? YES ☐ NO ☒

15a. ARE ALL COMPANIES' FACILITIES IN CALIFORNIA IN COMPLIANCE WITH AIR POLLUTION RULES?
YES ☒ NO ☐

16.SIGNATURE OF RESPONSIBLE MEMBER OF ORGANIZATION:
Thomas S Tedesco

17.OFFICIAL TITLE OF SIGNER:
~~President~~ Chairmen

18.TYPED OR PRINTED NAME OF SIGNER:
Thomas S. Tedesco

19.PHONE NO.
818-960-3948

20.DATE

SCAQMD USE

SIC NO.
EQUIP. CAT. NO.: 107200 - - / - -
SCH/STEP: 16 JAN 6 1989
APPLICATION NO. 185072
PERMIT NO.
TYPE (B OR C)
WORK UNITS A/C P/O
ASSIGNMENT 2 UNIT ENGR
CLASS 1 5
VALIDATION 12/30/88
FILING FEE. $ 2640
CHECK OR MONEY ORDER NO. 01 50

Form 400A - REVISED 8-84 PRIOR VERSIONS NOT VALID 2833 1/19/89 AP. (Continued on reverse) C-1

SEE REVERSE FOR FEES REQUIRED UPON FILING

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

## FILING FEES

Except as noted following, a $250 filing fee must accompany each application for Permit to Construct/Operate.

1. For small businesses the filing fee is $160. The small business declaration form below must be completed in order to be considered a small business.

2. Each application for change of ownership requires a $110 transfer fee.

3. All applicants, including state, local governmental and public districts, must pay a permit evaluation fee. Such fees are in addition to filing fees and change of ownership fees.

4. All state, local governmental agencies or public districts are exempt from paying filing fees and change of ownership fees.

SEE APPLICATION INSTRUCTIONS FORM 400-B FOR ADDITIONAL INSTRUCTIONS
Call (818) 572-6212 for assistance
SUPPLEMENTAL DATA FORMS REQUIRED

Special supplemental data forms must be completed for: BOILERS, LIQUID HEATERS, DEGREASERS, DRY CLEANING EQUIPMENT, OVENS, SPRAY BOOTHS AND STORAGE TANKS.

## SMALL BUSINESS DECLARATION

In order to be considered a small business as specified in Regulation XIII, this form must be completed. If not a small business, do not complete this form.

A "Small Business" is a business which is independently owned and operated and meets the following criteria or, if affiliated with another concern, the combined activities of both concerns meet these criteria:

The number of employees is 10 or less; and
*The total annual receipts are $500,000 or less.*

I hereby certify, under penalty of perjury, that the business enterprise containing the emission source(s) for which an SCAQMD Permit to Construct or Permit to Operate is being applied herein qualifies as a SMALL BUSINESS, based on compliance with the definition above:

Signature of Applicant _____ Date _____ ( ) Telephone Number

Printed or Typed Signature _____ Company Name

# AEIS SHEET

NAME OF FIRM UNITED ROCK PRODUCTS CORPORATION COMPANY I.D. 65341

LOCATION ADDRESS 1245 E. ARROW HWY, IRWINDALE, CA 91706

REASON FOR INACTIVATION: 1. ALTERATION 2. CHANGE OF OPERATOR 3. MOVED 4. REMOVED 5. OUT OF BUSINESS 6. BANKING ISSUED 7. OTHER _____

SUBS. APPLICATION NO. _____ INACTIVATION DATE __/__/__

---

ACTION CODE (A) C D A = ADD DATA C = CHANGE DATA D = DELETE DATA

---

*PERMIT NUMBER D08808

APPLICATION NUMBER 165072

*ISSUE DATE 07/07/89

**INSTALLATION DATE __/__/__

**EQUIPMENT B CAT. 107200

**EQUIPMENT C CAT. __

**DESCRIPTION Aggregate Reclaiming + Loadout Sys

PERMIT TYPE (B, C, or D) B

SCHEDULE/STEP 1/G

---

*SECTION __

*SECTOR __

| EMISSIONS | $R_1$ | $R_2$ |
|---|---|---|
| rHC | | |
| tHC | | |
| $NO_x$ | | |
| $SO_2$ | | |
| CO | | |
| Part | 10 L | 10 L |
| Other 1 | | |
| Other 2 | | |
| Other 3 | | |

| Weeks Operated | | Mon | Tues | Weds | Thurs | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|---|
| Per Year 52 | Daily Start Time | 08 | 06 | 06 | 06 | 08 | 08 | __ |
| | Daily Stop Time | 16 | 16 | 16 | 16 | 16 | 16 | __ |
| | *UTM Coordinates X | __ | __ | __ | __ | __ | __ | __ |

*Not to be completed by the engineer.
**Fill out only if different from application.

Engineer ARTURO ARREOLA Date 5/23/89

# INSTRUCTIONS FOR PERMIT WORDING & FEE DATA

**APPLICATION No.** 185072

**NEED EIR?** ☐ YES ☑ NO

| DISPOSITION | PERMIT UNIT WORDING | CONDITIONS |
|---|---|---|
| ☑ APPROVED | ☐ BELOW | ☐ NONE |
| ☐ DENIED | ☐ ON FIELD REPORT DATED _____ | ☑ NUMBERS LISTED 36 |
| ☐ CANCELED — DON'T REFUND FILING FEE | ☐ ON PAGE _____ OF PROCESS SHEETS | ☐ SPECIAL (SEE PERMIT UNIT WORDING & CONDITIONS) |
| ☐ CANCELED — REFUND FILING FEE | ☑ ON PERMIT P69033 ATTACHED | ☐ AS ON _____ |
| SEE COMMENTS | | |

**PREVIOUS PERMIT NO.** P69033

**PERMIT UNIT WORDING & CONDITIONS:**

NOT MORE THAN 9000 TON OF AGGREGATE SHALL BE PROCESSED IN ANY ONE DAY.

( ) P/C ( ✓ ) P/O ( ) P/O NO P/C ( ) NOTICE TO APPLY WRITTEN

☑ CHANGE OF OWNERSHIP, large business ☐ ALTERATION ☐ TIME & MATERIALS

☐ CHANGE OF OWNERSHIP, small business ☐ FEDERAL GOVERNMENT

☐ CHANGE OF CONDITIONS ☐ GOVERNMENT (other)

| SCHEDULE | ① H P | ② 1000s BTU | ③ KVA | ④ SQ. FT | ⑤ GALLONS | ⑥ GASOLINE FUELING | ⑦ EXCEPTIONS |
|---|---|---|---|---|---|---|---|
| RATING | 371 | | | | | | |
| FEE | 6230 | | | | | | |

1. PERMIT EVALUATION FEE — RULE 301.1(b)(1)

A. SCHEDULE _____ STEP _____ = FEE $ _____

B. TIME & MATERIALS (T & M): HOURS _____ X $50/HOUR = FEE $ _____

C. CHANGE OF OWNERSHIP, large business or ALTERATION — EXCEPT T & M: DISPOSITIONED

SCHEDULE 1 STEP G = FEE 6230 X 50% = FEE $ 3115.00

D. ADDITIONAL FEE FOR NO P/C: ABOVE FEE _____ X 50% = FEE $ _____

2. EIR/MODELING FEE — RULE 301.1(g): HOURS _____ X $50/HOUR = FEE $ _____

3. 301(d)(1)(C) CREDIT OR DIFFERENCE DUE TO INCORRECT INFORMATION

_____ ADJUSTED FEE $ _____

Comments: _____

**TOTAL FEE** $ 3115.00

**REFUND** 0

WORK UNIT# 3

RECOMMENDED BY ARTURO ARREOLA DATE 5/23/89 REVIEWING ENGINEER KM DATE 6/14/89

## GENERAL STANDARD CONDITIONS

3. This equipment must not be operated unless (it)(the) _____ _____ (is)(are) vented only to air pollution control equipment which is in full use and which has been issued (an operating permit) (a permit to construct) by the Executive Officer.
4. a. Fuel oil supplied at the burner must be No. _____ or lighter grade as described by the latest ASTM specifications and must have a sulfur content of not more than 0. _____ % by weight.
   b. No. _____ fuel oil supplied at the burner must be at a temperature of _____ °F or greater.
5. A temperature of not less than _____ °F must be maintained in the (afterburner) (combustion chamber) when the equipment it serves is in operation.
6. Not less than _____ gallons per minute of (water)(scrubbing solution) at a pressure of _____ to _____ psig must be supplied to the scrubber(_____) when the equipment it serves is in operation.
7. This oven must not be operated at temperatures above _____ °F.
8. Steam atomization only must be employed during the entire period of fuel oil burning.
9. This equipment must not discharge to the atmosphere radioactive materials in excess of the permissible limits established by existing authorities.
10. Whenever air contaminants are vented to the boiler firebox, all burners must be continously operated either with natural gas at a burner pressure of not less than _____ (psig) (inches water column) or with fuel oil at an equivalent heat input.

### MECHANICAL UNIT

11. Circulating water to the _____ must be maintained at pH _____ or (higher) (lower).
13. This equipment must not be used to vent more than _____ at any one time.
27. The (incinerator) (equipment) must be operated by personnel properly trained in its operation.
29. The (mixing chamber burner(s)) (afterburner) (and water spray chamber) must be used throughout the burning period.
36. (Aggregate)(~~Material~~), charged, and (aggregate) (~~material~~) in process ~~must~~ shall be kept sufficiently moist to prevent dust emissions.
58. This furnace may be used only to process EXCESS WAX.
61. The cloth bags in the silo filter vent(s) must be thoroughly cleaned immediately after each load of material is received.
71. Plastics or materials containing plastics must not be charged into this (incinerator) (furnace).
74. A mechanical gauge must be installed so as to indicate, in inches water column, the static pressure differential across the bags.
75. A flowmeter, indicating G.P.M. (and a pressure gauge indicating in P.S.I.), must be installed in the water supply line to the scrubber.
84. Dust collected in the baghouse must be discharged only into closed containers.
85. This incinerator may be used only to cremate human or animal anatomical parts.
86. Slide dampers must be installed in each branch duct of the exhaust system.

SCAQMD
ENGINEERING DIVISION
NEW SOURCE REVIEW REGULATION XIII DATA SHEET

1 ☐ P/C 2 ☐ P/O 3 ☑ C/O

COMPANY ID# 65341
APPLICATION # 185079

COMPANY NAME UNITED ROCK PRODUCTS CORPORATION DATE 5/23/89
EQUIPMENT LOCATION 1245 E. ARROW HWY, IRWINDALE, CA 91706

APPLICABLE NEW SOURCE RULE: (equip. installed or Class I applc'n rec'd...)
1 ☐ None (before 10-8-76)
2 ☐ Rule 213 (before 7-1-79 and on or after 10-8-76)
3 ☐ Original Reg XIII (before 1-1-83 and on or after 7-1-79)
4 ☐ 1st Revision Reg XIII (before 7-12-85 and on or after 1-1-83)
5 ☑ 2nd Revision Reg XIII (on or after 7-12-85)

SPECIAL CASES:
1 ☐ Banking Ref Applc'n #_____
2 ☐ Reg 13 Exempt
3 ☐ Mitigations 4 ☐ Tradeoffs
5 ☐ Toxic Materials
6 ☐ Banking Cert./Reg. Used
7 ☐ Rule 219 Exemptions
8 ☐ Alter.-Prev. App. #_____

EMISSION INCREASE OR DECREASE FROM THIS PERMIT UNIT CREDITED TO THIS LOCATION (Indicate "+" or "-"): [] 1.1 factor used for Max

| CONTAMINANT | RHC | $NO_x$ | $SO_x$ | CO | Part | Lead | UnRHC |
|---|---|---|---|---|---|---|---|
| Max #/day | | | | | | | |
| Actual w/internal BACT #/day | | | | | | | |
| Actual w/o BACT #/day | | | | | | | |

REGULATION XIII EXEMPT EMISSIONS (Indicate "+" or "-")
Exempt by Rule 1304 (____) (____) or Rule 213(f) (____) (____)

| CONTAMINANT | RHC | $NO_x$ | $SO_x$ | CO | Part | Lead | UnRHC |
|---|---|---|---|---|---|---|---|
| Max #/day | | | | | | | |
| Actual #/day | | | | | | | |

MITIGATIONS ACHIEVED CONCURRENT WITH THIS APPLC'N (Indicate "+" or "-")

| APPLIC'N NUMBER | RHC #/day | NOx #/day | $SO_x$ #/day | CO #/day | Part #/day | Lead #/day | UnRHC #/day |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Engineer [illegible] Date 5/23/89 Reviewing Engineer VM Date 6/14/89

Revised 9/85

76P2304-12/71

# PERMIT TO OPERATE

P 69033

SECTOR BP

Operation under this permit must be conducted in compliance with all data and specifications included with the application under which this permit is issued. The equipment must be properly maintained and kept in good operating condition at all times. In accordance with Rule 10(c), this Permit to Operate must be posted or accessible.

BLUE DIAMOND MATERIALS DIV.

**LEGAL OWNER OR OPERATOR:** SULLY-MILLER CONTRACTING COMPANY

Appl. No. A-35746
PREVIOUS PERMIT NO. P-38960

**EQUIPMENT LOCATED AT:** 1245 EAST ARROW HIGHWAY
IRWINDALE, CALIFORNIA

**EQUIPMENT DESCRIPTION AND CONDITIONS:** CRUSHED AGGREGATE RECLAIMING, STORAGE AND LOADOUT SYSTEM CONSISTING OF:

1. BELT CONVEYOR NO. 27, RECLAIMING, 300 H.P. WITH A 1 H.P. DISCHARGE TURNHEAD.
2. SIX STORAGE BINS, NOS. 7 THROUGH 12; 200 TONS CAPACITY EACH, WITH PNEUMATICALLY OPERATED GATES.
3. FOUR AIR COMPRESSORS, TWO 20 H.P. AND TWO 15 H.P.

- CONDITION -

AGGREGATE CHARGED, AND AGGREGATE IN PROCESS MUST BE KEPT SUFFICIENTLY MOIST TO PREVENT DUST EMISSIONS.

THIS PERMIT BECOMES VOID UPON ANY CHANGE OF OWNERSHIP OR ADDRESS

This permit does not authorize the emission of air contaminants in excess of those allowed by Division 20, Chapter 2, Article 3, of the Health and Safety Code of the State of California or the Rules and Regulations of the Air Pollution Control District. This permit cannot be considered as permission to violate existing laws, ordinances, regulation or statutes of other governmental agencies.

Filing fee only - total cost of permit - filing fee paid on validation number 27259, dated 2-26-75."

VOID UNLESS VALIDATED

AIR POLLUTION CONTROL OFFICER

BY Ralph Thompson, Permit Section

DATE January 12, 1977

| SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT | PAGES 2 | PAGE 1 |
|---|---|---|
| ENGINEERING DIVISION | APPL. NO. 185071-7 | DATE 5/23/89 |
| APPLICATION PROCESSING AND CALCULATIONS | PROCESSED BY A ARREOLA | CHECKED BY |

## CHANGE OF OWNERSHIP

United Rock Products Corporation
13131 Los Angeles Street
Irwindale, CA 91706

**EQUIPMENT LOCATION**

1245 East Arrow Highway
Irwindale, CA 91706

**EQUIPMENT DESCRIPTION**

Refer to copy of prior permit in this file.

**HISTORY**

All ARE INACTIVE

A change of ownership took place January 1, 1989. Blue Diamond Materials, Division of Sully Miller Contracting Company was bought by United Rock Products Corporation.

| NEW APPL. | OLD APPL. | MICROFICHE NUMBER | DESCRIPTION |
|---|---|---|---|
| 185071 | A85747 | 1123-D5 | Primary Crusher |
| 185072 | A85746 | 1124-A1 | Pre-crushing System no. 2 |
| 185073 | A85745 | 1124-C25 | Sand & Aggregate Reclaim |
| 185074 | A85742 | 1123-J5 | Pre-crushing System No. 1 |
| 185075 | A85748 | 1123-H10 | Base Material Handling |
| 185076 | A87774 | 1123-A1 | Aggregate Transfer System |
| 185077 | C31948 | 1125-C18 | Aggregate Processing System |

NO ENFORCEMENT ACTIVITY FOUND.

**PROCESS DESCRIPTION & CALCULATIONS**

No changes to the equipment or process rate has taken place. Refer to microfiche listed above, corresponding to old application under the previous owner.

**EVALUATION**

Refer to old application, (REGULATIONS NOT AFFECTED).

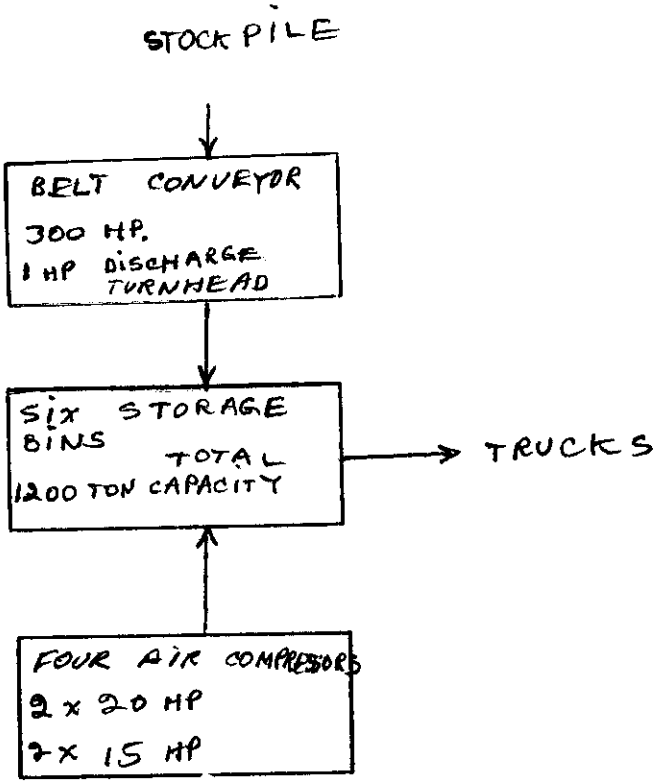
Reg XIII: Reg XIII (05) does not apply since this is a change of ownership.

**RECOMMENDATION**

This equipment is expected to continue to comply with all rules and regulations of the SCAQMD. A Permit to Operate is recommended.

A/N 185072

CRUSHED AGGREGATE RECLAIMING, STORAGE AND LOADOUT SYSTEM




AA
5-31-89

Press f5 to continue

ENG930 EMISSION THRESHOLD / NEWSOURCE

name: UNITED ROCK & CONCRETE CORP company id: 065341
address: 1245 E ARROW HWY date: 03/10/89
city: IRWINDALE I user: NS11

INCREASE (+) DECREASE (-) SUBSEQUENT TO 10-8-76

| # | I | M | date | appl | p/o | rl | RHC #/day | NOX #/day | SO2 #/day | CO #/day | PART #/day | LEAD #/day | UNRHC #/day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01 | | | 840105 | 116681 | C1 | 04 | | | | | 2 | | |
| 02 | | | 850107 | C31948 | C2 | 03 | | | | | | | |
| 03 | | | 850220 | 125992 | C1 | 04 | | | | | -409 | | |
| 04 | | | 850220 | 125994 | C1 | 04 | | | | | 1 | | |
| 05 | | | 850220 | 125996 | C1 | 04 | | | | | | | |
| 06 | | | 850220 | 125997 | C1 | 04 | 8 | 97 | 51 | 4 | 17269 | | |
| 07 | | | 850220 | 125999 | C1 | 04 | | | | | | | |
| 08 | | | 850220 | 126000 | C1 | 04 | | | | | 6 | | |
| 09 | | | 850220 | 126001 | C1 | 04 | 1 | 2 | 3 | 1 | 1 | | |
| 10 | | | 850220 | 126002 | C1 | 04 | | | | | -16762 | | |
| | | | | | | | | | | | | | |

TRADEOFF TOTAL
exempt total
TOTAL 9 99 54 5 108

# ENGINEERING DIVISION....MEMORANDUM

| TO | FROM | DATE |
|---|---|---|
| FILE | ARTURO ARREOLA | 5-23-89 |
| REFERENCE | | PERMIT APPL. NO. |
| UNITED ROCK PRODUCTS CORPORATION | | 185074-7 |
| SUBJECT | | |
| UNITED ROCK & CONCRETE CORPORATION | | 185090-3 |

MANY ATTEMPTS WERE MADE TO CONTACT THE DEPARTMENT OF STATE TO CONFIRM THE CHANGE OF OWNERSHIP, BUT THE LINE IS ALWAYS BUSY.

ANOTHER PHONE CALL WAS MADE TO MR. THOMAS S. TEDESCO, CHAIRMAN AND THE FOLLOW WAS CONFIRMED:

UNITED ROCK PRODUCTS CORPORATION AND UNITED ROCK & CONCRETE CORPORATION ARE DISTINCT LEGAL ENTITIES WHICH HAVE BOUGHT ALL ASSET OF BLUE DIAMOND MATERIALS, DIVISION OF SULLY MILLER CONTRACTING COMPANY.

A CHANGE OF OWNERSHIP HAS OCCURRED.

# ENGINEERING DIVISION....MEMORANDUM

| TO | FROM | DATE |
|---|---|---|
| FILE | ARTURO ARREOLA | 3-14-89 |
| REFERENCE. UNITED ROCK PRODUCTS CORPORATION | | PERMIT APPL. NO. 1850 |

SUBJECT

T/C TO MR. THOMAS TEDESCO
(213) 564-1866 — NOT IN; MESSAGE LEFT

3/17/89
T/C TO MR. TEDESCO — LEFT MESSAGE

4/21/89
T/C — LEFT MESSAGE

5/2/87 —
T/C TO MR. THOMAS TEDESCO — CONFIRMED THAT THIS ONLY A CHANGE OF OWNERSHIP WITH CHANGES TO THE EQUIPMENT OR FLOWRATES.

ROUTING RECORD

| DATE | FROM | TO | ACTION |
|---|---|---|---|
| 3-14-89 | MGM | AA | CLASS III ✓ |
| 5/28/89 | AA | MGM | P/O |
| 6-14-89 | KAM | MGM | P/O |
| 6/14/89 | MGM | APU | P/O ✓ |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

REFERENCE TO OTHER APCD RECORDS INCLUDING VARIANCES: ~~18391~~ 65341

**ALPHA FILE**

NEWSOURCE DATA ENTRY

☐ PC _____

☑ PO MM 6-16-89

18CR13

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D08809
A/N 185073
Page 1

**This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.**

**Legal Owner**
**Or Operator:** UNITED ROCK PRODUCTS CORPORATION

ID 65341

**Equipment**
**located at:** 1245 EAST ARROW HIGHWAY, IRWINDALE, CALIFORNIA

**Equipment Description:**

WASHED SAND AND AGGREGATE RECLAIMING, STORAGE, AND LOADOUT SYSTEM CONSISTING OF:

1. BELT CONVEYOR NO. C-26, WASHED MATERIALS RECLAIMING, 250 H.P. WITH A 1 H.P. DISCHARGE TURNHEAD.

2. SIX STORAGE BINS, NOS. 1 THROUGH 6; 200 TON CAPACITY EACH, WITH PNEUMATICALLY OPERATED GATES.

3. FOUR AIR COMPRESSORS, TWO 20 H.P. AND TWO 15 H.P.

FILE COPY

**Conditions:**

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. NOT MORE THAN 8000 TONS OF SAND AND AGGREGATE SHALL BE PROCESSED IN ANY ONE DAY.

4. AGGREGATE CHARGED AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Raquel Puerta/jas
July 6, 1989

UNITED ROCK PRODUCTS CORP.
ATTN: THOMAS S. TEDESCO
13131 LOS ANGELES ST.
IRWINDALE, CA. 91706

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
## 9150 Flair Drive El Monte, CA 91731

3600 55/13

APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE AND EXCAVATE AND
FOR PLANS REQUIRED BY THE EXECUTIVE OFFICER
FOR FEE INFORMATION AND SMALL BUSINESS EXEMPTION
SEE REVERSE SIDE

PLEASE TYPE OR PRINT

SCAQMD USE: SEC | TS | ID NUMBER 63341

1A. PERMIT TO BE ISSUED TO:
United Rock Products Corporation
BUSINESS LICENSE NAME OF ORGANIZATION THAT IS TO RECEIVE PERMIT

1 B.
NAME (OR NAMES) OF OWNER OR PRINCIPAL PARTNERS DOING BUSINESS AS (DBA) ABOVE ORGANIZATION

2 A. MAILING ADDRESS:
13131 Los Angeles Street (NUMBER STREET) | Irwindale (CITY OR COMMUNITY) | California (STATE)

2 B.
91706 (ZIP CODE)

3 A. EQUIPMENT LOCATION (IF SAME ENTER "SAME")
1245 East Arrow Highway (NUMBER STREET) | Irwindale (CITY OR COMMUNITY) | 91706 (ZIP)

3 B.
Buena Vista Street
NEAREST INTERSECTING STREET

4 A. CONTACT PERSON (INITIALS & NAME.)
Thomas S. Tedesco

4 B. CONTACT PHONE NO. (AREA & NO.):
(818 960-3948

5. EQUIPMENT. APPLICATION IS HEREBY MADE FOR PERMIT TO OPERATE THE FOLLOWING EQUIPMENT:
Washed Sand and Aggregate Reclaiming, Storage, and Loadout System

6. IF THIS EQUIPMENT HAD A PREVIOUS WRITTEN PERMIT, STATE NAME OF CORPORATION, COMPANY, OR INDIVIDUAL OWNER THAT OPERATED THIS EQUIPMENT, AND STATE PREVIOUS AIR POLLUTION CONTROL DISTRICT PERMIT NUMBER
Sully-Miller Contracting Company (NAME) | P69032 A05745 (PREVIOUS PERMIT NUMBER)

7 PERMIT APPLICATION FOR EQUIPMENT
- NEW CONSTRUCTION ☐
- ALTERATION ☐
- CHANGE OF LOCATION ☐
- REINSTATE NON—PAYMENT P O FEES DUE ☐ $0
- CHANGE OF OWNERSHIP ☒
- EXISTING EQUIPMENT IN OPERATION WITHOUT PRIOR PERMIT ☐
- CHANGE OF CONDITIONS ☐

8.TYPE OF ORGANIZATION:
- CORPORATION ☒
- PARTNERSHIP ☐
- INDIVIDUAL OWNER ☐
- LOCAL GOV'T AGENCY ☐
- STATE AGENCY ☐
- FEDERAL AGENCY ☐
- UTILITY ☐

9. ESTIMATED COST OF EQUIPMENT OR ALTERATION
BASIC EQUIPMENT $ N/A | AIR POLLUTION CONTROL EQUIPMENT $ N/A

10. FOR THE NEW CONSTRUCTION, ALTERATION, TRANSFER OF OWNERSHIP OR LOCATION, WHAT IS
ESTIMATED STARTING DATE? 1 January 1989 | ESTIMATED COMPLETION DATE? N/A

11. GENERAL NATURE OF BUSINESS
Mining and Sales of Aggregates

12. PRINCIPAL PRODUCT
Rock and Sand

13. DO YOU CLAIM CONFIDENTIALITY OF DATA?
YES ☐ NO ☒
IF YES STATE NATURE OF DATA ON SEPARATE SHEET

14 NORMAL OPERATING HOURS OF SUBJECT EQUIPMENT
HOURS/DAY 16
DAYS/WEEK 6
WEEKS/YEAR 52

15.HAS A CEQA DOCUMENT BEEN PREPARED FOR THIS PROJECT? YES ☐ NO ☒

15a. ARE ALL COMPANIES' FACILITIES IN CALIFORNIA IN COMPLIANCE WITH AIR POLLUTION RULES?
YES ☒ NO ☐

16.SIGNATURE OF RESPONSIBLE MEMBER OF ORGANIZATION:
Thomas S Tedesco

17.OFFICIAL TITLE OF SIGNER:
~~President~~ Chairman

18.TYPED OR PRINTED NAME OF SIGNER:
Thomas S. Tedesco

19.PHONE NO.
818-960-3948

20.DATE

SCAQMD USE

SIC NO.

EQUIP. CAT. NO. 102 200 — 1 — —

SCH/STEP: 1G JAN

APPLICATION NO. 185073

PERMIT NO.

TYPE B OR C

WORK UNITS A/C P/O

ASSIGNMENT 2 UNIT ENGR

CLASS I II III

VALIDATION 12/30/88

FILING FEE. $ 2640

CHECK OR MONEY ORDER NO. 01 $0

Form 400A - REVISED 8-84 PRIOR VERSIONS NOT VALID 35823 1/1/89 AP (Continued on reverse) C-1

SEE REVERSE FOR FEES REQUIRED UPON FILING

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

## FILING FEES

Except as noted following, a $250 filing fee must accompany each application for Permit to Construct/Operate.

1. For small businesses the filing fee is $160. The small business declaration form below must be completed in order to be considered a small business.

2. Each application for change of ownership requires a $110 transfer fee.

3. All applicants, including state, local governmental and public districts, must pay a permit evaluation fee. Such fees are in addition to filing fees and change of ownership fees.

4. All state, local governmental agencies or public districts are exempt from paying filing fees and change of ownership fees.

SEE APPLICATION INSTRUCTIONS FORM 400-B FOR ADDITIONAL INSTRUCTIONS
Call (818) 572-6212 for assistance
SUPPLEMENTAL DATA FORMS REQUIRED

Special supplemental data forms must be completed for: BOILERS, LIQUID HEATERS, DEGREASERS, DRY CLEANING EQUIPMENT, OVENS, SPRAY BOOTHS AND STORAGE TANKS.

## SMALL BUSINESS DECLARATION

In order to be considered a small business as specified in Regulation XIII, this form must be completed. If not a small business, do not complete this form.

A "Small Business": is a business which is independently owned and operated and meets the following criteria or, if affiliated with another concern, the combined activities of both concerns meet these criteria:

The number of employees is 10 or less; and
The total annual receipts are $500,000 or less.

I hereby certify, under penalty of perjury, that the business enterprise containing the emission source(s) for which an SCAQMD Permit to Construct or Permit to Operate is being applied herein qualifies as a SMALL BUSINESS, based on compliance with the definition above:

| Signature of Applicant | Date | ( ) Telephone Number |
|---|---|---|
| Printed or Typed Signature | Company Name | |

# AEIS SHEET

NAME OF FIRM UNITED ROCK PRODUCTS CORPORATION COMPANY I.D. 65341

LOCATION ADDRESS 1245 E. ARROW HWY, IRWINDALE, CA 91706

REASON FOR INACTIVATION: 1. ALTERATION 2. CHANGE OF OPERATOR 3. MOVED 4. REMOVED 5. OUT OF BUSINESS 6. BANKING ISSUED 7. OTHER ____

SUBS. APPLICATION NO. _____ INACTIVATION DATE __/__/__

---

ACTION CODE (A) C D A = ADD DATA C = CHANGE DATA D = DELETE DATA

---

*PERMIT NUMBER D08809

APPLICATION NUMBER 165073

*ISSUE DATE 07/06/89

**INSTALLATION DATE __/__/__

**EQUIPMENT B CAT. 107200

**EQUIPMENT C CAT. ___

**DESCRIPTION Sand & Aggregate Reclaiming Sys.

PERMIT TYPE (B, C, or D) B

SCHEDULE/STEP 1/6

---

*SECTION ___

*SECTOR ___

| EMISSIONS | $R_1$ | $R_2$ |
|---|---|---|
| rHC | ___ | ___ |
| tHC | ___ | ___ |
| $NO_x$ | ___ | ___ |
| $SO_2$ | ___ | ___ |
| CO | ___ | ___ |
| Part | 101 | 101 |
| Other 1 ___ | ___ | ___ |
| Other 2 ___ | ___ | ___ |
| Other 3 ___ | ___ | ___ |

| Weeks Operated | | Mon | Tues | Weds | Thurs | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|---|
| Per Year 52 | Daily Start Time | 08 | 08 | 08 | 08 | 08 | 08 | __ |
| | Daily Stop Time | 16 | 16 | 16 | 16 | 16 | 16 | __ |
| | *UTM Coordinates X | __ | __ | __ | __ | __ | __ | __ |

*Not to be completed by the engineer.
**Fill out only if different from application.

Engineer ARTURO ARREOLA Date 5/23/89

# INSTRUCTIONS FOR PERMIT WORDING & FEE DATA

**APPLICATION No.** 185073

**NEED EIR?** ☐ YES ☑ NO

| DISPOSITION | PERMIT UNIT WORDING | CONDITIONS |
|---|---|---|
| ☑ APPROVED | ☐ BELOW | ☐ NONE |
| ☐ DENIED | ☐ ON FIELD REPORT DATED _____ | ☑ NUMBERS LISTED 36 |
| ☐ CANCELED — DON'T REFUND FILING FEE | ☐ ON PAGE _____ OF PROCESS SHEETS | ☑ SPECIAL AQMD PERMIT UNIT WORDING & CONDITIONS |
| ☐ CANCELED — REFUND FILING FEE | ☑ ON PERMIT P69032 (copy attached) ATTACHED | ☐ ON _____ |
| SEE COMMENTS | | |

**PREVIOUS PERMIT NO.** P69032

**PERMIT UNIT WORDING & CONDITIONS:**

NOT MORE THAN 8000 TONS OF [redacted] SAND AND AGGREGATE SHALL BE PROCESSED IN ANY ONE DAY.

( ) P/C ( ) P/O ( ) P/O NO P/C ( ) NOTICE TO APPLY WRITTEN

☑ CHANGE OF OWNERSHIP, large business ☐ ALTERATION ☐ TIME & MATERIALS

☐ CHANGE OF OWNERSHIP, small business ☐ FEDERAL GOVERNMENT

☐ CHANGE OF CONDITIONS ☐ GOVERNMENT (other)

| SCHEDULE | ① H P | ② 1000s BTU | ③ KVA | ④ SQ FT | ⑤ GALLONS | ⑥ GASOLINE FUELING | ⑦ EXCEPTIONS |
|---|---|---|---|---|---|---|---|
| RATING | 321 | | | | | | |
| FEE | 6230 | | | | | | |

1. PERMIT EVALUATION FEE — RULE 301.1(b)(1)

A. SCHEDULE _____ STEP _____ = FEE $ _____

B. TIME & MATERIALS (T & M): HOURS _____ X $50/HOUR = FEE $ _____

C. CHANGE OF OWNERSHIP, large business or ALTERATION — EXCEPT T & M: DISPOSITIONED

SCHEDULE 1 STEP G = FEE 6230 X 50% = FEE $ 3115.00

D. ADDITIONAL FEE FOR NO P/C: ABOVE FEE _____ X 50% = FEE $ _____

2. EIR/MODELING FEE — RULE 301.1(g): HOURS _____ X $50/HOUR = FEE $ _____

3. 301(d)(1)(C) CREDIT OR DIFFERENCE DUE TO INCORRECT INFORMATION

_____ ADJUSTED FEE $ _____

Comments: _____

**TOTAL FEE** $3115.00

**REFUND** 0

WORK UNITS 3

RECOMMENDED BY ARTURO ARREOLA DATE 5/23/89 REVIEWING ENGINEER KM DATE 6/14/89

## GENERAL STANDARD CONDITIONS

3. This equipment must not be operated unless (it)(the) _____ _____ (is)(are) vented only to air pollution control equipment which is in full use and which has been issued (an operating permit) (a permit to construct) by the Executive Officer.
4. a. Fuel oil supplied at the burner must be No. _____ or lighter grade as described by the latest ASTM specifications and must have a sulfur content of not more than 0. _____ % by weight.
   b. No. _____ fuel oil supplied at the burner must be at a temperature of _____ °F or greater.
5. A temperature of not less than _____ °F must be maintained in the (afterburner) (combustion chamber) when the equipment it serves is in operation.
6. Not less than _____ gallons per minute of (water)(scrubbing solution) at a pressure of _____ to _____ psig must be supplied to the scrubber(_____) when the equipment it serves is in operation.
7. This oven must not be operated at temperatures above _____ °F.
8. Steam atomization only must be employed during the entire period of fuel oil burning.
9. This equipment must not discharge to the atmosphere radioactive materials in excess of the permissible limits established by existing authorities.
10. Whenever air contaminants are vented to the boiler firebox, all burners must be continously operated either with natural gas at a burner pressure of not less than _____ (psig) (inches water column) or with fuel oil at an equivalent heat input.

### MECHANICAL UNIT

11. Circulating water to the _____ must be maintained at pH _____ or (higher) (lower).
13. This equipment must not be used to vent more than _____ at any one time.
27. The (incinerator) (equipment) must be operated by personnel properly trained in its operation.
29. The (mixing chamber burner(s)) (afterburner) (and water spray chamber) must be used throughout the burning period.
36. (Aggregate)(~~Material~~) charged, and (aggregate) (~~material~~) in process shall ~~must~~ be kept sufficiently moist to prevent dust emissions.
58. This furnace may be used only to process EXCESSIVE _____.
61. The cloth bags in the silo filter vent(s) must be thoroughly cleaned immediately after each load of material is received.
71. Plastics or materials containing plastics must not be charged into this (incinerator) (furnace).
74. A mechanical gauge must be installed so as to indicate, in inches water column, the static pressure differential across the bags.
75. A flowmeter, indicating G.P.M. (and a pressure gauge indicating in P.S.I.), must be installed in the water supply line to the scrubber.
84. Dust collected in the baghouse must be discharged only into closed containers.
85. This incinerator may be used only to cremate human or animal anatomical parts.
86. Slide dampers must be installed in each branch duct of the exhaust system.

SCAQMD
ENGINEERING DIVISION
NEW SOURCE REVIEW REGULATION XIII DATA SHEET

1 ☐ P/C 2 ☐ P/O 3 ☒ C/O

COMPANY ID# 65341
APPLICATION # 185073

COMPANY NAME UNITED ROCK PRODUCTS CORPORATION DATE 5/23/89
EQUIPMENT LOCATION 1245 E. ARROW HWY, CA 91706

---

APPLICABLE NEW SOURCE RULE: (equip. installed or Class I applc'n rec'd...)

1 ☐ None (before 10-8-76)
2 ☐ Rule 213 (before 7-1-79 and on or after 10-8-76)
3 ☐ Original Reg XIII (before 1-1-83 and on or after 7-1-79)
4 ☐ 1st Revision Reg XIII (before 7-12-85 and on or after 1-1-83)
5 ☒ 2nd Revision Reg XIII (on or after 7-12-85)

---

SPECIAL CASES:

1 ☐ Banking Ref Applc'n #_____
2 ☐ Reg 13 Exempt
3 ☐ Mitigations 4 ☐ Tradeoffs
5 ☐ Toxic Materials
6 ☐ Banking Cert./Reg. Used
7 ☐ Rule 219 Exemptions
8 ☐ Alter.-Prev. App. #_____

---

EMISSION INCREASE OR DECREASE FROM THIS PERMIT UNIT CREDITED TO THIS LOCATION (Indicate "+" or "-"): [] 1.1 factor used for Max

| CONTAMINANT | RHC | $NO_x$ | $SO_x$ | CO | Part | Lead | UnRHC |
|---|---|---|---|---|---|---|---|
| Max #/day | | | | | | | |
| Actual w/internal BACT #/day | | | | | | | |
| Actual w/o BACT #/day | | | | | | | |

---

REGULATION XIII EXEMPT EMISSIONS (Indicate "+" or "-")

Exempt by Rule 1304 (____) (____) or Rule 213(f) (____) (____)

| CONTAMINANT | RHC | $NO_x$ | $SO_x$ | CO | Part | Lead | UnRHC |
|---|---|---|---|---|---|---|---|
| Max #/day | | | | | | | |
| Actual #/day | | | | | | | |

---

MITIGATIONS ACHIEVED CONCURRENT WITH THIS APPLC'N (Indicate "+" or "-")

| APPLIC'N NUMBER | RHC #/day | NOx #/day | $SO_x$ #/day | CO #/day | Part #/day | Lead #/day | UnRHC #/day |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Engineer 5/23/89 Date ARTURO ARRBOLA Reviewing Engineer KM Date 6/14/89

Revised 9/85

# PERMIT to OPERATE

P 69032

SECTOR BF

Operation under this permit must be conducted in compliance with all data and specifications included with the application under which this permit is issued. The equipment must be properly maintained and kept in good operating condition at all times. In accordance with Rule 10(c), this Permit to Operate must be posted or accessible.

LEGAL OWNER OR OPERATOR: BLUE DIAMOND MATERIALS DIV.
SULLY-MILLER CONTRACTING COMPANY

Appl. No. A-35745
PREVIOUS PERMIT NO. P-33964

EQUIPMENT LOCATED AT: 1245 EAST ARROW HIGHWAY
IRWINDALE, CALIFORNIA

EQUIPMENT DESCRIPTION AND CONDITIONS: WASHED SAND AND AGGREGATE RECLAIMING, STORAGE, AND LOADOUT SYSTEM CONSISTING OF.

1. BELT CONVEYOR, NO. C-26, WASHED MATERIALS RECLAIMING, 250 H.P. WITH A 1 H.P. DISCHARGE TURNHEAD.
2. SIX STORAGE BINS, NO. 1 THROUGH 6; 200 TON CAPACITY EACH, WITH PNEUMATICALLY OPERATED GATES.
3. FOUR AIR COMPRESSORS, TWO 20 H.P. AND TWO 15 H.P.

- CONDITION -

AGGREGATE CHARGED, AND AGGREGATE IN PROCESS MUST BE KEPT SUFFICIENTLY MOIST TO PREVENT DUST EMISSIONS.

This permit does not authorize the emission of air contaminants in excess of those allowed by Division 20, Chapter 2, Article 3, of the Health and Safety Code of the State of California or the Rules and Regulations of the Air Pollution Control District. This permit cannot be considered as permission to violate existing laws, ordinances, regulation or statutes of other governmental agencies. Filing fee only - total cost of permit-filing fee paid on validation number 27858, dated 2-26-75."

VOID UNLESS VALIDATED

AIR POLLUTION CONTROL OFFICER

BY Helen Thompson, Permit Section

DATE January 12, 1977

| SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT | PAGES 2 | PAGE 1 |
|---|---|---|
| ENGINEERING DIVISION | APPL. NO. 185071-7 | DATE 5/23/89 |
| APPLICATION PROCESSING AND CALCULATIONS | PROCESSED BY A ARREOLA | CHECKED BY KM 6/14/89 |

CHANGE OF OWNERSHIP

United Rock Products Corporation
13131 Los Angeles Street
Irwindale, CA 91706

EQUIPMENT LOCATION

1245 East Arrow Highway
Irwindale, CA 91706

**EQUIPMENT DESCRIPTION**

Refer to copy of prior permit in this file.

**HISTORY**

A change of ownership took place January 1, 1989. Blue Diamond Materials, Division of Sully Miller Contracting Company was bought by United Rock Products Corporation.

| NEW APPL. | OLD APPL. | MICROFICHE NUMBER | DESCRIPTION |
|---|---|---|---|
| 185071 | A85747 | 1123-D5 | Primary Crusher |
| 185072 | A85746 | 1124-A1 | Pre-crushing System no. 2 |
| 185073 | A85745 | 1124-C25 | Sand & Aggregate Reclaim |
| 185074 | A85742 | 1123-J5 | Pre-crushing System No. 1 |
| 185075 | A85748 | 1123-H10 | Base Material Handling |
| 185076 | A87774 | 1123-A1 | Aggregate Transfer System |
| 185077 | C31948 | 1125-C18 | Aggregate Processing System |

NO ENFORCEMENT ACTIVITY FOUND.

**PROCESS DESCRIPTION & CALCULATIONS**

No changes to the equipment or process rate has taken place. Refer to microfiche listed above, corresponding to old application under the previous owner.

**EVALUATION**

Refer to old application (REGULATIONS NOT AFFECTED).

Reg XIII: Reg XIII (05) does not apply since this is a change of ownership.

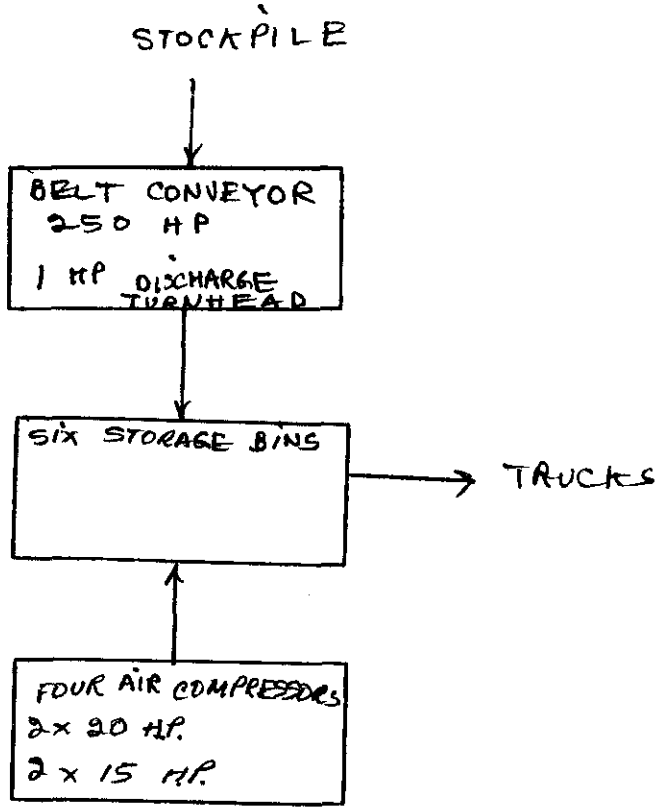
**RECOMMENDATION**

This equipment is expected to continue to comply with all rules and regulations of the SCAQMD. A Permit to Operate is recommended.

# BLOCK FLOW DIAGRAM

A/N 185073

WASHED SAND AND AGGREGATE RECLAIMING, STORAGE, & LOADOUT SYSTEM




AA

5-31-87

Press f5 to continue

ENG930 EMISSION THRESHOLD / NEWSOURCE

name: UNITED ROCK & CONCRETE CORP company id: 065341
address: 1245 E ARROW HWY date: 03/10/89
city: IRWINDALE I user: NS11

INCREASE (+) DECREASE (-) SUBSEQUENT TO 10-8-76

| L# | I | M | date | appl | p/o | 13 rl | RHC #/day | NOX #/day | SO2 #/day | CO #/day | PART #/day | LEAD #/day | UNRHC #/day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01 | | | 840105 | 116681 | C1 | 04 | | | | | 2 | | |
| 02 | | | 850107 | C31948 | C2 | 03 | | | | | | | |
| 03 | | | 850220 | 125992 | C1 | 04 | | | | | -409 | | |
| 04 | | | 850220 | 125994 | C1 | 04 | | | | | 1 | | |
| 05 | | | 850220 | 125996 | C1 | 04 | | | | | | | |
| 06 | | | 850220 | 125997 | C1 | 04 | 8 | 97 | 51 | 4 | 17269 | | |
| 07 | | | 850220 | 125999 | C1 | 04 | | | | | | | |
| 08 | | | 850220 | 126000 | C1 | 04 | | | | | 6 | | |
| 09 | | | 850220 | 126001 | C1 | 04 | 1 | 2 | 3 | 1 | 1 | | |
| 10 | | | 850220 | 126002 | C1 | 04 | | | | | -16762 | | |
| | | | | | | | | | | | | | |

TRADEOFF TOTAL
exempt total
TOTAL 9 99 54 5 108

# ENGINEERING DIVISION····MEMORANDUM

| TO | FROM | DATE |
|---|---|---|
| FILE | ARTURO ARREOLA | 5-23-89 |
| REFERENCE | | PERMIT APPL. NO. |
| UNITED ROCK PRODUCTS CORPORATION | | 185071-7 |

SUBJECT

UNITED ROCK & CONCRETE CORPORATION 185090-3

MANY ATTEMPTS WERE MADE TO CONTACT THE DEPARTMENT OF STATE TO CONFIRM THE CHANGE OF OWNERSHIP, BUT THE LINE IS ALWAYS BUSY.

ANOTHER PHONE CALL WAS MADE TO MR. THOMAS S. TEDESCO, CHAIRMAN AND THE FOLLOW WAS CONFIRMED:

UNITED ROCK PRODUCTS CORPORATION AND UNITED ROCK & CONCRETE CORPORATION ARE DISTINCT LEGAL ENTITIES WHICH HAVE BOUGHT ALL ASSET OF BLUE DIAMOND MATERIALS, DIVISION OF SULLY MILLER CONTRACTING COMPANY. [redacted]

A CHANGE OF OWNERSHIP HAS ACCURRED.

# ENGINEERING DIVISION....MEMORANDUM

| TO | FROM | DATE |
|---|---|---|
| FILE | ARTURO ARREOLA | 3-14-89 |
| REFERENCE. UNITED ROCK PRODUCTS CORPORATION | | PERMIT APPL. NO. 1850 |

SUBJECT

T/C TO MR. THOMAS TEDESCO
(213) 564-1866 — NOT IN; MESSAGE LEFT

3/17/89
T/C TO MR. TEDESCO — LEFT MESSAGE

4/21/89
T/C — LEFT MESSAGE

5/2/89 —
T/C TO MR. THOMAS TEDESCO — CONFIRMED THAT THIS ONLY A CHANGE OF OWNERSHIP WITH CHANGES TO THE EQUIPMENT OR FLOWRATES.

ROUTING RECORD

| DATE | FROM | TO | ACTION |
|---|---|---|---|
| 3-14-89 | MGM | AA | CLASS III ✓ |
| 5/23/89 | AA | MGM | P/O |
| 6-14-89 | KAM | MGM | P/O |
| 6/14/89 | MGM | PPU | P/O ✓ |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

REFERENCE TO OTHER APCD
RECORDS INCLUDING VARIANCES:

65341

ALPHA FILE

| NEWSOURCE | DATA ENTRY |
|---|---|
| ☐ PC _____ | _____ |
| ☑ PO _____ m | 6-16-89 |

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D08810
A/N 185074
Page 1

**This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.**

**Legal Owner** ID 65341
**Or Operator:** *UNITED ROCK PRODUCTS CORPORATION*

**Equipment**
**located at:** 1245 EAST ARROW HIGHWAY, IRWINDALE, CALIFORNIA

**Equipment Description:**

ROCK PRE-CRUSHING, CONVEYING, AND STACKING SYSTEM NO. 1, CONSISTING OF:

1. RECEIVING HOPPER, WITH A PNEUMATICALLY OPERATED RECIPROCATING PLATE FEEDER.

2. JAW CRUSHER, KUE-KAN, OAKLAND, SIZE 24 X 36, 50 H.P.

3. THREE BELT CONVEYORS, 175 H.P. TOTAL.

FILE COPY

**Conditions:**

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. NOT MORE THAN 11,200 TONS OF AGGREGATE SHALL BE PROCESSED IN ANY ONE DAY.

4. AGGREGATE CHARGED AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Raquel Puerta/jas
July 6, 1989

UNITED ROCK PRODUCTS CORP.
ATTN: THOMAS S. TEDESCO
13131 LOS ANGELES ST.
IRWINDALE, CA. 91706

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
## 9150 Flair Drive El Monte, CA 91731

APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE AND EXCAVATE AND
FOR PLANS REQUIRED BY THE EXECUTIVE OFFICER
FOR FEE INFORMATION AND SMALL BUSINESS EXEMPTION
SEE REVERSE SIDE

PLEASE TYPE OR PRINT

SCAQMD USE: SEC ____ TS ____ ID NUMBER 65341

1A. PERMIT TO BE ISSUED TO:
United Rock Products Corporation
BUSINESS LICENSE NAME OF ORGANIZATION THAT IS TO RECEIVE PERMIT

1B.
NAME (OR NAMES) OF OWNER OR PRINCIPAL PARTNERS DOING BUSINESS AS (DBA) ABOVE ORGANIZATION

2A. MAILING ADDRESS:
13131 Los Angeles Street (NUMBER STREET) Irwindale (CITY OR COMMUNITY) California (STATE)

2B. 91706 (ZIP CODE)

3A. EQUIPMENT LOCATION (IF SAME ENTER "SAME")
1245 East Arrow Highway (NUMBER STREET) Irwindale (CITY OR COMMUNITY) 91706 (ZIP)

3B. Buena Vista Street (NEAREST INTERSECTING STREET)

4A. CONTACT PERSON (INITIALS & NAME.)
Thomas S. Tedesco

4B. CONTACT PHONE NO. (AREA & NO.):
(818 960-3948

5. EQUIPMENT. APPLICATION IS HEREBY MADE FOR PERMIT TO OPERATE THE FOLLOWING EQUIPMENT:
Rock Pre-Crushing, Conveying, and Stacking System No. 1

6. IF THIS EQUIPMENT HAD A PREVIOUS WRITTEN PERMIT, STATE NAME OF CORPORATION, COMPANY, OR INDIVIDUAL OWNER THAT OPERATED THIS EQUIPMENT, AND STATE PREVIOUS AIR POLLUTION CONTROL DISTRICT PERMIT NUMBER
Sully-Miller Contracting Company (NAME) P69031 (PREVIOUS PERMIT NUMBER)

7. PERMIT APPLICATION FOR EQUIPMENT
- NEW CONSTRUCTION ☐
- ALTERATION ☐
- CHANGE OF LOCATION ☐
- REINSTATE NON—PAYMENT P O FEES DUE ☐
- CHANGE OF OWNERSHIP ☒ SS
- EXISTING EQUIPMENT IN OPERATION WITHOUT PRIOR PERMIT ☐
- CHANGE OF CONDITIONS ☐

8. TYPE OF ORGANIZATION:
- CORPORATION ☒
- PARTNERSHIP ☐
- INDIVIDUAL OWNER ☐
- LOCAL GOV'T AGENCY ☐
- STATE AGENCY ☐
- FEDERAL AGENCY ☐
- UTILITY ☐

9. ESTIMATED COST OF EQUIPMENT OR ALTERATION
BASIC EQUIPMENT $ N/A
AIR POLLUTION CONTROL EQUIPMENT $ N/A

10. FOR THE NEW CONSTRUCTION, ALTERATION, TRANSFER OF OWNERSHIP OR LOCATION, WHAT IS
ESTIMATED STARTING DATE? 1 January 1989
ESTIMATED COMPLETION DATE? N/A

11. GENERAL NATURE OF BUSINESS
Mining and Sales of Aggregates

12. PRINCIPAL PRODUCT
Rock and Sand

13. DO YOU CLAIM CONFIDENTIALITY OF DATA?
YES ☐ NO ☒
IF YES STATE NATURE OF DATA ON SEPARATE SHEET

14. NORMAL OPERATING HOURS OF SUBJECT EQUIPMENT
HOURS/DAY 16
DAYS/WEEK 6
WEEKS/YEAR 52

15. HAS A CEQA DOCUMENT BEEN PREPARED FOR THIS PROJECT? YES ☐ NO ☒

15a. ARE ALL COMPANIES' FACILITIES IN CALIFORNIA IN COMPLIANCE WITH AIR POLLUTION RULES?
YES ☒ NO ☐

16. SIGNATURE OF RESPONSIBLE MEMBER OF ORGANIZATION:
Thomas S Tedesco

17. OFFICIAL TITLE OF SIGNER:
~~President~~ Chairman

18. TYPED OR PRINTED NAME OF SIGNER:
Thomas S. Tedesco

19. PHONE NO.
818-960-3948

20. DATE

SCAQMD USE

SIC NO.

EQUIP. CAT. NO. 000299 149

SCH/STEP: 16 JAN 6 1989

APPLICATION NO. 185074

PERMIT NO.

TYPE (B) C

WORK UNITS A/C P/O

ASSIGNMENT 2 UNIT ENGR

CLASS 1 (II)

VALIDATION 12/13/88

FILING FEE. $ 2640

CHECK OR MONEY ORDER NO. 01 50

Form 400A - REVISED 8-84 PRIOR VERSIONS NOT VALID 40833 1/9/89 AP. (Continued on reverse) C-1

SEE REVERSE FOR FEES REQUIRED UPON FILING

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

## FILING FEES

Except as noted following, a $250 filing fee must accompany each application for Permit to Construct/Operate.

1. For small businesses the filing fee is $160. The small business declaration form below must be completed in order to be considered a small business.

2. Each application for change of ownership requires a $110 transfer fee.

3. All applicants, including state, local governmental and public districts, must pay a permit evaluation fee. Such fees are in addition to filing fees and change of ownership fees.

4. All state, local governmental agencies or public districts are exempt from paying filing fees and change of ownership fees.

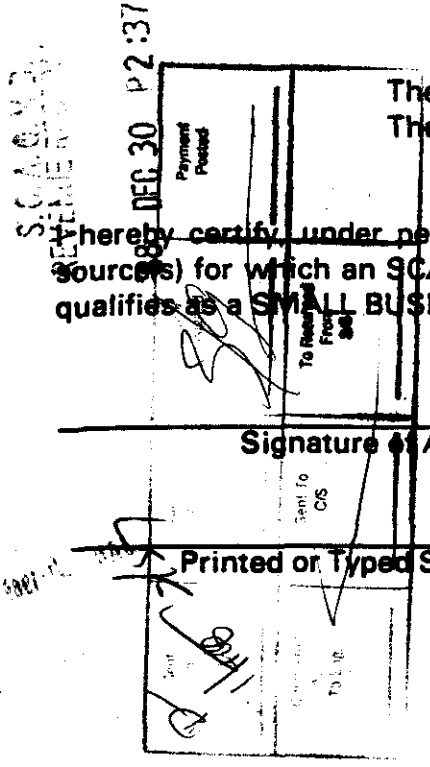
SEE APPLICATION INSTRUCTIONS FORM 400-B FOR ADDITIONAL INSTRUCTIONS
Call (818) 572-6212 for assistance
SUPPLEMENTAL DATA FORMS REQUIRED

Special supplemental data forms must be completed for: BOILERS, LIQUID HEATERS, DEGREASERS, DRY CLEANING EQUIPMENT, OVENS, SPRAY BOOTHS AND STORAGE TANKS.

## SMALL BUSINESS DECLARATION

In order to be considered a small business as specified in Regulation XIII, this form must be completed. If not a small business, do not complete this form.

A "Small Business": is a business which is independently owned and operated and meets the following criteria or, if affiliated with another concern, the combined activities of both concerns meet these criteria:




The number of employees is 10 or less; and
The total annual receipts are $500,000 or less.

I hereby certify, under penalty of perjury, that the business enterprise containing the emission source(s) for which an SCAQMD Permit to Construct or Permit to Operate is being applied herein qualifies as a SMALL BUSINESS, based on compliance with the definition above:

Signature of Applicant _____ Date _____ ( ) Telephone Number

Printed or Typed Signature _____ Company Name

# AEIS SHEET

NAME OF FIRM UNITED ROCK PRODUCTS CORPORATION COMPANY I.D. 65341

LOCATION ADDRESS 1245 E. ARROW HWY, IRWINDALE, CA 91706

REASON FOR INACTIVATION: 1. ALTERATION 2. CHANGE OF OPERATOR 3. MOVED 4. REMOVED 5. OUT OF BUSINESS 6. BANKING ISSUED 7. OTHER _____

SUBS. APPLICATION NO. _____ INACTIVATION DATE __/__/__

ACTION CODE (A) C D A = ADD DATA C = CHANGE DATA D = DELETE DATA

*PERMIT NUMBER D08810

APPLICATION NUMBER 785074

*ISSUE DATE 07/06/89

**INSTALLATION DATE __/__/__

**EQUIPMENT B CAT. 000299

**EQUIPMENT C CAT. 49

**DESCRIPTION Rock Conveying & Stacking Sys.

PERMIT TYPE (B, C, or D) D

SCHEDULE/STEP 1/6

*SECTION __

*SECTOR __

| EMISSIONS | $R_1$ | $R_2$ |
|---|---|---|
| rHC | | |
| tHC | | |
| $NO_x$ | | |
| $SO_2$ | | |
| CO | | |
| Part | 840 | 840 |
| Other 1 | | |
| Other 2 | | |
| Other 3 | | |

| Weeks Operated | | Mon | Tues | Weds | Thurs | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|---|
| Per Year 52 | Daily Start Time | 06 | 06 | 06 | 06 | 06 | 06 | __ |
| | Daily Stop Time | 16 | 16 | 16 | 16 | 16 | 16 | __ |
| | *UTM Coordinates X | __ | __ | __ | __ | __ | __ | __ |

*Not to be completed by the engineer.
**Fill out only if different from application.

Engineer ARTURO ARREOLA Date 5/23/89

# INSTRUCTIONS FOR PERMIT WORDING & FEE DATA

**APPLICATION No.** 185074

**NEED EIR?** ☐ YES ☑ NO

| DISPOSITION | PERMIT UNIT WORDING | CONDITIONS |
|---|---|---|
| ☑ APPROVED | ☐ BELOW | ☐ NONE |
| ☐ DENIED | ☐ ON FIELD REPORT DATED _____ | ☑ NUMBERS LISTED 36 |
| ☐ CANCELLED – DON'T REFUND FILING FEE | ☐ ON PAGE _____ OF PROCESS SHEETS | ☑ SPECIAL (SEE PERMIT UNIT WORDING & CONDITIONS) |
| ☐ CANCELLED – REFUND FILING FEE | ☑ ON PERMIT P69031 (MODIFIED) ATTACHED | AS ON _____ |
| SEE COMMENTS | | |

**PREVIOUS PERMIT NO.** P69031

**PERMIT UNIT WORDING & CONDITIONS:**

NOT MORE THAN 11,200 TONS OF AGGREGATE SHALL BE PROCESSED IN ANY ONE DAY.

( ) P/C ( ) P/O ( ) P/O NO P/C ( ) NOTICE TO APPLY WRITTEN

☑ CHANGE OF OWNERSHIP, large business ☐ ALTERATION ☐ TIME & MATERIALS

☐ CHANGE OF OWNERSHIP, small business ☐ FEDERAL GOVERNMENT

☐ CHANGE OF CONDITIONS ☐ GOVERNMENT (other)

| SCHEDULE | ① H P | ② 1000s BTU | ③ KVA | ④ SQ. FT | ⑤ GALLONS | ⑥ GASOLINE FUELING | ⑦ EXCEPTIONS |
|---|---|---|---|---|---|---|---|
| RATING | 225 | | | | | | |
| FEE | $230 | | | | | | |

1. PERMIT EVALUATION FEE — RULE 301.1(b)(1)

A. SCHEDULE _____ STEP _____ = FEE $ _____

B. TIME & MATERIALS (T & M): HOURS _____ X $50/HOUR = FEE $ _____

DISPOSITIONED

C. CHANGE OF OWNERSHIP, large business or ALTERATION — EXCEPT T & M:
SCHEDULE 1 STEP G = FEE 6230 X 50% = FEE $ 3115.00

D. ADDITIONAL FEE FOR NO P/C: ABOVE FEE _____ X 50% = FEE $ _____

2. EIR/MODELING FEE — RULE 301.1(g): HOURS _____ X $50/HOUR = FEE $ _____

3. 301(d)(1)(C) CREDIT OR DIFFERENCE DUE TO INCORRECT INFORMATION

_____ ADJUSTED FEE $ _____

Comments: _____

TOTAL FEE $ 3115.00

REFUND $ 0

WORK UNITS: 3

RECOMMENDED BY: MAURO ARREOLA DATE 5/23/89 REVIEWING ENGINEER: KM DATE 6/14/89

## GENERAL STANDARD CONDITIONS

3. This equipment must not be operated unless (it)(the) _____ _____ (is)(are) vented only to air pollution control equipment which is in full use and which has been issued (an operating permit) (a permit to construct) by the Executive Officer.
4. a. Fuel oil supplied at the burner must be No. _____ or lighter grade as described by the latest ASTM specifications and must have a sulfur content of not more than 0. _____ % by weight.
   b. No. _____ fuel oil supplied at the burner must be at a temperature of _____ °F or greater.
5. A temperature of not less than _____ °F must be maintained in the (afterburner) (combustion chamber) when the equipment it serves is in operation.
6. Not less than _____ gallons per minute of (water)(scrubbing solution) at a pressure of _____ to _____ psig must be supplied to the scrubber(_____) when the equipment it serves is in operation.
7. This oven must not be operated at temperatures above _____ °F.
8. Steam atomization only must be employed during the entire period of fuel oil burning.
9. This equipment must not discharge to the atmosphere radioactive materials in excess of the permissible limits established by existing authorities.
10. Whenever air contaminants are vented to the boiler firebox, all burners must be continously operated either with natural gas at a burner pressure of not less than _____ (psig) (inches water column) or with fuel oil at an equivalent heat input.

### MECHANICAL UNIT

11. Circulating water to the _____ must be maintained at pH _____ or (higher) (lower).
13. This equipment must not be used to vent more than _____ _____ at any one time.
27. The (incinerator) (equipment) must be operated by personnel properly trained in its operation.
29. The (mixing chamber burner(s)) (afterburner) (and water spray chamber) must be used throughout the burning period.
36. ~~(Aggregate)~~ (~~Material~~) charged, and ~~(aggregate)~~ (~~Material~~) in process must be kept sufficiently moist to prevent dust emissions.
58. This furnace may be used only to process EXCESSIVE.
61. The cloth bags in the silo filter vent(s) must be thoroughly cleaned immediately after each load of material is received.
71. Plastics or materials containing plastics must not be charged into this (incinerator) (furnace).
74. A mechanical gauge must be installed so as to indicate, in inches water column, the static pressure differential across the bags.
75. A flowmeter, indicating G.P.M. (and a pressure gauge indicating in P.S.I.), must be installed in the water supply line to the scrubber.
84. Dust collected in the baghouse must be discharged only into closed containers.
85. This incinerator may be used only to cremate human or animal anatomical parts.
86. Slide dampers must be installed in each branch duct of the exhaust system.

SCAQMD
ENGINEERING DIVISION
NEW SOURCE REVIEW REGULATION XIII DATA SHEET

1 ☐ P/C 2 ☐ P/O 3 ☑ C/O

COMPANY ID# 65341
APPLICATION # 185074

COMPANY NAME UNITED ROCK PRODUCTS CORPORATION DATE 5/23/89
EQUIPMENT LOCATION 1245 E. ARROW HWY, CA 91706

---

APPLICABLE NEW SOURCE RULE: (equip. installed or Class I applc'n rec'd...)

1 ☐ None (before 10-8-76)
2 ☐ Rule 213 (before 7-1-79 and on or after 10-8-76)
3 ☐ Original Reg XIII (before 1-1-83 and on or after 7-1-79)
4 ☐ 1st Revision Reg XIII (before 7-12-85 and on or after 1-1-83)
5 ☑ 2nd Revision Reg XIII (on or after 7-12-85)

---

SPECIAL CASES:

1 ☐ Banking Ref Applc'n #_____
2 ☐ Reg 13 Exempt
3 ☐ Mitigations 4 ☐ Tradeoffs
5 ☐ Toxic Materials
6 ☐ Banking Cert./Reg. Used
7 ☐ Rule 219 Exemptions
8 ☐ Alter.-Prev. App. #_____

---

EMISSION INCREASE OR DECREASE FROM THIS PERMIT UNIT CREDITED TO THIS LOCATION (Indicate "+" or "-"): [] 1.1 factor used for Max

N/A

| CONTAMINANT | RHC | $NO_x$ | $SO_x$ | CO | Part | Lead | UnRHC |
|---|---|---|---|---|---|---|---|
| Max #/day | | | | | | | |
| Actual w/internal BACT #/day | | | | | | | |
| Actual w/o BACT #/day | | | | | | | |

---

REGULATION XIII EXEMPT EMISSIONS (Indicate "+" or "-")

Exempt by Rule 1304 (____) (____) or Rule 213(f) (____) (____)

| CONTAMINANT | RHC | $NO_x$ | $SO_x$ | CO | Part | Lead | UnRHC |
|---|---|---|---|---|---|---|---|
| Max #/day | | | | | | | |
| Actual #/day | | | | | | | |

---

MITIGATIONS ACHIEVED CONCURRENT WITH THIS APPLC'N (Indicate "+" or "-")

| APPLIC'N NUMBER | RHC #/day | NOx #/day | $SO_x$ #/day | CO #/day | Part #/day | Lead #/day | UnRHC #/day |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Engineer [illegible] Date 5/23/89 Reviewing Engineer KM Date 6/14/89

Revised 9/85

RECOMMENDED BY _____ DATE _____

PAGE ____ OF ____ PAGES

60D135-R6 68-10

# PERMIT TO OPERATE

P 69031

SECTOR B7

Operation under this permit must be conducted in compliance with all data and specifications included with the application under which this permit is issued. The equipment must be properly maintained and kept in good operating condition at all times. In accordance with Rule 10(c), this Permit to Operate must be posted or accessible.

LEGAL OWNER OR OPERATOR: BLUE DIAMOND MATERIALS DIV.
SULLY-MILLER CONTRACTING COMPANY

Appl. No. A-35742
PREVIOUS PERMIT NO. P-56912

EQUIPMENT LOCATED AT: 1245 EAST ARROW HIGHWAY
IRWINDALE, CALIFORNIA

EQUIPMENT DESCRIPTION AND CONDITIONS: ROCK PRE-CRUSHING, CONVEYING, AND STACKING SYSTEM NO. 1, CONSISTING OF:

1. RECEIVING HOPPER, WITH A PNEUMATICLY OPERATED RECIPROCATING PLATE FEEDER.
2. JAW CRUSHER, KUE-KAN, OAKLAND, SIZE 24 x 36, 50 H.P.
3. THREE BELT CONVEYORS, 175 H.P. TOTAL.

- CONDITION -

AGGREGATE CHARGED, AND AGGREGATE IN PROCESS MUST BE KEPT SUFFICIENTLY MOIST TO PREVENT DUST EMISSIONS.

FILE COPY

[redacted]

This permit does not authorize the emission of air contaminants in excess of those allowed by Division 20, Chapter 2, Article 3, of the Health and Safety Code of the State of California or the Rules and Regulations of the Air Pollution Control District. This permit shall not be considered as permission to violate existing laws, ordinances, [redacted]

AIR POLLUTION CONTROL OFFICER

filing fee paid on validation number [illegible], dated 2-26-75."

VOID UNLESS VALIDATED

DATE [illegible]

| SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT | PAGES 2 | PAGE 1 |
|---|---|---|
| ENGINEERING DIVISION | APPL. NO. 185071-7 | DATE 5/23/89 |
| APPLICATION PROCESSING AND CALCULATIONS | PROCESSED BY A ARREOLA | CHECKED BY KM 6/14/89 |

CHANGE OF OWNERSHIP

United Rock Products Corporation
13131 Los Angeles Street
Irwindale, CA 91706

EQUIPMENT LOCATION

1245 East Arrow Highway
Irwindale, CA 91706

**EQUIPMENT DESCRIPTION**

Refer to copy of prior permit in this file.

**HISTORY**

All ARE INACTIVE

A change of ownership took place January 1, 1989. Blue Diamond Materials, Division of Sully Miller Contracting Company was bought by United Rock Products Corporation.

| NEW APPL. | OLD APPL. | MICROFICHE NUMBER | DESCRIPTION |
|---|---|---|---|
| 185071 | A85747 | 1123-D5 | Primary Crusher |
| 185072 | A85746 | 1124-A1 | Pre-crushing System no. 2 |
| 185073 | A85745 | 1124-C25 | Sand & Aggregate Reclaim |
| 185074 | A85742 | 1123-J5 | Pre-crushing System No. 1 |
| 185075 | A85748 | 1123-H10 | Base Material Handling |
| 185076 | A87774 | 1123-A1 | Aggregate Transfer System |
| 185077 | C31948 | 1125-C18 | Aggregate Processing System |

**PROCESS DESCRIPTION & CALCULATIONS**

No changes to the equipment or process rate has taken place. Refer to microfiche listed above, corresponding to old application under the previous owner.

**EVALUATION**

Refer to old application (REGULATIONS NOT AFFECTED).

Reg XIII: Reg XIII (05) does not apply since this is a change of ownership.

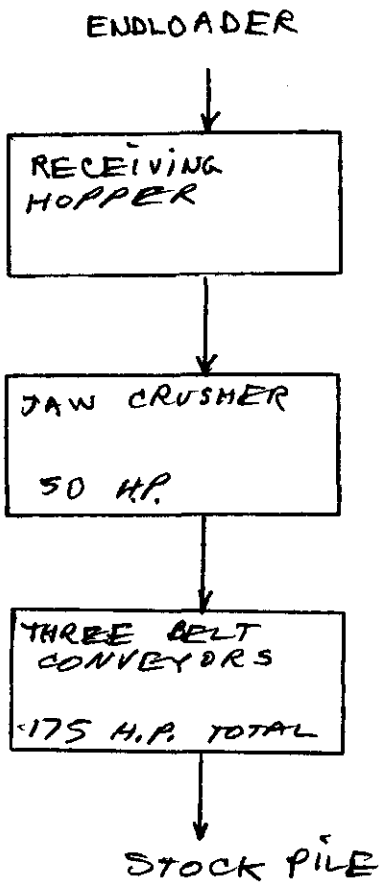
**RECOMMENDATION**

This equipment is expected to continue to comply with all rules and regulations of the SCAQMD. A Permit to Operate is recommended.

# BLOCK FLOW DIAGRAM

A/N 185074

ROCK PRE-CRUSHING, CONVEYING, AND STACKING SYSTEM NO 1.



Press f5 to continue

ENG930 EMISSION THRESHOLD / NEWSOURCE

name: UNITED ROCK & CONCRETE CORP company id: 065341
address: 1245 E ARROW HWY date: 03/10/89
city: IRWINDALE I user: NS11

INCREASE (+) DECREASE (-) SUBSEQUENT TO 10-8-76

| L# | I | M | date | appl | p/o | 13 rl | RHC #/day | NOX #/day | SO2 #/day | CO #/day | PART #/day | LEAD #/day | UNRHC #/day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01 | | | 840105 | 116681 | C1 | 04 | | | | | 2 | | |
| 02 | | | 850107 | C31948 | C2 | 03 | | | | | | | |
| 03 | | | 850220 | 125992 | C1 | 04 | | | | | -409 | | |
| 04 | | | 850220 | 125994 | C1 | 04 | | | | | 1 | | |
| 05 | | | 850220 | 125996 | C1 | 04 | | | | | | | |
| 06 | | | 850220 | 125997 | C1 | 04 | 8 | 97 | 51 | 4 | 17269 | | |
| 07 | | | 850220 | 125999 | C1 | 04 | | | | | | | |
| 08 | | | 850220 | 126000 | C1 | 04 | | | | | 6 | | |
| 09 | | | 850220 | 126001 | C1 | 04 | 1 | 2 | 3 | 1 | 1 | | |
| 10 | | | 850220 | 126002 | C1 | 04 | | | | | -16762 | | |
| | | | | | | | | | | | | | |

TRADEOFF TOTAL
exempt total
TOTAL 9 99 54 5 108

# ENGINEERING DIVISION....MEMORANDUM

| TO | FROM | DATE |
|---|---|---|
| FILE | ARTURO ARREOLA | 5-23-89 |
| REFERENCE | | PERMIT APPL. NO. |
| UNITED ROCK PRODUCTS CORPORATION | | 185071-7 |
| SUBJECT | | |
| UNITED ROCK & CONCRETE CORPORATION 185090-3 | | |

MANY ATTEMPTS WERE MADE TO CONTACT THE DEPARTMENT OF STATE TO CONFIRM THE CHANGE OF OWNERSHIP, BUT THE LINE IS ALWAYS BUSY.

ANOTHER PHONE CALL WAS MADE TO MR. THOMAS S. TEDESCO, CHAIRMAN AND THE FOLLOW WAS CONFIRMED:

UNITED ROCK PRODUCTS CORPORATION AND UNITED ROCK & CONCRETE CORPORATION ARE DISTINCT LEGAL ENTITIES WHICH HAVE BOUGHT ALL ASSET OF BLUE DIAMOND MATERIALS, DIVISION OF SULLY MILLER CONTRACTING COMPANY. [redacted]

A CHANGE OF OWNERSHIP HAS ACCURRED.

# ENGINEERING DIVISION....MEMORANDUM

| TO | FROM | DATE |
|---|---|---|
| FILE | ARTURO ARREOLA | 3-14-89 |
| REFERENCE. UNITED ROCK PRODUCTS CORPORATION | | PERMIT APPL. NO. 1850 |

SUBJECT

T/C TO MR. THOMAS TEDESCO
(213) 564-1466 — NOT IN; MESSAGE LEFT

3/17/89
T/C TO MR. TEDESCO — LEFT MESSAGE

4/21/89
T/C — LEFT MESSAGE

5/2/87 —
T/C TO MR. THOMAS TEDESCO —
CONFIRMED THAT THIS ONLY A CHANGE OF OWNERSHIP WITH CHANGES TO THE EQUIPMENT OR FLOWRATES.

ROUTING RECORD

| DATE | FROM | TO | ACTION |
|---|---|---|---|
| 3-14-89 | MGM | AA | CLASS III ✓ |
| 5/23/89 | AA | MGM | P/O |
| 6-14-89 | KAM | MGM | P/O |
| 6-14-89 | MGM | PPU | P/O ✓ |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

REFERENCE TO OTHER APCD RECORDS INCLUDING VARIANCES:

65341

ALPHA FILE

NEWSOURCE DATA ENTRY

☐ PC _____ _____

☑ PO mm 6.16.89

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D08811
A/N 185075
Page 1

**This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.**

**Legal Owner**
**Or Operator:** UNITED ROCK PRODUCTS CORPORATION

ID 65341

**Equipment**
**located at:** 1245 EAST ARROW HIGHWAY, IRWINDALE, CALIFORNIA

**Equipment Description:**

BASE MATERIAL CONVEYING, STORAGE, AND LOADOUT SYSTEM CONSISTING OF:

1. FIVE SURGE BINS, 10 CU. YD. CAPACITY EACH.
2. TWO PUGMILLS, NOS. PM-1 AND PM-2, EACH WITH A 100 H.P. DRIVE AND A 7 1/2 H.P. WATER PUMP.
3. TWO LOADOUT BINS, EACH 75 TONS CAPACITY EACH WITH A PNEUMATICALLY OPERATED GATE.
4. SIX BELT CONVEYORS, NOS. C-28, C-29, C-30, C-31, C-32, C-33, 180 H.P. TOTAL.
5. TWO AIR COMPRESSORS, 15 H.P. EACH.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. NOT MORE THAN 3,200 TONS OF AGGREGATE SHALL BE PROCESSED IN ANY ONE DAY.
4. AGGREGATE CHARGED AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCRSSIVE DUST EMISSIONS.

**THIS PERMIT CONCLUDES ON THE NEXT PAGE.**

FILE COPY

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731



**CONTINUATION OF PERMIT TO OPERATE**

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

FILE COPY

By Raquel Puerta/jas
July 6, 1989

UNITED ROCK PRODUCTS CORP.
ATTN: THOMAS S. TEDESCO
13131 LOS ANGELES ST.
IRWINDALE, CA. 91706

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
## 9150 Flair Drive El Monte, CA 91731

34058
13

APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE AND EXCAVATE AND
FOR PLANS REQUIRED BY THE EXECUTIVE OFFICER
FOR FEE INFORMATION AND SMALL BUSINESS EXEMPTION
SEE REVERSE SIDE
PLEASE TYPE OR PRINT

SCAQMD USE: SEC | TS | ID NUMBER 65341

1A. PERMIT TO BE ISSUED TO:
United Rock Products Corporation
BUSINESS LICENSE NAME OF ORGANIZATION THAT IS TO RECEIVE PERMIT

1 B.
NAME (OR NAMES) OF OWNER OR PRINCIPAL PARTNERS DOING BUSINESS AS (DBA) ABOVE ORGANIZATION

2 A. MAILING ADDRESS:
13131 Los Angeles Street — Irwindale — California
NUMBER — STREET — CITY OR COMMUNITY — STATE

2 B. 91706
ZIP CODE

3 A. EQUIPMENT LOCATION (IF SAME ENTER "SAME")
1245 East Arrow Highway — Irwindale — 91706
NUMBER — STREET — CITY OR COMMUNITY — ZIP

3 B. Buena Vista Street
NEAREST INTERSECTING STREET

4 A. CONTACT PERSON (INITIALS & NAME.)
Thomas S. Tedesco

4 B. CONTACT PHONE NO. (AREA & NO.):
(818 960-3948

5. EQUIPMENT. APPLICATION IS HEREBY MADE FOR PERMIT TO OPERATE THE FOLLOWING EQUIPMENT:
Base Material Conveying, Storage, and Loadout System

6. IF THIS EQUIPMENT HAD A PREVIOUS WRITTEN PERMIT, STATE NAME OF CORPORATION, COMPANY, OR INDIVIDUAL OWNER THAT OPERATED THIS EQUIPMENT, AND STATE PREVIOUS AIR POLLUTION CONTROL DISTRICT PERMIT NUMBER
Sully-Miller Contracting Company — P68410
NAME — PREVIOUS PERMIT NUMBER

7. PERMIT APPLICATION FOR EQUIPMENT
- NEW CONSTRUCTION ☐
- ALTERATION ☐
- CHANGE OF LOCATION ☐
- REINSTATE NON—PAYMENT P O FEES DUE ☐
- CHANGE OF OWNERSHIP ☒ 85
- EXISTING EQUIPMENT IN OPERATION WITHOUT PRIOR PERMIT ☐
- CHANGE OF CONDITIONS ☐

8. TYPE OF ORGANIZATION:
- CORPORATION ☒
- PARTNERSHIP ☐
- INDIVIDUAL OWNER ☐
- LOCAL GOV'T AGENCY ☐
- STATE AGENCY ☐
- FEDERAL AGENCY ☐
- UTILITY ☐

9. ESTIMATED COST OF EQUIPMENT OR ALTERATION
BASIC EQUIPMENT $ N/A
AIR POLLUTION CONTROL EQUIPMENT $ N/A

10. FOR THE NEW CONSTRUCTION, ALTERATION, TRANSFER OF OWNERSHIP OR LOCATION, WHAT IS
ESTIMATED STARTING DATE? 1 January 1989
ESTIMATED COMPLETION DATE? N/A

11. GENERAL NATURE OF BUSINESS
Mining and Sales of Aggregates

12. PRINCIPAL PRODUCT
Rock and Sand

13. DO YOU CLAIM CONFIDENTIALITY OF DATA?
YES ☐ NO ☒
IF YES STATE NATURE OF DATA ON SEPARATE SHEET

14. NORMAL OPERATING HOURS OF SUBJECT EQUIPMENT
HOURS/DAY 16
DAYS/WEEK 6
WEEKS/YEAR 52

15. HAS A CEQA DOCUMENT BEEN PREPARED FOR THIS PROJECT? YES ☐ NO ☒

15a. ARE ALL COMPANIES' FACILITIES IN CALIFORNIA IN COMPLIANCE WITH AIR POLLUTION RULES? YES ☒ NO ☐

16. SIGNATURE OF RESPONSIBLE MEMBER OF ORGANIZATION:
Thomas S Tedesco

17. OFFICIAL TITLE OF SIGNER:
~~President~~ Chairman

18. TYPED OR PRINTED NAME OF SIGNER:
Thomas S. Tedesco

19. PHONE NO.
818-960-3948

20. DATE

SCAQMD USE

| SIC NO. | | EQUIP. CAT. NO.: 107200 / | SCH/STEP: 1H JAN 6 1989 |
|---|---|---|---|
| APPLICATION NO. 185075 | PERMIT NO. | TYPE: B OR C | WORK UNITS: A/C P/O; ASSIGNMENT: UNIT 7 ENGR; CLASS: 0 |
| VALIDATION 12/30/88 | | FILING FEE: $ 2646 | CHECK OR MONEY ORDER NO. 01 80 |

Form 400A - REVISED 8-84 PRIOR VERSIONS NOT VALID 50823 119189 AP (Continued on reverse) C-1

SEE REVERSE FOR FEES REQUIRED UPON FILING

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

## FILING FEES

Except as noted following, a $250 filing fee must accompany each application for Permit to Construct/Operate.

1. For small businesses the filing fee is $160. The small business declaration form below must be completed in order to be considered a small business.

2. Each application for change of ownership requires a $110 transfer fee.

3. All applicants, including state, local governmental and public districts, must pay a permit evaluation fee. Such fees are in addition to filing fees and change of ownership fees.

4. All state, local governmental agencies or public districts are exempt from paying filing fees and change of ownership fees.

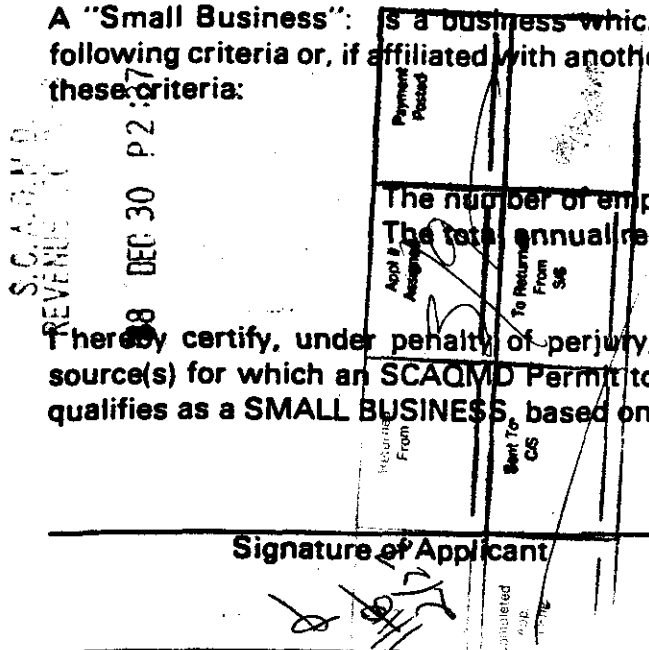
SEE APPLICATION INSTRUCTIONS FORM 400-B FOR ADDITIONAL INSTRUCTIONS
Call (818) 572-6212 for assistance
SUPPLEMENTAL DATA FORMS REQUIRED

Special supplemental data forms must be completed for: BOILERS, LIQUID HEATERS, DEGREASERS, DRY CLEANING EQUIPMENT, OVENS, SPRAY BOOTHS AND STORAGE TANKS.

## SMALL BUSINESS DECLARATION

In order to be considered a small business as specified in Regulation XIII, this form must be completed. If not a small business, do not complete this form.

A "Small Business": is a business which is independently owned and operated and meets the following criteria or, if affiliated with another concern, the combined activities of both concerns meet these criteria:




The number of employees is 10 or less; and
The total annual receipts are $500,000 or less.

I hereby certify, under penalty of perjury, that the business enterprise containing the emission source(s) for which an SCAQMD Permit to Construct or Permit to Operate is being applied herein qualifies as a SMALL BUSINESS, based on compliance with the definition above:

| Signature of Applicant | Date | ( ) Telephone Number |
|---|---|---|
| Printed or Typed Signature | Company Name | |

# AEIS SHEET

NAME OF FIRM UNITED ROCK PRODUCTS CORPORATION COMPANY I.D. 65341

LOCATION ADDRESS 1245 E. ARROW HIGHWAY, IRWINDALE, CA 91706

REASON FOR INACTIVATION: 1. ALTERATION 2. CHANGE OF OPERATOR 3. MOVED 4. REMOVED 5. OUT OF BUSINESS 6. BANKING ISSUED 7. OTHER _____

SUBS. APPLICATION NO. _____ INACTIVATION DATE __/__/__

---

ACTION CODE (A) C D A = ADD DATA C = CHANGE DATA D = DELETE DATA

---

*PERMIT NUMBER 008811

APPLICATION NUMBER 165025

*ISSUE DATE 07/06/89

**INSTALLATION DATE __/__/__

**EQUIPMENT B CAT. 107200

**EQUIPMENT C CAT. __

**DESCRIPTION Base Material Conveying & Loadout Sys.

PERMIT TYPE (B, C, or D) B

SCHEDULE/STEP 1/H

---

*SECTION __

*SECTOR __

| EMISSIONS | $R_1$ | $R_2$ |
|---|---|---|
| rHC | | |
| tHC | | |
| $NO_x$ | | |
| $SO_2$ | | |
| CO | | |
| Part | 101 | 101 |
| Other 1 | | |
| Other 2 | | |
| Other 3 | | |

| Weeks Operated | | Mon | Tues | Weds | Thurs | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|---|
| Per Year 52 | Daily Start Time | 06 | 06 | 06 | 06 | 06 | 08 | __ |
| | Daily Stop Time | 16 | 16 | 16 | 16 | 16 | 16 | __ |
| | *UTM Coordinates X | __ | __ | __ | __ | __ | __ | __ |

*Not to be completed by the engineer.
**Fill out only if different from application.

Engineer ARTURO ARREOLA Date 5/23/89

# INSTRUCTIONS FOR PERMIT WORDING & FEE DATA

**APPLICATION No.** 465075

**NEED EIR?** ☐ YES ☒ NO

| DISPOSITION | PERMIT UNIT WORDING | CONDITIONS |
|---|---|---|
| ☒ APPROVED | ☐ BELOW | ☐ NONE |
| ☐ DENIED | ☐ ON FIELD REPORT DATED _____ | ☒ NUMBERS LISTED 36 |
| ☐ CANCELED — DON'T REFUND FILING FEE | ☐ ON PAGE _____ OF PROCESS SHEETS | ☒ SPECIAL (SEE PERMIT UNIT WORDING & CONDITIONS) |
| ☐ CANCELED — REFUND FILING FEE | ☒ ON PERMIT P68410 (MODIFIED) ATTACHED | ☐ SEE ON _____ |
| SEE COMMENTS | | |

**PREVIOUS PERMIT NO.** P68410

**PERMIT UNIT WORDING & CONDITIONS:**

NOT MORE THAN 3,200 TONS OF AGGREGATE SHALL BE PROCESSED IN ANY ONE DAY.

( ) P/C ( ) P/O ( ) P/O NO P/C ( ) NOTICE TO APPLY WRITTEN

☒ CHANGE OF OWNERSHIP, large business ☐ ALTERATION ☐ TIME & MATERIALS

☐ CHANGE OF OWNERSHIP, small business ☐ FEDERAL GOVERNMENT

☐ CHANGE OF CONDITIONS ☐ GOVERNMENT (other)

| SCHEDULE | ① H P | ② 1000s BTU | ③ KVA | ④ SQ. FT | ⑤ GALLONS | ⑥ GASOLINE PUELING | ⑦ EXCEPTIONS |
|---|---|---|---|---|---|---|---|
| RATING | 425 | | | | | | |
| FEE | 8534 | | | | | | |

1. PERMIT EVALUATION FEE — RULE 301.1(b)(1)

A. SCHEDULE _____ STEP _____ = FEE $ _____

B. TIME & MATERIALS (T & M): HOURS _____ X $50/HOUR = FEE $ _____

C. CHANGE OF OWNERSHIP, large business or ALTERATION — EXCEPT T & M: DISPOSITIONED

SCHEDULE 1 STEP H = FEE 8534 X 50% = FEE $ 4267.00

D. ADDITIONAL FEE FOR NO P/C: ABOVE FEE _____ X 50% = FEE $ _____

2. EIR/MODELING FEE — RULE 301.1(g): HOURS _____ X $50/HOUR = FEE $ _____

3. 301(d)(1)(C) CREDIT OR DIFFERENCE DUE TO INCORRECT INFORMATION

_____ ADJUSTED FEE $ _____

Comments: _____

TOTAL FEE $ 4267.00

REFUND 0

WORK UNITS 3

RECOMMENDED BY ARTURO ARREOLA DATE 9/27/89 REVIEWING ENGINEER VM DATE 6/14/89

## GENERAL STANDARD CONDITIONS

3. This equipment must not be operated unless (it)(the) _____ _____ (is)(are) vented only to air pollution control equipment which is in full use and which has been issued (an operating permit) (a permit to construct) by the Executive Officer.
4. a. Fuel oil supplied at the burner must be No. _____ or lighter grade as described by the latest ASTM specifications and must have a sulfur content of not more than 0. _____ % by weight.
   b. No. _____ fuel oil supplied at the burner must be at a temperature of _____ °F or greater.
5. A temperature of not less than _____ °F must be maintained in the (afterburner) (combustion chamber) when the equipment it serves is in operation.
6. Not less than _____ gallons per minute of (water)(scrubbing solution) at a pressure of _____ to _____ psig must be supplied to the scrubber(_____) when the equipment it serves is in operation.
7. This oven must not be operated at temperatures above _____ °F.
8. Steam atomization only must be employed during the entire period of fuel oil burning.
9. This equipment must not discharge to the atmosphere radioactive materials in excess of the permissible limits established by existing authorities.
10. Whenever air contaminants are vented to the boiler firebox, all burners must be continously operated either with natural gas at a burner pressure of not less than _____ (psig) (inches water column) or with fuel oil at an equivalent heat input.

### MECHANICAL UNIT

11. Circulating water to the _____ must be maintained at pH _____ or (higher) (lower).
13. This equipment must not be used to vent more than _____ _____ at any one time.
27. The (incinerator) (equipment) must be operated by personnel properly trained in its operation.
29. The (mixing chamber burner(s)) (afterburner) (and water spray chamber) must be used throughout the burning period.
36. (Aggregate) (~~Material~~) charged, and (aggregate) (~~material~~) in process ~~must~~ SHALL be kept sufficiently moist to prevent dust emissions.
58. This furnace may be used only to process EXCESSIVE _____.
61. The cloth bags in the silo filter vent(s) must be thoroughly cleaned immediately after each load of material is received.
71. Plastics or materials containing plastics must not be charged into this (incinerator) (furnace).
74. A mechanical gauge must be installed so as to indicate, in inches water column, the static pressure differential across the bags.
75. A flowmeter, indicating G.P.M. (and a pressure gauge indicating in P.S.I.), must be installed in the water supply line to the scrubber.
84. Dust collected in the baghouse must be discharged only into closed containers.
85. This incinerator may be used only to cremate human or animal anatomical parts.
86. Slide dampers must be installed in each branch duct of the exhaust system.

SCAQMD
ENGINEERING DIVISION
NEW SOURCE REVIEW REGULATION XIII DATA SHEET

1 ☐ P/C 2 ☐ P/O 3 ☑ C/O

COMPANY ID# 65341
APPLICATION # 185075

COMPANY NAME UNITED ROCK PRODUCTS CORPORATION DATE 5/23/89
EQUIPMENT LOCATION 1845 E. ARROW HWY, CA 91706

APPLICABLE NEW SOURCE RULE: (equip. installed or Class I applc'n rec'd...)
1 ☐ None (before 10-8-76)
2 ☐ Rule 213 (before 7-1-79 and on or after 10-8-76)
3 ☐ Original Reg XIII (before 1-1-83 and on or after 7-1-79)
4 ☐ 1st Revision Reg XIII (before 7-12-85 and on or after 1-1-83)
5 ☑ 2nd Revision Reg XIII (on or after 7-12-85)

SPECIAL CASES:
1 ☐ Banking Ref Applc'n #_____
2 ☐ Reg 13 Exempt
3 ☐ Mitigations 4 ☐ Tradeoffs
5 ☐ Toxic Materials
6 ☐ Banking Cert./Reg. Used
7 ☐ Rule 219 Exemptions
8 ☐ Alter.-Prev. App. #_____

EMISSION INCREASE OR DECREASE FROM THIS PERMIT UNIT CREDITED TO THIS LOCATION (Indicate "+" or "-"): [] 1.1 factor used for Max

| CONTAMINANT | RHC | $NO_x$ | $SO_x$ N/A | CO | Part | Lead | UnRHC |
|---|---|---|---|---|---|---|---|
| Max #/day | | | | | | | |
| Actual w/internal BACT #/day | | | | | | | |
| Actual w/o BACT #/day | | | | | | | |

REGULATION XIII EXEMPT EMISSIONS (Indicate "+" or "-")
Exempt by Rule 1304 (____) (____) or Rule 213(f) (____) (____)

| CONTAMINANT | RHC | $NO_x$ | $SO_x$ | CO | Part | Lead | UnRHC |
|---|---|---|---|---|---|---|---|
| Max #/day | | | | | | | |
| Actual #/day | | | | | | | |

MITIGATIONS ACHIEVED CONCURRENT WITH THIS APPLC'N (Indicate "+" or "-")

| APPLIC'N NUMBER | RHC #/day | NOx #/day | $SO_x$ #/day | CO #/day | Part #/day | Lead #/day | UnRHC #/day |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Engineer ARTURO ARREOLA Date 5/23/89 Reviewing Engineer KM Date 6/14/89

Revised 9/85

70P235M-12/71

# PERMIT TO OPERATE

P 68410
SECTOR BF

Operation under this permit must be conducted in compliance with all data and specifications included with the application under which this permit is issued. The equipment must be properly maintained and kept in good operating condition at all times. In accordance with Rule 10(c), this Permit to Operate must be posted or accessible.

**LEGAL OWNER OR OPERATOR:** BLUE DIAMOND MATERIALS DIV.
SULLY-MILLER CONTRACTING COMPANY

Appl. No. A-35748
PREVIOUS PERMIT NO. P-38966

**EQUIPMENT LOCATED AT:** 1245 EAST ARROW HIGHWAY
IRWINDALE, CALIFORNIA

**EQUIPMENT DESCRIPTION AND CONDITIONS:**

BASE MATERIAL CONVEYING, STORAGE, AND LOADOUT SYSTEM CONSISTING OF:

1. FIVE SUGE BINS, 110 CU. YD. CAPACITY EACH.
2. TWO PUGMILLS, NOS. PM-1 AND PM-2, EACH WITH A 100 H.P. DRIVE AND A 7 1/2 H.P. WATER PUMP. EACH
3. TWO LOADOUT BINS, 75 TONS CAPACITY ~~EACH~~; EACH A WITH PNEUMATICALLY OPERATED GATES.
4. SIX BELT CONVEYORS, NOS. C-28, C-29, C-30, C-31, C-32, C-33, [redacted] 180 H.P. TOTAL
5. TWO AIR COMPRESSORS, 15 H.P. EACH.

- CONDITION -

AGGREGATE CHARGED, AND AGGREGATE IN PROCESS MUST BE KEPT SUFFICIENTLY MOIST TO PREVENT DUST EMISSIONS.

FILE COPY

[redacted]

This permit does not authorize the emission of air contaminants in excess of those allowed by Division 20, Chapter 2, Article 3, of the Health and Safety Code of the State of California or the Rules and Regulations of the Air Pollution Control District. This permit cannot be considered as permission to violate existing laws, ordinances, regulation or statutes of other governmental agencies. VALIDATION NO. 27261, DATED 2-26-75

VOID UNLESS VALIDATED

AIR POLLUTION CONTROL OFFICER

BY Helen Thompson, Permit Section

DATE January 13, 1977

| SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT | PAGES 2 | PAGE 1 |
|---|---|---|
| ENGINEERING DIVISION | APPL. NO. 185071-7 | DATE 5/23/89 |
| APPLICATION PROCESSING AND CALCULATIONS | PROCESSED BY A ARREOLA | CHECKED BY KM 6/14/89 |

## CHANGE OF OWNERSHIP

United Rock Products Corporation
13131 Los Angeles Street
Irwindale, CA 91706

**EQUIPMENT LOCATION**

1245 East Arrow Highway
Irwindale, CA 91706

**EQUIPMENT DESCRIPTION**

Refer to copy of prior permit in this file.

**HISTORY**

All Are Inactive

A change of ownership took place January 1, 1989. Blue Diamond Materials, Division of Sully Miller Contracting Company was bought by United Rock Products Corporation.

| NEW APPL. | OLD APPL. | MICROFICHE NUMBER | DESCRIPTION |
|---|---|---|---|
| 185071 | A85747 | 1123-D5 | Primary Crusher |
| 185072 | A85746 | 1124-A1 | Pre-crushing System no. 2 |
| 185073 | A85745 | 1124-C25 | Sand & Aggregate Reclaim |
| 185074 | A85742 | 1123-J5 | Pre-crushing System No. 1 |
| 185075 | A85748 | 1123-H10 | Base Material Handling |
| 185076 | A87774 | 1123-A1 | Aggregate Transfer System |
| 185077 | C31948 | 1125-C18 | Aggregate Processing System |

NO ENFORCEMENT ACTIVITY FOUND.

**PROCESS DESCRIPTION & CALCULATIONS**

No changes to the equipment or process rate has taken place. Refer to microfiche listed above, corresponding to old application under the previous owner.

**EVALUATION**

Refer to old application (REGULATIONS NOT AFFECTED).

Reg XIII: Reg XIII (05) does not apply since this is a change of ownership.

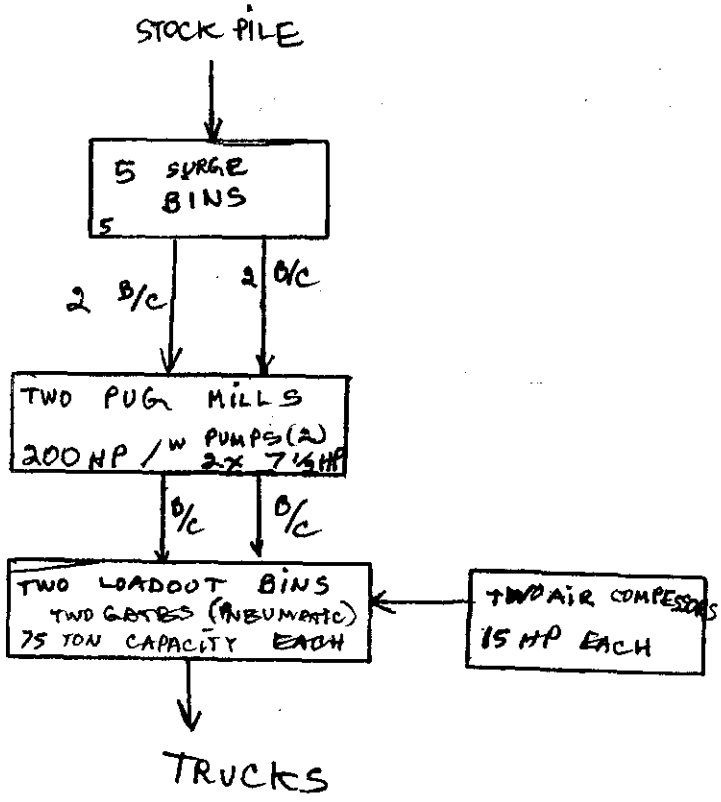
**RECOMMENDATION**

This equipment is expected to continue to comply with all rules and regulations of the SCAQMD. A Permit to Operate is recommended.

# BLOCK FLOW DIAGRAM

A/N 185075

BASE MATERIAL CONVEYING / STORAGE AND LOADOUT SYSTEM



Press f5 to continue

ENG930 EMISSION THRESHOLD / NEWSOURCE

name: UNITED ROCK & CONCRETE CORP company id: 065341
address: 1245 E ARROW HWY date: 03/10/89
city: IRWINDALE I user: NS11

INCREASE (+) DECREASE (-) SUBSEQUENT TO 10-8-76

| L# | I | M | date | appl | p/o | rl | RHC #/day | NOX #/day | SO2 #/day | CO #/day | PART #/day | LEAD #/day | UNRHC #/day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01 | | | 840105 | 116681 | C1 | 04 | | | | | 2 | | |
| 02 | | | 850107 | C31948 | C2 | 03 | | | | | | | |
| 03 | | | 850220 | 125992 | C1 | 04 | | | | | -409 | | |
| 04 | | | 850220 | 125994 | C1 | 04 | | | | | 1 | | |
| 05 | | | 850220 | 125996 | C1 | 04 | | | | | | | |
| 06 | | | 850220 | 125997 | C1 | 04 | 8 | 97 | 51 | 4 | 17269 | | |
| 07 | | | 850220 | 125999 | C1 | 04 | | | | | | | |
| 08 | | | 850220 | 126000 | C1 | 04 | | | | | 6 | | |
| 09 | | | 850220 | 126001 | C1 | 04 | 1 | 2 | 3 | 1 | 1 | | |
| 10 | | | 850220 | 126002 | C1 | 04 | | | | | -16762 | | |
| | | | | | | | | | | | | | |

TRADEOFF TOTAL
exempt total
TOTAL 9 99 54 5 108

# ENGINEERING DIVISION....MEMORANDUM

| TO | FROM | DATE |
|---|---|---|
| FILE | ARTURO ARREOLA | 5-23-89 |
| REFERENCE | | PERMIT APPL. NO. |
| UNITED ROCK PRODUCTS CORPORATION | | 185076-7 |
| SUBJECT | | |
| UNITED ROCK & CONCRETE CORPORATION | | 185090-3 |

MANY ATTEMPTS WERE MADE TO CONTACT THE DEPARTMENT OF STATE TO CONFIRM THE CHANGE OF OWNERSHIP, BUT THE LINE IS ALWAYS BUSY.

ANOTHER PHONE CALL WAS MADE TO MR. THOMAS S. TEDESCO, CHAIRMAN AND THE FOLLOW WAS CONFIRMED:

UNITED ROCK PRODUCTS CORPORATION AND UNITED ROCK & CONCRETE CORPORATION ARE DISTINCT LEGAL ENTITIES WHICH HAVE BOUGHT ALL ASSET OF BLUE DIAMOND MATERIALS, DIVISION OF SULLY MILLER CONTRACTING COMPANY.

A CHANGE OF OWNERSHIP HAS OCCURRED.

# ENGINEERING DIVISION....MEMORANDUM

| TO | FROM | DATE |
|---|---|---|
| FILE | ARTURO ARREOLA | 3-14-89 |
| REFERENCE. UNITED ROCK PRODUCTS CORPORATION | | PERMIT APPL. NO. 1850 |
| SUBJECT | | |

T/C TO MR. THOMAS TEDESCO
(213) 564-1866 — NOT IN; MESSAGE LEFT

3/17/89
T/C TO MR. TEDESCO — LEFT MESSAGE

4/21/89
T/C — LEFT MESSAGE

5/2/87 —
T/C TO MR. THOMAS TEDESCO — CONFIRMED THAT THIS ONLY A CHANGE OF OWNERSHIP WITH CHANGES TO THE EQUIPMENT OR FLOWRATES.

**ROUTING RECORD**

| DATE | FROM | TO | ACTION |
|---|---|---|---|
| 3-14-89 | MGM | AA | CLASS III ✓ |
| 5/23/89 | AA | MGM | P/O |
| 6-14-89 | KAM | mGm | P/O |
| 6/14/89 | MGM | PPO | P/O ✓ |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

REFERENCE TO OTHER APCD RECORDS INCLUDING VARIANCES:

65341

ALPHA FILE

| NEWSOURCE | DATA ENTRY |
|---|---|
| ☐ PC | |
| ☑ PO | pm 6-16-89 |

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D08812
A/N 185076
Page 1

**This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.**

**Legal Owner**
**Or Operator:** UNITED ROCK PRODUCTS CORPORATION

ID 65341

**Equipment**
**located at:** 1245 EAST ARROW HIGHWAY, IRWINDALE, CALIFORNIA

**Equipment Description:**

AGGREGATE TRANSFER SYSTEM CONSISTING OF:

1. TWO UNDERGROUND DUMP TRUCK RECEIVING HOPPERS, EACH 10' W. X 10' L. X 10' D.

2. BELT CONVEYOR, INCLINED, 40 H.P.

3. BELT CONVEYOR, SHUTTLE, 5 H.P., WITH A 1 1/2 H.P. DRIVE.

FILE COPY

**Conditions:**

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. NOT MORE THAN 4000 TONS OF AGGREGATE SHALL BE PROCESSED IN ANY ONE DAY.

4. AGGREGATE CHARGED AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Raquel Puerta/jas
July 6, 1989

UNITED ROCK PRODUCTS CORP.
ATTN: THOMAS S. TEDESCO
13131 LOS ANGELES ST.
IRWINDALE, CA. 91706

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
## 9150 Flair Drive El Monte, CA 91731

APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE AND EXCAVATE AND
FOR PLANS REQUIRED BY THE EXECUTIVE OFFICER
FOR FEE INFORMATION AND SMALL BUSINESS EXEMPTION
SEE REVERSE SIDE

34055/13

PLEASE TYPE OR PRINT

SCAQMD USE: SEC | TS | ID NUMBER 65341

1A. PERMIT TO BE ISSUED TO:
United Rock Products Corporation
BUSINESS LICENSE NAME OF ORGANIZATION THAT IS TO RECEIVE PERMIT

1 B.
NAME (OR NAMES) OF OWNER OR PRINCIPAL PARTNERS DOING BUSINESS AS (DBA) ABOVE ORGANIZATION

2 A. MAILING ADDRESS:
13131 Los Angeles Street (NUMBER STREET) | Irwindale (CITY OR COMMUNITY) | California (STATE)
2 B. 91706 (ZIP CODE)

3 A. EQUIPMENT LOCATION (IF SAME ENTER "SAME")
1245 East Arrow Highway (NUMBER STREET) | Irwindale (CITY OR COMMUNITY) | 91706 (ZIP)
3 B. Buena Vista Street (NEAREST INTERSECTING STREET)

4 A. CONTACT PERSON (INITIALS & NAME.)
Thomas S. Tedesco
4 B. CONTACT PHONE NO. (AREA & NO.):
(818 960-3948

5. EQUIPMENT. APPLICATION IS HEREBY MADE FOR PERMIT TO OPERATE THE FOLLOWING EQUIPMENT:
Aggregate Transfer System

6. IF THIS EQUIPMENT HAD A PREVIOUS WRITTEN PERMIT, STATE NAME OF CORPORATION, COMPANY, OR INDIVIDUAL OWNER THAT OPERATED THIS EQUIPMENT, AND STATE PREVIOUS AIR POLLUTION CONTROL DISTRICT PERMIT NUMBER
Sully-Miller Contracting Company (NAME) | P64025 (PREVIOUS PERMIT NUMBER)

7 PERMIT APPLICATION FOR EQUIPMENT
- NEW CONSTRUCTION ☐
- ALTERATION ☐
- CHANGE OF LOCATION ☐
- REINSTATE NON-PAYMENT P O FEES DUE ☐
- CHANGE OF OWNERSHIP ☒ 85
- EXISTING EQUIPMENT IN OPERATION WITHOUT PRIOR PERMIT ☐
- CHANGE OF CONDITIONS ☐

8. TYPE OF ORGANIZATION:
- CORPORATION ☒
- PARTNERSHIP ☐
- INDIVIDUAL OWNER ☐
- LOCAL GOV'T AGENCY ☐
- STATE AGENCY ☐
- FEDERAL AGENCY ☐
- UTILITY ☐

9. ESTIMATED COST OF EQUIPMENT OR ALTERATION
BASIC EQUIPMENT $ N/A
AIR POLLUTION CONTROL EQUIPMENT $ N/A

10. FOR THE NEW CONSTRUCTION, ALTERATION, TRANSFER OF OWNERSHIP OR LOCATION, WHAT IS
ESTIMATED STARTING DATE? 1 January 1989
ESTIMATED COMPLETION DATE? N/A

11. GENERAL NATURE OF BUSINESS
Mining and Sales of Aggregates

12. PRINCIPAL PRODUCT
Rock and Sand

13. DO YOU CLAIM CONFIDENTIALITY OF DATA?
YES ☐ NO ☒
IF YES STATE NATURE OF DATA ON SEPARATE SHEET

14 NORMAL OPERATING HOURS OF SUBJECT EQUIPMENT
HOURS/DAY 16
DAYS/WEEK 6
WEEKS/YEAR 52

15. HAS A CEQA DOCUMENT BEEN PREPARED FOR THIS PROJECT? YES ☐ NO ☒

15a. ARE ALL COMPANIES' FACILITIES IN CALIFORNIA IN COMPLIANCE WITH AIR POLLUTION RULES?
YES ☒ NO ☐

16. SIGNATURE OF RESPONSIBLE MEMBER OF ORGANIZATION:
Thomas S Tedesco

17. OFFICIAL TITLE OF SIGNER:
~~President~~ Chairman

18. TYPED OR PRINTED NAME OF SIGNER:
Thomas S. Tedesco

19. PHONE NO.
818-960-3948

20. DATE

SCAQMD USE

SIC NO.
EQUIP. CAT. NO.: 107200 / __
SCH/STEP: 10 JAN 6 1989
APPLICATION NO. 185076
PERMIT NO.
TYPE (B OR C)
WORK UNITS A/C P/O
ASSIGNMENT 2 UNIT ENGR
CLASS 1 0
VALIDATION 12/30/88
FILING FEE: $ 2640
CHECK OR MONEY ORDER NO. H 50

Form 400A - REVISED 8-84 PRIOR VERSIONS NOT VALID 6 of 23 1/19/89 AP. (Continued on reverse) C-1

SEE REVERSE FOR FEES REQUIRED UPON FILING

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

## FILING FEES

Except as noted following, a $250 filing fee must accompany each application for Permit to Construct/Operate.

1. For small businesses the filing fee is $160. The small business declaration form below must be completed in order to be considered a small business.

2. Each application for change of ownership requires a $110 transfer fee.

3. All applicants, including state, local governmental and public districts, must pay a permit evaluation fee. Such fees are in addition to filing fees and change of ownership fees.

4. All state, local governmental agencies or public districts are exempt from paying filing fees and change of ownership fees.

SEE APPLICATION INSTRUCTIONS FORM 400-B FOR ADDITIONAL INSTRUCTIONS
Call (818) 572-6212 for assistance
SUPPLEMENTAL DATA FORMS REQUIRED

Special supplemental data forms must be completed for: BOILERS, LIQUID HEATERS, DEGREASERS, DRY CLEANING EQUIPMENT, OVENS, SPRAY BOOTHS AND STORAGE TANKS.

## SMALL BUSINESS DECLARATION

In order to be considered a small business as specified in Regulation XIII, this form must be completed. If not a small business, do not complete this form.

A "Small Business": is a business which is independently owned and operated and meets the following criteria or, if affiliated with another concern, the combined activities of both concerns meet these criteria:

The number of employees is 10 or less; and
The total annual receipts are $500,000 or less.

I hereby certify, under penalty of perjury, that the business enterprise containing the emission source(s) for which an SCAQMD Permit to Construct or Permit to Operate is being applied herein qualifies as a SMALL BUSINESS, based on compliance with the definition above:

Signature of Applicant _____ Date _____ ( ) Telephone Number

Printed or Typed Signature _____ Company Name

# AEIS SHEET

NAME OF FIRM UNITED ROCK PRODUCTS CORPORATION COMPANY I.D. 65341

LOCATION ADDRESS 1245 E ARROW HIGHWAY, IRWINDALE, CA 91706

REASON FOR INACTIVATION: 1. ALTERATION 2. CHANGE OF OPERATOR 3. MOVED 4. REMOVED 5. OUT OF BUSINESS 6. BANKING ISSUED 7. OTHER ____

SUBS. APPLICATION NO. _____ INACTIVATION DATE __/__/__

---

ACTION CODE (A) C D A = ADD DATA C = CHANGE DATA D = DELETE DATA

---

*PERMIT NUMBER D08812

APPLICATION NUMBER 185026

*ISSUE DATE 07/07/89

**INSTALLATION DATE __/__/__

**EQUIPMENT B CAT. 107200

**EQUIPMENT C CAT. __

**DESCRIPTION Aggregate Transfer Sys.

PERMIT TYPE (B, C, or D) B

SCHEDULE/STEP 1/ D

---

*SECTION __

*SECTOR __

| EMISSIONS | $R_1$ | $R_2$ |
|---|---|---|
| rHC | | |
| tHC | | |
| $NO_x$ | | |
| $SO_2$ | | |
| CO | | |
| Part | 1.5 L | 2.5 L |
| Other 1 | | |
| Other 2 | | |
| Other 3 | | |

| Weeks Operated Per Year 52 | Mon | Tues | Weds | Thurs | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|
| Daily Start Time | 06 | 06 | 06 | 06 | 06 | | |
| Daily Stop Time | 16 | 16 | 16 | 16 | 16 | | |
| *UTM Coordinates X | | | | | | | |

*Not to be completed by the engineer.
**Fill out only if different from application.

Engineer ARTURO ARREOLA Date 5/23/89

# INSTRUCTIONS FOR PERMIT WORDING & FEE DATA

**APPLICATION No.** 185076

**NEED EIR?** ☐ YES ☑ NO

| DISPOSITION | PERMIT UNIT WORDING | CONDITIONS |
|---|---|---|
| ☑ APPROVED | ☐ BELOW | ☐ NONE |
| ☐ DENIED | ☐ ON FIELD REPORT DATED _____ | ☑ NUMBERS LISTED: 36 |
| ☐ CANCELED — DON'T REFUND FILING FEE | ☐ ON PAGE _____ OF PROCESS SHEETS | ☑ SPECIAL (SEE PERMIT UNIT WORDING & CONDITIONS) |
| ☐ CANCELED — REFUND FILING FEE | ☑ ON Permit P64025 that is attached (Modified) | ☐ AS ON _____ |
| SEE COMMENTS | | |

**PREVIOUS PERMIT NO.** P64025

**PERMIT UNIT WORDING & CONDITIONS:**

NOT MORE THAN 4000 TONS OF AGGREGATE SHALL BE PROCESSED IN ANY ONE DAY.

( ) P/C ( ) P/O ( ) P/O NO P/C ( ) NOTICE TO APPLY WRITTEN

☑ CHANGE OF OWNERSHIP, large business ☐ ALTERATION ☐ TIME & MATERIALS

☐ CHANGE OF OWNERSHIP, small business ☐ FEDERAL GOVERNMENT

☐ CHANGE OF CONDITIONS ☐ GOVERNMENT (other)

| SCHEDULE | ① H P | ② 1000s BTU | ③ KVA | ④ SQ. FT | ⑤ GALLONS | ⑥ GASOLINE PUMPING | ⑦ EXCEPTIONS |
|---|---|---|---|---|---|---|---|
| RATING | 46½ | | | | | | |
| FEE | 2002 | | | | | | |

1. PERMIT EVALUATION FEE — RULE 301.1(b)(1)

A. SCHEDULE _____ STEP _____ = FEE $ _____

B. TIME & MATERIALS (T & M): HOURS _____ X $50/HOUR = FEE $ _____

C. CHANGE OF OWNERSHIP, large business or ALTERATION — EXCEPT T & M:
SCHEDULE 1 STEP D = FEE 2002 X 50% = FEE $ 1001.00

D. ADDITIONAL FEE FOR NO P/C: ABOVE FEE _____ X 50% = FEE $ _____

2. EIR/MODELING FEE — RULE 301.1(g): HOURS _____ X $50/HOUR = FEE $ _____

3. 301(d)(1)(C) CREDIT OR DIFFERENCE DUE TO INCORRECT INFORMATION

_____ ADJUSTED FEE $ _____

DISPOSITIONED

Comments: _____

**TOTAL FEE** $ 1001.00

**REFUND** 0

WORK UNITS: 3

RECOMMENDED BY ARTURO ARREOLA DATE 5/23/89 REVIEWING ENGINEER KM DATE 6/14/89

## GENERAL STANDARD CONDITIONS

3. This equipment must not be operated unless (it)(the) _____ _____ (is)(are) vented only to air pollution control equipment which is in full use and which has been issued (an operating permit) (a permit to construct) by the Executive Officer.
4. a. Fuel oil supplied at the burner must be No. _____ or lighter grade as described by the latest ASTM specifications and must have a sulfur content of not more than 0. _____ % by weight.
   b. No. _____ fuel oil supplied at the burner must be at a temperature of _____ °F or greater.
5. A temperature of not less than _____ °F must be maintained in the (afterburner) (combustion chamber) when the equipment it serves is in operation.
6. Not less than _____ gallons per minute of (water)(scrubbing solution) at a pressure of _____ to _____ psig must be supplied to the scrubber(_____) when the equipment it serves is in operation.
7. This oven must not be operated at temperatures above _____ °F.
8. Steam atomization only must be employed during the entire period of fuel oil burning.
9. This equipment must not discharge to the atmosphere radioactive materials in excess of the permissible limits established by existing authorities.
10. Whenever air contaminants are vented to the boiler firebox, all burners must be continously operated either with natural gas at a burner pressure of not less than _____ (psig) (inches water column) or with fuel oil at an equivalent heat input.

### MECHANICAL UNIT

11. Circulating water to the _____ must be maintained at pH _____ or (higher) (lower).
13. This equipment must not be used to vent more than _____ at any one time.
27. The (incinerator) (equipment) must be operated by personnel properly trained in its operation.
29. The (mixing chamber burner(s)) (afterburner) (and water spray chamber) must be used throughout the burning period.
36. (Aggregate)(~~Material~~) charged, and (aggregate) (~~material~~) in process ~~must~~ shall be kept sufficiently moist to prevent dust emissions.
58. This furnace may be used only to process EXCESSIVE _____.
61. The cloth bags in the silo filter vent(s) must be thoroughly cleaned immediately after each load of material is received.
71. Plastics or materials containing plastics must not be charged into this (incinerator) (furnace).
74. A mechanical gauge must be installed so as to indicate, in inches water column, the static pressure differential across the bags.
75. A flowmeter, indicating G.P.M. (and a pressure gauge indicating in P.S.I.), must be installed in the water supply line to the scrubber.
84. Dust collected in the baghouse must be discharged only into closed containers.
85. This incinerator may be used only to cremate human or animal anatomical parts.
86. Slide dampers must be installed in each branch duct of the exhaust system.

SCAQMD
ENGINEERING DIVISION
NEW SOURCE REVIEW REGULATION XIII DATA SHEET

1 ☐ P/C 2 ☐ P/O 3 ☑ C/O

COMPANY ID# 65341
APPLICATION # 185076

COMPANY NAME UNITED ROCK PRODUCTS CORPORATION DATE 5/23/89
EQUIPMENT LOCATION 1245 E. ARROW HWY, CA 91706

---

APPLICABLE NEW SOURCE RULE: (equip. installed or Class I applc'n rec'd...)

1 ☐ None (before 10-8-76)
2 ☐ Rule 213 (before 7-1-79 and on or after 10-8-76)
3 ☐ Original Reg XIII (before 1-1-83 and on or after 7-1-79)
4 ☐ 1st Revision Reg XIII (before 7-12-85 and on or after 1-1-83)
5 ☑ 2nd Revision Reg XIII (on or after 7-12-85)

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SPECIAL CASES:

1 ☐ Banking Ref Applc'n #_____
2 ☐ Reg 13 Exempt
3 ☐ Mitigations 4 ☐ Tradeoffs
5 ☐ Toxic Materials
6 ☐ Banking Cert./Reg. Used
7 ☐ Rule 219 Exemptions
8 ☐ Alter.-Prev. App. #_____

---

EMISSION INCREASE OR DECREASE FROM THIS PERMIT UNIT CREDITED TO THIS LOCATION (Indicate "+" or "-"): [] 1.1 factor used for Max

N/A

| CONTAMINANT | RHC | $NO_x$ | $SO_x$ | CO | Part | Lead | UnRHC |
|---|---|---|---|---|---|---|---|
| Max #/day | | | | | | | |
| Actual w/internal BACT #/day | | | | | | | |
| Actual w/o BACT #/day | | | | | | | |

---

REGULATION XIII EXEMPT EMISSIONS (Indicate "+" or "-")

Exempt by Rule 1304 (____) (____) or Rule 213(f) (____) (____)

| CONTAMINANT | RHC | $NO_x$ | $SO_x$ | CO | Part | Lead | UnRHC |
|---|---|---|---|---|---|---|---|
| Max #/day | | | | | | | |
| Actual #/day | | | | | | | |

---

MITIGATIONS ACHIEVED CONCURRENT WITH THIS APPLC'N (Indicate "+" or "-")

| APPLIC'N NUMBER | RHC #/day | NOx #/day | $SO_x$ #/day | CO #/day | Part #/day | Lead #/day | UnRHC #/day |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Engineer ARTHUR ARREOZA Date 5/23/89 Reviewing Engineer KM Date 6/14/89

Revised 9/85

76PZ15M-12/71

# AIR POLLUTION CONTROL DISTRICT

[illegible] South San Pedro Street, Los Angeles, Calif. 90013

P 64025

SECTOR BE

Operation under this permit must be conducted in compliance with all data and specifications included with the application under which this permit is issued. The equipment must be properly maintained and kept in good operating condition at all times. In accordance with Rule 1(c), this Permit to Operate must be posted or accessible

LEGAL OWNER OR OPERATOR: BLUE DIAMOND MATERIALS DIV.
SULLY-MILLER CONTRACTING COMPANY  Appl. No. A-37774

EQUIPMENT LOCATED AT: 1245 EAST ARROW HIGHWAY
IRWINDALE, CALIFORNIA

EQUIPMENT DESCRIPTION AND CONDITIONS:

AGGREGATE TRANSFER SYSTEM CONSISTING OF:

1. TWO UNDERGROUND DUMP TRUCK RECEIVING HOPPERS, EACH 10' W. x 10' L. x 10' D.
2. BELT CONVEYOR, INCLINED, ~~30" W. x 250' L.~~, 40 H.P.
3. BELT CONVEYOR, SHUTTLE, ~~24" W. x 30' L.~~, 5 H.P., WITH A 1½ H.P. DRIVE.

(CONDITION)

AGGREGATE CHARGED, AND AGGREGATE IN PROCESS MUST BE KEPT SUFFICIENTLY MOIST TO PREVENT DUST EMISSIONS.

**THIS PERMIT BECOMES VOID UPON ANY CHANGE OF OWNERSHIP OR ADDRESS, OR ANY ALTERATION**

This permit does not authorize the emission of air contaminants in excess of those allowed by Division 20, Chapter 2, Article 2, of the Health and Safety Code of the State of California or the Rules and Regulations of the Air Pollution Control District. This permit cannot be considered as permission to violate existing laws, ordinances, regulation or statutes of other governmental agencies.

VOID UNLESS [illegible]

AIR POLLUTION CONTROL OFFICER

BY _____
Helen Thompson, Permit Section

DATE October 8, 1975

| SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT | PAGES 2 | PAGE 1 |
|---|---|---|
| ENGINEERING DIVISION | APPL. NO. 185071-7 | DATE 5/23/89 |
| APPLICATION PROCESSING AND CALCULATIONS | PROCESSED BY A ARREOLA | CHECKED BY KM 6/14/89 |

CHANGE OF OWNERSHIP

United Rock Products Corporation
13131 Los Angeles Street
Irwindale, CA 91706

EQUIPMENT LOCATION

1245 East Arrow Highway
Irwindale, CA 91706

**EQUIPMENT DESCRIPTION**

Refer to copy of prior permit in this file.

**HISTORY**

ALL A/Cs INACTIVE

A change of ownership took place January 1, 1989. Blue Diamond Materials, Division of Sully Miller Contracting Company was bought by United Rock Products Corporation.

| NEW APPL. | OLD APPL. | MICROFICHE NUMBER | DESCRIPTION |
|---|---|---|---|
| 185071 | A85747 | 1123-D5 | Primary Crusher |
| 185072 | A85746 | 1124-A1 | Pre-crushing System no. 2 |
| 185073 | A85745 | 1124-C25 | Sand & Aggregate Reclaim |
| 185074 | A85742 | 1123-J5 | Pre-crushing System No. 1 |
| 185075 | A85748 | 1123-H10 | Base Material Handling |
| 185076 | A87774 | 1123-A1 | Aggregate Transfer System |
| 185077 | C31948 | 1125-C18 | Aggregate Processing System |

NO ENFORCEMENT ACTIVITY FOUND.

**PROCESS DESCRIPTION & CALCULATIONS**

No changes to the equipment or process rate has taken place. Refer to microfiche listed above, corresponding to old application under the previous owner.

**EVALUATION**

Refer to old application (REGULATIONS NOT AFFECTED).

Reg XIII: Reg XIII (05) does not apply since this is a change of ownership.

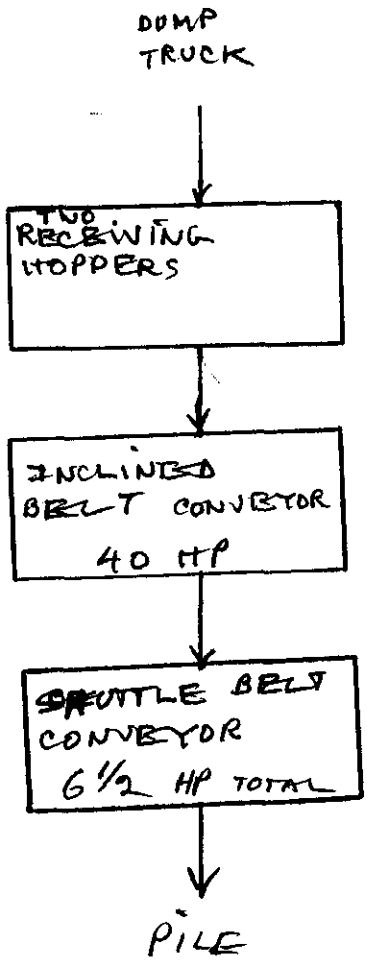
**RECOMMENDATION**

This equipment is expected to continue to comply with all rules and regulations of the SCAQMD. A Permit to Operate is recommended.

# BLOCK FLOW DIAGRAM

A/N 185076

AGGREGATE TRANSFER SYSTEM



Press f5 to continue

ENG930 EMISSION THRESHOLD / NEWSOURCE

name: UNITED ROCK & CONCRETE CORP company id: 065341
address: 1245 E ARROW HWY date: 03/10/89
city: IRWINDALE I user: NS11

INCREASE (+) DECREASE (-) SUBSEQUENT TO 10-8-76

| L# | I | M | date | appl | p/o | 13 rl | RHC #/day | NOX #/day | SO2 #/day | CO #/day | PART #/day | LEAD #/day | UNRHC #/day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01 | | | 840105 | 116681 | C1 | 04 | | | | | 2 | | |
| 02 | | | 850107 | C31948 | C2 | 03 | | | | | | | |
| 03 | | | 850220 | 125992 | C1 | 04 | | | | | -409 | | |
| 04 | | | 850220 | 125994 | C1 | 04 | | | | | 1 | | |
| 05 | | | 850220 | 125996 | C1 | 04 | | | | | | | |
| 06 | | | 850220 | 125997 | C1 | 04 | 8 | 97 | 51 | 4 | 17269 | | |
| 07 | | | 850220 | 125999 | C1 | 04 | | | | | | | |
| 08 | | | 850220 | 126000 | C1 | 04 | | | | | 6 | | |
| 09 | | | 850220 | 126001 | C1 | 04 | 1 | 2 | 3 | 1 | 1 | | |
| 10 | | | 850220 | 126002 | C1 | 04 | | | | | -16762 | | |
| | | | | | | | | | | | | | |

TRADEOFF TOTAL
exempt total
TOTAL 9 99 54 5 108

# ENGINEERING DIVISION....MEMORANDUM

| TO | FROM | DATE |
|---|---|---|
| FILE | ARTURO ARREOLA | 5-23-89 |
| REFERENCE | | PERMIT APPL. NO. |
| UNITED ROCK PRODUCTS CORPORATION | | 185071-7 |

SUBJECT

UNITED ROCK & CONCRETE CORPORATION 185090-3

MANY ATTEMPTS WERE MADE TO CONTACT THE DEPARTMENT OF STATE TO CONFIRM THE CHANGE OF OWNERSHIP, BUT THE LINE IS ALWAYS BUSY.

ANOTHER PHONE CALL WAS MADE TO MR. THOMAS S. TEDESCO, CHAIRMAN AND THE FOLLOW WAS CONFIRMED:

UNITED ROCK PRODUCTS CORPORATION AND UNITED ROCK & CONCRETE CORPORATION ARE DISTINCT LEGAL ENTITIES WHICH HAVE BOUGHT ALL ASSET OF BLUE DIAMOND MATERIALS, DIVISION OF SULLY MILLER CONTRACTING COMPANY. [redacted]

A CHANGE OF OWNERSHIP HAS ACCURRED.

# ENGINEERING DIVISION····MEMORANDUM

| TO | FROM | DATE |
|---|---|---|
| FILE | ARTURO ARREOLA | 3-14-89 |
| REFERENCE. UNITED ROCK PRODUCTS CORPORATION | | PERMIT APPL. NO. 1850 |

SUBJECT

T/C TO MR. THOMAS TEDESCO
(213) 564-1866 — NOT IN; MESSAGE LEFT

3/17/89
T/C TO MR. TEDESCO — LEFT MESSAGE

4/21/89
T/C — LEFT MESSAGE

5/2/87 —
T/C TO MR. THOMAS TEDESCO —
CONFIRMED THAT THIS ONLY A CHANGE OF OWNERSHIP WITH CHANGES TO THE EQUIPMENT OR FLOWRATES.

ROUTING RECORD

| DATE | FROM | TO | ACTION |
|---|---|---|---|
| 3-14-89 | MGM AA | CLASS III ✓ | |
| 5/23/89 | AA | MGM | P/O |
| 6-14-89 | KAm | mgm | P/O |
| 6/14/89 | MGM | PPU | P/O ✓ |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

REFERENCE TO OTHER APCD
RECORDS INCLUDING VARIANCES:

65341

ALPHA FILE

NEWSOURCE DATA ENTRY

☐ PC _____ _____

☑ PO mm 6-16-89

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D08813
A/N 185077
Page 1

**This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.**

**Legal Owner**
**Or Operator:** *UNITED ROCK PRODUCTS CORPORATION*

ID 65341

**Equipment**
**located at:** 1245 EAST ARROW HIGHWAY, IRWINDALE, CALIFORNIA

**Equipment Description:**

AGGREGATE PROCESSING SYSTEM CONSISTING OF:

1. BELT CONVEYOR, C-1A, 200 H.P.
2. BELT CONVEYOR, C-1, 250 H.P.
3. TWO CLASSIFYING SCREENS, NOS. VS-1 AND VS-2, HEWITT-ROBINS, DOUBLE DECK, 8' X 20', EACH 30 H.P.
4. BELT CONVEYOR, C-5, 100 H.P.
5. BELT CONVEYOR, C-6, 75 H.P.
6. TWO CLASSIFYING SCREENS, NOS. VS-4 AND VS-5, WET SCREENINGS, HEWITT-ROBINS, DOUBLE DECK, 8' X 20', EACH 30 H.P.
7. CLASSIFYING TANK, WEMCO, MODEL "D", 10' X 36', 1-1/2 H.P.
8. THREE WASHERS, WEMCO, MODEL "B", EACH 10 H.P.
9. METERING BIN, 9 TONS CAPACITY.
10. BELT CONVEYOR C-21, 5 H.P.
11. SURGE BIN, 75 TONS CAPACITY.
12. BELT CONVEYOR, C-13, 30 H.P.
13. BELT CONVEYOR, C-7, 7-1/2 H.P.
14. SURGE BIN, 65 TON CAPACITY.
15. BELT CONVEYOR, CR-5 CRUSHER FEED, 5 H.P.
16. CONE CRUSHER, NO. CR-5, EL JAY, MODEL NO. 45, 125 H.P.
17. BELT CONVEYOR, NO. C-12, 5 H.P.

FILE COPY

**CONTINUATION OF PERMIT TO OPERATE**

18. BELT CONVEYOR, NO. C-11, 5 H.P.

19. TWO CONE CRUSHER, NOS. CR-3 AND CR-4, SYMONS, EACH WITH A 200 H.P. MAIN DRIVE, A 3 H.P. ROTARY FEEDER, A 5 H.P. LUBE PUMP AND A 7-1/2 H.P. ADJUSTER.

20. TWO SURGE BINS, 36 TONS CAPACITY EACH.

21. BELT CONVEYOR, NO. C-9, 7-1/2 H.P.

22. CONE CRUSHER, NO. CR-1, SYMONS, SIZE 7' WITH A 300 H.P. MAIN DRIVE, A 5 H.P. LUBE PUMP AND A 5 H.P. ADJSUTER.

23. BELT CONVEYOR, NO. C-10, 5 H.P.

24. CONE CRUSHER, NO. CR-2, TELSMITH, MODEL FC 66, WITH A 300 H.P. MAIN DRIVE, A 5 H.P. LUBE PUMP.

25. BELT CONVEYOR, NO. C-8, 5 H.P.

26. BELT CONVEYOR, NO. C-2, 50 H.P.

27. BELT CONVEYOR, NO. C-3, 100 H.P.

28. BELT CONVEYOR, NO. C-4, 150 H.P.

29. FOUR CLASSIFYING SCREENS, NOS. VS-6A, VS-6B, VS-7A, VS-7B, HEWITT-ROBINS, DOUBLE DECK, 8' X 20', EACH 30 H.P.

30. CLASSIFYING SCREEN NO. VS-6C, EL-JAY, MODEL FS-6163, TRIPLE DECK, 30 H.P.

31. BELT CONVEYOR, NO. C-14, 15 H.P.

32. BELT CONVEYOR, NO. C-15, 15 H.P.

33. BELT CONVEYOR, NO. C-16, 15 H.P.

34. BELT CONVEYOR, NO. C-17, 20 H.P.

35. BELT CONVEYOR, NO. C-18, 7-1/2 H.P.

36. BELT CONVEYOR, NO. C-19, 20 H.P.

37. BELT CONVEYOR, NO. C-20, 7-1/2 H.P.

38. BELT CONVEYOR, NO. C-22, 15 H.P.

39. BELT CONVEYOR, NO. C-23, 30 H.P.

40. BELT CONVEYOR, NO. C-24, 20 H.P.

41. BELT CONVEYOR, NO. C-25, 37-1/2 H.P.

FILE COPY

**CONTINUATION OF PERMIT TO OPERATE**

42. BELT CONVEYOR, 24" W. X 30' L., 5 H.P.

43. SURGE HOPPER, 75 TONS.

44. BELT CONVEYOR, NO. CS-1, 5 H.P.

45. BELT CONVEYOR, NO. CS-2, 15 H.P.

46. WATER SPRAY SYSTEM WITH 68 SPRAY NOZZLES, JOHNSON-MARCH, 10 H.P.

47. CONE CRUSHER, SYMONS, MODEL 66", WITH A 250 H.P. MAIN DRIVE, A 5 H.P. LUBE PUMP AND A 7-1.2 H.P. ADJUSTER.

48. BELT CONVEYOR, NO. CS-3, 15 H.P.

49. CLASSIFYING SCREEN, NO. VS-8, HEWITT-ROBINS, 8' X 20', 50 H.P.

50. BELT CONVEYOR, NO. CS-4, 5 H.P.

51. BELT CONVEYOR, NO. CS-5, 5 H.P.

52. BELT CONVEYOR, NO. CS-6, 15 H.P.

53. BELT CONVEYOR, NO. CS-7, 15 H.P.

FILE COPY

**Conditions:**

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. AGGREGATE CHARGED AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THIS SYSTEM SHALL NOT PROCESS MORE THAN 24,000 TONS PER DAY OF AGGREGATE.

5. A DAILY OPERATING LOG SHOWING TONS OF AGGREGATE PROCESSED SHALL BE MAINTAINED BY THE OPERATOR. THIS OPERATING LOG SHALL BE KEPT ON FILE FOR TWO YEARS AND MADE AVAILABLE, UPON REQUEST, TO THE EXECUTIVE OFFICER OR HIS REPRESENTATIVE.

**THIS PERMIT CONCLUDES ON THE NEXT PAGE.**

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731



**CONTINUATION OF PERMIT TO OPERATE**

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Raquel Puerta/jas
July 6, 1989

FILE COPY

UNITED ROCK PRODUCTS CORP.
ATTN: THOMAS S. TEDESCO
13131 LOS ANGELES ST.
IRWINDALE, CA. 91706

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
## 9150 Flair Drive El Monte, CA 91731

34055/3

APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE AND EXCAVATE AND
FOR PLANS REQUIRED BY THE EXECUTIVE OFFICER
FOR FEE INFORMATION AND SMALL BUSINESS EXEMPTION
SEE REVERSE SIDE

PLEASE TYPE OR PRINT

SCAQMD USE: SEC | TS | ID NUMBER 65341

1A. PERMIT TO BE ISSUED TO:
United Rock Products Corporation
BUSINESS LICENSE NAME OF ORGANIZATION THAT IS TO RECEIVE PERMIT

1 B.
NAME (OR NAMES) OF OWNER OR PRINCIPAL PARTNERS DOING BUSINESS AS (DBA) ABOVE ORGANIZATION

2 A. MAILING ADDRESS:
13131 Los Angeles Street (NUMBER STREET) | Irwindale (CITY OR COMMUNITY) | California (STATE)

2 B.
91706
ZIP CODE

3 A. EQUIPMENT LOCATION (IF SAME ENTER "SAME"):
1245 East Arrow Highway (NUMBER STREET) | Irwindale (CITY OR COMMUNITY) | 91706 (ZIP)

3 B.
Buena Vista Street
NEAREST INTERSECTING STREET

4 A. CONTACT PERSON (INITIALS & NAME):
Thomas S. Tedesco

4 B. CONTACT PHONE NO. (AREA & NO.):
(818 960-3948

5. EQUIPMENT: APPLICATION IS HEREBY MADE FOR PERMIT TO OPERATE THE FOLLOWING EQUIPMENT:
Aggregate Processing System

6. IF THIS EQUIPMENT HAD A PREVIOUS WRITTEN PERMIT, STATE NAME OF CORPORATION, COMPANY, OR INDIVIDUAL OWNER THAT OPERATED THIS EQUIPMENT, AND STATE PREVIOUS AIR POLLUTION CONTROL DISTRICT PERMIT NUMBER.
Blue Diamond Materials (NAME) | M42454 (PREVIOUS PERMIT NUMBER)

7. PERMIT APPLICATION FOR EQUIPMENT:
- NEW CONSTRUCTION ☐
- ALTERATION ☐
- CHANGE OF LOCATION ☐
- REINSTATE NON—PAYMENT P O FEES DUE ☐
- CHANGE OF OWNERSHIP ☒ $85
- EXISTING EQUIPMENT IN OPERATION WITHOUT PRIOR PERMIT ☐
- CHANGE OF CONDITIONS ☐

8. TYPE OF ORGANIZATION:
- CORPORATION ☒
- PARTNERSHIP ☐
- INDIVIDUAL OWNER ☐
- LOCAL GOV'T AGENCY ☐
- STATE AGENCY ☐
- FEDERAL AGENCY ☐
- UTILITY ☐

9. ESTIMATED COST OF EQUIPMENT OR ALTERATION.
BASIC EQUIPMENT $ N/A
AIR POLLUTION CONTROL EQUIPMENT $ N/A

10. FOR THE NEW CONSTRUCTION, ALTERATION, TRANSFER OF OWNERSHIP OR LOCATION, WHAT IS
ESTIMATED STARTING DATE? 1 January 1989
ESTIMATED COMPLETION DATE? N/A

11. GENERAL NATURE OF BUSINESS:
Mining and Sales of Aggregates

12. PRINCIPAL PRODUCT
Rock and Sand

13. DO YOU CLAIM CONFIDENTIALITY OF DATA?
YES ☐ NO ☒
IF YES STATE NATURE OF DATA ON SEPARATE SHEET

14. NORMAL OPERATING HOURS OF SUBJECT EQUIPMENT:
HOURS/DAY 16
DAYS/WEEK 6
WEEKS/YEAR 52

15. HAS A CEQA DOCUMENT BEEN PREPARED FOR THIS PROJECT? YES ☐ NO ☒

15a. ARE ALL COMPANIES' FACILITIES IN CALIFORNIA IN COMPLIANCE WITH AIR POLLUTION RULES?
YES ☒ NO ☐

16. SIGNATURE OF RESPONSIBLE MEMBER OF ORGANIZATION:
Thomas S Tedesco

17. OFFICIAL TITLE OF SIGNER:
~~President~~ Chairman

18. TYPED OR PRINTED NAME OF SIGNER:
Thomas S. Tedesco

19. PHONE NO.
818-960-3948

20. DATE

SCAQMD USE:
SIC NO.
EQUIP. CAT. NO.: 000299 / __
SCH/STEP: 1H JAN 6 1989
APPLICATION NO. 185077
PERMIT NO.
TYPE B OR C
WORK UNITS A/C P/O
ASSIGNMENT 7 UNIT ENGR
CLASS 1 0
VALIDATION 12/30/88
FILING FEE: $ 2640
CHECK OR MONEY ORDER NO. 01

Form 400A - REVISED 8-84 PRIOR VERSIONS NOT VALID 70823 1/9/89 AP. (Continued on reverse) C-1

SEE REVERSE FOR FEES REQUIRED UPON FILING

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

## FILING FEES

Except as noted following, a $250 filing fee must accompany each application for Permit to Construct/Operate.

1. For small businesses the filing fee is $160. The small business declaration form below must be completed in order to be considered a small business.

2. Each application for change of ownership requires a $110 transfer fee.

3. All applicants, including state, local governmental and public districts, must pay a permit evaluation fee. Such fees are in addition to filing fees and change of ownership fees.

4. All state, local governmental agencies or public districts are exempt from paying filing fees and change of ownership fees.

SEE APPLICATION INSTRUCTIONS FORM 400-B FOR ADDITIONAL INSTRUCTIONS
Call (818) 572-6212 for assistance
SUPPLEMENTAL DATA FORMS REQUIRED

Special supplemental data forms must be completed for: BOILERS, LIQUID HEATERS, DEGREASERS, DRY CLEANING EQUIPMENT, OVENS, SPRAY BOOTHS AND STORAGE TANKS.

## SMALL BUSINESS DECLARATION

*In order to be considered a small business as specified in Regulation XIII, this form must be completed.* If not a small business, do not complete this form.

A "Small Business": is a business which is independently owned and operated and meets the following criteria or, if affiliated with another concern, the combined activities of both concerns meet these criteria:

The number of employees is 10 or less; and
The total annual receipts are $500,000 or less.

I hereby certify, under penalty of perjury, that the business enterprise containing the emission source(s) for which an SCAQMD Permit to Construct or Permit to Operate is being applied herein qualifies as a SMALL BUSINESS, based on compliance with the definition above:

| Signature of Applicant | Date | ( ) Telephone Number |
|---|---|---|
| Printed or Typed Signature | Company Name | |

SCAQMD REVENUE '88 FEB 23
Payment Posted
Appl # Assigned
Returned From
Sent to

# AEIS SHEET

NAME OF FIRM UNITED ROCK PRODUCTS CORPORATION COMPANY I.D. 65341

LOCATION ADDRESS 1245 E. ARROW HIGHWAY, IRWINDALE, CA 91706

REASON FOR INACTIVATION: 1. ALTERATION 2. CHANGE OF OPERATOR 3. MOVED 4. REMOVED 5. OUT OF BUSINESS 6. BANKING ISSUED 7. OTHER _____

SUBS. APPLICATION NO. _____ INACTIVATION DATE __/__/__

---

ACTION CODE (A) C D A = ADD DATA C = CHANGE DATA D = DELETE DATA

---

*PERMIT NUMBER D08813

APPLICATION NUMBER 185077

*ISSUE DATE 07/07/89

**INSTALLATION DATE __/__/__

**EQUIPMENT B CAT. 000299

**EQUIPMENT C CAT. __

**DESCRIPTION Aggregate Processing Sys

PERMIT TYPE (B, C, or D) B

SCHEDULE/STEP 1/ H

---

*SECTION __

*SECTOR __

| EMISSIONS | $R_1$ | $R_2$ |
|---|---|---|
| rHC | | |
| tHC | | |
| $NO_x$ | | |
| $SO_2$ | | |
| CO | | |
| Part | 262 | 262 |
| Other 1 | | |
| Other 2 | | |
| Other 3 | | |

| Weeks Operated Per Year 52 | Mon | Tues | Weds | Thurs | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|
| Daily Start Time | 06 | 06 | 06 | 06 | 06 | 06 | __ |
| Daily Stop Time | 16 | 16 | 16 | 16 | 16 | 16 | __ |
| *UTM Coordinates X | __ | __ | __ | __ | __ | __ | __ |

*Not to be completed by the engineer.
**Fill out only if different from application.

Engineer ARTURO ARREOLA Date 5/23/89

# INSTRUCTIONS FOR PERMIT WORDING & FEE DATA

**APPLICATION No.** 185077

**NEED EIR?** ☐ YES ☑ NO

| DISPOSITION | PERMIT UNIT WORDING: | CONDITIONS: |
|---|---|---|
| ☑ APPROVED | ☐ BELOW | ☐ NONE |
| ☐ DENIED | ☐ ON FIELD REPORT DATED _____ | ☐ NUMBERS LISTED: _____ |
| ☐ CANCELED — DON'T REFUND FILING FEE | ☐ ON PAGE _____ OF PROCESS SHEETS | ☐ SPECIAL (SEE PERMIT UNIT WORDING & CONDITIONS) |
| ☐ CANCELED — REFUND FILING FEE | ☑ ON PERMIT M42454 ATTACHED | ☑ AS ON PERMIT M42454 ATTACHED |
| SEE COMMENTS | | |

**PREVIOUS PERMIT NO.** M42454

**PERMIT UNIT WORDING & CONDITIONS:** MODIFIED

( ) P/C ( ✓ ) P/O ( ) P/O NO P/C ( ) NOTICE TO APPLY WRITTEN

☑ CHANGE OF OWNERSHIP, large business ☐ ALTERATION ☐ TIME & MATERIALS

☐ CHANGE OF OWNERSHIP, small business ☐ FEDERAL GOVERNMENT

☐ CHANGE OF CONDITIONS ☐ GOVERNMENT (other)

| SCHEDULE | ① H P | ② 1000s BTU | ③ KVA | ④ SQ. FT | ⑤ GALLONS | ⑥ GASOLINE FUELING | ⑦ EXCEPTIONS |
|---|---|---|---|---|---|---|---|
| RATING | 307 1/2 | | | | | | |
| FEE | 8534 | | | | | | |

1. PERMIT EVALUATION FEE — RULE 301.1(b)(1)

DISPOSITIONED

A. SCHEDULE _____ STEP _____ FEE $ _____

B. TIME & MATERIALS (T & M): HOURS _____ X $50/HOUR = FEE $ _____

C. CHANGE OF OWNERSHIP, large business or ALTERATION — EXCEPT T & M:
SCHEDULE 1 STEP H = FEE $534 X 50% = FEE $ 4267.00

D. ADDITIONAL FEE FOR NO P/C: ABOVE FEE _____ X 50% = FEE $ _____

2. EIR/MODELING FEE — RULE 301.1(g): HOURS _____ X $50/HOUR = FEE $ _____

3. 301(d)(1)(C) CREDIT OR DIFFERENCE DUE TO INCORRECT INFORMATION

_____ ADJUSTED FEE $ _____

Comments: _____

**TOTAL FEE** $ 4267.00

**REFUND** Ø

WORK UNITS 3

RECOMMENDED BY ARTURO ARREOLA DATE 5/23/89 REVIEWING ENGINEER KM DATE 6/14/89

SCAQMD
ENGINEERING DIVISION
NEW SOURCE REVIEW REGULATION XIII DATA SHEET

1 ☐ P/C 2 ☐ P/O 3 ☒ C/O

COMPANY ID# 65341
APPLICATION # 195077

COMPANY NAME UNITED ROCK PRODUCTS CORPORATION DATE 5/23/89
EQUIPMENT LOCATION 145 E. ARROW HWY, IRWINDALE, CA 91706

APPLICABLE NEW SOURCE RULE: (equip. installed or Class I applc'n rec'd...)
1 ☐ None (before 10-8-76)
2 ☐ Rule 213 (before 7-1-79 and on or after 10-8-76)
3 ☐ Original Reg XIII (before 1-1-83 and on or after 7-1-79)
4 ☐ 1st Revision Reg XIII (before 7-12-85 and on or after 1-1-83)
5 ☒ 2nd Revision Reg XIII (on or after 7-12-85)

SPECIAL CASES:
1 ☐ Banking Ref Applc'n #_____
2 ☐ Reg 13 Exempt
3 ☐ Mitigations 4 ☐ Tradeoffs
5 ☐ Toxic Materials
6 ☐ Banking Cert./Reg. Used
7 ☐ Rule 219 Exemptions
8 ☐ Alter.-Prev. App. #_____

EMISSION INCREASE OR DECREASE FROM THIS PERMIT UNIT CREDITED TO THIS LOCATION (Indicate "+" or "-"): N/A ☐ 1.1 factor used for Max

| CONTAMINANT | RHC | $NO_x$ | $SO_x$ | CO | Part | Lead | UnRHC |
|---|---|---|---|---|---|---|---|
| Max #/day | | | | | | | |
| Actual w/internal BACT #/day | | | | | | | |
| Actual w/o BACT #/day | | | | | | | |

REGULATION XIII EXEMPT EMISSIONS (Indicate "+" or "-")
Exempt by Rule 1304 (____) (____) or Rule 213(f) (____) (____)

| CONTAMINANT | RHC | $NO_x$ | $SO_x$ | CO | Part | Lead | UnRHC |
|---|---|---|---|---|---|---|---|
| Max #/day | | | | | | | |
| Actual #/day | | | | | | | |

MITIGATIONS ACHIEVED CONCURRENT WITH THIS APPLC'N (Indicate "+" or "-")

| APPLIC'N NUMBER | RHC #/day | NOx #/day | $SO_x$ #/day | CO #/day | Part #/day | Lead #/day | UnRHC #/day |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Engineer ADOLFO ARREOLA Date 5/23/89 Reviewing Engineer VM Date 6/13/89

Revised 9/85

SIGNATURE C.R. And[illegible]on, Sr. A.P. Engineer

PAGE 3 OF 6 PAGES 16-50D107 R1-55-5

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

M 42454

Operation under this permit must be conducted in compliance with all information included with the initial application and the initial permit conditions. The equipment must be properly maintained and kept in good operating condition at all times, in accordance with Rule 206. This Permit to Operate or copy must be posted on or within 8 meters of equipment.

LEGAL OWNER OR OPERATOR: BLUE DIAMOND MATERIALS
1245 EAST ARROW HWY
EQUIPMENT LOCATED AT: IRWINDALE, CALIFORNIA

APPL. NO. C-31948
PREVIOUS PERMIT NO. P68578

PAGE 1 OF 4 PAGES

EQUIPMENT DESCRIPTION AND CONDITIONS:

AGGREGATE PROCESSING SYSTEM CONSISTING OF:

1. BELT CONVEYOR, C-1A, ~~42" W. X 436' L.~~, 200 H.P.
2. BELT CONVEYOR, C-1, ~~42" W. X 357' L.~~, 250 H.P.
3. TWO CLASSIFYING SCREENS, NOS. VS-1 AND VS-2, HEWITT-ROBINS, DOUBLE DECK, 8' X 20', EACH 30 H.P.
4. BELT CONVEYOR, C-5, ~~36" W. X 201' L.~~, 100 H.P.
5. BELT CONVEYOR, C-6, ~~36" W. X 170' L.~~, 75 H.P.
6. TWO CLASSIFYING SCREENS, NOS. VS-4 AND VS-5, WET SCREENINGS, HEWITT-ROBINS, DOUBLE DECK,

FILE COPY

This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If billing for annual renewal fee (Rule 301.f) not received by expiration date, contact office above.

This permit does not authorize the emission of air contaminants in excess of those allowed by Division 26 of the Health and Safety Code of the State of California or the Rules of the Air Quality Management District. This permit cannot be considered as permission to violate existing laws, ordinances, regulations or statutes of other government agencies.

XXXXXXXXX

J. A. STUART
EXECUTIVE OFFICER

BY VIRGINIA MOY

DATE 01/31/85

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

CONTINUATION OF PERMIT NO: M 42454
(MUST BE DISPLAYED WITH PERMIT)

APPL NO. C-31948

8' X 20', EACH 30 H.P.

7. CLASSIFYING TANK, WEMCO, MODEL "D", 10' X 36', 1-1/2 H.P.
8. THREE WASHERS, WEMCO, MODEL "B", EACH 10 H.P.
9. METERING BIN, 9 TONS CAPACITY.
10. BELT CONVEYOR C-21, ~~24" W. X 47' L.~~, 5 H.P.
11. SURGE BIN, 75 TONS CAPACITY
12. BELT CONVEYOR, C-13, ~~30" W. X 173' L.~~, 30 H.P.
13. BELT CONVEYOR, C-7, ~~24" W. X 40' L.~~, 7-1/2 H.P.
14. SURGE BIN, 65 TON CAPACITY.
15. BELT CONVEYOR, CR-5 CRUSHER FEED, ~~24" W. X 50' L.~~ 5 H.P.
16. CONE CRUSHER, NO. CR-5, EL JAY, MODEL NO. 45, 125 H.P.
17. BELT CONVEYOR, NO. C-12, ~~24" W. X 25' L.~~, 5 H.P.
18. BELT CONVEYOR, NO. C-11, ~~24" W. X 25' L.~~, 5 H.P.
19. TWO CONE CRUSHER, NOS. CR-3 AND CR-4, SYMONS, EACH WITH A 200 H.P. MAIN DRIVE, A 3 H.P. ROTARY FEEDER, A 5 H.P. LUBE PUMP AND A 7-1/2 H.P. ADJUSTER.
20. TWO SURGE BINS, 36 TONS CAPACITY EACH.
21. BELT CONVEYOR, NO. C-9, ~~48" W. X 25' L.~~, 7-1/2 H.P.
22. CONE CRUSHER, NO. CR-1, SYMONS, SIZE 7' WITH A 300 H.P. MAIN DRIVE, A 5 H.P. LUBE PUMP AND A 5 H.P. ADJUSTER.
23. BELT CONVEYOR, NO. C-10, ~~30" W. X 25' L.~~, 5 H.P.
24. CONE CRUSHER, NO. CR-2, TELSMITH, MODEL FC 66, WITH A 300 H.P. MAIN DRIVE, A 5 H.P. LUBE PUMP.
25. BELT CONVEYOR, NO. C-8, ~~24" W. X 33' L.~~, 5 H.P.
26. BELT CONVEYOR, NO. C-2, ~~48" W. X 164' L.~~, 50 H.P.

FILE COPY

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

H 42454

CONTINUATION OF PERMIT NO. _____
(MUST BE DISPLAYED WITH PERMIT)

APPL. NO. C-31948

27. BELT CONVEYOR, NO. C-3, ~~42" W. X 160' L.~~, 100 H.P.
28. BELT CONVEYOR, NO. C-4, ~~42" W. X 249' L.~~, 150 H.P.
29. FOUR CLASSIFYING SCREENS, NOS. VS-6A, VS-6B, VS-7A, VS-7B, HEWITT-ROBINS, DOUBLE DECK, 8' X 20', EACH 30 H.P.
30. CLASSIFYING SCREEN, NO. VS-6C, EL-JAY, MODEL FS-6163, TRIPLE DECK, 30 H.P.
31. BELT CONVEYOR, NO. C-14, ~~24" W. X 143' L.~~, 15 H.P.
32. BELT CONVEYOR, NO. C-15, ~~24" W. X 132' L.~~, 15 H.P.
33. BELT CONVEYOR, NO. C-16, ~~24" W. X 141' L.~~, 15 H.P.
34. BELT CONVEYOR, NO. C-17, ~~24" W. X 204' L.~~, 20 H.P.
35. BELT CONVEYOR, NO. C-18, ~~24" W. X 242' L.~~, 7-1/2 H.P.
36. BELT CONVEYOR, NO. C-19, ~~24" W. X 202' L.~~, 20 H.P.
37. BELT CONVEYOR, NO. C-20, ~~24" W. X 171' L.~~, 7-1/2 H.P.
38. BELT CONVEYOR, NO. C-22, ~~30" W. X 118' L.~~, 15 H.P.
39. BELT CONVEYOR, NO. C-23, ~~30" W. X 169' L.~~, 30 H.P.
40. BELT CONVEYOR, NO. C-24, ~~30" W. X 134' L.~~, 20 H.P.
41. BELT CONVEYOR, NO. C-25, ~~30" W. X 162' L.~~, 37-1/2 H.P.
42. BELT CONVEYOR, 24" W. X 30' L., 5 H.P.
43. SURGE HOPPER, 75 TONS.
44. BELT CONVEYOR, NO. CS-1, ~~24" W. X 75' L.~~, 5 H.P.
45. BELT CONVEYOR, NO. CS-2, ~~24" W. X 60' L.~~, 15 H.P.
46. WATER SPRAY SYSTEM WITH 68 SPRAY NOZZLES, JOHNSON-MARCH, 10 H.P.
47. CONE CRUSHER, SYMONS, MODEL 66", WITH A 250 H.P. MAIN DRIVE, A 5 H.P. LUBE PUMP AND A 7-1/2 H.P. ADJUSTER.

FILE COPY

SIGNATURE C.R. Anderson, Sr. A.P. Engineer

PAGE 6 OF 6 PAGES 16-50D107 R1-55-5

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

CONTINUATION OF PERMIT NO. M 42454

(MUST BE DISPLAYED WITH PERMIT)

APPL NO. C-31948

48. BELT CONVEYOR, NO. CS-3, ~~24" W. X 80' L.~~, 15 H.P.
49. CLASSIFYING SCREEN, NO. VS-8, HEWITT-ROBINS, 8' X 20', 50 H.P.
50. BELT CONVEYOR, NO. CS-4, ~~24" W. X 50' L.~~, 5 H.P.
51. BELT CONVEYOR, NO. CS-5, ~~24" W. X 80' L.~~, 5 H.P.
52. BELT CONVEYOR, NO. CS-6, ~~24" W. X 100' L.~~, 15 H.P.
53. BELT CONVEYOR, NO. CS-7, ~~24" W. X 75' L.~~, 15 H.P.

FILE COPY

FILE COPY

-CONDITIONS-

1. AGGREGATE CHARGED, AND AGGREGATE IN PROCESS ~~MUST~~ SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.
2. THIS SYSTEM ~~MUST~~ SHALL NOT PROCESS MORE THAN 24,000 TONS PER DAY OF AGGREGATE.
3. A DAILY OPERATING LOG SHOWING TONS OF AGGREGATE PROCESSED SHALL ~~MUST~~ BE MAINTAINED BY THE OPERATOR. THIS OPERATING LOG ~~MUST~~ SHALL BE KEPT ON FILE FOR TWO YEARS AND MADE AVAILABLE, UPON REQUEST, TO THE EXECUTIVE OFFICER ~~OF THE DISTRICT~~, OR HIS REPRESENTATIVE.

PAGE 4 OF 4 PAGES

| SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT | PAGES 2 | PAGE 1 |
|---|---|---|
| ENGINEERING DIVISION | APPL. NO. 185071-7 | DATE 5/23/89 |
| APPLICATION PROCESSING AND CALCULATIONS | PROCESSED BY A ARREOLA | CHECKED BY KM 6/13/89 |

CHANGE OF OWNERSHIP

United Rock Products Corporation
13131 Los Angeles Street
Irwindale, CA 91706

EQUIPMENT LOCATION

1245 East Arrow Highway
Irwindale, CA 91706

**EQUIPMENT DESCRIPTION**

Refer to copy of prior permit in this file.

**HISTORY**

A change of ownership took place January 1, 1989. Blue Diamond Materials, Division of Sully Miller Contracting Company was bought by United Rock Products Corporation.

| NEW APPL. | OLD APPL. | MICROFICHE NUMBER | DESCRIPTION |
|---|---|---|---|
| 185071 | A85747 | 1123-D5 | Primary Crusher |
| 185072 | A85746 | 1124-A1 | Pre-crushing System no. 2 |
| 185073 | A85745 | 1124-C25 | Sand & Aggregate Reclaim |
| 185074 | A85742 | 1123-J5 | Pre-crushing System No. 1 |
| 185075 | A85748 | 1123-H10 | Base Material Handling |
| 185076 | A87774 | 1123-A1 | Aggregate Transfer System |
| 185077 | C31948 | 1125-C18 | Aggregate Processing System |

NO ENFORCEMENT ACTIVITY FOUND.

**PROCESS DESCRIPTION & CALCULATIONS**

No changes to the equipment or process rate has taken place. Refer to microfiche listed above, corresponding to old application under the previous owner.

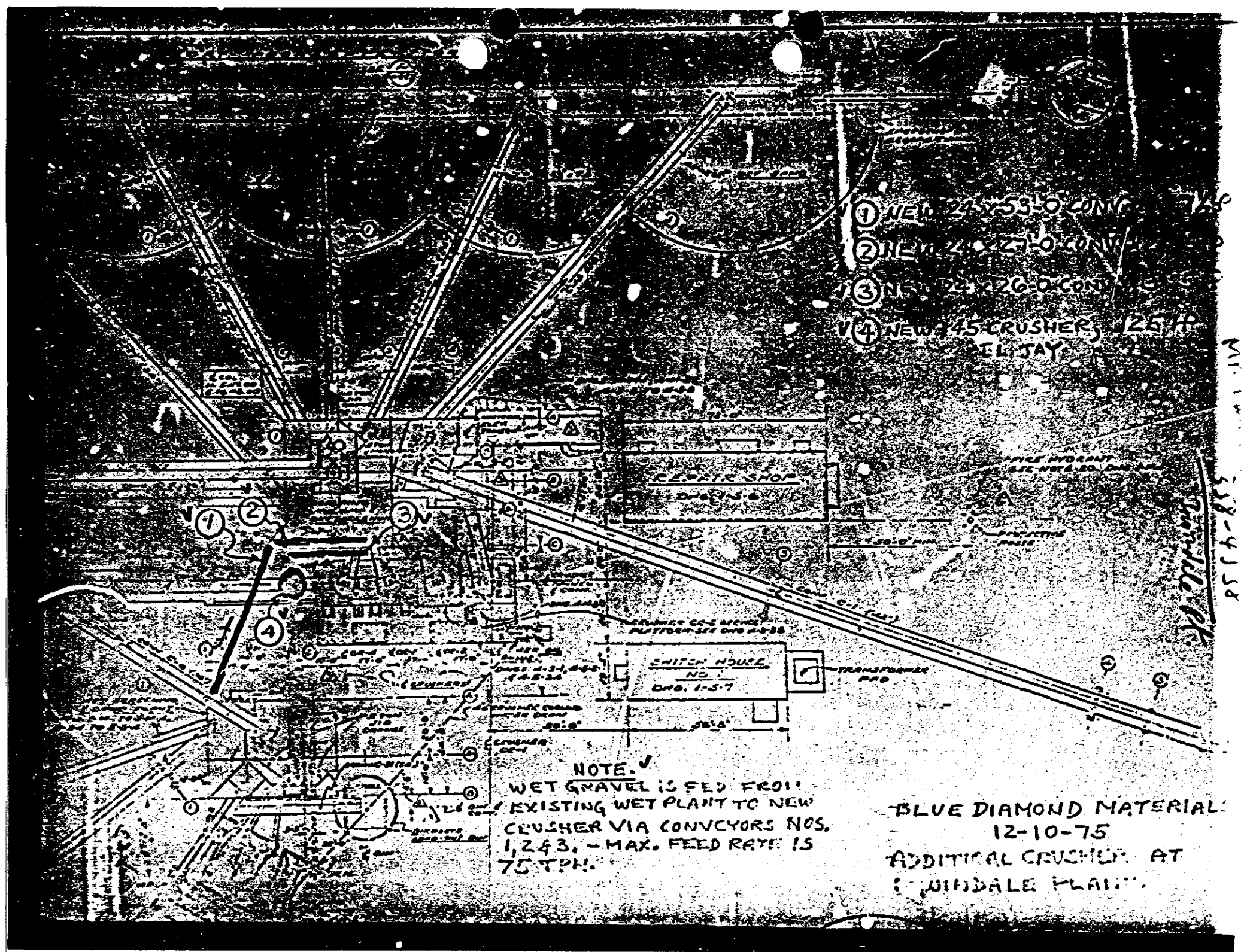
**EVALUATION**

Refer to old application (REGULATIONS NOT AFFECTED).

Reg XIII: Reg XIII (05) does not apply since this is a change of ownership.

**RECOMMENDATION**

This equipment is expected to continue to comply with all rules and regulations of the SCAQMD. A Permit to Operate is recommended.




FROM MICROFICHE 1125 CIB BLOCK FLOW DIAGRAM FROM FILE

Press f5 to continue

ENG930 EMISSION THRESHOLD / NEWSOURCE

name: UNITED ROCK & CONCRETE CORP company id: 065341
address: 1245 E ARROW HWY date: 03/10/89
city: IRWINDALE I user: NS11

INCREASE (+) DECREASE (-) SUBSEQUENT TO 10-8-76

| L# | I | M | date | appl | p/o | rl | RHC #/day | NOX #/day | SO2 #/day | CO #/day | PART #/day | LEAD #/day | UNRHC #/day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01 | | | 840105 | 116681 | | 04 | | | | | 2 | | |
| 02 | | | 850107 | C31948 | | 03 | | | | | | | |
| 03 | | | 850220 | 125992 | | 04 | | | | | -409 | | |
| 04 | | | 850220 | 125994 | | 04 | | | | | 1 | | |
| 05 | | | 850220 | 125996 | | 04 | | | | | | | |
| 06 | | | 850220 | 125997 | | 04 | 8 | 97 | 51 | 4 | 17269 | | |
| 07 | | | 850220 | 125999 | | 04 | | | | | | | |
| 08 | | | 850220 | 126000 | | 04 | | | | | 6 | | |
| 09 | | | 850220 | 126001 | | 04 | 1 | 2 | 3 | 1 | 1 | | |
| 10 | | | 850220 | 126002 | | 04 | | | | | -16762 | | |
| | | | | | | | | | | | | | |

TRADEOFF TOTAL
exempt total
TOTAL 9 99 54 5 108

# ENGINEERING DIVISION....MEMORANDUM

| TO | FROM | DATE |
|---|---|---|
| FILE | ARTURO ARREOLA | 5-23-89 |
| REFERENCE | | PERMIT APPL. NO. |
| UNITED ROCK PRODUCTS CORPORATION & UNITED ROCK & CONCRETE CORPORATION | | 185071-7 185090-3 |
| SUBJECT | | |

MANY ATTEMPTS WERE MADE TO CONTACT THE DEPARTMENT OF STATE TO CONFIRM THE CHANGE OF OWNERSHIP, BUT THE LINE IS ALWAYS BUSY.

ANOTHER PHONE CALL WAS MADE TO MR. THOMAS S. TEDESCO, CHAIRMAN AND THE FOLLOW WAS CONFIRMED:

UNITED ROCK PRODUCTS CORPORATION AND UNITED ROCK & CONCRETE CORPORATION ARE DISTINC LEGAL ENTITIES WHICH HAVE BOUGHT ALL ASSET OF BLUE DIAMOND MATERIALS, DIVISION OF SULLY MILLER CONTRACTING COMPANY.

A CHANGE OF OWNERSHIP HAS OCCURRED.

# ENGINEERING DIVISION....MEMORANDUM

| TO | FROM | DATE |
|---|---|---|
| FILE | ARTURO ARREOLA | 3-14-89 |
| REFERENCE. | | PERMIT APPL. NO. |
| UNITED ROCK PRODUCTS CORPORATION | | 1850 |

SUBJECT

T/C TO MR. THOMAS TEDESCO
(213) 564-1866 — NOT IN; MESSAGE LEFT

3/17/89
T/C TO MR. TEDESCO — LEFT MESSAGE

4/21/89
T/C — LEFT MESSAGE

5/2/87 —
T/C TO MR. THOMAS TEDESCO — CONFIRMED THAT THIS ONLY A CHANGE OF OWNERSHIP WITH CHANGES TO THE EQUIPMENT OR FLOWRATES.

ROUTING RECORD

| DATE | FROM | TO | ACTION |
|---|---|---|---|
| 3-14-89 | MGM | AA | CLASSIFY ✓ |
| 5/23/89 | AA | MGM | P/O |
| 6-14-89 | KAM | MGM | P/O |
| 6/14/89 | MGM | PPU | P/O ✓ |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

REFERENCE TO OTHER APCD RECORDS INCLUDING VARIANCES:

65341

ALPHA FILE

NEWSOURCE DATA ENTRY

☐ PC _____ _____

☑ PO AM 6-16-89

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D08807
A/N 185071
Page 1

**This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.**

**Legal Owner**
**Or Operator:** UNITED ROCK PRODUCTS CORPORATION

ID 65341

**Equipment**
**located at:** 1245 EAST ARROW HIGHWAY, IRWINDALE, CALIFORNIA

**Equipment Description:**

ROCK PRE-CRUSHING, CONVEYING, AND STACKING SYSTEM NO. 2 CONSISTING OF:

1. RECEIVING HOPPER WITH RECIPROCATING PLATE FEEDER, PNEUMATICALLY OPERATED.

2. JAW CRUSHER, PIONEER, SIZE 35 X 46, 200 H.P.

3. EIGHT BELT CONVEYORS, 800 H.P. TOTAL.

FILE COPY

**Conditions:**

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. NOT MORE THAN 9600 TONS OF AGGREGATE SHALL BE PROCESSED IN ANY DAY.

4. AGGREGATE CHARGED AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Raquel Puerta/jas
July 6, 1989

UNITED ROCK PRODUCTS CORP.
ATTN: THOMAS S. TEDESCO
13131 LOS ANGELES ST.
IRWINDALE, CA. 91706

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
## 9150 Flair Drive El Monte, CA 91731

34055
13

APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE AND EXCAVATE AND
FOR PLANS REQUIRED BY THE EXECUTIVE OFFICER
FOR FEE INFORMATION AND SMALL BUSINESS EXEMPTION
SEE REVERSE SIDE
PLEASE TYPE OR PRINT

SCAQMD USE: SEC | TS | ID NUMBER 65341

1A. PERMIT TO BE ISSUED TO:
United Rock Products Corporation
BUSINESS LICENSE NAME OF ORGANIZATION THAT IS TO RECEIVE PERMIT

1 B.
NAME (OR NAMES) OF OWNER OR PRINCIPAL PARTNERS DOING BUSINESS AS (DBA) ABOVE ORGANIZATION

2 A. MAILING ADDRESS:
13131 Los Angeles Street Irwindale California
NUMBER STREET CITY OR COMMUNITY STATE

2 B. 91706
ZIP CODE

3 A. EQUIPMENT LOCATION (IF SAME ENTER "SAME")
1245 East Arrow Highway Irwindale 91706
NUMBER STREET CITY OR COMMUNITY ZIP

3 B. Buena Vista Street
NEAREST INTERSECTING STREET

4 A. CONTACT PERSON (INITIALS & NAME.)
Thomas S. Tedesco

4 B. CONTACT PHONE NO. (AREA & NO.):
818 960-3948

5. EQUIPMENT. APPLICATION IS HEREBY MADE FOR PERMIT TO OPERATE THE FOLLOWING EQUIPMENT:
Rock Pre-Crushing, Conveying and Stacking System No. 2

6. IF THIS EQUIPMENT HAD A PREVIOUS WRITTEN PERMIT, STATE NAME OF CORPORATION, COMPANY, OR INDIVIDUAL OWNER THAT OPERATED THIS EQUIPMENT, AND STATE PREVIOUS AIR POLLUTION CONTROL DISTRICT PERMIT NUMBER
Sully-Miller Contracting Company — NAME
P69034 , A 85747 — PREVIOUS PERMIT NUMBER

7. PERMIT APPLICATION FOR EQUIPMENT
NEW CONSTRUCTION ☐
ALTERATION ☐
CHANGE OF LOCATION ☐
REINSTATE NON—PAYMENT P O FEES DUE ☐
CHANGE OF OWNERSHIP ☒ 80
EXISTING EQUIPMENT IN OPERATION WITHOUT PRIOR PERMIT ☐
CHANGE OF CONDITIONS ☐

8. TYPE OF ORGANIZATION:
CORPORATION ☒
PARTNERSHIP ☐
INDIVIDUAL OWNER ☐
LOCAL GOV'T AGENCY ☐
STATE AGENCY ☐
FEDERAL AGENCY ☐
UTILITY ☐

9. ESTIMATED COST OF EQUIPMENT OR ALTERATION
BASIC EQUIPMENT $ N/A
AIR POLLUTION CONTROL EQUIPMENT $ N/A

10. FOR THE NEW CONSTRUCTION, ALTERATION, TRANSFER OF OWNERSHIP OR LOCATION, WHAT IS
ESTIMATED STARTING DATE? 1 January 1989
ESTIMATED COMPLETION DATE? N/A

11. GENERAL NATURE OF BUSINESS
Mining and Sales of Aggregates

12. PRINCIPAL PRODUCT
Rock and Sand

13. DO YOU CLAIM CONFIDENTIALITY OF DATA?
YES ☐ NO ☒
IF YES STATE NATURE OF DATA ON SEPARATE SHEET

14. NORMAL OPERATING HOURS OF SUBJECT EQUIPMENT
HOURS/DAY 16
DAYS/WEEK 6
WEEKS/YEAR 52

15. HAS A CEQA DOCUMENT BEEN PREPARED FOR THIS PROJECT? YES ☐ NO ☒

15a. ARE ALL COMPANIES' FACILITIES IN CALIFORNIA IN COMPLIANCE WITH AIR POLLUTION RULES? YES ☒ NO ☐

16. SIGNATURE OF RESPONSIBLE MEMBER OF ORGANIZATION:
Thomas S Tedesco

17. OFFICIAL TITLE OF SIGNER:
~~Thomas S Tedes~~
~~President~~ Chairman

18. TYPED OR PRINTED NAME OF SIGNER:
Thomas S. Tedesco

19. PHONE NO.
818-960-3948

20. DATE

SCAQMD USE

| SIC NO. | | EQUIP. CAT. NO.: 000 299 149 | SCH/STEP: 1H JAN 6 1989 |
|---|---|---|---|
| APPLICATION NO. 185071 | PERMIT NO. | TYPE B OR C | WORK UNITS A/C P/O; ASSIGNMENT 2 UNIT ENGR; CLASS I III |
| VALIDATION 12/30/88 | | FILING FEE.. $ 2640 | CHECK OR MONEY ORDER NO. 01 50 |
| | | 110.00 / OP | |

Form 400A - REVISED 8-84 PRIOR VERSIONS NOT VALID 1 of 23 1/9/89 AP (Continued on reverse)

SEE REVERSE FOR FEES REQUIRED UPON FILING

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

## FILING FEES

Except as noted following, a $250 filing fee must accompany each application for Permit to Construct/Operate.

1. For small businesses the filing fee is $160. The small business declaration form below must be completed in order to be considered a small business.

2. Each application for change of ownership requires a $110 transfer fee.

3. All applicants, including state, local governmental and public districts, must pay a permit evaluation fee. Such fees are in addition to filing fees and change of ownership fees.

4. All state, local governmental agencies or public districts are exempt from paying filing fees and change of ownership fees.

**SEE APPLICATION INSTRUCTIONS FORM 400-B FOR ADDITIONAL INSTRUCTIONS**
**Call (818) 572-6212 for assistance**
**SUPPLEMENTAL DATA FORMS REQUIRED**

Special supplemental data forms must be completed for: BOILERS, LIQUID HEATERS, DEGREASERS, DRY CLEANING EQUIPMENT, OVENS, SPRAY BOOTHS AND STORAGE TANKS.

## SMALL BUSINESS DECLARATION

In order to be considered a small business as specified in Regulation XIII, this form must be completed. If not a small business, do not complete this form.

A "Small Business": is a business which is independently owned and operated and meets the following criteria or, if affiliated with another concern, the combined activities of both concerns meet these criteria:

The number of employees is 10 or less; and
The total annual receipts are $500,000 or less.

I hereby certify, under penalty of perjury, that the business enterprise containing the emission source(s) for which an SCAQMD Permit to Construct or Permit to Operate is being applied herein qualifies as a SMALL BUSINESS, based on compliance with the definition above:

| Signature of Applicant | Date | ( ) Telephone Number |
|---|---|---|
| Printed or Typed Signature | | Company Name |

# AEIS SHEET

NAME OF FIRM UNITED ROCK PRODUCTS CORPORATION COMPANY I.D. 65341

LOCATION ADDRESS 1245 E. ORROW HWY, IRWINDALE, CA 91706

REASON FOR INACTIVATION: 1. ALTERATION 2. CHANGE OF OPERATOR 3. MOVED 4. REMOVED 5. OUT OF BUSINESS 6. BANKING ISSUED 7. OTHER _____

SUBS. APPLICATION NO. _____ INACTIVATION DATE __/__/__

ACTION CODE (A) C D A = ADD DATA C = CHANGE DATA D = DELETE DATA

*PERMIT NUMBER 008807

APPLICATION NUMBER 165021

*ISSUE DATE 07/06/89

**INSTALLATION DATE __/__/__

**EQUIPMENT B CAT. 000299

**EQUIPMENT C CAT. 49

**DESCRIPTION Rock Crushing Conveying & Stacking Sys

PERMIT TYPE (B, C, or D) D

SCHEDULE/STEP 1/ A

*SECTION __

*SECTOR __

| EMISSIONS | $R_1$ | $R_2$ |
|---|---|---|
| rHC | | |
| tHC | | |
| $NO_x$ | | |
| $SO_2$ | | |
| CO | | |
| Part | 261 | 261 |
| Other 1 | | |
| Other 2 | | |
| Other 3 | | |

| Weeks Operated | | Mon | Tues | Weds | Thurs | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|---|
| Per Year 52 | Daily Start Time | 08 | 08 | 08 | 08 | 08 | 08 | __ |
| | Daily Stop Time | 16 | 16 | 16 | 16 | 16 | 16 | __ |
| | *UTM Coordinates X | __ | __ | __ | __ | __ | __ | __ |

*Not to be completed by the engineer.
**Fill out only if different from application.

Engineer ARTURO ARREOLA Date 5/23/89

# INSTRUCTIONS FOR PERMIT WORDING & FEE DATA

1-1

**APPLICATION No.** 185071

**NEED EIR?** ☐ YES ☒ NO

| DISPOSITION | PERMIT UNIT WORDING: | CONDITIONS: |
|---|---|---|
| ☒ APPROVED | ☐ BELOW | ☐ NONE |
| ☐ DENIED | ☐ ON FIELD REPORT DATED _____ | ☒ NUMBERS LISTED: 36 |
| ☐ CANCELED — DON'T REFUND FILING FEE | ☐ ON PAGE _____ OF PROCESS SHEETS | ☒ SPECIAL (SEE PERMIT UNIT WORDING & CONDITIONS) |
| ☐ CANCELED — REFUND FILING FEE | ☒ ON PREVIOUS PERMIT (COPY IN THIS FILE) P69034 ATTACHED. (MODIFIED) | ☐ AS ON _____ |
| SEE COMMENTS | | |

**PREVIOUS PERMIT NO.** P69034

**PERMIT UNIT WORDING & CONDITIONS:**

NOT MORE THAN 9600 TONS OF AGGREGATE SHALL BE PROCESSED IN ANY DAY.

( ) P/C ( ✓ ) P/O ( ) P/O NO P/C ( ) NOTICE TO APPLY WRITTEN

☒ CHANGE OF OWNERSHIP, large business ☐ ALTERATION ☐ TIME & MATERIALS

☐ CHANGE OF OWNERSHIP, small business ☐ FEDERAL GOVERNMENT

☐ CHANGE OF CONDITIONS ☐ GOVERNMENT (other)

| SCHEDULE | ① H P | ② 1000s BTU | ③ KVA | ④ SQ. FT | ⑤ GALLONS | ⑥ GASOLINE FUELING | ⑦ EXCEPTIONS |
|---|---|---|---|---|---|---|---|
| RATING | 1000 | | | | | | |
| FEE | 8534 | | | | | | |

1. PERMIT EVALUATION FEE — RULE 301.1(b)(1)

A. SCHEDULE _____ STEP _____ = FEE $ _____

B. TIME & MATERIALS (T & M): HOURS _____ X $50/HOUR DISPOSITIONED = FEE $ _____

C. CHANGE OF OWNERSHIP, large business or ALTERATION — EXCEPT T & M:
SCHEDULE 1 STEP H = FEE 8534 X 50% = FEE $ 4267.00

D. ADDITIONAL FEE FOR NO P/C: ABOVE FEE _____ X 50% = FEE $ _____

2. EIR/MODELING FEE — RULE 301.1(g): HOURS _____ X $50/HOUR = FEE $ _____

3. 301(d)(1)(C) CREDIT OR DIFFERENCE DUE TO INCORRECT INFORMATION

_____ ADJUSTED FEE $ _____

Comments: _____

**TOTAL FEE** $ 4267.00

**REFUND** 0

WORK UNITS: 3

RECOMMENDED BY ARTURO ARREOLA DATE 5/23/89 REVIEWING ENGINEER VM DATE 6/14/89

SCAQMD
ENGINEERING DIVISION
NEW SOURCE REVIEW REGULATION XIII DATA SHEET

1 ☐ P/C 2 ☐ P/O 3 ☑ C/O

COMPANY ID# 65341
APPLICATION # 195071

COMPANY NAME UNITED ROCK PRODUCTS CORPORATION DATE 5/23/89
EQUIPMENT LOCATION 1245 E. ARROW HWY, IRWINDALE, CA 91706

APPLICABLE NEW SOURCE RULE: (equip. installed or Class I applc'n rec'd...)
1 ☐ None (before 10-8-76)
2 ☐ Rule 213 (before 7-1-79 and on or after 10-8-76)
3 ☐ Original Reg XIII (before 1-1-83 and on or after 7-1-79)
4 ☐ 1st Revision Reg XIII (before 7-12-85 and on or after 1-1-83)
5 ☑ 2nd Revision Reg XIII (on or after 7-12-85)

SPECIAL CASES:
1 ☐ Banking Ref Applc'n #_____
2 ☐ Reg 13 Exempt
3 ☐ Mitigations 4 ☐ Tradeoffs
5 ☐ Toxic Materials
6 ☐ Banking Cert./Reg. Used
7 ☐ Rule 219 Exemptions
8 ☐ Alter.-Prev. App. #_____

EMISSION INCREASE OR DECREASE FROM THIS PERMIT UNIT CREDITED TO THIS LOCATION (Indicate "+" or "-"): [] 1.1 factor used for Max N/A

| CONTAMINANT | RHC | $NO_x$ | $SO_x$ | CO | Part | Lead | UnRHC |
|---|---|---|---|---|---|---|---|
| Max #/day | | | | | | | |
| Actual w/internal BACT #/day | | | | | | | |
| Actual w/o BACT #/day | | | | | | | |

REGULATION XIII EXEMPT EMISSIONS (Indicate "+" or "-")
Exempt by Rule 1304 (____) (____) or Rule 213(f) (____) (____)

| CONTAMINANT | RHC | $NO_x$ | $SO_x$ | CO | Part | Lead | UnRHC |
|---|---|---|---|---|---|---|---|
| Max #/day | | | | | | | |
| Actual #/day | | | | | | | |

MITIGATIONS ACHIEVED CONCURRENT WITH THIS APPLC'N (Indicate "+" or "-")

| APPLIC'N NUMBER | RHC #/day | NOx #/day | $SO_x$ #/day | CO #/day | Part #/day | Lead #/day | UnRHC #/day |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Engineer ARTURO ARREOLA Date 5/23/89 Reviewing Engineer VM Date 6/14/89

Revised 9/85

76P235M-12/71

# AIR POLLUTION CONTROL DISTRICT
# PERMIT TO OPERATE

P 69034

SECTION B

Operation under this permit must be conducted in compliance with all data and specifications included with the application under which this permit is issued. The equipment must be properly maintained and kept in good operating condition at all times. In accordance with Rule 10(c), this Permit to Operate must be posted or accessible.

LEGAL OWNER OR OPERATOR: BLUE DIAMOND MATERIALS DIV.
SULLY-MILLER CONTRACTING COMPANY

Appl. No. A-35747
PREVIOUS PERMIT NO. P-26590

EQUIPMENT LOCATED AT: 1245 EAST ARROW HIGHWAY
IRWINDALE, CALIFORNIA

EQUIPMENT DESCRIPTION AND CONDITIONS: ROCK PRE-CRUSHING, CONVEYING, AND STACKING SYSTEM NO. 2 CONSISTING OF:

1. RECEIVING HOPPER WITH RECIPROCATING PLATE FEEDER, PNEUMATICALLY OPERATED
2. JAW CRUSHER, PIONEER, SIZE 35 x 46, 200 H.P.
3. EIGHT BELT CONVEYORS, 300 H.P. TOTAL.

- CONDITION -

AGGREGATE CHARGED, AND AGGREGATE IN PROCESS MUST BE KEPT SUFFICIENTLY MOIST TO PREVENT DUST EMISSIONS.

**THIS PERMIT BECOMES VOID UPON ANY CHANGE OF OWNERSHIP OR ADDRESS, OR [illegible]**

This permit does not authorize the emission of air contaminants in excess of those allowed by Division 20, Chapter 2, Article 3, of the Health and Safety Code of the State of California or the Rules and Regulations of the Air Pollution Control District. This permit cannot be considered as permission to violate existing laws, ordinances, regulation or statutes of other governmental agencies.

Filing fee only - total cost of permit-filing fee paid on validation number 27260, dated 2-26-75."

VOID UNLESS [illegible]

AIR POLLUTION CONTROL OFFICER

BY Helen Thompson

Helen Thompson, Permit Section

DATE January 12, 1977

| SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT | PAGES 2 | PAGE 1 |
|---|---|---|
| ENGINEERING DIVISION | APPL. NO. 185071-7 | DATE 5/23/89 |
| APPLICATION PROCESSING AND CALCULATIONS | PROCESSED BY A ARREOLA | CHECKED BY KM 6/19/89 |

CHANGE OF OWNERSHIP

United Rock Products Corporation
13131 Los Angeles Street
Irwindale, CA 91706

EQUIPMENT LOCATION

1245 East Arrow Highway
Irwindale, CA 91706

**EQUIPMENT DESCRIPTION**

Refer to copy of prior permit in this file.

**HISTORY**

A change of ownership took place January 1, 1989. Blue Diamond Materials, Division of Sully Miller Contracting Company was bought by United Rock Products Corporation.

ALL ARE INACTIVE

| NEW APPL. | OLD APPL. | MICROFICHE NUMBER | DESCRIPTION |
|---|---|---|---|
| 185071 | A85747 | 1123-D5 | Primary Crusher |
| 185072 | A85746 | 1124-A1 | Pre-crushing System no. 2 |
| 185073 | A85745 | 1124-C25 | Sand & Aggregate Reclaim |
| 185074 | A85742 | 1123-J5 | Pre-crushing System No. 1 |
| 185075 | A85748 | 1123-H10 | Base Material Handling |
| 185076 | A87774 | 1123-A1 | Aggregate Transfer System |
| 185077 | C31948 | 1125-C18 | Aggregate Processing System |

NO ENFORCEMENT ACTIVITY FOUND.

**PROCESS DESCRIPTION & CALCULATIONS**

No changes to the equipment or process rate has taken place. Refer to microfiche listed above, corresponding to old application under the previous owner.

**EVALUATION**

Refer to old application. (REGULATIONS NOT AFFECTED)

Reg XIII: Reg XIII (05) does not apply since this is a change of ownership.

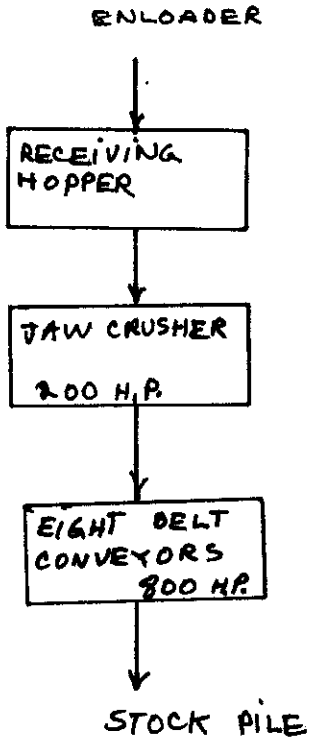
**RECOMMENDATION**

This equipment is expected to continue to comply with all rules and regulations of the SCAQMD. A Permit to Operate is recommended.

# BLOCK FLOW DIAGRAM

A/N 18507 1

ROCK PRE-CRUSHING, CONVEYING, AND STACKING SYSTEM NO. 2




5-31-89
AA

Press f5 to continue

ENG930 EMISSION THRESHOLD / NEWSOURCE

name: UNITED ROCK & CONCRETE CORP company id: 065341
address: 1245 E ARROW HWY date: 03/10/89
city: IRWINDALE I user: NS11

INCREASE (+) DECREASE (-) SUBSEQUENT TO 10-8-76

| L# | I | M | date | appl | p/o | 13 rl | RHC #/day | NOX #/day | SO2 #/day | CO #/day | PART #/day | LEAD #/day | UNRHC #/day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01 | | | 840105 | 116681 | C1 | 04 | | | | | 2 | | |
| 02 | | | 850107 | C31948 | C2 | 03 | | | | | | | |
| 03 | | | 850220 | 125992 | C1 | 04 | | | | | -409 | | |
| 04 | | | 850220 | 125994 | C1 | 04 | | | | | 1 | | |
| 05 | | | 850220 | 125996 | C1 | 04 | | | | | | | |
| 06 | | | 850220 | 125997 | C1 | 04 | 8 | 97 | 51 | 4 | 17269 | | |
| 07 | | | 850220 | 125999 | C1 | 04 | | | | | | | |
| 08 | | | 850220 | 126000 | C1 | 04 | | | | | 6 | | |
| 09 | | | 850220 | 126001 | C1 | 04 | 1 | 2 | 3 | 1 | 1 | | |
| 10 | | | 850220 | 126002 | C1 | 04 | | | | | -16762 | | |
| | | | | | | | | | | | | | |

TRADEOFF TOTAL
exempt total
TOTAL 9 99 54 5 108

# ENGINEERING DIVISION....MEMORANDUM

| TO | FROM | DATE |
|---|---|---|
| FILE | ARTURO ARREOLA | 5-23-89 |
| REFERENCE | | PERMIT APPL. NO. |
| UNITED ROCK PRODUCTS CORPORATION | | 185074-7 |

SUBJECT

UNITED ROCK & CONCRETE CORPORATION 185090-3

MANY ATTEMPTS WERE MADE TO CONTACT THE DEPARTMENT OF STATE TO CONFIRM THE CHANGE OF OWNERSHIP, BUT THE LINE IS ALWAYS BUSY.

ANOTHER PHONE CALL WAS MADE TO MR. THOMAS S. TEDESCO, CHAIRMAN AND THE FOLLOW WAS CONFIRMED:

UNITED ROCK PRODUCTS CORPORATION AND UNITED ROCK & CONCRETE CORPORATION ARE DISTINCT LEGAL ENTITIES WHICH HAVE BOUGHT ALL ASSET OF BLUE DIAMOND MATERIALS, DIVISION OF SULLY MILLER CONTRACTING COMPANY. [redacted]

A CHANGE OF OWNERSHIP HAS OCCURRED.

# ENGINEERING DIVISION....MEMORANDUM

| TO | FROM | DATE |
|---|---|---|
| FILE | ARTURO ARREOLA | 3-14-89 |
| REFERENCE. UNITED ROCK PRODUCTS CORPORATION | | PERMIT APPL. NO. 185071 |

SUBJECT

T/C TO MR. THOMAS TEDESCO
(213) 564-1866 — NOT IN; MESSAGE LEFT

3/17/89
T/C TO MR. TEDESCO — LEFT MESSAGE

4/21/89
T/C — LEFT MESSAGE

5/2/89 —
T/C TO MR. THOMAS TEDESCO —
CONFIRMED THAT THIS ONLY A CHANGE OF OWNERSHIP WITH CHANGES TO THE EQUIPMENT OR FLOWRATES.

South Coast
AIR QUALITY MANAGEMENT DISTRICT

RECEIPT NO. E 14563

December 30, 1988

RECEIVED FROM United Rock Products Corp $2,640.00

Two thousand six hundred fourty dollars only — DOLLARS

FOR 23 apls for C/O — O/P $110.00

to be refunded

CASH ~~[illegible]~~

at 427 W. MacArthur Pl. Santa Ana, CHECK NO. 0001

" 12976 E Firestone Pl. Santa Fe Springs

" 445 E Arrow Hwy Irwindale

[illegible]

Cash —

OFFICIAL TITLE

"Your lover letter for 1st 8 appro in group of 23 submitted"

Acc ID 34055
P/O # 908134
A/NA-85758

Blue Pen Hoot

AQMD PERMITS

IRWINDALE ROCK PLANT AND GASOLINE DISPENSING FACILITY

8 PERMITS

(1) Missing ??

(7)/20

probably gas Bappl

The Drawing Board®
P.O. BOX 220505, DALLAS, TEXAS 75222
CALL TOLL FREE: 1-800-527-9530

MEMO-LETTER IV
☐ REGULAR ☐ INTER-OFFICE

e/s letters

REORDER ITEM # ML4N72

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Customer Service Unit
9150 Flair Drive • El Monte, California 91731 • Phone (818) 572-6326

## MEMO-LETTER

TO United Rock Products

DATE 1/18/89

SUBJECT One additional gas application needed--total applications should hav been 24. (We only received 23)
Check No. 0001; Amount--$2640.00

Re: Address of 1245 E. Arrow Hwy, Irwindale

Since we only received 23 application--Filing fee of $110--There is an overpayment of $110. We will refund this amount in the near future.

One additional application for a gasoline and dispensing facility was missing from the particular batch for the above-stated address. Please remit an additional $75 filing fee and return the enclosed (green) gasoline application for the fuling operation.

Sandy Ornelas
Revenue Receiving

Enclosures

THOMAS
TEOSCO
AT
SOUTHGATE
PLANT
(313) 564-1866

Item # ML4N72 © Wheeler Group Inc 1982

FOLD AT (—) TO FIT DRAWING BOARD ENVELOPE # EW10P

ALPHA FILE

ROUTING RECORD

| DATE | FROM | TO | ACTION |
|---|---|---|---|
| 3.22.89 | BLY | GD | W |
| 10.20.89 | VHN | CDW | Transfer |
| | CDW | VHN | P/O |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

REFERENCE TO OTHER APCD RECORDS INCLUDING VARIANCES:

65341

10

ap 12/12/89

185087

185087

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# PERMIT TO OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
**D16722**
A/N 185087
Page 1

**This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.**

**Legal Owner** **ID 65341**
**Or Operator:** UNITED ROCK AND CONCRETE CORPORATION
13131 LOS ANGELES STREET
IRWINDALE, CALIFORNIA 91706
ATTN: THOMAS S. TEDESCO

**Equipment**
**located at:** 1245 E. ARROW HWY., IRWINDALE, CALIFORNIA

**Equipment Description:**

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. BAGHOUSE, CONFAB, FOUR COMPARTMENT, REVERSE-AIR CLEANING, 1,400 SQ. FT. DACRON FILTER CLOTH, WITH A 1 H.P. DISCHARGING SCREW CONVEYOR.

2. EXHAUST SYSTEM WITH A 10 H.P. BLOWER VENTING THE BATCH DISCHARGING STATION OF THE TRANSIT-MIXED CONCRETE BATCH PLANT.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. DUSTS COLLECTED IN THE BAGHOUSE MUST BE DISCHARGED ONLY INTO CLOSED CONTAINERS.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

**FILE COPY**

# PERMIT TO OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

## CONTINUATION OF PERMIT TO OPERATE

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Raquel Puerta/ps
January 24, 1990

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
## 9150 Flair Drive El Monte, CA 91731

3405 C7

APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE AND EXCAVATE AND FOR PLANS REQUIRED BY THE EXECUTIVE OFFICER

FOR FEE INFORMATION AND SMALL BUSINESS EXEMPTION SEE REVERSE SIDE

PLEASE TYPE OR PRINT

SCAQMD USE: SEC | TS | ID NUMBER 65341

1A. PERMIT TO BE ISSUED TO:
United Rock & Concrete Corporation
BUSINESS LICENSE NAME OF ORGANIZATION THAT IS TO RECEIVE PERMIT

1B.
NAME (OR NAMES) OF OWNER OR PRINCIPAL PARTNERS DOING BUSINESS AS (DBA) ABOVE ORGANIZATION

2A. MAILING ADDRESS:
13131 Los Angeles Street (NUMBER STREET) Irwindale (CITY OR COMMUNITY) California (STATE)

2B. 91706 (ZIP CODE)

3A EQUIPMENT LOCATION (IF SAME ENTER "SAME")
1245 East Arrow Highway (NUMBER STREET) Irwindale (CITY OR COMMUNITY) 91706 (ZIP)

3B Buena Vista Street (NEAREST INTERSECTING STREET)

4A CONTACT PERSON (INITIALS & NAME.)
Thomas S. Tedesco

4B. CONTACT PHONE NO. (AREA & NO.)
(818) 960-3948

5 EQUIPMENT APPLICATION IS HEREBY MADE FOR PERMIT TO OPERATE THE FOLLOWING EQUIPMENT:
Baghouse, Basic, Dry Filter

6 IF THIS EQUIPMENT HAD A PREVIOUS WRITTEN PERMIT, STATE NAME OF CORPORATION, COMPANY, OR INDIVIDUAL OWNER THAT OPERATED THIS EQUIPMENT, AND STATE PREVIOUS AIR POLLUTION CONTROL DISTRICT PERMIT NUMBER
Sully-Miller Contracting Company (NAME)
MØ4156 (PREVIOUS PERMIT NUMBER)

7 PERMIT APPLICATION FOR EQUIPMENT
- NEW CONSTRUCTION ☐
- ALTERATION ☐
- CHANGE OF LOCATION ☐
- REINSTATE NON-PAYMENT P O FEES DUE ☐
- CHANGE OF OWNERSHIP ☒ SP
- EXISTING EQUIPMENT IN OPERATION WITHOUT PRIOR PERMIT ☐
- CHANGE OF CONDITIONS ☐

8 TYPE OF ORGANIZATION
- CORPORATION ☒
- PARTNERSHIP ☐
- INDIVIDUAL OWNER ☐
- LOCAL GOV'T AGENCY ☐
- STATE AGENCY ☐
- FEDERAL AGENCY ☐
- UTILITY ☐

9. ESTIMATED COST OF EQUIPMENT OR ALTERATION
BASIC EQUIPMENT $ N/A
AIR POLLUTION CONTROL EQUIPMENT $ N/A

10 FOR THE NEW CONSTRUCTION, ALTERATION, TRANSFER OF OWNERSHIP OR LOCATION, WHAT IS
ESTIMATED STARTING DATE? 1 January 1989
ESTIMATED COMPLETION DATE? N/A

11 GENERAL NATURE OF BUSINESS
Ready-Mix Concrete

12. PRINCIPAL PRODUCT
Ready-Mix Concrete

13. DO YOU CLAIM CONFIDENTIALITY OF DATA?
YES ☐ NO ☒
IF YES STATE NATURE OF DATA ON SEPARATE SHEET

14 NORMAL OPERATING HOURS OF SUBJECT EQUIPMENT
HOURS/DAY 12
DAYS/WEEK 7
WEEKS/YEAR 52

15 HAS A CEQA DOCUMENT BEEN PREPARED FOR THIS PROJECT? YES ☐ NO ☒

15a. ARE ALL COMPANIES' FACILITIES IN CALIFORNIA IN COMPLIANCE WITH AIR POLLUTION RULES?
YES ☒ NO ☐

16. SIGNATURE OF RESPONSIBLE MEMBER OF ORGANIZATION
Thomas S Tedesco

17 OFFICIAL TITLE OF SIGNER.
~~President~~ Chairman

18. TYPED OR PRINTED NAME OF SIGNER.
Thomas S. Tedesco

19 PHONE NO.
818-960-3948

20. DATE

SCAQMD USE

SIC NO.

EQUIP. CAT. NO. 000292 121

SCH/STEP: 1B JAN 6 1989

APPLICATION NO. 185089

PERMIT NO.

TYPE B OR C

WORK UNITS A/C P O

ASSIGNMENT 10 UNIT ENGR

CLASS I III

VALIDATION 12/30/88

FILING FEE $ 2640

CHECK OR MONEY ORDER NO. 01 80

Form 400A - REVISED 8-84 PRIOR VERSIONS NOT VALID 110823 1/9/89 wyc (Continued on reverse) C-1

SEE REVERSE FOR FEES REQUIRED UPON FILING

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

## FILING FEES

Except as noted following, a $250 filing fee must accompany each application for Permit to Construct/Operate.

1. For small businesses the filing fee is $160. The small business declaration form below must be completed in order to be considered a small business.

2. Each application for change of ownership requires a $110 transfer fee.

3. All applicants, including state, local governmental and public districts, must pay a permit evaluation fee. Such fees are in addition to filing fees and change of ownership fees.

4. All state, local governmental agencies or public districts are exempt from paying filing fees and change of ownership fees.

SEE APPLICATION INSTRUCTIONS FORM 400-B FOR ADDITIONAL INSTRUCTIONS

Call (818) 572-6212 for assistance

SUPPLEMENTAL DATA FORMS REQUIRED

Special supplemental data forms must be completed for: BOILERS, LIQUID HEATERS, DEGREASERS, DRY CLEANING EQUIPMENT, OVENS, SPRAY BOOTHS AND STORAGE TANKS.

## SMALL BUSINESS DECLARATION

In order to be considered a small business as specified in Regulation XIII, this form must be completed. If not a small business, do not complete this form.

A "Small Business": is a business which is independently owned and operated and meets the following criteria or, if affiliated with another concern, the combined activities of both concerns meet these criteria:

The number of employees is 10 or less; and
The total annual receipts are $500,000 or less.

I hereby certify, under penalty of perjury, that the business enterprise containing the emission source(s) for which an SCAQMD Permit to Construct or Permit to Operate is being applied herein qualifies as a SMALL BUSINESS, based on compliance with the definition above:

| Signature of Applicant | Date | ( ) Telephone Number |
|---|---|---|
| Printed or Typed Signature | Company Name | |

# AEIS SHEET

NAME OF FIRM UNITED ROCK & CONCRETE COMPANY I.D. 065341

LOCATION ADDRESS 1245 E. ARROW HWY, IRWINDALE 91706

REASON FOR INACTIVATION: 1. ALTERATION 2. CHANGE OF OPERATOR 3. MOVED 4. REMOVED 5. OUT OF BUSINESS 6. BANKING ISSUED 7. OTHER _____

SUBS. APPLICATION NO. _____ INACTIVATION DATE __/__/__

ACTION CODE (A) C D A = ADD DATA C = CHANGE DATA D = DELETE DATA

*PERMIT NUMBER D16722

APPLICATION NUMBER 105087

*ISSUE DATE 01/24/90

**INSTALLATION DATE __/__/__

**EQUIPMENT B CAT. 000000

**EQUIPMENT C CAT. 8W

**DESCRIPTION BAG HOUSE

PERMIT TYPE (B, C, or D) C

SCHEDULE/STEP 1 / B

*SECTION __

*SECTOR __

| EMISSIONS | | $R_1$ | $R_2$ |
|---|---|---|---|
| | rHC | | |
| | tHC | | |
| | $NO_x$ | | |
| | $SO_2$ | | |
| | CO | | |
| | Part | | |
| | Other 1 | | |
| | Other 2 | | |
| | Other 3 | | |

| Weeks Operated Per Year 00 | | Mon | Tues | Weds | Thurs | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|---|
| | Daily Start Time | | | | | | | |
| | Daily Stop Time | | | | | | | |
| | *UTM Coordinates X | | | | | | | |

*Not to be completed by the engineer.
**Fill out only if different from application.

Engineer WILEY Date 11-14-89

# INSTRUCTIONS FOR PERMIT WORDING & FEE DATA

APPLICATION NO. 1855089 | NEED EIR? ☐ YES ☒ NO

**DISPOSITION:**
- ☒ APPROVED
- ☐ DENIED
- ☐ CANCELED — DON'T REFUND FILING FEE
- ☐ CANCELED — REFUND FILING FEE SEE COMMENTS

**PERMIT UNIT WORDING:**
- ☐ BELOW
- ☐ ON FIELD REPORT DATED _____
- ☐ ON PAGE _____ OF PROCESS SHEETS
- ☒ ON PG 2 of 2

**CONDITIONS:**
- ☐ NONE
- ☐ NUMBERS LISTED _____
- ☐ SPECIAL (SEE PERMIT UNIT WORDING & CONDITIONS)
- ☒ AS ON PG 2 of 2

PREVIOUS PERMIT NO. M04156

PERMIT UNIT WORDING & CONDITIONS: _____

( ) P/C ( ✓ ) P/O ( ) P/O NO P/C ( ) NOTICE TO APPLY WRITTEN

- ☐ CHANGE OF OWNERSHIP, large business
- ☐ CHANGE OF OWNERSHIP, small business
- ☐ CHANGE OF CONDITIONS
- ☐ ALTERATION
- ☐ FEDERAL GOVERNMENT
- ☐ GOVERNMENT (other)
- ☐ TIME & MATERIALS

| SCHEDULE | ①H.P. | ②1000s BTU | ③KVA | ④SQ. FT. | ⑤GALLONS | ⑥GASOLINE FUELING | ⑦EXCEPTIONS |
|---|---|---|---|---|---|---|---|
| RATING | 11 | | | | | | |
| FEE | 369 | | | | | | |

1. PERMIT EVALUATION FEE — RULE 301.1(b)(1)
   - A. SCHEDULE 1 STEP B = FEE $ 369
   - B. TIME & MATERIALS (T & M): HOURS _____ X $50/HOUR = FEE $ _____
   - C. CHANGE OF OWNERSHIP, large business or ALTERATION — EXCEPT T & M:
     SCHEDULE _____ STEP _____ = FEE _____ X 50% = FEE $ _____
   - D. ADDITIONAL FEE FOR NO P/C: ABOVE FEE _____ X 50% = FEE $ _____
2. EIR/MODELING FEE — RULE 301.1(g): HOURS _____ X $50/HOUR = FEE $ _____
3. 301(d)(1)(C) CREDIT OR DIFFERENCE DUE TO INCORRECT INFORMATION
   250 - 110 = $140 ADJUSTED FEE $ 140.00

DISPOSITION NOTES

COMMENTS: _____

TOTAL FEE 509.00

REFUND _____

WORK UNITS ( )

RECOMMENDED BY ODW DATE 11-14-89 REVIEWING ENGINEER VHN DATE 11.28.89

SCAQMD
ENGINEERING DIVISION
NEW SOURCE REVIEW REGULATION XIII DATA SHEET

1 ☐ P/C 2 ☐ P/O 3 ☒ C/O

COMPANY ID# 005341
APPLICATION # 185099

COMPANY NAME UNITED ROCK & CONCRETE DATE 11-14-89

EQUIPMENT LOCATION 1245 E. ARROW HWY, IRWINDALE 91706

---

APPLICABLE NEW SOURCE RULE: (equip. installed or Class I applc'n rec'd...)

1 ☐ None (before 10-8-76)
2 ☒ Rule 213 (before 7-1-79 and on or after 10-8-76)
3 ☐ Original Reg XIII (before 1-1-83 and on or after 7-1-79)
4 ☐ 1st Revision Reg XIII (before 7-12-85 and on or after 1-1-83)
5 ☐ 2nd Revision Reg XIII (on or after 7-12-85)

---

SPECIAL CASES:

1 ☐ Banking Ref Applc'n #_____
2 ☐ Reg 13 Exempt
3 ☐ Mitigations 4 ☐ Tradeoffs
5 ☐ Toxic Materials
6 ☐ Banking Cert./Reg. Used
7 ☐ Rule 219 Exemptions
8 ☐ Alter.-Prev. App. #_____

---

EMISSION INCREASE OR DECREASE FROM THIS PERMIT UNIT CREDITED TO THIS LOCATION (Indicate "+" or "-"): [] 1.1 factor used for Max

| CONTAMINANT | RHC | $NO_x$ | $SO_x$ | CO | Part | Lead | UnRHC |
|---|---|---|---|---|---|---|---|
| Max #/day | | | | | 0 | | |
| Actual w/internal BACT #/day | | | | | 0 | | |
| Actual w/o BACT #/day | | | | | 0 | | |

---

REGULATION XIII EXEMPT EMISSIONS (Indicate "+" or "-")

Exempt by Rule 1304 (____) (____) or Rule 213(f) (____) (____)

| CONTAMINANT | RHC | $NO_x$ | $SO_x$ | CO | Part | Lead | UnRHC |
|---|---|---|---|---|---|---|---|
| Max #/day | | | | | | | |
| Actual #/day | | | | | | | |

---

MITIGATIONS ACHIEVED CONCURRENT WITH THIS APPLC'N (Indicate "+" or "-")

| APPLIC'N NUMBER | RHC #/day | NOx #/day | $SO_x$ #/day | CO #/day | Part #/day | Lead #/day | UnRHC #/day |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Engineer WILEY Date 11-14-89 Reviewing Engineer VHN Date 11.28.89

Revised 9/85

CHANGE OF OWNERSHIP

UNITED ROCK AND CONCRETE CORP
13131 LOS ANGELES ST.
IRWINDALE, CA. 910706

EQUIPMENT LOCATION

1245 EAST ARRROW HIGHWAY
IRWINDALE, CA. 91706

EQUIPMENT DESCRIPTION

A/N 185089 Previous A/N C03142 P/O M04084

TRANSIT MIXED CONCRETE BATCH PLANT, APPCO, CONSISTING OF :

1. THREE BELT CONVEYORS, AGGREGATE TRANSFER, EACH 20 H.P.
2. BELT CONVEYOR, AGGREGATE TRANSFER, 15 H.P.
3. FOUR-COMPARTMENT SURGE BIN, AGGREGATE WITH AN 8 CU.YD. WEIGH HOPPER AND A 15 H.P. DISCHARGING BELT CONVEYOR.
4. BELT CONVEYOR, AGGREGATE-INCLINED, 20-H.P.
5. TWO SCREW CONVEYORS, CEMENT-TRANSFER, EACH 20-H.P.
6. SCREW CONVEYOR, CEMENT-TRANSFER, 30 H.P.
7. WEIGH HOPPER, CEMENT, 5,000 LB CAPACITY WITH A FILTER VENT
8. GATHERING HOPPER, ADJUSTABLE
9. AIR COMPRESSOR, 15 H.P.

CONDITIONS

THIS EQUIPMENT MUST NOT BE OPERATED UNLESS THE BATCH DISCHARGING STATION IS VENTED ONLY TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND WHICH HAS BEEN ISSUED AN OPERATING PERMIT BY THE EXECUTIVE OFFICER.

A/N 185087 Previous: A/N C03144 P/O M04156

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. BAGHOUSE CONFAB, FOUR COMPARTMENT, REVERSE-AIR CLEANING, 1,400 SQ. FT. DACRON FILTER CLOTH, WITH A 1-H.P. DISCHARGING SCREW CONVEYOR
2. EXHAUST SYSTEM WITH A 10 H.P.BLOWER VENTING THE BATCH DISCHARGING STATION OF THE TRANSIT-MIXED CONCRETE BATCH PLANT.

Pg 2 of 2

# ENGINEERING DIVISION....MEMORANDUM

| TO | FROM | DATE |
|---|---|---|
| FILE | CDW | 11-14-89 |
| REFERENCE | | PERMIT APPL. NO. |
| UNITED ROCK CONCRETE | | 185087 |

SUBJECT

NOTES

REC'D AS A CHANGE OF OWNERSHIP. NO CHANGE IN OPERATION. ALL CALCULATIONS AND ENGR'S NOTES CAN BE FOUND IN MICRO FICHE ~~X~~ 1123 A21. PREVIOUS PERMIT INACTIVE ADJUST FILING FEE AND CHARGE FULL EVALUATION FEE. NO CURRENT IR'S OR NOV'S AGAINST ~~THE~~ THIS LOCATION.

valid clo under Reg XIII

ROUTING RECORD

| DATE | FROM | TO | ACTION |
|---|---|---|---|
| 3.22.89 | BLY | GD | IV |
| 10.20.89 | VHN | CDW | Transfer |
| | CDW | VHN | P/O |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

ALPHA FILE

REFERENCE TO OTHER APCD
RECORDS INCLUDING VARIANCES:

65341

ENTRY

✓ PO Cy 12/12/89

10

UNITED RULE & COMMERCE CORP OF IRLANDA
CEMENT RECEIVING & STORAGE ST. ID 08[illegible]

185088

185088

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# PERMIT TO OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
**D16723**
A/N 185088
Page 1

**This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.**

**Legal Owner Or Operator:** **ID - 65341**
UNITED ROCK AND CONCRETE CORPORATION
13131 LOS ANGELES STREET
IRWINDALE, CALIFORNIA 91706
ATTN: THOMAS S. TEDESCO

**Equipment located at:** 1245 E. ARROW HWY., IRWINDALE, CALIFORNIA

**Equipment Description:**

CEMENT-RECEIVING AND STORAGE SYSTEM CONSISTING OF:

1. SILO NO. 1, 300 BBL CAPACITY, WITH A 4" DIA. PNEUMATIC FILL TUBE AND A 100 SQ. FT. FILTER VENT.

2. SILO NO. 2, 230 BBL CAPACITY, WITH A 4" DIA. PNEUMATIC FILL TUBE AND A 100 SQ. FT. FILTER VENT.

3. SILO NO. 3, 350 BBL CAPACITY, WITH A 4" DIA. PNEUMATIC FILL TUBE AND 84 SQ. FT. FILTER VENT.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

**FILE COPY**

**CONTINUATION OF PERMIT TO OPERATE**

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Raquel Puerta/ps
January 24, 1990

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
## 9150 Flair Drive El Monte, CA 91731

APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE AND EXCAVATE AND
FOR PLANS REQUIRED BY THE EXECUTIVE OFFICER
FOR FEE INFORMATION AND SMALL BUSINESS EXEMPTION
SEE REVERSE SIDE

34055/13

PLEASE TYPE OR PRINT

SCAQMD USE: SEC | TS | ID NUMBER 65341

1A. PERMIT TO BE ISSUED TO:
United Rock & Concrete Corporation
BUSINESS LICENSE NAME OF ORGANIZATION THAT IS TO RECEIVE PERMIT

1 B.
NAME (OR NAMES) OF OWNER OR PRINCIPAL PARTNERS DOING BUSINESS AS (DBA) ABOVE ORGANIZATION

2 A. MAILING ADDRESS.
13131 Los Angeles Street (NUMBER STREET) | Irwindale (CITY OR COMMUNITY) | California (STATE)

2 B. ZIP CODE: 91706

3 A. EQUIPMENT LOCATION (IF SAME ENTER "SAME")
1245 East Arrow Highway (NUMBER STREET) | Irwindale (CITY OR COMMUNITY) | 91706 (ZIP)

3 B. NEAREST INTERSECTING STREET: Buena Vista Street

4 A. CONTACT PERSON (INITIALS & NAME.): Thomas S. Tedesco

4 B. CONTACT PHONE NO. (AREA & NO.): (818) 960-3948

5. EQUIPMENT APPLICATION IS HEREBY MADE FOR PERMIT TO OPERATE THE FOLLOWING EQUIPMENT:
Cement Receiving and Storage System

6 IF THIS EQUIPMENT HAD A PREVIOUS WRITTEN PERMIT, STATE NAME OF CORPORATION, COMPANY, OR INDIVIDUAL OWNER THAT OPERATED THIS EQUIPMENT, AND STATE PREVIOUS AIR POLLUTION CONTROL DISTRICT PERMIT NUMBER
Sully-Miller Contracting Company (NAME) | M04085 (PREVIOUS PERMIT NUMBER)

7 PERMIT APPLICATION FOR EQUIPMENT
- NEW CONSTRUCTION ☐
- ALTERATION ☐
- CHANGE OF LOCATION ☐
- REINSTATE NON—PAYMENT P O FEES DUE ☐
- CHANGE OF OWNERSHIP ☒
- EXISTING EQUIPMENT IN OPERATION WITHOUT PRIOR PERMIT ☐
- CHANGE OF CONDITIONS ☐

8 TYPE OF ORGANIZATION
- CORPORATION ☒
- PARTNERSHIP ☐
- INDIVIDUAL OWNER ☐
- LOCAL GOV'T AGENCY ☐
- STATE AGENCY ☐
- FEDERAL AGENCY ☐
- UTILITY ☐

9 ESTIMATED COST OF EQUIPMENT OR ALTERATION
BASIC EQUIPMENT $ N/A
AIR POLLUTION CONTROL EQUIPMENT $ N/A

10. FOR THE NEW CONSTRUCTION, ALTERATION, TRANSFER OF OWNERSHIP OR LOCATION, WHAT IS
ESTIMATED STARTING DATE? 1 January 1989
ESTIMATED COMPLETION DATE? N/A

11 GENERAL NATURE OF BUSINESS: Ready-Mix Concrete

12. PRINCIPAL PRODUCT: Ready-Mix Concrete

13. DO YOU CLAIM CONFIDENTIALITY OF DATA?
YES ☐ NO ☒
IF YES STATE NATURE OF DATA ON SEPARATE SHEET

14 NORMAL OPERATING HOURS OF SUBJECT EQUIPMENT
HOURS/DAY 12
DAYS/WEEK 7
WEEKS/YEAR 52

15. HAS A CEQA DOCUMENT BEEN PREPARED FOR THIS PROJECT? YES ☐ NO ☒

15a. ARE ALL COMPANIES' FACILITIES IN CALIFORNIA IN COMPLIANCE WITH AIR POLLUTION RULES?
YES ☒ NO ☐

16. SIGNATURE OF RESPONSIBLE MEMBER OF ORGANIZATION: Thomas S Tedesco

17 OFFICIAL TITLE OF SIGNER: ~~President~~ Chairman

18. TYPED OR PRINTED NAME OF SIGNER: Thomas S. Tedesco

19 PHONE NO.: 818-960-3948

20. DATE

SCAQMD USE

SIC NO.

EQUIP CAT NO.: 101900 / 120

SCH/STEP: 5C JAN 0 1990

APPLICATION NO.: 185088

PERMIT NO.

TYPE: B OR C

WORK UNITS: A C P O

ASSIGNMENT: 10 UNIT ENGR

CLASS: I II

VALIDATION: 12/30/88

FILING FEE.: $ 3640

CHECK OR MONEY ORDER NO.: 01 80

Form 400A - REVISED 8-84 PRIOR VERSIONS NOT VALID (20823 1/9/89 WJC (Continued on reverse) C-1

SEE REVERSE FOR FEES REQUIRED UPON FILING

# SOUTH COAST AIR QUAL[redacted]ANAGEMENT DISTRICT

## FILING FEES

Except as noted following, a $250 filing fee must accompany each application for Permit to Construct/Operate.

1. For small businesses the filing fee is $160. The small business declaration form below must be completed in order to be considered a small business.

2. Each application for change of ownership requires a $110 transfer fee.

3. All applicants, including state, local governmental and public districts, must pay a permit evaluation fee. Such fees are in addition to filing fees and change of ownership fees.

4. All state, local governmental agencies or public districts are exempt from paying filing fees and change of ownership fees.

SEE APPLICATION INSTRUCTIONS FORM 400-B FOR ADDITIONAL INSTRUCTIONS
Call (818) 572-6212 for assistance
SUPPLEMENTAL DATA FORMS REQUIRED

Special supplemental data forms must be completed for: BOILERS, LIQUID HEATERS, DEGREASERS, DRY CLEANING EQUIPMENT, OVENS, SPRAY BOOTHS AND STORAGE TANKS.

## SMALL BUSINESS DECLARATION

In order to be considered a small business as specified in Regulation XIII, this form must be completed. If not a small business, do not complete this form.

A "Small Business": is a business which is independently owned and operated and meets the following criteria or, if affiliated with another concern, the combined activities of both concerns meet these criteria:

The number of employees is 10 or less; and
The total annual receipts are $500,000 or less.

I hereby certify, under penalty of perjury, that the business enterprise containing the emission source(s) for which an SCAQMD Permit to Construct or Permit to Operate is being applied herein qualifies as a SMALL BUSINESS, based on compliance with the definition above:

| Signature of Applicant | Date | ( ) Telephone Number |
|---|---|---|
| Printed or Typed Signature | Company Name | |

# AEIS SHEET

NAME OF FIRM UNITED ROCK & CONCRETE COMPANY I.D. 065341

LOCATION ADDRESS 1245 E. ARROW HWY, IRWINDALE 91706

REASON FOR INACTIVATION: 1. ALTERATION 2. CHANGE OF OPERATOR 3. MOVED 4. REMOVED 5. OUT OF BUSINESS 6. BANKING ISSUED 7. OTHER ____

SUBS. APPLICATION NO. _____ INACTIVATION DATE __/__/__

ACTION CODE (A) C D A = ADD DATA C = CHANGE DATA D = DELETE DATA

*PERMIT NUMBER D16723

APPLICATION NUMBER 185089

*ISSUE DATE 01/24/92

**INSTALLATION DATE __/__/__

**EQUIPMENT B CAT. 101900

**EQUIPMENT C CAT. ~~20~~

**DESCRIPTION CEMENT RECIEVING & STORAGE SYSTEM

PERMIT TYPE (B, C, or D) D

SCHEDULE/STEP 5/C

*SECTION ___

*SECTOR ___

| EMISSIONS | $R_1$ | $R_2$ |
|---|---|---|
| rHC | ___ | ___ |
| tHC | ___ | ___ |
| $NO_x$ | ___ | ___ |
| $SO_2$ | ___ | ___ |
| CO | ___ | ___ |
| Part | 502 | 500 |
| Other 1 ___ | ___ | ___ |
| Other 2 ___ | ___ | ___ |
| Other 3 ___ | ___ | ___ |

| | Mon | Tues | Weds | Thurs | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|
| Weeks Operated Per Year 50 — Daily Start Time | 08 | 08 | / | / | / | / | / |
| Daily Stop Time | 10 | 10 | / | / | / | / | / |
| *UTM Coordinates X | ___ | ___ | ___ | ___ | ___ | ___ | ___ |

*Not to be completed by the engineer.
**Fill out only if different from application.

Engineer WILEY Date 11-14-89

# INSTRUCTIONS FOR PERMIT WORDING & FEE DATA

APPLICATION NO. 185088 | NEED EIR? ☐ YES ☐ NO

DISPOSITION:
- ☒ APPROVED
- ☐ DENIED
- ☐ CANCELED — DON'T REFUND FILING FEE
- ☐ CANCELED — REFUND FILING FEE
- SEE COMMENTS

PERMIT UNIT WORDING:
- ☐ BELOW
- ☐ ON FIELD REPORT DATED _____
- ☐ ON PAGE _____ OF PROCESS SHEETS
- ☑ ON pg 2 of 2

CONDITIONS:
- ☐ NONE
- ☐ NUMBERS LISTED _____
- ☐ SPECIAL (SEE PERMIT UNIT WORDING & CONDITIONS)
- ☑ AS ON pg 2 of 2

PREVIOUS PERMIT NO. M04085

PERMIT UNIT WORDING & CONDITIONS: _____

( ) P/C ( ✓ ) P/O ( ) P/O NO P/C ( ) NOTICE TO APPLY WRITTEN

- ☐ CHANGE OF OWNERSHIP, large business
- ☐ CHANGE OF OWNERSHIP, small business
- ☐ CHANGE OF CONDITIONS
- ☐ ALTERATION
- ☐ FEDERAL GOVERNMENT
- ☐ GOVERNMENT (other)
- ☐ TIME & MATERIALS

| SCHEDULE | (1) H.P. | (2) 1000s BTU | (3) KVA | (4) SQ. FT. | (5) GALLONS Barrels | (6) GASOLINE FUELING | (7) EXCEPTIONS |
|---|---|---|---|---|---|---|---|
| RATING | | | | | 880 | | |
| FEE | | | | | 1,010 | | |

1. PERMIT EVALUATION FEE — RULE 301.1(b)(1)
   - A. SCHEDULE 5 STEP C = FEE $ 1,010
   - B. TIME & MATERIALS (T & M): HOURS _____ X $50/HOUR = FEE $ _____
   - C. CHANGE OF OWNERSHIP, large business or ALTERATION — EXCEPT T & M:
     SCHEDULE _____ STEP _____ = FEE _____ X 50% = FEE $ _____
   - D. ADDITIONAL FEE FOR NO P/C: ABOVE FEE _____ X 50% = FEE $ _____
2. EIR/MODELING FEE — RULE 301.1(g): HOURS _____ X $50/HOUR = FEE $ _____
3. 301(d)(1)(C) CREDIT OR DIFFERENCE DUE TO INCORRECT INFORMATION
   250 - 110 = $140 ADJUSTED FEE $ 140

DISCONTINUED

COMMENTS: _____

TOTAL FEE 1150.00

REFUND _____

WORK UNITS ( )

RECOMMENDED BY WILEY DATE 11-14-89 REVIEWING ENGINEER VHN DATE 11.28.89

PAGE 1 OF 1 PAGES

SCAQMD
ENGINEERING DIVISION
NEW SOURCE REVIEW REGULATION XIII DATA SHEET

1 ☐ P/C 2 ☐ P/O 3 ☒ C/O

COMPANY ID# 105341
APPLICATION # 195188

COMPANY NAME UNITED ROCK CONCRETE CORP DATE 11-15-89
EQUIPMENT LOCATION 1245 E. ARROW HWY., IRWINDALE 91706

APPLICABLE NEW SOURCE RULE: (equip. installed or Class I applc'n rec'd...)
1 ☐ None (before 10-8-76)
2 ☒ Rule 213 (before 7-1-79 and on or after 10-8-76)
3 ☐ Original Reg XIII (before 1-1-83 and on or after 7-1-79)
4 ☐ 1st Revision Reg XIII (before 7-12-85 and on or after 1-1-83)
5 ☐ 2nd Revision Reg XIII (on or after 7-12-85)

SPECIAL CASES:
1 ☐ Banking Ref Applc'n #_____
2 ☐ Reg 13 Exempt
3 ☐ Mitigations 4 ☐ Tradeoffs
5 ☐ Toxic Materials
6 ☐ Banking Cert./Reg. Used
7 ☐ Rule 219 Exemptions
8 ☐ Alter.-Prev. App. #_____

EMISSION INCREASE OR DECREASE FROM THIS PERMIT UNIT CREDITED TO THIS LOCATION (Indicate "+" or "-"): [] 1.1 factor used for Max
NO INCREASE - CHANGE OF OWNERSHIP.

| CONTAMINANT | RHC | $NO_x$ | $SO_x$ | CO | Part | Lead | UnRHC |
|---|---|---|---|---|---|---|---|
| Max #/day | | | | | 0 | | |
| Actual w/internal BACT #/day | | | | | 0 | | |
| Actual w/o BACT #/day | | | | | 0 | | |

REGULATION XIII EXEMPT EMISSIONS (Indicate "+" or "-")
Exempt by Rule 1304 (____) (____) or Rule 213(f) (____) (____)

| CONTAMINANT | RHC | $NO_x$ | $SO_x$ | CO | Part | Lead | UnRHC |
|---|---|---|---|---|---|---|---|
| Max #/day | | | | | | | |
| Actual #/day | | | | | | | |

MITIGATIONS ACHIEVED CONCURRENT WITH THIS APPLC'N (Indicate "+" or "-")

| APPLIC'N NUMBER | RHC #/day | NOx #/day | $SO_x$ #/day | CO #/day | Part #/day | Lead #/day | UnRHC #/day |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Engineer WILEY Date 11-14-89 Reviewing Engineer VHN Date 11-28-89

Revised 9/85

CHANGE OF OWNERSHIP

UNITED ROCK AND CONCRETE CORP
13131 LOS ANGELES ST.
IRWINDALE, CA. 910706

EQUIPMENT LOCATION

1245 EAST ARRROW HIGHWAY
IRWINDALE, CA. 91706

EQUIPMENT DESCRIPTION

A/N 185088 Previous: A/N C03143 P/O M04085

CEMENT-RECEIVING AND STORAGE SYSTEM CONSISTING OF:

1. SILO NO. 1, 300 BBL CAPACITY, WITH A 4" DIA. PNEUMATIC FILL TUBE AND A 100 SQ. FT. FILTER VENT

2. SILO NO. 2, 230 BBL CAPACITY, WITH A 4" DIA. PNEUMATIC FILL TUBE AND A 100 SQ. FT. FILTER VENT.

3. SILO NO. 3, 350 BBL CAPACITY, WITH A 4" DIA. PNEUMATIC FILL TUBE AND 84 SQ. FT. FILTER VENT.

A/N 185085 Previous: A/N C34908 P/O M21296

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. BAGHOUSE, DD INC., MODEL 36LS, WITH 36 FILTER BAGS, 250 SQ. FT. NET FILTER AREA, AND A 1/6-H.P. SHAKER.

2. EXHAUST SYSTEM WITH A 3-H.P. BLOWER VENTING A CEMENT STORAGE SILO.

CONDITIONS

DUST COLLECTED IN THE BAGHOUSE MUST BE DISCHARGED ONLY INTO CLOSED CONTAINERS.

# ENGINEERING DIVISION....MEMORANDUM

| TO | FROM | DATE |
|---|---|---|
| File | CDW | 11-14-89 |
| REFERENCE | | PERMIT APPL. NO. |
| UNITED ROCK CONCRETE | | 165082 |

SUBJECT

NOTES

REC'D AS CHANGE OF OWNERSHIP. NO CHANGES IN OPERATION. ALL CALCULATIONS AND ENGR's NOTES CAN BE FOUND IN MICROFICHE ## 1124 E21. PREVIOUS P/O INACTIVE. ADJUST FILING FEE AND CHARGE FULL EVALUATION FEE. NO CURRENT IR'S OR NOV'S AGAINST THIS LOCATION.

Valid to under Reg XIII

ENGINEERING DIVISION

| TO | FROM | DATE |
|---|---|---|
| File | CDW | 11/27/89 |
| REFERENCE | | PERMIT APPL. NO. |
| United Rock Concrete | | |

SUBJECT

Notes & Conversation

United Rock, formerly Blue Diamond Materials, submitted 23 applications for change of ownership. 13 of 23 apps were assigned to Class IV, Unit 10.

These apps are for the following locations
67342 4127 W. MacArthur Blvd. Santa Ana
67341 12976 E. Firestone Blvd, Santa Fe Springs
65341 1245 E. ARROW Hwy., IRWINDALE

T/C w/ Mr. Potter, controller, 960 3948, he states the Santa Fe Springs Facility is being sold and equipment is being removed.

Of the two remaining locations, it is unclear if the applicant submitted the correct number of apps. I've requested a Block Flow diagram of each location

Mr Potter would also like to meet to ~~go~~ go over fees that have been charged to his company.

APPS ASSIGNED TO CLASS IV, Unit 10

185092 id 67342, 185089, id 65341, 185087, 65341
185093 67342, 185084, 65341, 185078, 67341
185083 67341, 185086, 65341, 185079, 67341
185088 65341, 185085, 65341, 185080, 185081 } 67341

16-SOD115-R1

ROUTING RECORD

| [illegible] | FROM | TO | ACTION |
|---|---|---|---|
| 3.22 89 | BLY | GD | IV |
| 10.20.89 | VHN | CDW | Transfer |
| | CDW | VHN | P/O |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

[illegible] TO OTHER APCD
[illegible] INCLUDING VARIANCES:

65341

[illegible] DATA ENTRY

ap 11/17/89

185089

UNITED ROCK & CONCRETE CORP AP 18[illegible]

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# PERMIT TO OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
**D16724**
A/N 185089
Page 1

**This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.**

**Legal Owner** **ID 65341**
**Or Operator:** UNITED ROCK AND CONCRETE CORPORATION
13131 LOS ANGELES STREET
IRWINDALE, CALIFORNIA 91706
ATTN: THOMAS S. TEDESCO

**Equipment**
**located at:** 1245 E. ARROW HWY., IRWINDALE, CALIFORNIA

**Equipment Description:**

TRANSIT MIXED CONCRETE BATCH PLANT, APPCO, CONSISTING OF:

1. THREE BELT CONVEYORS, AGGREGATE TRANSFER, EACH 20 H.P.
2. BELT CONVEYOR, AGGREGATE TRANSFER, 15 H.P.
3. FOUR-COMPARTMENT SURGE BIN, AGGREGATE WITH AN 8 CU. YD. WEIGH HOPPER AND A 15 H.P. DISCHARGING BELT CONVEYOR.
4. BELT CONVEYOR, AGGREGATE INCLINED, 20 H.P.
5. TWO SCREW CONVEYORS, CEMENT-TRANSFER, EACH 20 H.P.
6. SCREW CONVEYOR, CEMENT-TRANSFER, 30 H.P.
7. WEIGH HOPPER, CEMENT, 5,000 LB. CAPACITY WITH A FILTER VENT.
8. GATHERING HOPPER, ADJUSTABLE.
9. AIR COMPRESSOR, 15 H.P.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

**FILE COPY**

**CONTINUATION OF PERMIT TO OPERATE**

3. THIS EQUIPMENT MUST NOT BE OPERATED UNLESS THE BATCH DISCHARGING STATION IS VENTED ONLY TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND WHICH HAS BEEN ISSUED AN OPERATING PERMIT BY THE EXECUTIVE OFFICER.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Raquel Puerta/ps
January 24, 1990

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
## 9150 Flair Drive El Monte, CA 91731

APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE AND EXCAVATE AND
FOR PLANS REQUIRED BY THE EXECUTIVE OFFICER
FOR FEE INFORMATION AND SMALL BUSINESS EXEMPTION
SEE REVERSE SIDE

PLEASE TYPE OR PRINT

SCAQMD USE: SEC | TS | ID NUMBER: 65341

1A. PERMIT TO BE ISSUED TO.
United Rock & Concrete Corporation
BUSINESS LICENSE NAME OF ORGANIZATION THAT IS TO RECEIVE PERMIT

1 B
NAME (OR NAMES) OF OWNER OR PRINCIPAL PARTNERS DOING BUSINESS AS (DBA) ABOVE ORGANIZATION

2 A. MAILING ADDRESS
13131 Los Angeles Street (NUMBER STREET) | Irwindale (CITY OR COMMUNITY) | California (STATE)
2 B. 91706 (ZIP CODE)

3 A. EQUIPMENT LOCATION (IF SAME ENTER "SAME")
1245 East Arrow Highway (NUMBER STREET) | Irwindale (CITY OR COMMUNITY) | 91706 (ZIP)
3 B. Buena Vista Street (NEAREST INTERSECTING STREET)

4 A. CONTACT PERSON (INITIALS & NAME.)
Thomas S. Tedesco
4 B. CONTACT PHONE NO. (AREA & NO.)
(818) 960-3948

5. EQUIPMENT APPLICATION IS HEREBY MADE FOR PERMIT TO OPERATE THE FOLLOWING EQUIPMENT:
Concrete Batch Plant

6 IF THIS EQUIPMENT HAD A PREVIOUS WRITTEN PERMIT STATE NAME OF CORPORATION, COMPANY, OR INDIVIDUAL OWNER THAT OPERATED THIS EQUIPMENT, AND STATE PREVIOUS AIR POLLUTION CONTROL DISTRICT PERMIT NUMBER
Sully-Miller Contracting Company (NAME)
M04084 (PREVIOUS PERMIT NUMBER)

7 PERMIT APPLICATION FOR EQUIPMENT
- NEW CONSTRUCTION ☐
- ALTERATION ☐
- CHANGE OF LOCATION ☐
- REINSTATE NON—PAYMENT P O FEES DUE ☐
- CHANGE OF OWNERSHIP ☒ S
- EXISTING EQUIPMENT IN OPERATION WITHOUT PRIOR PERMIT ☐
- CHANGE OF CONDITIONS ☐

8 TYPE OF ORGANIZATION
- CORPORATION ☒
- PARTNERSHIP ☐
- INDIVIDUAL OWNER ☐
- LOCAL GOV'T AGENCY ☐
- STATE AGENCY ☐
- FEDERAL AGENCY ☐
- UTILITY ☐

9 ESTIMATED COST OF EQUIPMENT OR ALTERATION
BASIC EQUIPMENT $ N/A
AIR POLLUTION CONTROL EQUIPMENT $ N/A

10 FOR THE NEW CONSTRUCTION, ALTERATION, TRANSFER OF OWNERSHIP OR LOCATION, WHAT IS
ESTIMATED STARTING DATE? 1 January 1989
ESTIMATED COMPLETION DATE? N/A

11. GENERAL NATURE OF BUSINESS
Ready-Mix Concrete

12. PRINCIPAL PRODUCT
Ready-Mix Concrete

13. DO YOU CLAIM CONFIDENTIALITY OF DATA?
YES ☐ NO ☒
IF YES STATE NATURE OF DATA ON SEPARATE SHEET

14 NORMAL OPERATING HOURS OF SUBJECT EQUIPMENT.
HOURS/DAY 12
DAYS/WEEK 7
WEEKS/YEAR 52

15 HAS A CEQA DOCUMENT BEEN PREPARED FOR THIS PROJECT? YES ☐ NO ☒

15a. ARE ALL COMPANIES' FACILITIES IN CALIFORNIA IN COMPLIANCE WITH AIR POLLUTION RULES?
YES ☒ NO ☐

16. SIGNATURE OF RESPONSIBLE MEMBER OF ORGANIZATION.
Thomas S Tedesco

17 OFFICIAL TITLE OF SIGNER.
~~President~~ Chairman

18 TYPED OR PRINTED NAME OF SIGNER.
Thomas S. Tedesco

19 PHONE NO
818-960-3948

20. DATE

SCAQMD USE

SIC NO.

EQUIP. CAT NO. 000292 / ___

SCH/STEP: 1F JAN 6-1989

APPLICATION NO. 185089

PERMIT NO.

TYPE (B OR C)

WORK UNITS A/C P O

ASSIGNMENT UNIT ENGR

CLASS I II III

VALIDATION 12/30/88

FILING FEE. $ 2640

CHECK OR MONEY ORDER NO. 01

Form 400A - REVISED 8-84 PRIOR VERSIONS NOT VALID 130823 119189 AP. (Continued on reverse) C-1

SEE REVERSE FOR FEES REQUIRED UPON FILING

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

## FILING FEES

Except as noted following, a $250 filing fee must accompany each application for Permit to Construct/Operate.

1. For small businesses the filing fee is $160. The small business declaration form below must be completed in order to be considered a small business.

2. Each application for change of ownership requires a $110 transfer fee.

3. All applicants, including state, local governmental and public districts, must pay a permit evaluation fee. Such fees are in addition to filing fees and change of ownership fees.

4. All state, local governmental agencies or public districts are exempt from paying filing fees and change of ownership fees.

SEE APPLICATION INSTRUCTIONS FORM 400-B FOR ADDITIONAL INSTRUCTIONS
Call (818) 572-6212 for assistance
SUPPLEMENTAL DATA FORMS REQUIRED

Special supplemental data forms must be completed for: BOILERS, LIQUID HEATERS, DEGREASERS, DRY CLEANING EQUIPMENT, OVENS, SPRAY BOOTHS AND STORAGE TANKS.

## SMALL BUSINESS DECLARATION

In order to be considered a small business as specified in Regulation XIII, this form must be completed. If not a small business, do not complete this form.

A "Small Business": is a business which is independently owned and operated and meets the following criteria or, if affiliated with another concern, the combined activities of both concerns meet these criteria:

The number of employees is 10 or less; and
The total annual receipts are $500,000 or less.

I hereby certify, under penalty of perjury, that the business enterprise containing the emission source(s) for which an SCAQMD Permit to Construct or Permit to Operate is being applied herein qualifies as a SMALL BUSINESS, based on compliance with the definition above:

Signature of Applicant _____ Date _____ ( ) Telephone Number

Printed or Typed Signature _____ Company Name

# AEIS SHEET

NAME OF FIRM UNITED ROCK & CONCRETE CORP COMPANY I.D. D 6 5 3 4 1

LOCATION ADDRESS 1245 E. ARROW HIGHWAY, IRWINDALE

REASON FOR INACTIVATION: 1. ALTERATION 2. CHANGE OF OPERATOR 3. MOVED 4. REMOVED 5. OUT OF BUSINESS 6. BANKING ISSUED 7. OTHER _____

SUBS. APPLICATION NO. _ _ _ _ _ _ _ INACTIVATION DATE _ _/_ _/_ _

ACTION CODE (A) C D A = ADD DATA C = CHANGE DATA D = DELETE DATA

*PERMIT NUMBER D 16729

APPLICATION NUMBER 1 8 5 0 8 9

*ISSUE DATE 0 1 1 2 4 1 9 0

**INSTALLATION DATE _ _/_ _/_ _

**EQUIPMENT B CAT. _ _ _ _ _ _ _

**EQUIPMENT C CAT. 2 1

**DESCRIPTION CONCRETE BATCH PLANT

PERMIT TYPE (B, C, or D) D

SCHEDULE/STEP 1/F

*SECTION _ _

*SECTOR _ _

| EMISSIONS | $R_1$ | $R_2$ |
|---|---|---|
| rHC | _ _ _ | _ _ _ |
| tHC | _ _ _ | _ _ _ |
| $NO_x$ | _ _ _ | _ _ _ |
| $SO_2$ | _ _ _ | _ _ _ |
| CO | _ _ _ | _ _ _ |
| Part | 2 7 1 | 1 3 0 |
| Other 1 _ _ _ _ | _ _ _ | _ _ _ |
| Other 2 _ _ _ _ | _ _ _ | _ _ _ |
| Other 3 _ _ _ _ | _ _ _ | _ _ _ |

| Weeks Operated Per Year 5 0 | Mon | Tues | Weds | Thurs | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|
| Daily Start Time | 0 8 | 0 8 | 0 8 | 0 8 | 0 8 | _/ | /_ |
| Daily Stop Time | 1 6 | 1 6 | 1 6 | 1 6 | 1 6 | _/_ | /_ |
| *UTM Coordinates X | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ |

*Not to be completed by the engineer.
**Fill out only if different from application.

Engineer WILEY Date 11-9-89

# INSTRUCTIONS FOR PERMIT WORDING & FEE DATA

APPLICATION NO. 1855089 NEED EIR? ☐ YES ☑ NO

| DISPOSITION: | PERMIT UNIT WORDING: | CONDITIONS: |
|---|---|---|
| ☑ APPROVED | ☐ BELOW | ☐ NONE |
| ☐ DENIED | ☐ ON FIELD REPORT DATED | ☐ NUMBERS LISTED |
| ☐ CANCELED — DON'T REFUND FILING FEE | ☐ ON PAGE ____ OF PROCESS SHEETS | ☐ SPECIAL (SEE PERMIT UNIT WORDING & CONDITIONS) |
| ☐ CANCELED — REFUND FILING FEE SEE COMMENTS | ☑ ON pg 2 of 2 | ☑ AS ON pg 2 of 2 |

PREVIOUS PERMIT NO. M041084

PERMIT UNIT WORDING & CONDITIONS: _____

( ) P/C ( / ) P/O ( ) P/O NO P/C ( ) NOTICE TO APPLY WRITTEN

☐ CHANGE OF OWNERSHIP, large business ☐ ALTERATION ☐ TIME & MATERIALS

☐ CHANGE OF OWNERSHIP, small business ☐ FEDERAL GOVERNMENT

☐ CHANGE OF CONDITIONS ☐ GOVERNMENT (other)

| SCHEDULE | ①H.P. | ②1000s BTU | ③KVA | ④SQ. FT. | ⑤GALLONS | ⑥GASOLINE FUELING | ⑦EXCEPTIONS |
|---|---|---|---|---|---|---|---|
| RATING | 185 | | | | | | |
| FEE | 6075 | | | | | | |

1. PERMIT EVALUATION FEE — RULE 301.1(b)(1)

A. SCHEDULE 1 STEP F = FEE $ 6075

B. TIME & MATERIALS (T & M): HOURS _____ X $50/HOUR = FEE $ _____

C. CHANGE OF OWNERSHIP, large business or ALTERATION — EXCEPT T & M:

SCHEDULE _____ STEP _____ = FEE _____ X 50% = FEE $ _____

D. ADDITIONAL FEE FOR NO P/C: ABOVE FEE _____ X 50% = FEE $ _____

2. EIR/MODELING FEE — RULE 301.1(g): HOURS _____ X $50/HOUR = FEE $ _____

3. 301(d)(1)(C) CREDIT OR DIFFERENCE DUE TO INCORRECT INFORMATION

250 - 110 = $140 ADJUSTED FEE $ 140.00

ALPHA FILE

DISPOSITION

COMMENTS: PREVIOUS P/O INACTIVE. ADJUST FILING FEE, CHARGE FULL EVALUATION FEE.

TOTAL FEE 6215.00

REFUND _____

WORK UNITS ( )

RECOMMENDED BY WILEY DATE 11-A-89 REVIEWING ENGINEER VHN DATE 11.28.89

PAGE 1 OF 2 PAGES

SCAQMD
ENGINEERING DIVISION
NEW SOURCE REVIEW REGULATION XIII DATA SHEET

1 ☐ P/C 2 ☐ P/O 3 ☒ C/O

COMPANY ID# 165341
APPLICATION # 185189

COMPANY NAME UNITED ROCK AND CONCRETE DATE 11-14-89
EQUIPMENT LOCATION 1245 E. ARROW HWY, IRWINDALE, CA 91706

APPLICABLE NEW SOURCE RULE: (equip. installed or Class I applc'n rec'd...)
1 ☐ None (before 10-8-76)
2 ☒ Rule 213 (before 7-1-79 and on or after 10-8-76)
3 ☐ Original Reg XIII (before 1-1-83 and on or after 7-1-79)
4 ☐ 1st Revision Reg XIII (before 7-12-85 and on or after 1-1-83)
5 ☐ 2nd Revision Reg XIII (on or after 7-12-85)

SPECIAL CASES:
1 ☐ Banking Ref Applc'n #_____
2 ☐ Reg 13 Exempt
3 ☐ Mitigations 4 ☐ Tradeoffs
5 ☐ Toxic Materials
6 ☐ Banking Cert./Reg. Used
7 ☐ Rule 219 Exemptions
8 ☐ Alter.-Prev. App. #_____

EMISSION INCREASE OR DECREASE FROM THIS PERMIT UNIT CREDITED TO THIS LOCATION (Indicate "+" or "-"): [] 1.1 factor used for Max

| CONTAMINANT | RHC | $NO_x$ | $SO_x$ | CO | Part | Lead | UnRHC |
|---|---|---|---|---|---|---|---|
| Max #/day | | | | | 0 | | |
| Actual w/internal BACT #/day | | | | | 0 | | |
| Actual w/o BACT #/day | | | | | 0 | | |

REGULATION XIII EXEMPT EMISSIONS (Indicate "+" or "-")
Exempt by Rule 1304 (____) (____) or Rule 213(f) (____) (____)

| CONTAMINANT | RHC | $NO_x$ | $SO_x$ | CO | Part | Lead | UnRHC |
|---|---|---|---|---|---|---|---|
| Max #/day | | | | | | | |
| Actual #/day | | | | | | | |

MITIGATIONS ACHIEVED CONCURRENT WITH THIS APPLC'N (Indicate "+" or "-")

| APPLIC'N NUMBER | RHC #/day | NOx #/day | $SO_x$ #/day | CO #/day | Part #/day | Lead #/day | UnRHC #/day |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Engineer WILEY Date 11-14-89 Reviewing Engineer VHN Date 11.28.89

Revised 9/85

CHANGE OF OWNERSHIP

UNITED ROCK AND CONCRETE CORP
13131 LOS ANGELES ST.
IRWINDALE, CA. 910706

EQUIPMENT LOCATION

1245 EAST ARRROW HIGHWAY
IRWINDALE, CA. 91706

EQUIPMENT DESCRIPTION

A/N 185089 Previous A/N C03142 P/O M04084

TRANSIT MIXED CONCRETE BATCH PLANT, APPCO, CONSISTING OF :

1. THREE BELT CONVEYORS, AGGREGATE TRANSFER, EACH 20 H.P.
2. BELT CONVEYOR, AGGREGATE TRANSFER, 15 H.P.
3. FOUR-COMPARTMENT SURGE BIN, AGGREGATE WITH AN 8 CU.YD. WEIGH HOPPER AND A 15 H.P. DISCHARGING BELT CONVEYOR.
4. BELT CONVEYOR, AGGREGATE-INCLINED, 20-H.P.
5. TWO SCREW CONVEYORS, CEMENT-TRANSFER, EACH 20-H.P.
6. SCREW CONVEYOR, CEMENT-TRANSFER, 30 H.P.
7. WEIGH HOPPER, CEMENT, 5,000 LB CAPACITY WITH A FILTER VENT
8. GATHERING HOPPER, ADJUSTABLE
9. AIR COMPRESSOR, 15 H.P.

CONDITIONS

THIS EQUIPMENT MUST NOT BE OPERATED UNLESS THE BATCH DISCHARGING STATION IS VENTED ONLY TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND WHICH HAS BEEN ISSUED AN OPERATING PERMIT BY THE EXECUTIVE OFFICER.

A/N 185087 Previous: A/N C03144 P/O M04156

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. BAGHOUSE CONFAB, FOUR COMPARTMENT, REVERSE-AIR CLEANING, 1,400 SQ. FT. DACRON FILTER CLOTH, WITH A 1-H.P. DISCHARGING SCREW CONVEYOR
2. EXHAUST SYSTEM WITH A 10 H.P.BLOWER VENTING THE BATCH DISCHARGING STATION OF THE TRANSIT-MIXED CONCRETE BATCH PLANT.

ENGINEERING DIVISION — MEMORANDUM

| TO | FROM | DATE |
|---|---|---|
| File | CDW | 11/27/89 |
| REFERENCE | | PERMIT APPL. NO. |
| United Rock Concrete | | |

SUBJECT

Notes & Conversation

United Rock, formerly Blue Diamond Materials, submitted 23 applications for change of ownership. 13 of 23 apps were assigned to Class IV, Unit 10.

These apps are for the following locations
67342 4127 W. MacArthur Blvd. Santa Ana
67341 12976 E. Firestone Blvd, Santa Fe Springs
65341 1245 E. ARROW Hwy., IRWINDALE

T/C w/ Mr. Potter, controller, 960 3948, he states the Santa Fe Springs Facility is being sold and equipment is being removed.

Of the two remaining locations, it is unclear if the applicant submitted the correct number of apps. I've requested a Block Flow diagram of each location

Mr Potter would also like to meet to go over fees that have been charged to his company.

APPS ASSIGNED TO CLASS IV, Unit 10

| | | | | |
|---|---|---|---|---|
| 185092 | Id 67342, | 185089, | Id 65341, | 185087, 65341 |
| 185093 | 67342, | 185084, | 65341, | 185078, 67341 |
| 185083 | 67341, | 185086, | 65341, | 185079, 67341 |
| 185088 | 65341, | 185085, | 65341, | 185080 } 67341<br>185081 } |

16-50D115-R1

File ENGINEERING DIVISION....MEMORANDUM

| TO | FROM | DATE |
|---|---|---|
| UNITED ROCK & CONCRETE | CDW | 11-14-89 |
| REFERENCE | | PERMIT APPL. NO. |
| | | 1885089 |

SUBJECT NOTES

RECD AS A CHANGE OF OWNERSHIP. NO CHANGES IN OPERATION. ALL CALCULATIONS AND ENGR'S NOTES CAN BE FOUND IN MICROFICHE # 1125 A1. PREVIOUS PERMIT WAS INACTIVE. ~~ADD~~ ADJUST FILING FEE AND CHARGE FULL EVALUATION FEE. NO CURRENT IR'S OR NOV'S ON FILE AGAINST THIS COMPANY (LOCATION)

CHARGE ACCORDING TO ~~HHPP~~ TOTAL HP.

1. 60 H.P. Belt Conveyors (3)
2. 15 H.P. Belt Conveyor (1)
3. 15 H.P. Discharging Belt Conveyor (1)
4. 20 H.P. Belt Conveyor (1)
5. 30 H.P. SCREW CONVEYOR (2)
6. 30 H.P. SCREW CONVEYOR (1)
7. 15 H.P. AIR COMPRESSOR (1)

185 H.P.

valid C/O under Reg XIII

| | | | ACTION |
|---|---|---|---|
| 3.22.89 | BLY | GD | IV |
| 10.20.89 | ~~VHN~~ | CDW | Transfer |
| | CDW | VHN | ~~BLO~~ |

ALPHA FILE

TO OTHER APCD
...UDING VARIANCES:

65341

| NEWSOURCE | DATA ENTRY |
|---|---|
| ✓ | 12/12/89 |

10

UNITED ROCK & CONCRETE CORP
MACHUSE

185084

185084

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# PERMIT TO OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
**D16721**
A/N 185084
Page 1

**This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.**

**Legal Owner** **ID 65341**
**Or Operator:** UNITED ROCK AND CONCRETE CORPORATION
13131 LOS ANGELES STREET
IRWINDALE, CALIFORNIA 91706
ATTN: THOMAS S. TEDESCO

**Equipment**
**located at:** 1245 E. ARROW HWY., IRWINDALE, CALIFORNIA

**Equipment Description:**

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. BAGHOUSE, DD INC. MODEL 36LS WITH 36 FILTER BAGS, 250 SQ. FT., NET FILTER AREA, AND A 1/6 H.P. SHAKER.

2. EXHAUST SYSTEM WITH A 3 H.P. BLOWER VENTING A CEMENT STORAGE SILO.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. DUSTS COLLECTED IN THE BAGHOUSE MUST BE DISCHARGED ONLY INTO CLOSED CONTAINERS.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

**FILE COPY**

# PERMIT TO OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731



## CONTINUATION OF PERMIT TO OPERATE

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Raquel Puerta/ps
January 24, 1990

FILE COPY

# SOUTH COAST [redacted]UALITY MANAGEMENT DISTRICT
## 9150 [redacted]Drive El Monte, CA 91731

APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE AND EXCAVATE AND
FOR PLANS REQUIRED BY THE EXECUTIVE OFFICER
FOR FEE INFORMATION AND SMALL BUSINESS EXEMPTION
SEE REVERSE SIDE

PLEASE TYPE OR PRINT

SCAQMD USE: SEC | TS | ID NUMBER: 65341

1A. PERMIT TO BE ISSUED TO:
United Rock & Concrete Corporation
BUSINESS LICENSE NAME OF ORGANIZATION THAT IS TO RECEIVE PERMIT

1 B.
NAME (OR NAMES) OF OWNER OR PRINCIPAL PARTNERS DOING BUSINESS AS (DBA) ABOVE ORGANIZATION

2 A. MAILING ADDRESS.
13131 (NUMBER) Los Angeles Street (STREET) Irwindale (CITY OR COMMUNITY) California (STATE)

2 B. 91706 (ZIP CODE)

3 A EQUIPMENT LOCATION (IF SAME ENTER "SAME")
1245 (NUMBER) East Arrow Highway (STREET) Irwindale (CITY OR COMMUNITY) 91706 (ZIP)

3 B Buena Vista Street (NEAREST INTERSECTING STREET)

4 A CONTACT PERSON (INITIALS & NAME.) Thomas S. Tedesco

4 B. CONTACT PHONE NO. (AREA & NO.) (818) 960-3948

5. EQUIPMENT APPLICATION IS HEREBY MADE FOR PERMIT TO OPERATE THE FOLLOWING EQUIPMENT:
Baghouse, Basic, Dry Filter

6 IF THIS EQUIPMENT HAD A PREVIOUS WRITTEN PERMIT, STATE NAME OF CORPORATION, COMPANY, OR INDIVIDUAL OWNER THAT OPERATED THIS EQUIPMENT, AND STATE PREVIOUS AIR POLLUTION CONTROL DISTRICT PERMIT NUMBER
Sully-Miller Contracting Company (NAME) — M21297 (PREVIOUS PERMIT NUMBER)

7 PERMIT APPLICATION FOR EQUIPMENT
- NEW CONSTRUCTION ☐
- ALTERATION ☐
- CHANGE OF LOCATION ☐
- REINSTATE NON-PAYMENT P O FEES DUE ☐
- CHANGE OF OWNERSHIP ☒
- EXISTING EQUIPMENT IN OPERATION WITHOUT PRIOR PERMIT ☐
- CHANGE OF CONDITIONS ☐

8. TYPE OF ORGANIZATION
- CORPORATION ☒
- PARTNERSHIP ☐
- INDIVIDUAL OWNER ☐
- LOCAL GOV'T AGENCY ☐
- STATE AGENCY ☐
- FEDERAL AGENCY ☐
- UTILITY ☐

9 ESTIMATED COST OF EQUIPMENT OR ALTERATION
BASIC EQUIPMENT $ N/A
AIR POLLUTION CONTROL EQUIPMENT $ N/A

10. FOR THE NEW CONSTRUCTION, ALTERATION, TRANSFER OF OWNERSHIP OR LOCATION, WHAT IS
ESTIMATED STARTING DATE? 1 January 1989
ESTIMATED COMPLETION DATE? N/A

11 GENERAL NATURE OF BUSINESS: Ready-Mix Concrete

12. PRINCIPAL PRODUCT: Ready-Mix Concrete

13. DO YOU CLAIM CONFIDENTIALITY OF DATA? YES ☐ NO ☒
IF YES STATE NATURE OF DATA ON SEPARATE SHEET

14 NORMAL OPERATING HOURS OF SUBJECT EQUIPMENT
HOURS/DAY 12
DAYS/WEEK 7
WEEKS/YEAR 52

15 HAS A CEQA DOCUMENT BEEN PREPARED FOR THIS PROJECT? YES ☐ NO ☒

15a. ARE ALL COMPANIES' FACILITIES IN CALIFORNIA IN COMPLIANCE WITH AIR POLLUTION RULES? YES ☒ NO ☐

16. SIGNATURE OF RESPONSIBLE MEMBER OF ORGANIZATION: Thomas S Tedesco

17 OFFICIAL TITLE OF SIGNER: ~~President~~ Chairman

18. TYPED OR PRINTED NAME OF SIGNER: Thomas S. Tedesco

19 PHONE NO. 818-960-3948

20. DATE

SCAQMD USE

SIC NO.

EQUIP CAT. NO. 101900 / 121

SCH/STEP: 1A JAN 6 1989

APPLICATION NO. 185284

PERMIT NO.

TYPE B OR C

WORK UNITS A/C P O

ASSIGNMENT 10 UNIT ENGR

CLASS I II III

VALIDATION 12/30/88

FILING FEE $ 2640

CHECK OR MONEY ORDER NO. 01 fo

Form 400A - REVISED 8-84 PRIOR VERSIONS NOT VALID 80823 1/9/89 WJC (Continued on reverse) C-1

SEE REVERSE FOR FEES REQUIRED UPON FILING

# SOUTH COAST AIR QUALITY M[redacted]GEMENT DISTRICT

## FILING FEES

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Call (818) 572-6212 for assistance
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Special supplemental data forms must be completed for: BOILERS, LIQUID HEATERS, DEGREASERS, DRY CLEANING EQUIPMENT, OVENS, SPRAY BOOTHS AND STORAGE TANKS.

## SMALL BUSINESS DECLARATION

In order to be considered a small business as specified in Regulation XIII, this form must be completed. If not a small business, do not complete this form.

S.C.A.Q.M.D. REVENUE SEP 27 '88

A "Small Business": is a business which is independently owned and operated and meets the following criteria or, if affiliated with another concern, the combined activities of both concerns meet these criteria:

The number of employees is 10 or less; and
The total annual receipts are $500,000 or less.

I hereby certify, under penalty of perjury, that the business enterprise containing the emission source(s) for which an SCAQMD Permit to Construct or Permit to Operate is being applied herein qualifies as a SMALL BUSINESS, based on compliance with the definition above:

Signature of Applicant _____ Date _____ ( ) Telephone Number

Printed or Typed Signature _____ Company Name

S H E E T

NAME OF FIRM UNITED RO[redacted]CONCRETE COMPANY I.D. 065341

LOCATION ADDRESS 1245 EAST ARROW HWY, IRWINDALE, CA 91706

REASON FOR INACTIVATION: 1. ALTERATION 2. CHANGE OF OPERATOR 3. MOVED 4. REMOVED 5. OUT OF BUSINESS 6. BANKING ISSUED 7. OTHER _____

SUBS. APPLICATION NO. _____ INACTIVATION DATE __/__/__

ACTION CODE (A) C D A = ADD DATA C = CHANGE DATA D = DELETE DATA

*PERMIT NUMBER D16721

APPLICATION NUMBER 185084

*ISSUE DATE 01/24/92

**INSTALLATION DATE __/__/__

**EQUIPMENT B CAT. ~~000000~~ 101900

**EQUIPMENT C CAT. 24

**DESCRIPTION BAG HOUSE

PERMIT TYPE (B, C, or D) C

SCHEDULE/STEP 1/A

*SECTION __

*SECTOR __

| EMISSIONS | $R_1$ | $R_2$ |
|---|---|---|
| rHC | | |
| tHC | | |
| $NO_x$ | | |
| $SO_2$ | | |
| CO | | |
| Part | | |
| Other 1 | | |
| Other 2 | | |
| Other 3 | | |

| Weeks Operated Per Year 00 | Mon | Tues | Weds | Thurs | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|
| Daily Start Time | 13 | 13 | 13 | 13 | 13 | / | / |
| Daily Stop Time | 14 | 14 | 14 | 14 | 14 | / | / |
| *UTM Coordinates X | | | | | | | |

*Not to be completed by the engineer.
**Fill out only if different from application.

Engineer WILEY Date 11-14-89

# INSTRUCTIONS FOR PERMIT WORDING & FEE DATA

APPLICATION NO. 1855084 NEED EIR? ☐ YES ☑ NO

DISPOSITION:
- ☑ APPROVED
- ☐ DENIED
- ☐ CANCELED — DON'T REFUND FILING FEE
- ☐ CANCELED — REFUND FILING FEE SEE COMMENTS

PERMIT UNIT WORDING:
- ☐ BELOW
- ☐ ON FIELD REPORT DATED _____
- ☐ ON PAGE _____ OF PROCESS SHEETS
- ☑ ON PG 2 of 2

CONDITIONS:
- ☐ NONE
- ☐ NUMBERS LISTED _____
- ☐ SPECIAL (SEE PERMIT UNIT WORDING & CONDITIONS)
- ☑ AS ON PG 2 of 2

PREVIOUS PERMIT NO. M21297

PERMIT UNIT WORDING & CONDITIONS: _____

( ) P/C ( / ) P/O ( ) P/O NO P/C ( ) NOTICE TO APPLY WRITTEN

- ☐ CHANGE OF OWNERSHIP, large business
- ☐ CHANGE OF OWNERSHIP, small business
- ☐ CHANGE OF CONDITIONS
- ☐ ALTERATION
- ☐ FEDERAL GOVERNMENT
- ☐ GOVERNMENT (other)
- ☐ TIME & MATERIALS

| SCHEDULE | ①H.P. | ②1000s BTU | ③KVA | ④SQ. FT. | ⑤GALLONS | ⑥GASOLINE FUELING | ⑦EXCEPTIONS |
|---|---|---|---|---|---|---|---|
| RATING | 3½ | | | | | | |
| FEE | 174 | | | | | | |

1. PERMIT EVALUATION FEE — RULE 301.1(b)(1)
   - A. SCHEDULE 1 STEP A = FEE $ 174.00
   - B. TIME & MATERIALS (T & M): HOURS _____ X $50/HOUR = FEE $ _____
   - C. CHANGE OF OWNERSHIP, large business or ALTERATION — EXCEPT T & M: SCHEDULE _____ STEP _____ = FEE _____ X 50% = FEE $ _____
   - D. ADDITIONAL FEE FOR NO P/C: ABOVE FEE _____ X 50% = FEE $ _____
2. EIR/MODELING FEE — RULE 301.1(g): HOURS _____ X $50/HOUR = FEE $ _____
3. 301(d)(1)(C) CREDIT OR DIFFERENCE DUE TO INCORRECT INFORMATION
   250 - 110 = $140 ADJUSTED FEE $ 140.00

DISPOSITIONED

COMMENTS: Previous permit inactive
Change filing fee! Change, full
[illegible]

TOTAL FEE 314.00

REFUND _____

WORK UNITS ( )

RECOMMENDED BY WILEY DATE 11-14-89 REVIEWING ENGINEER VHN DATE 11.28.89

SCAQMD
ENGINEERING DIVISION
NEW SOURCE REVIEW REGULATION XIII DATA SHEET

1 ☐ P/C 2 ☐ P/O 3 ☒ C/O

COMPANY ID# 65341
APPLICATION # 185084

COMPANY NAME UNITED ROCK AND CONCRETE DATE 11-14-89
EQUIPMENT LOCATION 1245 E. ARROW HWY, IRWINDALE, CA 91706

APPLICABLE NEW SOURCE RULE: (equip. installed or Class I applc'n rec'd...)
1 ☐ None (before 10-8-76)
2 ☐ Rule 213 (before 7-1-79 and on or after 10-8-76)
3 ☒ Original Reg XIII (before 1-1-83 and on or after 7-1-79)
4 ☐ 1st Revision Reg XIII (before 7-12-85 and on or after 1-1-83)
5 ☐ 2nd Revision Reg XIII (on or after 7-12-85)

SPECIAL CASES:
1 ☐ Banking Ref Applc'n #_____
2 ☐ Reg 13 Exempt
3 ☐ Mitigations 4 ☐ Tradeoffs
5 ☐ Toxic Materials
6 ☐ Banking Cert./Reg. Used
7 ☐ Rule 219 Exemptions
8 ☐ Alter.-Prev. App. #_____

EMISSION INCREASE OR DECREASE FROM THIS PERMIT UNIT CREDITED TO THIS LOCATION (Indicate "+" or "-"): NO INCREASE [] 1.1 factor used for Max

| CONTAMINANT | RHC | $NO_x$ | $SO_x$ | CO | Part | Lead | UnRHC |
|---|---|---|---|---|---|---|---|
| Max #/day | | | | | 0 | | |
| Actual w/internal BACT #/day | | | | | 0 | | |
| Actual w/o BACT #/day | | | | | 0 | | |

REGULATION XIII EXEMPT EMISSIONS (Indicate "+" or "-")
Exempt by Rule 1304 (____) (____) or Rule 213(f) (____) (____)

| CONTAMINANT | RHC | $NO_x$ | $SO_x$ | CO | Part | Lead | UnRHC |
|---|---|---|---|---|---|---|---|
| Max #/day | | | | | | | |
| Actual #/day | | | | | | | |

MITIGATIONS ACHIEVED CONCURRENT WITH THIS APPLC'N (Indicate "+" or "-")

| APPLIC'N NUMBER | RHC #/day | NOx #/day | $SO_x$ #/day | CO #/day | Part #/day | Lead #/day | UnRHC #/day |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Engineer WILEY Date 11-14-89 Reviewing Engineer VHN Date 11.28.89

Revised 9/85

CHANGE OF OWNERSHIP

UNITED ROCK AND CONCRETE CORP
13131 LOS ANGELES ST.
IRWINDALE, CA. 910706

EQUIPMENT LOCATION

1245 EAST ARRROW HIGHWAY
IRWINDALE, CA. 91706

EQUIPMENT DESCRIPTION

A/N 185084 Previous: A/N C34909 P/O M21297

AIR POLLUTION CONTROL SYSTEM CONSISTING OF :

1. BAGHOUSE, DD INC., MODEL 36LS WITH 36 FILTER BAGS, 250 SQ.FT. NET FILTER AREA, AND A 1/6-H.P. SHAKER.
2. EXHAUST SYSTEM WITH A 3-H.P. BLOWER VENTING A CEMENT STORAGE SILO.

CONDITIONS

DUST COLLECTED IN THE BAGHOUSE MUST BE DISCHARGED ONLY INTO CLOSED CONTAINERS.

A/N 185086 Previous: A/N C34364 P/O 185086

AIR POLLUTION CONTROL SYSTEM CONSISTING OF :

1. BAGHOUSE, DD INC., MODEL 36LS WITH 36 FILTER BAGS, 250 SQ.FT. NET FILTER AREA, AND A 1/6-H.P. SHAKER.
2. EXHAUST SYSTEM WITH A 3-H.P. BLOWER VENTING A CEMENT STORAGE SILO.

CONDITIONS

DUST COLLECTED IN THE BAGHOUSE MUST BE DISCHARGED ONLY INT CLOSED CONTAINERS.

ENGINEERING DIVISION — MEMORANDUM

| TO | FROM | DATE |
|---|---|---|
| File | CDW | 11/27/89 |
| REFERENCE | | PERMIT APPL. NO. |
| United Rock Concrete | | |

SUBJECT

Notes & Conversation

United Rock, formerly Blue Diamond Materials, submitted 23 applications for change of ownership. 13 of 23 apps were assigned to Class IV, Unit 10.

These apps are for the following locations
67342 4127 W. MacArthur Blvd. Santa Ana
67341 12976 E. Firestone Blvd, Santa Fe Springs
65341 1245 E. ARROW Hwy., IRWINDALE

T/C w/ Mr. Potter, controller, 960 3948, he states the Santa Fe Springs Facility is being sold and equipment is being removed.

Of the two remaining locations, it is unclear if the applicant submitted the correct number of apps. I've requested a Block Flow diagram of each location

Mr Potter would also like to meet to ~~go over~~ go over fees that have been charged to his company.

APPS ASSIGNED TO CLASS IV, Unit 10

185092 id 67342, 185089, id 65341, 185087
185093 67342, 185084, 65341, 185078, 67341
185083 67341, 185086, 65341, 185079, 67341
185088 65341, 185085, 65341, 185080, 185081 } 67341

16-50D115-R1

# ENGINEERING DIVISION···MEMORANDUM

| TO | FROM | DATE |
|---|---|---|
| File | CDW | 11-14-89 |
| REFERENCE | ~~BLUE DIAMOND~~ UNITED ROCK & CONCRETE | PERMIT APPL. NO. 185084 |

SUBJECT

NOTES

REC'D AS CHANGE OF OWNERSHIP.
NO CHANGES IN OPERATION. ALL
CALCULATIONS AND ENGR'S NOTES
CAN BE FOUND ~~IM~~ IN MICROFICHE
# 1124 C1. PREVIOUS PERMIT
WAS INACTIVE. ADJUST FILING FEE
AND CHARGE FULL EVALUATION FEE.
NO CURRENT IR'S OR NOV'S AGAINST
THIS LOCATION.

Valid C/O under Rule 13.

Press F5 to continue

ENG930 EMISSION THRESHOLD / NEWSOURCE

name: UNITED ROCK & CONCRETE CORP
address: 1245 E ARROW HWY
city: IRWINDALE I

company id: 065341
date: 03/10/89
user: NS11

INCREASE (+) DECREASE (-) SUBSEQUENT TO 10-8-76

| # | I | M | date | appl | p/o | 13 rl | RHC #/day | NOX #/day | SO2 #/day | CO #/day | PART #/day | LEAD #/day | UNRHC #/day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01 | | | 840105 | 116681 | C1 | 04 | | | | | 2 | | |
| 02 | | | 850107 | C31948 | C2 | 03 | | | | | | | |
| 03 | | | 850220 | 125992 | C1 | 04 | | | | | -409 | | |
| 04 | | | 850220 | 125994 | C1 | 04 | | | | | 1 | | |
| 05 | | | 850220 | 125996 | C1 | 04 | | | | | | | |
| 06 | | | 850220 | 125997 | C1 | 04 | 8 | 97 | 51 | 4 | 17269 | | |
| 07 | | | 850220 | 125999 | C1 | 04 | | | | | | | |
| 08 | | | 850220 | 126000 | C1 | 04 | | | | | 6 | | |
| 09 | | | 850220 | 126001 | C1 | 04 | 1 | 2 | 3 | 1 | 1 | | |
| 10 | | | 850220 | 126002 | C1 | 04 | | | | | -16762 | | |
| | | | | | | | | | | | | | |

TRADEOFF TOTAL
exempt total
TOTAL 9 99 54 5 108

# ALPHA FILE

ROUTING RECORD

| DATE | FROM | TO | ACTION |
|---|---|---|---|
| 3.22.89 | BLY | GD | IV |
| 10.20.89 | VHN | CDW | Transfer |
| | CDW | VHN | P/U |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

REFERENCE TO OTHER APCD
RECORDS INCLUDING VARIANCES:

65341

DATA ENTRY
ENGINEERING

| SOURCE | DATA ENTRY |
|---|---|
| PC | |
| PO | 1/30/90 |

UNITED ROCK & CONCRETE CORP
BAGHOUSE

AP 185085
ID 065341

185085

185085

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# PERMIT TO OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
**D17134**
A/N 185085
Page 1

**This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.**

**Legal Owner Or Operator:** **ID 65341**
UNITED ROCK & CONCRETE CORPORATION
13131 LOS ANGELES STREET
IRWINDALE, CA 91706
ATTN: THOMAS S. TEDESCO

**Equipment located at:** 1245 EAST ARROW HIGHWAY, IRWINDALE, CA

**Equipment Description:**

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. BAGHOUSE, DD INC., MODEL 36LS, WITH 36 FILTER BAGS, 250 SQ. FT. NET FILTER AREA, AND A 1/6-H.P. SHAKER.

2. EXHAUST SYSTEM WITH A 3-H.P. BLOWER VENTING A CEMENT STORAGE SILO.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. DUSTS COLLECTED IN THE BAGHOUSE MUST BE DISCHARGED ONLY INTO CLOSED CONTAINERS.

**FILE COPY**

## CONTINUATION OF PERMIT TO OPERATE

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Raquel Puerta/mjd
January 31, 1990

# SOUTH COAST AIR LITY MANAGEMENT DISTRICT
## 9150 Flair Drive El Monte, CA 91731

APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE AND EXCAVATE AND
FOR PLANS REQUIRED BY THE EXECUTIVE OFFICER
FOR FEE INFORMATION AND SMALL BUSINESS EXEMPTION
SEE REVERSE SIDE

PLEASE TYPE OR PRINT

SCAQMD USE: SEC | TS | ID NUMBER 65341

1A. PERMIT TO BE ISSUED TO:
United Rock & Concrete Corporation
BUSINESS LICENSE NAME OF ORGANIZATION THAT IS TO RECEIVE PERMIT

1B.
NAME (OR NAMES) OF OWNER OR PRINCIPAL PARTNERS DOING BUSINESS AS (DBA) ABOVE ORGANIZATION

2A. MAILING ADDRESS:
13131 Los Angeles Street | Irwindale | California
NUMBER STREET | CITY OR COMMUNITY | STATE

2B. 91706
ZIP CODE

3A. EQUIPMENT LOCATION (IF SAME ENTER "SAME")
1245 East Arrow Highway | Irwindale | 91706
NUMBER STREET | CITY OR COMMUNITY | ZIP

3B. Buena Vista Street
NEAREST INTERSECTING STREET

4A. CONTACT PERSON (INITIALS & NAME.)
Thomas S. Tedesco

4B. CONTACT PHONE NO. (AREA & NO.):
(818) 960-3948

5. EQUIPMENT: APPLICATION IS HEREBY MADE FOR PERMIT TO OPERATE THE FOLLOWING EQUIPMENT:
Baghouse, Basic, Dry Filter

6. IF THIS EQUIPMENT HAD A PREVIOUS WRITTEN PERMIT, STATE NAME OF CORPORATION, COMPANY, OR INDIVIDUAL OWNER THAT OPERATED THIS EQUIPMENT, AND STATE PREVIOUS AIR POLLUTION CONTROL DISTRICT PERMIT NUMBER
Sully-Miller Contracting Company (NAME) | M21296 (PREVIOUS PERMIT NUMBER)

7. PERMIT APPLICATION FOR EQUIPMENT:
- NEW CONSTRUCTION ☐
- ALTERATION ☐
- CHANGE OF LOCATION ☐
- REINSTATE NON—PAYMENT P O FEES DUE ☐
- CHANGE OF OWNERSHIP ☒
- EXISTING EQUIPMENT IN OPERATION WITHOUT PRIOR PERMIT ☐
- CHANGE OF CONDITIONS ☐

8. TYPE OF ORGANIZATION:
- CORPORATION ☒
- PARTNERSHIP ☐
- INDIVIDUAL OWNER ☐
- LOCAL GOV'T AGENCY ☐
- STATE AGENCY ☐
- FEDERAL AGENCY ☐
- UTILITY ☐

9. ESTIMATED COST OF EQUIPMENT OR ALTERATION:
BASIC EQUIPMENT $ N/A
AIR POLLUTION CONTROL EQUIPMENT $ N/A

10. FOR THE NEW CONSTRUCTION, ALTERATION, TRANSFER OF OWNERSHIP OR LOCATION, WHAT IS
ESTIMATED STARTING DATE? 1 January 1989
ESTIMATED COMPLETION DATE? N/A

11. GENERAL NATURE OF BUSINESS
Ready-Mix Concrete

12. PRINCIPAL PRODUCT
Ready-Mix Concrete

13. DO YOU CLAIM CONFIDENTIALITY OF DATA?
YES ☐ NO ☒
IF YES STATE NATURE OF DATA ON SEPARATE SHEET

14. NORMAL OPERATING HOURS OF SUBJECT EQUIPMENT:
HOURS/DAY 12
DAYS/WEEK 7
WEEKS/YEAR 52

15. HAS A CEQA DOCUMENT BEEN PREPARED FOR THIS PROJECT? YES ☐ NO ☒

15a. ARE ALL COMPANIES' FACILITIES IN CALIFORNIA IN COMPLIANCE WITH AIR POLLUTION RULES?
YES ☒ NO ☐

16. SIGNATURE OF RESPONSIBLE MEMBER OF ORGANIZATION
C Thomas S Tedesco

17. OFFICIAL TITLE OF SIGNER
~~President~~ Chairman

18. TYPED OR PRINTED NAME OF SIGNER:
Thomas S. Tedesco

19. PHONE NO.
818-960-3948

20. DATE

SCAQMD USE

SIC NO.

EQUIP. CAT. NO.: 10100 121

SCH/STEP: 1A

APPLICATION NO.: 185085

PERMIT NO.

TYPE: B OR C

WORK UNITS: A/C P O

ASSIGNMENT: 10 UNIT ENGR

CLASS: 2

VALIDATION: 13288

FILING FEE: $ 2660

CHECK OR MONEY ORDER NO.: 01

Form 400A - REVISED 8-84 PRIOR VERSIONS NOT VALID 90833 1/9/89 wjc (Continued on reverse) C-1

SEE REVERSE FOR FEES REQUIRED UPON FILING

# SOUTH COAST AIR QUALITY ... NAGEMENT DISTRICT

## FILING FEES

Except as noted following, a $250 filing fee must accompany each application for Permit to Construct/Operate.

1. For small businesses the filing fee is $160. The small business declaration form below must be completed in order to be considered a small business.

2. Each application for change of ownership requires a $110 transfer fee.

3. All applicants, including state, local governmental and public districts, must pay a permit evaluation fee. Such fees are in addition to filing fees and change of ownership fees.

4. All state, local governmental agencies or public districts are exempt from paying filing fees and change of ownership fees.

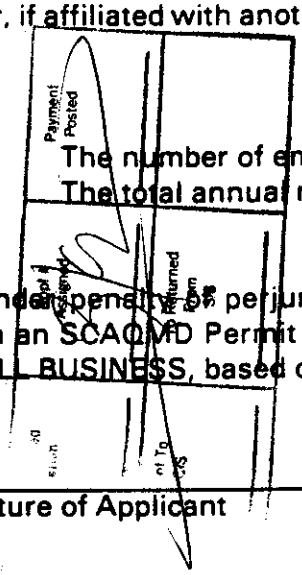
SEE APPLICATION INSTRUCTIONS FORM 400-B FOR ADDITIONAL INSTRUCTIONS
Call (818) 572-6212 for assistance
SUPPLEMENTAL DATA FORMS REQUIRED

Special supplemental data forms must be completed for: BOILERS, LIQUID HEATERS, DEGREASERS, DRY CLEANING EQUIPMENT, OVENS, SPRAY BOOTHS AND STORAGE TANKS.

## SMALL BUSINESS DECLARATION

In order to be considered a small business as specified in Regulation XIII, this form must be completed. If not a small business, do not complete this form.

A "Small Business": is a business which is independently owned and operated and meets the following criteria or, if affiliated with another concern, the combined activities of both concerns meet these criteria:




The number of employees is 10 or less; and
The total annual receipts are $500,000 or less.

I hereby certify, under penalty of perjury, that the business enterprise containing the emission source(s) for which an SCAQMD Permit to Construct or Permit to Operate is being applied herein qualifies as a SMALL BUSINESS, based on compliance with the definition above:

| Signature of Applicant | Date | ( ) Telephone Number |
|---|---|---|
| Printed or Typed Signature | | Company Name |

# AEIS SHEET

NAME OF FIRM UNITED ROCK & CONCRETE COMPANY I.D. 065341

LOCATION ADDRESS 1245 E. ARRON HIGHWAY, IRWINDALE

REASON FOR INACTIVATION: 1. ALTERATION (2.) CHANGE OF OPERATOR 3. MOVED 4. REMOVED 5. OUT OF BUSINESS 6. BANKING ISSUED 7. OTHER _____

SUBS. APPLICATION NO: _____ INACTIVATION DATE __/__/__

ACTION CODE (A) C D A = ADD DATA C = CHANGE DATA D = DELETE DATA

*PERMIT NUMBER 017134

APPLICATION NUMBER 185085

*ISSUE DATE 01/31/90

**INSTALLATION DATE __/__/__

**EQUIPMENT B CAT. 000000

**EQUIPMENT C CAT. N/A

**DESCRIPTION _____

PERMIT TYPE (B, C, or D) C

SCHEDULE/STEP 1/A

*SECTION __

*SECTOR __

| EMISSIONS | | $R_1$ | $R_2$ |
|---|---|---|---|
| rHC | | | |
| tHC | | | |
| $NO_x$ | | | |
| $SO_2$ | | | |
| CO | | | |
| Part | | | |
| Other 1 | | | |
| Other 2 | | | |
| Other 3 | | | |

| Weeks Operated Per Year __ | | Mon | Tues | Weds | Thurs | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|---|
| | Daily Start Time | 11 | 11 | 11 | 11 | 11 | / | / |
| | Daily Stop Time | 12 | 12 | 12 | 12 | 12 | / | / |
| | *UTM Coordinates X | | | | | | | |

*Not to be completed by the engineer.
**Fill out only if different from application.

Engineer WILEY Date 11-14-89

# INSTRUCTIONS FOR PERMIT WORDING & FEE DATA

APPLICATION NO. 1850085

NEED EIR? ☐ YES ☑ NO

DISPOSITION:
- ☑ APPROVED
- ☐ DENIED
- ☐ CANCELED — DON'T REFUND FILING FEE
- ☐ CANCELED — REFUND FILING FEE SEE COMMENTS

PERMIT UNIT WORDING:
- ☐ BELOW
- ☐ ON FIELD REPORT DATED _____
- ☐ ON PAGE _____ OF PROCESS SHEETS
- ☑ ON Pg 2 of 2

CONDITIONS:
- ☐ NONE
- ☐ NUMBERS LISTED _____
- ☐ SPECIAL (SEE PERMIT UNIT WORDING & CONDITIONS)
- ☑ AS ON Pg 2 of 2

PREVIOUS PERMIT NO. M21296

PERMIT UNIT WORDING & CONDITIONS: _____

( ) P/C ( ✓ ) P/O ( ) P/O NO P/C ( ) NOTICE TO APPLY WRITTEN

- ☐ CHANGE OF OWNERSHIP, large business
- ☐ CHANGE OF OWNERSHIP, small business
- ☐ CHANGE OF CONDITIONS
- ☐ ALTERATION
- ☐ FEDERAL GOVERNMENT
- ☐ GOVERNMENT (other)
- ☐ TIME & MATERIALS

| SCHEDULE | ①H.P. | ②1000s BTU | ③KVA | ④SQ. FT. | ⑤GALLONS | ⑥GASOLINE FUELING | ⑦EXCEPTIONS |
|---|---|---|---|---|---|---|---|
| RATING | 3½ | | | | | | |
| FEE | 174 | | | | | | |

1. PERMIT EVALUATION FEE — RULE 301.1(b)(1)
   - A. SCHEDULE 1 STEP A = FEE $ 174.00
   - B. TIME & MATERIALS (T & M): HOURS _____ X $50/HOUR = FEE $ _____
   - C. CHANGE OF OWNERSHIP, large business or ALTERATION — EXCEPT T & M: SCHEDULE _____ STEP _____ = FEE _____ X 50% = FEE $ _____
   - D. ADDITIONAL FEE FOR NO P/C: ABOVE FEE _____ X 50% = FEE $ _____
2. EIR/MODELING FEE — RULE 301.1(g): HOURS _____ X $50/HOUR = FEE $ _____
3. 301(d)(1)(C) CREDIT OR DIFFERENCE DUE TO INCORRECT INFORMATION 250 - 110 = $140

DISPOSITIONED

ADJUSTED FEE $ 140.00

COMMENTS: _____

TOTAL FEE 314.00

REFUND _____

WORK UNITS ( )

RECOMMENDED BY WILEY DATE 11-14-89 REVIEWING ENGINEER VAN DATE 11.28.89

SCAQMD
ENGINEERING DIVISION
NEW SOURCE REVIEW REGULATION XIII DATA SHEET

1 ☐ P/C 2 ☐ P/O 3 ☒ C/O

COMPANY ID# 005341
APPLICATION # 185085

COMPANY NAME UNITED ROCK AND CONCRETE CORP DATE 11-17-89
EQUIPMENT LOCATION 1245 E. ARROW HWY, IRWINDALE 91706

APPLICABLE NEW SOURCE RULE: (equip. installed or Class I applc'n rec'd...)
1 ☐ None (before 10-8-76)
2 ☐ Rule 213 (before 7-1-79 and on or after 10-8-76)
3 ☒ Original Reg XIII (before 1-1-83 and on or after 7-1-79)
4 ☐ 1st Revision Reg XIII (before 7-12-85 and on or after 1-1-83)
5 ☐ 2nd Revision Reg XIII (on or after 7-12-85)

SPECIAL CASES:
1 ☐ Banking Ref Applc'n #_____
2 ☐ Reg 13 Exempt
3 ☐ Mitigations 4 ☐ Tradeoffs
5 ☐ Toxic Materials
6 ☐ Banking Cert./Reg. Used
7 ☐ Rule 219 Exemptions
8 ☐ Alter.-Prev. App. #_____

EMISSION INCREASE OR DECREASE FROM THIS PERMIT UNIT CREDITED TO THIS LOCATION (Indicate "+" or "-"): NO INCREASE [] 1.1 factor used for Max

| CONTAMINANT | RHC | $NO_x$ | $SO_x$ | CO | Part | Lead | UnRHC |
|---|---|---|---|---|---|---|---|
| Max #/day | | | | | 0 | | |
| Actual w/internal BACT #/day | | | | | 0 | | |
| Actual w/o BACT #/day | | | | | 0 | | |

REGULATION XIII EXEMPT EMISSIONS (Indicate "+" or "-")
Exempt by Rule 1304 (____) (____) or Rule 213(f) (____) (____)

| CONTAMINANT | RHC | $NO_x$ | $SO_x$ | CO | Part | Lead | UnRHC |
|---|---|---|---|---|---|---|---|
| Max #/day | | | | | | | |
| Actual #/day | | | | | | | |

MITIGATIONS ACHIEVED CONCURRENT WITH THIS APPLC'N (Indicate "+" or "-")

| APPLIC'N NUMBER | RHC #/day | NOx #/day | $SO_x$ #/day | CO #/day | Part #/day | Lead #/day | UnRHC #/day |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Engineer WILEY Date 11-17-89 Reviewing Engineer VHN Date 11.27.89

Revised 9/85

CHANGE OF OWNERSHIP

UNITED ROCK AND CONCRETE CORP
13131 LOS ANGELES ST.
IRWINDALE, CA. 910706

EQUIPMENT LOCATION

1245 EAST ARRROW HIGHWAY
IRWINDALE, CA. 91706

EQUIPMENT DESCRIPTION

A/N 185088 Previous: A/N C03143 P/O M04085

CEMENT-RECEIVING AND STORAGE SYSTEM CONSISTING OF:
1. SILO NO. 1, 300 BBL CAPACITY, WITH A 4" DIA. PNEUMATIC FILL TUBE AND A 100 SQ. FT. FILTER VENT

2. SILO NO. 2, 230 BBL CAPACITY, WITH A 4" DIA. PNEUMATIC FILL TUBE AND A 100 SQ. FT. FILTER VENT.

3. SILO NO. 3, 350 BBL CAPACITY, WITH A 4" DIA. PNEUMATIC FILL TUBE AND 84 SQ. FT. FILTER VENT.

A/N 185085 Previous: A/N C34908 P/O M21296

AIR POLLUTION CONTROL SYSTEM CONSISTING OF;

1. BAGHOUSE, DD INC., MODEL 36LS, WITH 36 FILTER BAGS, 250 SQ. FT. NET FILTER AREA, AND A 1/6-H.P. SHAKER.

2. EXHAUST SYSTEM WITH A 3-H.P. BLOWER VENTING A CEMENT STORAGE SILO.

CONDITIONS

DUST COLLECTED IN THE BAGHOUSE MUST BE DISCHARGED ONLY INTO CLOSED CONTAINERS.

ENGINEERING DIVISION···MEMORANDUM

| TO | FROM | DATE |
|---|---|---|
| File | CDW | 11/27/89 |
| REFERENCE | | PERMIT APPL. NO. |
| United Rock Concrete | | |

SUBJECT

Notes & Conversation

United Rock, formerly Blue Diamond Materials, submitted 23 applications for change of ownership. 13 of 23 apps were assigned to Class IV, Unit 10.

These apps are for the following locations
67342 4127 W. MacArthur Blvd. Santa Ana
67341 12976 E. Firestone Blvd, Santa Fe Springs
65341 1245 E. Arrow Hwy., IRWINDALE

T/C w/ Mr. Potter, controller, 960 3948, he states the Santa Fe Springs Facility is being sold and equipment is being removed.

Of the two remaining locations, it is unclear if the applicant submitted the correct number of apps. I've requested a Block Flow diagram of each location

Mr Potter would also like to meet to go over fees that have been charged to his company.

APPS ASSIGNED TO CLASS IV, Unit 10

185092 ld 67342, 185089, ld 65341, 185087
185093 67342, 185084, 65341, 185078, 67341
185083 67341, 185086, 65341, 185079, 67341
185088 65341, 185085, 65341, 185080, 67341, 185081

16-50D115-R1

# ENGINEERING DIVISION···MEMORANDUM

| TO | FROM | DATE |
|---|---|---|
| FILE | CDW | 11-14-89 |
| REFERENCE | | PERMIT APPL. NO. |
| UNITED ROCK & CONCRETE | | 185085 |

SUBJECT

NOTES

REC'D AS CHANGE OF OWNERSHIP. NO CHANGES IN OPERATION. ALL CALCULATIONS AND ENGR'S NOTES CAN BE FOUND IN MICROFICHE NO. 1123 G11. PREVIOUS PERMIT WAS INACTIVE. ADJUST FILING FEE AND CHARGE FULL EVALUATION FEE. NO CURRENT IR'S OR NOV'S AGAINST THIS LOCATION.

Valid clo under Reg XIII

ROUTING RECORD

| DATE | FROM | TO | ACTION |
|---|---|---|---|
| 05/20/89 | TDV | CAM | IH |
| 3-5-90 | U-13 | P/S | P/O |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

REFERENCE TO OTHER APCD RECORDS INCLUDING VARIANCES

13

65341

186859

186859

UNITED ROCK PRODUCTS CORPORATION
INTERNAL COMBUSTION ENGINE

AP 186859
ID 065341

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# PERMIT TO OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D14492
A/N 186859
Page 1

*This [illegible] must be renewed ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule [illegible]) is not received by the expiration date, contact the District.*

**Legal Owner Or Operator:** UNITED ROCK PRODUCTS CORPORATION
13131 LOS ANGELES ST.
IRWINDALE CA 91706
ATTN: H. GREEN

**ID** 065341

**Equipment located at:** 1245 E. ARROW HIGHWAY, IRWINDALE CA 91706

**Equipment Description:**

INTERNAL COMBUSTION ENGINE, GENERAL MOTORS, DIESEL-FUELED,
MODEL NO. 6-71, SERIAL NO. 6A43540, 6 CYLINDERS,
TWO CYCLE, TURBO-CHARGED, 175 BHP, WITH 1 EXHAUST.

**Conditions:**

1. Operation of this equipment must be conducted in compliance with all data and specifications submitted with the application under which this Permit is issued unless otherwise noted below.

2. This equipment must be properly maintained and kept in good operating conditions at all times.

3. The ignition timing of this engine shall be inspected, adjusted, and certified at a minimum of once every three years of operation. Inspections, adjustments, and certifications must be performed by a qualified mechanic and done in accordance with the engine manufacturer's specifications and procedures.

**FILE COPY**

## CONTINUATION OF PERMIT TO OPERATE

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Raquel Puerta/Creighton
March 5, 1990

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
## 91[illegible] Flair Drive El Monte, CA [illegible] 731

34055
13

APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE AND EXCAVATE AND
FOR PLANS REQUIRED BY THE EXECUTIVE OFFICER
FOR FEE INFORMATION AND SMALL BUSINESS EXEMPTION
SEE REVERSE SIDE
PLEASE TYPE OR PRINT

65341 fb

SCAQMD USE

| SEC | TS | ID NUMBER |
|---|---|---|
| | | 65431 |

1A. PERMIT TO BE ISSUED TO:
United Rock Products Corporation
BUSINESS LICENSE NAME OF ORGANIZATION THAT IS TO RECEIVE PERMIT

1B.
NAME (OR NAMES) OF OWNER OR PRINCIPAL PARTNERS DOING BUSINESS AS (DBA) ABOVE ORGANIZATION

2A. MAILING ADDRESS:
13131 Los Angeles Street — Irwindale — CA
NUMBER — STREET — CITY OR COMMUNITY — STATE

2B. 91706
ZIP CODE

3A. EQUIPMENT LOCATION (IF SAME ENTER "SAME")
1245 East Arrow Highway — Irwindale — 91706
NUMBER — STREET — CITY OR COMMUNITY — ZIP

3B. Buena Vista Drive
NEAREST INTERSECTING STREET

4A. CONTACT PERSON (INITIALS & NAME)
H. Green

4B. CONTACT PHONE NO. (AREA & NO.)
(818) 960-3948

5. EQUIPMENT APPLICATION IS HEREBY MADE FOR PERMIT TO OPERATE THE FOLLOWING EQUIPMENT
Internal Combustion Engine Greater than 50 Horsepower

6. IF THIS EQUIPMENT HAD A PREVIOUS WRITTEN PERMIT STATE NAME OF CORPORATION, COMPANY, OR INDIVIDUAL OWNER THAT OPERATED THIS EQUIPMENT AND STATE PREVIOUS AIR POLLUTION CONTROL DISTRICT PERMIT NUMBER
(Blue Diamond Materials Div. - Sully Miller)
NAME — PREVIOUS PERMIT NUMBER

7. PERMIT APPLICATION FOR EQUIPMENT
- NEW CONSTRUCTION [ ]
- ALTERATION [ ]
- CHANGE OF LOCATION [ ]
- REINSTATE NON—PAYMENT P O FEES DUE [ ]
- CHANGE OF OWNERSHIP [✓]
- EXISTING EQUIPMENT IN OPERATION WITHOUT PRIOR PERMIT [X]
- CHANGE OF CONDITIONS [ ]

8. TYPE OF ORGANIZATION
- CORPORATION [X]
- PARTNERSHIP [ ]
- INDIVIDUAL OWNER [ ]
- LOCAL GOV'T AGENCY [ ]
- STATE AGENCY [ ]
- FEDERAL AGENCY [ ]
- UTILITY [ ]

9. ESTIMATED COST OF EQUIPMENT OR ALTERATION
BASIC EQUIPMENT $ N/A — AIR POLLUTION CONTROL EQUIPMENT $ N/A

10. FOR THE NEW CONSTRUCTION, ALTERATION, TRANSFER OF OWNERSHIP OR LOCATION, WHAT IS
ESTIMATED STARTING DATE? N/A — ESTIMATED COMPLETION DATE? N/A orig. install. date

11. GENERAL NATURE OF BUSINESS
Mining and sales of construction aggregates

12. PRINCIPAL PRODUCT
rock and sand

13. DO YOU CLAIM CONFIDENTIALITY OF DATA?
YES [ ] NO [X]
IF YES STATE NATURE OF DATA ON SEPARATE SHEET

14. NORMAL OPERATING HOURS OF SUBJECT EQUIPMENT
HOURS/DAY 12
DAYS/WEEK 7
WEEKS/YEAR 52

15. HAS A CEQA DOCUMENT BEEN PREPARED FOR THIS PROJECT? YES [ ] NO [X]

15a. ARE ALL COMPANIES' FACILITIES IN CALIFORNIA IN COMPLIANCE WITH AIR POLLUTION RULES? YES [X] NO [ ]

16. SIGNATURE OF RESPONSIBLE MEMBER OF ORGANIZATION
Horace Green

17. OFFICIAL TITLE OF SIGNER
Maintenance Supervisor

18. TYPED OR PRINTED NAME OF SIGNER
Horace Green

19. PHONE NO
818-960-3948

20. DATE
1/9/89

SCAQMD USE

| SIC NO. | EQUIP. CAT. NO. | SCH/STEP |
|---|---|---|
| | 016900 / | 7A APR 27 1989 |

| APPLICATION NO. | PERMIT NO. | TYPE | WORK UNITS | ASSIGNMENT | CLASS |
|---|---|---|---|---|---|
| 186859 | | B OR C | A/C P O | UNIT 13 ENGR | |

| VALIDATION | FILING FEE | CHECK OR MONEY ORDER NO. |
|---|---|---|
| 03/20/89 | $300.00 | 500200 |

218789

(3 of 4)

ENGINEERING REVIEW
Date 04/17/89 Date ____ Date ____
BY [illegible] BY ____ (Continued on rev.)

Form 400A - REVISED 8-84 PRIOR VERSIONS NOT VALID

SEE REVERSE FOR FEES REQUIRED UPON FILING

Rule 219

| SENT TO DATA/ID | SENT TO C/S | SENT TO | PYMT. PSTD. & APPL. # 2/24 |
|---|---|---|---|
| RET. FROM DATA | FRE. FROM C/S | SENT TO | FIN. APPL. TO DATA 4/24 |

2/23

'89 FEB -9 P4:52

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
9150 FLAIR DR. EL MONTE, CA 91731

# INTERNAL COMBUSTION ENGINE INFORMATION TO ACCOMPANY PERMIT APPLICATION FORM 400-A
(SEE REVERSE SIDE FOR APPLICATION INSTRUCTIONS)

THIS FORM IS LIMITED TO EQUIPMENT WHICH WAS EXEMPT FROM WRITTEN PERMIT PURSUANT TO RULE 219 PRIOR TO JUNE 3, 1988

1. BUSINESS LICENSE NAME:
United Rock Products Corporation

2. ENGINE MANUFACTURER, MODEL NUMBER & SERIAL NUMBER: (ATTACH MANUFACTURER'S CATALOG) - if available
General Motors, Model 6-71, Serial No. 6A-43540

3. UTILIZATION OF ENGINE: [ ]ELECTRICAL GENERATOR DRIVER [ ]PUMP DRIVER
[ ]COMPRESSOR DRIVER [X]OTHER Mud Cat (Item 7, Attached Plan)

4. ENGINE DESCRIPTION: NUMBER OF CYLINDERS 6
[X]TWO CYCLE OR [ ]FOUR CYCLE
[ ]LEAN BURN OR [ ]RICH BURN
[X]TURBOCHARGED [ ]AFTERCOOLED or [ ]INTERCOOLED [ ]NATURALLY ASPIRATED

5. FUEL INFORMATION: AIR TO FUEL RATIO _____
[ ]NATURAL GAS [ ]GASOLINE [ ]LPG [X]DIESEL OIL
[ ]DIGESTER GAS [ ]LANDFILL GAS [ ]OTHER _____

6. MAXIMUM RATED FULL LOAD FUEL CONSUMPTION: 6 (GAL/HR) OR _____ (CU.FT/HR)
AVERAGE LOAD PERCENTAGE: 80 %

7. ENERGY RECOVERY FROM EXHAUST: [ ]YES [X]NO
IF YES, PLEASE EXPLAIN:

8. ENGINE SIZE (MANUFACTURER'S RATING): 175 BHP @ 2100 RPM

9. CONTROL DEVICE: [ ]YES [X]NO
IF YES, PLEASE EXPLAIN:

10. STACK OR VENT DATA:
DIMENSIONS: HEIGHT ABOVE GRADE 6 (FT) HEIGHT ABOVE BUILDING _____ (FT)
CROSS SECTION*: DIAMETER 3 (IN) OR WIDTH _____ (IN) LENGTH _____ (IN)
EXHAUST TEMPERATURE N/A (F)
STACK SERVES: a. [X]ONLY THIS EQUIPMENT EXHAUST FLOW RATE _____ (CFM) exhaust pressure
b. [ ]OTHER EQUIPMENT ALSO** TOTAL FLOW RATE _____ (CFM)
* MEASURED AT THE ATMOSPHERIC EXHAUST OPENING
**IF THIS ITEM IS CHECKED, SUBMIT TYPE AND RATING OF ALL OTHER EQUIPMENT EXHAUSTED THROUGH THIS VENT OR STACK

11. OPERATING SCHEDULE: 12 (HR/DAY) 7 (DAYS/WEEK) 52 (WEEKS/YEAR)
MAXIMUM OPERATING HOURS: 16 (HR/DAY)

THE ABOVE INFORMATION IS SUBMITTED TO DESCRIBE THE USE OF THE EQUIPMENT FOR WHICH APPLICATION FOR PERMIT IS BEING MADE ON THE ACCOMPANYING FORM 400-A

SIGNATURE OF RESPONSIBLE MEMBER OF FIRM: Horace Green DATE 1/9/89

TYPE OR PRINT NAME AND OFFICIAL TITLE OF PERSON SIGNING THIS DATA FORM
NAME: Horace Green
TITLE: Maintenance Supervisor

400-219(b)(1)-3 8/88

N/A - Information Not Available

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT - ENGINEERING DIVISION

*INTEGRATED COMPUTERIZED ASSISTED PERMIT PROCESSING (ICAPP)*

# CONSOLIDATED DATA ENTRY SHEET - RULE 219 EQUIPMENT

## INTERNAL COMBUSTION ENGINE

| | | |
|---|---|---|
| APPLICATION No. | 186859 | ENGINEER: CS |
| COMPANY: | UNITED ROCK PRODUCTS CORPORATION | I.D. No.: 065341 |
| EQUIPMENT ADDRESS: | 1245 E. ARROW HIGHWAY, IRWINDALE CA 91706 | DATE: 03/05/90 |

| | |
|---|---|
| NEW SOURCE REVIEW: | *No New Source Review Required for previously-exempted Rule 219 Equipment.* |

| CONTAMINANT | rHC | NOx | SOx | CO | PM | OTHER | UnRHC |
|---|---|---|---|---|---|---|---|
| MAX LB/DAY | 0 | 0 | 0 | 0 | 0 | | |
| W/BACT | 0 | 0 | 0 | 0 | 0 | | |
| W/O BACT | 0 | 0 | 0 | 0 | 0 | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Reg XIII Exempt (Max), lb/day | | | | | | | |
| Reg XIII Exempt (Act), lb/day | | | | | | | |

| | | | |
|---|---|---|---|
| PERMIT TYPE: | B | **RULE 219** | |
| SCHEDULE: | 1 | STEP: | F |

| | |
|---|---|
| Weeks Operated Per Year | 52 |

| AEIS EMISSIONS: | | rHC | tHC | NOx | SOx | CO | PM | Other |
|---|---|---|---|---|---|---|---|---|
| | R1 | 190 | 190 | 281 | 040 | 610 | 200 | |
| | R2 | 190 | 190 | 281 | 040 | 610 | 200 | |

| | Mon | Tues | Wed | Thurs | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|
| Daily Start Time | 8 | 8 | 8 | 8 | 8 | 0 | 0 |
| Daily Stop Time | 20 | 20 | 20 | 20 | 20 | | |

## INSTRUCTIONS FOR PERMIT WORDING & FEE DATA

| | |
|---|---|
| NEED EIR? | NO |

**DISPOSITION**

| | |
|---|---|
| X | APPROVED |
| | DENIED |
| | CANCELLED - DON'T REFUND FILING FEE |
| | CANCELLED - REFUND FILING FEE |

**PERMIT UNIT WORDING**

| | |
|---|---|
| | BELOW |
| | ON FIELD REPORT DATED |
| | ON PAGE 1 OF PROCESS SHEETS |
| X | See Next Page |

**CONDITIONS**

| | |
|---|---|
| | NONE |
| | NUMBERS LISTED |
| | SPECIAL |
| X | SEE Next Page |

| SCHEDUL | 1-HP | 2-MMBtu/hr | 3-KVA | 4-SQ FT | 5-GALLON | 6-GAS | 7-EXCEPTIONS |
|---|---|---|---|---|---|---|---|
| RATING | 175 | | | | | | |
| FEE | | | | | | | $150 |
| | | | | | | TOTAL FEE | $150 |

-> *Reduced Fee*

*(Continued)-->*

CM 03/27/90

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT - ENGINEERING DIVISION

*INTEGRATED COMPUTERIZED ASSISTED PERMIT PROCESSING (ICAPP)*

## CONSOLIDATED DATA ENTRY SHEET - RULE 219 EQUIPMENT

INTERNAL COMBUSTION ENGINE



## PERMIT UNIT WORDING:

INTERNAL COMBUSTION ENGINE, GENERAL MOTORS, DIESEL-FUELED,
MODEL NO. 6-71, SERIAL NO. 6A43540, 6 CYLINDERS,
TWO CYCLE, TURBO-CHARGED, 175 BHP, WITH 1 EXHAUST.

## CONDITIONS:

[X] 1. Operation of this equipment must be conducted in compliance with all data and specifications submitted with the application under which this Permit is issued unless otherwise noted below.

[X] 2. This equipment must be properly maintained and kept in good operating conditions at all times.

[X] 3. The ignition timing of this engine shall be inspected, adjusted, and certified at a minimum of once every three years of operation. Inspections, adjustments, and certifications must be performed by a qualified mechanic and done in accordance with the engine manufacturer's specifications and procedures.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

**ENGINEERING DIVISION**

*INTEGRATED COMPUTER ASSISTED PERMIT PROCESSING (ICAPP)*

2/20

| PAGES | PAGE |
|---|---|
| 5 | 1 |
| APPL. No. | DATE |
| 186859 | 03/05/90 |
| PROCESSED | CHECKED B |
| CS | |

## PERMIT TO OPERATE – INTERNAL COMBUSTION ENGINE

***APPLICABILITY: This processing form can only be used for previously Rule 219-exempted internal combustion engines rated between 50-500 BHP.***

APPLICANT'S NAME: UNITED ROCK PRODUCTS CORPORATION

MAILING ADDRESS: 13131 LOS ANGELES ST., IRWINDALE CA 91706

EQUIPMENT ADDRESS: 1245 E. ARROW HIGHWAY, IRWINDALE CA 91706

EQUIPMENT DESCRIPTION (Application No. 186859):

**INTERNAL COMBUSTION ENGINE, GENERAL MOTORS, DIESEL-FUELED, MODEL NO. 6-71, SERIAL NO. 6A43540, 6 CYLINDERS, TWO CYCLE, TURBO-CHARGED, 175 BHP, WITH 1 EXHAUST.**

**HISTORY:**

*This internal combustion engine was previously exempt from permit requirements. On June 3, 1988, the District's Board amended Rule 219 to include this equipment in the permit system. This engine was installed prior to June 3, 1988. Therefore, it is exempted from Best Available Control Technology (BACT) requirements and from having its emission accrued to the New Source Review (NSR) account (see memo from William J. Dennison, Director of Engineering, SCAQMD, dated July 18, 1988).*

*This application was submitted on March 20, 1989.*

## PROCESS DESCRIPTION:

**This internal combustion engine will supply mechanical energy to a(n): Mechanical Device.**

| | |
|---|---|
| Process: | Commercial |
| Emergency Service ? | No |
| Flow Diagram Attached ? | No |
| Portable Service ? | No |
| Rental Unit ? | No |

| | hrs/day | days/wk | wks/yr |
|---|---|---|---|
| Max. Operating Schedule (Ops): | 16 | 7 | 52 |
| Ave. Operating Schedule | 12 | 7 | 52 |
| | | | |

*(Continued)-->*

## INTERNAL COMBUSTION ENGINE

**DATA:**

| | Average | Maximum | Source |
|---|---|---|---|
| Engine Brake Horsepower: | 140 | 175 | Applicant |
| @RPM of: | | 2100 | Applicant |

| Operating Schedule, O: | Oa | Om | |
|---|---|---|---|
| hour(s)/day: | 12 | 16 | Applicant/Condition |
| day(s)/week: | 7 | 7 | Applicant |
| week(s)/year: | 52 | 52 | Applicant |
| hours/year: | 4,368 | 5,824 | Condition |

| Fuel Consumption Rate: | Ave., FCRa | Max., FCRm |
|---|---|---|
| Diesel, gal/hr | 6 | 6 |

| | | | |
|---|---|---|---|
| Exhaust Flow Rate, F | F1(dscfm): | Not Provided | Applicant |
| | F2(acfm): | Not Provided | Applicant |
| Exhaust Temperature, T | T2, °F: | Not Provided | Applicant |
| Exhaust Pressure, P | P2, in Hg: | Not Provided | Applicant |
| Efficiency of NOx Control Device, ECF, % | | 0.0 | Applicant |

| Uncontrolled Emission Factors (EF) | | | | | | |
|---|---|---|---|---|---|---|
| Fuel | ROG | NOx | SOx | CO | PM | Source |
| Diesel | 0.032 | 0.469 | 0.0071 | 0.102 | 0.0335 | Table 3.3-1d |

| UNITS: EF: | lb/gal | FCR: | gal/hr | O: | hrs/day |
|---|---|---|---|---|---|

## CALCULATIONS:

1. Emissions:

AEIS emissions are hourly emissions based on average (actual) equipment rating and operating schedule. NSR emissions are daily emissions based on maximum equipment rating and operating schedule.

*(Continued)-->*

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

## ENGINEERING DIVISION

*INTEGRATED COMPUTER ASSISTED PERMIT PROCESSING (ICAPP)*

| PAGES 5 | PAGE 3 |
|---|---|
| APPL. No. 186859 | DATE 03/05/90 |
| PROCESSED CS | CHECKED B |

## INTERNAL COMBUSTION ENGINE

| Emission | AEIS | NSR |
|---|---|---|
| Uncontrolled | R1 = EF x FCRa => lb/hr | EF x FCRm x Om => lb/day |
| Controlled | R2 = R1 x (1-ECF) => lb/hr | R1 x Om x (1-ECF) => lb/day |

| NSR Max | MAX = R2(NSR) x 1.1 => lb/day |
|---|---|

Where:

| | |
|---|---|
| R1 = | Uncontrolled emissions, lb/hr, lb/day |
| R2 = | Controlled emission, lb/hr, lb/day |
| EF = | Emission Factor, lb/gal or lb/scf |
| ECF = | Emission Control Factor |
| FCRa = | Average fuel consumption rate, gal/hr or scf/hr |
| FCRm = | Maximum fuel consumption rate, gal/hr or scf/hr |
| Om = | Maximum Time of Operation |
| MAX = | New Source Review (Regulation XIII) maximum emission |

## RESULTS:

| Emissions | AEIS, (lb/hr) | | | | | |
|---|---|---|---|---|---|---|
| | EF x | FCRa = | R1 x | (1-ECF) = | R2 | |
| ROG | 0.0320 | 6 | 0.192 | 1 | 0.192 | |
| NOx | 0.4690 | 6 | 2.814 | 1 | 2.814 | |
| SOx | 0.0071 | 6 | 0.043 | 1 | 0.043 | |
| CO | 0.1020 | 6 | 0.612 | 1 | 0.612 | |
| PM | 0.0335 | 6 | 0.201 | 1 | 0.201 | |

| | NSR, (lb/day) R1 (actual without BACT), R2 (actual with BACT). | | | | | |
|---|---|---|---|---|---|---|
| | EF x | FCRa x | Om = | R1 x | (1-ECF) = | R2 |
| ROG | 0.0320 | 6 | 12 | 2 | 1 | 2 |
| NOx | 0.4690 | 6 | 12 | 34 | 1 | 34 |
| SOx | 0.0071 | 6 | 12 | 1 | 1 | 1 |
| CO | 0.1020 | 6 | 12 | 7 | 1 | 7 |
| PM | 0.0335 | 6 | 12 | 2 | 1 | 2 |

*(Continued)-->*

## INTERNAL COMBUSTION ENGINE

**RESULTS (Cont.)**

| Emissions | NSR (MAX), (lb/day) | | | | | |
|---|---|---|---|---|---|---|
| | EF x | FCRm x | Om x | (1-ECF) x 1.1 = | | MAX |
| ROG | 0.0320 | 6 | 16 | 1 | | 3 |
| NOx | 0.4690 | 6 | 16 | 1 | | 50 |
| SOx | 0.0071 | 6 | 16 | 1 | | 1 |
| CO | 0.1020 | 6 | 16 | 1 | | 11 |
| PM | 0.0335 | 6 | 16 | 1 | | 4 |

2. Exhaust Gas Flow Rate (dscfm), (if not available from data).

$$F1 = F2 \times [(T1 \times P2)/(T2 \times P1)] \times [1 - (M/100)]$$

where:

F1 = dry standard cubic feet per minute, dscfm
F2 = actual cubic feet per minute, acfm
T1 = standard temperature, degrees Rankine (60°F + 460)
T2 = exhaust temperature, degrees Rankine (60°F + 460)
P1 = standard pressure (absolute), in. Hg
P2 = exhaust pressure (absolute), in. Hg
M = percent moisture in exhaust gas (assume 7% - 10%)

NOTE: (29.92 in. Hg / 407 in. H20 / 1 atm.)

F1 = ***(See Below):***

Based upon the industry standard of 3.75 dscfm/BHP for diesel engines:
The Exhaust Flow Rate of 656.3 dscfm will be used.

3. Exhaust Gas Total Particulate Concentration (PC) - Rule 404

$$PC = [(R2)(7{,}000 \text{ grains/lb})] / [(F1)(60 \text{ min/hr})]$$

where

PC = particulate concentration, grains/dscf
R2 = particulate mass emission rate (maximum), lb/hr
F1 = dry standard cubic fee per minute, dscfm

| PC = | 0.036 | grains/dscf |
|---|---|---|

*(Continued)-->*

## INTERNAL COMBUSTION ENGINE

**RULES EVALUATION:**

**RULE 401** : Based on experience with similar equipment, this engine is expected to comply with the visible emission limits.

**RULE 402** : Based on experience with similar equipment, nuisance complaints are not expected.

**RULE 404** : For an exhaust volume of 656.3 dscfm, the rule allows a maximum total particulate concentration of 0.196 grains/dscf. Calculations indicate a particulate concentration of 0.036 grains/dscf. Compliance with Rule 404 is expected.

**RULE 431.2** : (Not Applicable)

**Rule 1110.1** : Rule 1110.1 does not apply to diesel or gasoline engines.

**CONCLUSIONS/RECOMMENDATIONS**

This engine is expected to comply with all applicable District Rules and Regulations. Therefore, the following is recommended:

***(X) Issue a Permit to Operate subject to the following conditions:***

1. Operation of this equipment must be conducted in compliance with all data and specifications submitted with the application under which this Permit is issued unless otherwise noted below.

2. This equipment must be properly maintained and kept in good operating conditions at all times.

3. The ignition timing of this engine shall be inspected, adjusted, and certified at a minimum of once every three years of operation. Inspections, adjustments, and certifications must be performed by a qualified mechanic and done in accordance with the engine manufacturer's specifications and procedures.

South Coast
AIR QUALITY MANAGEMENT DISTRICT

Rec'd 5-12-89

HEADQUARTERS, 9150 FLAIR DR., EL MONTE, CA 91731

Date MAY 3, 1989

Re: Company ID 065341

It has been brought to the attention of the Air Quality Management District that the name of your business has been changed from:

Old Name: UNITED ROCK & CONCRETE CORPORATION
To
New Name: UNITED ROCK PRODUCTS CORPORATION

Please confirm that this change should be made and that this is only a name change and not a change in the ownership of your business. New applications for each piece of equipment being operated by you must be filed with the Air Quality Management District if there has been any change in the ownership of your business.

Please fill the form at the bottom of this letter and return to the Air Quality Management District within 10 business days. If there are any questions, please contact Ms. Barbara Irby at (818)572-6274.

Sincerely
Barbara Irby
by: Annie

6181 - Eff.

Barbara Irby
Supv. Office Assistant
Engineering Division

---

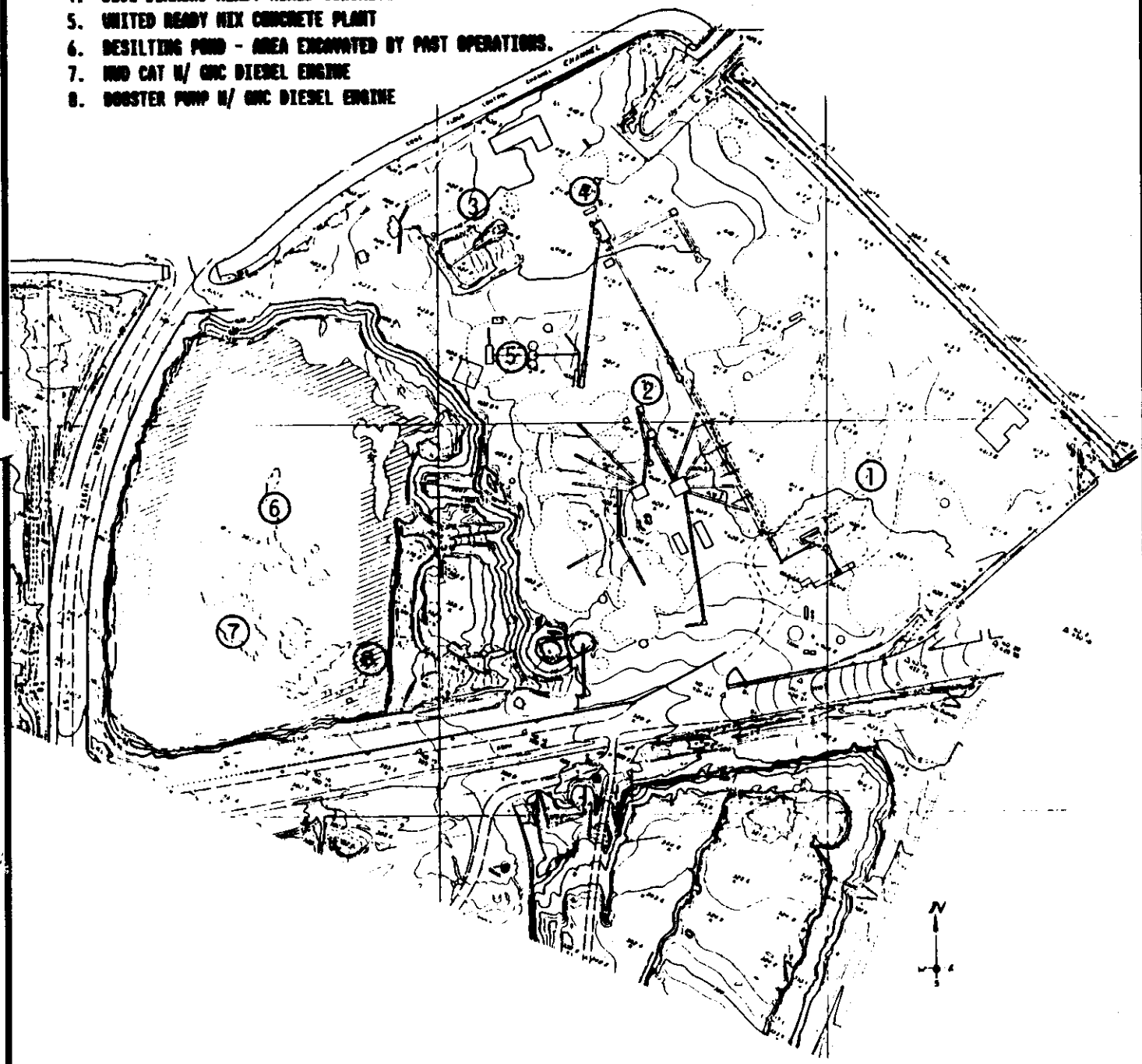
The Name of my business is: United Rock Products Corporation

This is only a change in the name of my business. The ownership remains the same.

Howard Bren
Authorized Signature

5/10/89
Date

1. BLUE DIAMOND ASPHALT PLANT
2. U.R.P. SAND & GRAVEL PLANT
3. VERNON PAVING ASPHALT PLAN
4. BLUE DIAMOND READY MIXED CONCRETE PLANT
5. UNITED READY MIX CONCRETE PLANT
6. DESILTING POND - AREA EXCAVATED BY PAST OPERATIONS.
7. MUD CAT W/ GMC DIESEL ENGINE
8. BOOSTER PUMP W/ GMC DIESEL ENGINE




SOURCE: RECLAMATION PLAN FOR BLUE DIAMOND IRWINDALE PLANT IN THE CITY OF IRWINDALE CHAMBERS CONSULTATION AND PLANNERS, 1986.

JRJ Associates

# SITE PLAN

UNITED ROCK PRODUCTS CORP.
IRWINDALE, CALIF.

DATE: 2/9/89

SCALE: 1" = 175'

ROUTING RECORD

| DATE | FROM | TO | ACTION |
|---|---|---|---|
| 8/20/89 | IDV | CAM | IIC |
| 3-5-90 | U-13 | P/S | P/O |

REFERENCE TO OTHER APCD RECORDS INCLUDING VARIANCES:

13

65341

186858

186858

UNITED ROCK PRODUCTS CORPORATION
INTERNAL COMBUSTION ENGINE

AP 186858
ID 065341

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# PERMIT TO OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D14490
A/N 186858
Page 1

*This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.*

ID 065341

**Legal Owner Or Operator:**

UNITED ROCK PRODUCTS CORPORATION
13131 LOS ANGELES ST
IRWINDALE CA 91706
ATTN: H. GREEN

**Equipment located at:** 1245 E. ARROW HIGHWAY, IRWINDALE CA 91706

**Equipment Description:**

INTERNAL COMBUSTION ENGINE, GENERAL MOTORS, DIESEL-FUELED,
MODEL NO. 6-71, SERIAL NO. 6A440959, 6 CYLINDERS,
TWO CYCLE, TURBO-CHARGED, 175 BHP, WITH 1 EXHAUST.

**Conditions:**

1. Operation of this equipment must be conducted in compliance with all data and specifications submitted with the application under which this Permit is issued unless otherwise noted below.

2. This equipment must be properly maintained and kept in good operating conditions at all times.

3. The ignition timing of this engine shall be inspected, adjusted, and certified at a minimum of once every three years of operation. Inspections, adjustments, and certifications must be performed by a qualified mechanic and done in accordance with the engine manufacturer's specifications and procedures.

**FILE COPY**

## CONTINUATION OF PERMIT TO OPERATE

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Raquel Puerta/Creighton
March 5, 1990

34055
13

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
## 50 Flair Drive El Monte, CA 91731

APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE AND EXCAVATE AND
FOR PLANS REQUIRED BY THE EXECUTIVE OFFICER
FOR FEE INFORMATION AND SMALL BUSINESS EXEMPTION
SEE REVERSE SIDE
PLEASE TYPE OR PRINT

65341 80

SCAQMD USE: SEC | TS | ID NUMBER 65431

1A. PERMIT TO BE ISSUED TO:
United Rock Products Corporation
BUSINESS LICENSE NAME OF ORGANIZATION THAT IS TO RECEIVE PERMIT

1B.
NAME (OR NAMES) OF OWNER OR PRINCIPAL PARTNERS DOING BUSINESS AS (DBA) ABOVE ORGANIZATION

2A. MAILING ADDRESS:
13131 Los Angeles Street Irwindale CA
NUMBER STREET CITY OR COMMUNITY STATE

2B. 91706
ZIP CODE

3A. EQUIPMENT LOCATION (IF SAME ENTER "SAME")
1245 East Arrow Highway Irwindale 91706
NUMBER STREET CITY OR COMMUNITY ZIP

3B. Buena Vista Drive
NEAREST INTERSECTING STREET

4A. CONTACT PERSON (INITIALS & NAME)
H. Green

4B. CONTACT PHONE NO. (AREA & NO.)
(818) 960-3948

5. EQUIPMENT. APPLICATION IS HEREBY MADE FOR PERMIT TO OPERATE THE FOLLOWING EQUIPMENT
Internal Combustion Engine Greater than 50 Horsepower

6. IF THIS EQUIPMENT HAD A PREVIOUS WRITTEN PERMIT, STATE NAME OF CORPORATION, COMPANY, OR INDIVIDUAL OWNER THAT OPERATED THIS EQUIPMENT AND STATE PREVIOUS AIR POLLUTION CONTROL DISTRICT PERMIT NUMBER
* Blue Diamond Materials Div Sully-Miller
NAME PREVIOUS PERMIT NUMBER

7. PERMIT APPLICATION FOR EQUIPMENT
NEW CONSTRUCTION ☐
ALTERATION ☐
CHANGE OF LOCATION ☐
REINSTATE NON—PAYMENT P.O. FEES DUE ☐
CHANGE OF OWNERSHIP ☐ ✓
EXISTING EQUIPMENT IN OPERATION WITHOUT PRIOR PERMIT ☒
CHANGE OF CONDITIONS ☐

8. TYPE OF ORGANIZATION
CORPORATION ☒
PARTNERSHIP ☐
INDIVIDUAL OWNER ☐
LOCAL GOV'T AGENCY ☐
STATE AGENCY ☐
FEDERAL AGENCY ☐
UTILITY ☐

* Rule 219

9. ESTIMATED COST OF EQUIPMENT OR ALTERATION
BASIC EQUIPMENT $ N/A
AIR POLLUTION CONTROL EQUIPMENT $ N/A

10. FOR THE NEW CONSTRUCTION, ALTERATION, TRANSFER OF OWNERSHIP OR LOCATION, WHAT IS
ESTIMATED STARTING DATE? N/A
ESTIMATED COMPLETION DATE? N/A original installation date

11. GENERAL NATURE OF BUSINESS
Mining and sales of construction aggregates

12. PRINCIPAL PRODUCT
rock and sand

13. DO YOU CLAIM CONFIDENTIALITY OF DATA?
YES ☐ NO ☒
IF YES STATE NATURE OF DATA ON SEPARATE SHEET

14. NORMAL OPERATING HOURS OF SUBJECT EQUIPMENT
HOURS/DAY 12
DAYS/WEEK 7
WEEKS/YEAR 52

15. HAS A CEQA DOCUMENT BEEN PREPARED FOR THIS PROJECT? YES ☐ NO ☒

15a. ARE ALL COMPANIES' FACILITIES IN CALIFORNIA IN COMPLIANCE WITH AIR POLLUTION RULES? YES ☒ NO ☐

16. SIGNATURE OF RESPONSIBLE MEMBER OF ORGANIZATION
Horace Green

17. OFFICIAL TITLE OF SIGNER
Maintenance Supervisor

18. TYPED OR PRINTED NAME OF SIGNER
Horace Green

19. PHONE NO
818-960-3948

20. DATE
1/9/89

SCAQMD USE

| SIC NO. | EQUIP. CAT. NO. | SCH/STEP |
|---|---|---|
| | 016900 / | 7A APR 27 1989 |

| APPLICATION NO. | PERMIT NO. | TYPE | WORK UNITS | ASSIGNMENT | CLASS |
|---|---|---|---|---|---|
| 186858 | | B OR C | A/C P.O. | UNIT 13 ENGR | I II |

VALIDATION 02/20/89 2/8/89

FILING FEE $300.00 CHECK OR MONEY ORDER NO. 500200

(2 OF 4)

ENGINEERING REVIEW
Date 02/17/89 Date ____ Date ____
BY ____ BY ____ BY ____

Form 400A - REVISED 8-84 PRIOR VERSIONS NOT VALID

(Continued on reverse)

SEE REVERSE FOR FEES REQUIRED UPON FILING

S.C.A.O.M.D.
REVENUE REVIEWING

'89 FEB -9 P4:51

| | | | |
|---|---|---|---|
| | To Returned From S/S | Sent To | Completed App. To Enc |
| Payment Posted | Appl # Assigned | Returned From | |

2/22

3/29 89

S.C.A.O.M.D.
MAILROOM

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
9150 FLAIR DR. EL MONTE, CA 91731

# INTERNAL COMBUSTION ENGINE INFORMATION TO ACCOMPANY PERMIT APPLICATION FORM 400-A

(SEE REVERSE SIDE FOR APPLICATION INSTRUCTIONS)

THIS FORM IS LIMITED TO EQUIPMENT WHICH WAS EXEMPT FROM WRITTEN PERMIT PURSUANT TO RULE 219 PRIOR TO JUNE 3, 1988

1. BUSINESS LICENSE NAME:
United Rock Products Corporation

2. ENGINE MANUFACTURER, MODEL NUMBER & SERIAL NUMBER: (ATTACH MANUFACTURER'S CATALOG) if available
General Motors, Model 6-71, Serial No. 6A-440959

3. UTILIZATION OF ENGINE: [ ]ELECTRICAL GENERATOR DRIVER [X]PUMP DRIVER (Item 8, Attached Plan)
[ ]COMPRESSOR DRIVER [ ]OTHER _____

4. ENGINE DESCRIPTION: NUMBER OF CYLINDERS 6
[X]TWO CYCLE OR [ ]FOUR CYCLE
[ ]LEAN BURN OR [ ]RICH BURN
[X]TURBOCHARGED [ ]AFTERCOOLED or [ ]INTERCOOLED [ ]NATURALLY ASPIRATED

5. FUEL INFORMATION: AIR TO FUEL RATIO N/A
[ ]NATURAL GAS [ ]GASOLINE [ ]LPG [X]DIESEL OIL
[ ]DIGESTER GAS [ ]LANDFILL GAS [ ]OTHER _____

6. MAXIMUM RATED FULL LOAD FUEL CONSUMPTION: 6 (GAL/HR) OR _____(CU.FT/HR)
AVERAGE LOAD PERCENTAGE: 90 %

7. ENERGY RECOVERY FROM EXHAUST: [ ]YES [X]NO
IF YES, PLEASE EXPLAIN:

8. ENGINE SIZE (MANUFACTURER'S RATING): 175 BHP @ 2100 RPM

9. CONTROL DEVICE: [ ]YES [X]NO
IF YES, PLEASE EXPLAIN:

10. STACK OR VENT DATA:
DIMENSIONS: HEIGHT ABOVE GRADE 6 (FT) HEIGHT ABOVE BUILDING _____(FT)
CROSS SECTION*: DIAMETER 3 (IN) OR WIDTH _____(IN) LENGTH _____(IN)
EXHAUST TEMPERATURE N/A (F)
STACK SERVES: a. [X]ONLY THIS EQUIPMENT EXHAUST FLOW RATE _____(CFM)
b. [ ]OTHER EQUIPMENT ALSO** TOTAL FLOW RATE _____(CFM) exhaust pressure
* MEASURED AT THE ATMOSPHERIC EXHAUST OPENING
**IF THIS ITEM IS CHECKED, SUBMIT TYPE AND RATING OF ALL OTHER EQUIPMENT EXHAUSTED THROUGH THIS VENT OR STACK.

11. OPERATING SCHEDULE: 12 (HR/DAY) 7 (DAYS/WEEK) 52 (WEEKS/YEAR)
MAXIMUM OPERATING HOURS: 16 (HR/DAY)

THE ABOVE INFORMATION IS SUBMITTED TO DESCRIBE THE USE OF THE EQUIPMENT FOR WHICH APPLICATION FOR PERMIT IS BEING MADE ON THE ACCOMPANYING FORM 400-A

SIGNATURE OF RESPONSIBLE MEMBER OF FIRM: Horace Green DATE 1/9/89

TYPE OR PRINT NAME AND OFFICIAL TITLE OF PERSON SIGNING THIS DATA FORM

NAME: Horace Green

TITLE: Maintenance Supervisor

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT - ENGINEERING DIVISION

*INTEGRATED COMPUTERIZED ASSISTED PERMIT PROCESSING (ICAPP)*

# CONSOLIDATED DATA ENTRY SHEET - RULE 219 EQUIPMENT

## INTERNAL COMBUSTION ENGINE

| | | |
|---|---|---|
| APPLICATION No. | 186858 | ENGINEER: CS |
| COMPANY: | UNITED ROCK PRODUCTS CORPORATION | I.D. No.: 065341 |
| EQUIPMENT ADDRESS: | 1245 E. ARROW HIGHWAY, IRWINDALE CA 91706 | DATE: 03/05/90 |

NEW SOURCE REVIEW: *No New Source Review Required for previously exempted Rule 219 Equipment.*

| CONTAMINANT | rHC | NOx | SOx | CO | PM | OTHER | UnRHC |
|---|---|---|---|---|---|---|---|
| MAX LB/DAY | 0 | 0 | 0 | 0 | 0 | | |
| W/BACT | 0 | 0 | 0 | 0 | 0 | | |
| W/O BACT | 0 | 0 | 0 | 0 | 0 | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Reg XIII Exempt (Max), lb/day | | | | | | | |
| Reg XIII Exempt (Act), lb/day | | | | | | | |

| | | | |
|---|---|---|---|
| PERMIT TYPE: | B | **RULE 219** | |
| SCHEDULE: | 1 | STEP: | F |

| | |
|---|---|
| Weeks Operated Per Year | 52 |

| AEIS EMISSIONS: | | rHC | tHC | NOx | SOx | CO | PM | Other |
|---|---|---|---|---|---|---|---|---|
| | R1 | 190 | 190 | 281 | 040 | 610 | 200 | |
| | R2 | 190 | 190 | 281 | 040 | 610 | 200 | |

| | Mon | Tues | Wed | Thurs | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|
| Daily Start Time | 8 | 8 | 8 | 8 | 8 | 0 | 0 |
| Daily Stop Time | 20 | 20 | 20 | 20 | 20 | | |

## INSTRUCTIONS FOR PERMIT WORDING & FEE DATA

| NEED EIR? | NO |
|---|---|

DISPOSITION

| | |
|---|---|
| X | APPROVED |
| | DENIED |
| | CANCELLED - DON'T REFUND FILING FEE |
| | CANCELLED - REFUND FILING FEE |

PERMIT UNIT WORDING

| | |
|---|---|
| | BELOW |
| | ON FIELD REPORT DATED |
| | ON PAGE 1 OF PROCESS SHEETS |
| X | See Next Page |

CONDITIONS

| | |
|---|---|
| | NONE |
| | NUMBERS LISTED |
| | SPECIAL |
| X | SEE Next Page |

| SCHEDUL | 1-HP | 2-[illegible] FT | 3-KVA | 4-SQ FT | 5-GALLON | 6-GAS | 7-EXCEPTIONS |
|---|---|---|---|---|---|---|---|
| RATING | 175 | | | | | | |
| FEE | | | | | | | $150 |
| | | | | | | TOTAL FEE | $150 |

-> *Reduced Fee*

*(Continued)-->*

CM 03/6-2/90

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT - ENGINEERING DIVISION

*INTEGRATED COMPUTERIZED ASSISTED PERMIT PROCESSING (ICAPP)*

# CONSOLIDATED DATA ENTRY SHEET - RULE 219 EQUIPMENT

INTERNAL COMBUSTION ENGINE



## PERMIT UNIT WORDING:

INTERNAL COMBUSTION ENGINE, GENERAL MOTORS, DIESEL-FUELED,
MODEL NO. 6-71, SERIAL NO. 6A440959, 6 CYLINDERS,
TWO CYCLE, TURBO-CHARGED, 175 BHP, WITH 1 EXHAUST.

## CONDITIONS:

[X] 1. Operation of this equipment must be conducted in compliance with all data and specifications submitted with the application under which this Permit is issued unless otherwise noted below.

[X] 2. This equipment must be properly maintained and kept in good operating conditions at all times.

[X] 3. The ignition timing of this engine shall be inspected, adjusted, and certified at a minimum of once every three years of operation. Inspections, adjustments, and certifications must be performed by a qualified mechanic and done in accordance with the engine manufacturer's specifications and procedures.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

**ENGINEERING DIVISION**

*INTEGRATED COMPUTER ASSISTED PERMIT PROCESSING (ICAPP)*

2/20

| PAGES | PAGE |
|---|---|
| 5 | 1 |
| APPL. No. | DATE |
| 186858 | 03/05/90 |
| PROCESSED | CHECKED B |
| CS | |

## PERMIT TO OPERATE – INTERNAL COMBUSTION ENGINE

***APPLICABILITY: This processing form can only be used for previously Rule 219-exempted internal combustion engines rated between 50-500 BHP.***

APPLICANT'S NAME: UNITED ROCK PRODUCTS CORPORATION

MAILING ADDRESS: 13131 LOS ANGELES ST, IRWINDALE CA 91706

EQUIPMENT ADDRESS: 1245 E. ARROW HIGHWAY, IRWINDALE CA 91706

EQUIPMENT DESCRIPTION (Application No. 186858):

**INTERNAL COMBUSTION ENGINE, GENERAL MOTORS, DIESEL-FUELED, MODEL NO. 6-71, SERIAL NO. 6A440959, 6 CYLINDERS, TWO CYCLE, TURBO-CHARGED, 175 BHP, WITH 1 EXHAUST.**

**HISTORY:**

*This internal combustion engine was previously exempt from permit requirements. On June 3, 1988, the District's Board amended Rule 219 to include this equipment in the permit system. This engine was installed prior to June 3, 1988. Therefore, it is exempted from Best Available Control Technology (BACT) requirements and from having its emission accrued to the New Source Review (NSR) account (see memo from William J. Dennison, Director of Engineering, SCAQMD, dated July 18, 1988).*

*This application was submitted on March 20, 1989.*

## PROCESS DESCRIPTION:

**This internal combustion engine will supply mechanical energy to a(n): Mechanical Device.**

| | |
|---|---|
| Process: | Commercial |
| Emergency Service ? | No |
| Flow Diagram Attached ? | No |
| Portable Service ? | No |
| Rental Unit ? | No |

| | hrs/day | days/wk | wks/yr |
|---|---|---|---|
| Max. Operating Schedule (Om): | 16 | 7 | 52 |
| Ave. Operating Schedule | 12 | 7 | 52 |
| | | | |

*(Continued)-->*

## INTERNAL COMBUSTION ENGINE

**DATA:**

| | Average | Maximum | Source |
|---|---|---|---|
| Engine Brake Horsepower: | 158 | 175 | Applicant |
| @RPM of: | | 2100 | Applicant |

| Operating Schedule, O: | On | Om | |
|---|---|---|---|
| hour(s)/day: | 12 | 16 | Applicant/Condition |
| day(s)/week: | 7 | 7 | Applicant |
| week(s)/year: | 52 | 52 | Applicant |
| hours/year: | 4,368 | 5,824 | Condition |

| Fuel Consumption Rate: | Ave., FCRa | Max., FCRm |
|---|---|---|
| Diesel, gal/hr | 6 | 6 |

| | | | |
|---|---|---|---|
| Exhaust Flow Rate, F | F1(dscfm): | Not Provided | Applicant |
| | F2(acfm): | Not Provided | Applicant |
| Exhaust Temperature, T | T2, °F: | Not Provided | Applicant |
| Exhaust Pressure, P | P2, in Hg: | Not Provided | Applicant |
| Efficiency of NOx Control Device, ECF, % | | 0.0 | Applicant |

| Uncontrolled Emission Factors (EF) | | | | | | |
|---|---|---|---|---|---|---|
| Fuel | ROG | NOx | SOx | CO | PM | Source |
| Diesel | 0.032 | 0.469 | 0.0071 | 0.102 | 0.0335 | Table 3.3-1d |

| UNITS: EF: | *lb/gal* | FCR: | *gal/hr* | O: | *hrs/day* |
|---|---|---|---|---|---|

## CALCULATIONS:

1. Emissions:

AEIS emissions are hourly emissions based on average (actual) equipment rating and operating schedule. NSR emissions are daily emissions based on maximum equipment rating and operating schedule.

*(Continued)-->*

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

## ENGINEERING DIVISION

*INTEGRATED COMPUTER ASSISTED PERMIT PROCESSING (ICAPP)*

| PAGES 5 | PAGE 3 |
|---|---|
| APPL. No. 186858 | DATE 03/05/90 |
| PROCESSED CS | CHECKED B |

## INTERNAL COMBUSTION ENGINE

| Emission | AEIS | NSR |
|---|---|---|
| Uncontrolled | R1 = EF x FCRa => lb/hr | EF x FCRm x Om => lb/day |
| Controlled | R2 = R1 x (1-ECF) => lb/hr | R1 x Om x (1-ECF) => lb/day |

| NSR Max | MAX = R2(NSR) x 1.1 => lb/day |
|---|---|

Where:

| | |
|---|---|
| R1 = | Uncontrolled emissions, lb/hr, lb/day |
| R2 = | Controlled emission, lb/hr, lb/day |
| EF = | Emission Factor, lb/gal or lb/scf |
| ECF = | Emission Control Factor |
| FCRa = | Average fuel consumption rate, gal/hr or scf/hr |
| FCRm = | Maximum fuel consumption rate, gal/hr or scf/hr |
| Om = | Maximum Time of Operation |
| MAX = | New Source Review (Regulation XIII) maximum emission |

## RESULTS:

| Emissions | AEIS, (lb/hr) | | | | |
|---|---|---|---|---|---|
| | EF x | FCRa = | R1 x | (1-ECF) = | R2 |
| ROG | 0.0320 | 6 | 0.192 | 1 | 0.192 |
| NOx | 0.4690 | 6 | 2.814 | 1 | 2.814 |
| SOx | 0.0071 | 6 | 0.043 | 1 | 0.043 |
| CO | 0.1020 | 6 | 0.612 | 1 | 0.612 |
| PM | 0.0335 | 6 | 0.201 | 1 | 0.201 |

| | NSR, (lb/day) | | | | | |
|---|---|---|---|---|---|---|
| | R1 (actual without BACT), R2 (actual with BACT). | | | | | |
| | EF x | FCRa x | Oa = | R1 x | (1-ECF) = | R2 |
| ROG | 0.0320 | 6 | 12 | 2 | 1 | 2 |
| NOx | 0.4690 | 6 | 12 | 34 | 1 | 34 |
| SOx | 0.0071 | 6 | 12 | 1 | 1 | 1 |
| CO | 0.1020 | 6 | 12 | 7 | 1 | 7 |
| PM | 0.0335 | 6 | 12 | 2 | 1 | 2 |

*(Continued)-->*

## INTERNAL COMBUSTION ENGINE

### RESULTS (Cont.)

| Emissions | NSR (MAX), (lb/day) | | | | | |
|---|---|---|---|---|---|---|
| | EF x | FCRm x | Dm | x (1-ECF) | x 1.1 = | MAX |
| ROG | 0.0320 | 6 | 16 | 1 | | 3 |
| NOx | 0.4690 | 6 | 16 | 1 | | 50 |
| SOx | 0.0071 | 6 | 16 | 1 | | 1 |
| CO | 0.1020 | 6 | 16 | 1 | | 11 |
| PM | 0.0335 | 6 | 16 | 1 | | 4 |

2. Exhaust Gas Flow Rate (dscfm), (if not available from data).

$$F1 = F2 \times [(T1 \times P2)/(T2 \times P1)] \times [1 - (M/100)]$$

where:

F1 = dry standard cubic feet per minute, dscfm
F2 = actual cubic feet per minute, acfm
T1 = standard temperature, degrees Rankine (60°F + 460)
T2 = exhaust temperature, degrees Rankine (60°F + 460)
P1 = standard pressure (absolute), in. Hg
P2 = exhaust pressure (absolute), in. Hg
M = percent moisture in exhaust gas (assume 7% - 10%)

NOTE: (29.92 in. Hg / 407 in. H20 / 1 atm.)

F1 = *(See Below):*

Based upon the industry standard of 3.75 dscfm/BHP for diesel engines:
The Exhaust Flow Rate of 656.3 dscfm will be used.

3. Exhaust Gas Total Particulate Concentration (PC) - Rule 404

$$PC = [(R2)(7{,}000 \text{ grains/lb})] / [(F1)(60 \text{ min/hr})]$$

where

PC = particulate concentration, grains/dscf
R2 = particulate mass emission rate (maximum), lb/hr
F1 = dry standard cubic fee per minute, dscfm

| PC = | 0.036 | grains/dscf |
|---|---|---|

*(Continued)-->*

## INTERNAL COMBUSTION ENGINE

**RULES EVALUATION:**

**RULE 401** : Based on experience with similar equipment, this engine is expected to comply with the visible emission limits.

**RULE 402** : Based on experience with similar equipment, nuisance complaints are not expected.

**RULE 404** : For an exhaust volume of 656.3 dscfm, the rule allows a maximum total particulate concentration of 0.196 grains/dscf. Calculations indicate a particulate concentration of 0.036 grains/dscf. Compliance with Rule 404 is expected.

**RULE 431.2** : (Not Applicable)

**Rule 1110.1** : Rule 1110.1 does not apply to diesel or gasoline engines.

**CONCLUSIONS/RECOMMENDATIONS**

This engine is expected to comply with all applicable District Rules and Regulations. Therefore, the following is recommended:

***(X) Issue a Permit to Operate subject to the following conditions:***

1. Operation of this equipment must be conducted in compliance with all data and specifications submitted with the application under which this Permit is issued unless otherwise noted below.

2. This equipment must be properly maintained and kept in good operating conditions at all times.

3. The ignition timing of this engine shall be inspected, adjusted, and certified at a minimum of once every three years of operation. Inspections, adjustments, and certifications must be performed by a qualified mechanic and done in accordance with the engine manufacturer's specifications and procedures.

South Coast
AIR QUALITY MANAGEMENT DISTRICT

Rec'd 5-12-89

HEADQUARTERS, 9150 FLAIR DR., EL MONTE, CA 91731

Date MAY 3, 1989

Re: Company ID 065341

It has been brought to the attention of the Air Quality Management District that the name of your business has been changed from:

Old Name: UNITED ROCK & CONCRETE CORPORATION
To
New Name: UNITED ROCK PRODUCTS CORPORATION

Please confirm that this change should be made and that this is only a name change and not a change in the ownership of your business. New applications for each piece of equipment being operated by you must be filed with the Air Quality Management District if there has been any change in the ownership of your business.

Please fill the form at the bottom of this letter and return to the Air Quality Management District within 10 business days. If there are any questions, please contact Ms. Barbara Irby at (818)572-6274.

Sincerely
Barbara Irby
by: Annie

6181-Eft.

Barbara Irby
Supv. Office Assistant
Engineering Division

---

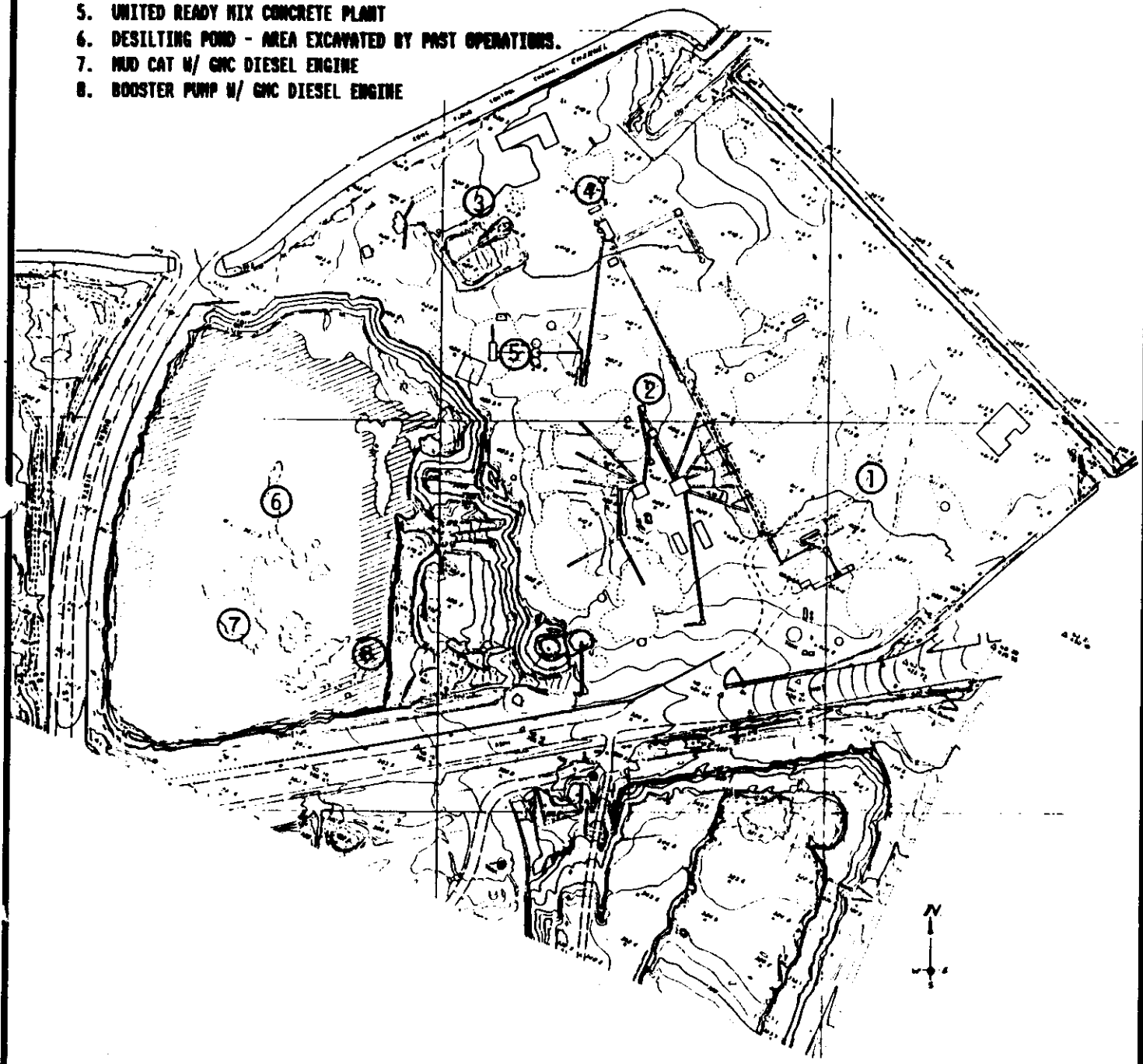
The Name of my business is: United Rock Products Corporation

This is only a change in the name of my business. The ownership remains the same.

Howard Cox
Authorized Signature

5/10/89
Date

1. BLUE DIAMOND ASPHALT PLANT
2. U.R.P. SAND & GRAVEL PLANT
3. VERNON PAVING ASPHALT PLAN
4. BLUE DIAMOND READY MIXED CONCRETE PLANT
5. UNITED READY MIX CONCRETE PLANT
6. DESILTING POND - AREA EXCAVATED BY PAST OPERATIONS.
7. MUD CAT W/ GMC DIESEL ENGINE
8. BOOSTER PUMP W/ GMC DIESEL ENGINE




SOURCE: RECLAMATION PLAN FOR BLUE DIAMOND IRWINDALE PLANT IN THE CITY OF IRWINDALE CHAMBERS CONSULTATION AND PLANNERS, 1986.

JRJ Associates

# SITE PLAN

UNITED ROCK PRODUCTS CORP.
IRWINDALE, CALIF.

DATE: 2/9/89

SCALE: 1" = 175'

Press f5 to continue

ENG930 EMISSION THRESHOLD / NEWSOURCE

name: UNITED ROCK & CONCRETE CORP
address: 1245 E ARROW HWY
city: IRWINDALE I

company id: 065341
date: 04/28/89
user: RCU

INCREASE (+) DECREASE (-) SUBSEQUENT TO 10-8-76

| L# | I | M | date | appl | p/o | rl | RHC #/day | NOX #/day | SO2 #/day | CO #/day | PART #/day | LEAD #/day | UNRHC #/day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01 | | | 840105 | 116681 | C1 | 04 | | | | | | | |
| 02 | | | 850107 | C31948 | C2 | 03 | | | | | 2 | | |
| 03 | | | 850220 | 125992 | C1 | 04 | | | | | | | |
| 04 | | | 850220 | 125994 | C1 | 04 | | | | | -409 | | |
| 05 | | | 850220 | 125996 | C1 | 04 | | | | | 1 | | |
| 06 | | | 850220 | 125997 | C1 | 04 | | | | | | | |
| 07 | | | 850220 | 125999 | C1 | 04 | 8 | 97 | 51 | 4 | 17269 | | |
| 08 | | | 850220 | 126000 | C1 | 04 | | | | | | | |
| 09 | | | 850220 | 126001 | C1 | 04 | | | | | 6 | | |
| 10 | | | 850220 | 126002 | C1 | 04 | 1 | 2 | 3 | 1 | 1 | | |
| | | | | | | | | | | | -16762 | | |

TRADEOFF TOTAL
exempt total
TOTAL

| | | | | |
|---|---|---|---|---|
| 9 | 99 | 54 | 5 | 108 |

**ROUTING RECORD**

| DATE | FROM | TO | ACTION |
|---|---|---|---|
| 05/20/84 | TDV | CAM | IE |
| 3-7-90 | H-13 | P/S | P/D |
| 1-25-90 | H-13 | P/S | P/D |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

**REFERENCE TO OTHER APCO RECORDS INCLUDING VARIANCES:**

65341

186860

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# PERMIT TO OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D14493
A/N 186860
Page 1

*This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.*

**Legal Owner Or Operator:**

**ID** 065341

UNITED ROCK PRODUCTS CORPORATION
13131 LOS ANGELES ST.
IRWINDALE CA 91706
ATTN: H. GREEN

**Equipment located at:** Various Locations in the SCAQMD

**Equipment Description:**

INTERNAL COMBUSTION ENGINE, CUMMINS, DIESEL-FUELED,
MODEL NO. C464P160, SERIAL NO. 589-779, 4 CYLINDERS, FOUR CYCLE,
NATURALLY ASPIRATED, 80 BHP, WITH 1 EXHAUST.

**Conditions:**

1. Operation of this equipment must be conducted in compliance with all data and specifications submitted with the application under which this Permit is issued unless otherwise noted below.

2. This equipment must be properly maintained and kept in good operating conditions at all times.

3. The ignition timing of this engine shall be inspected, adjusted, and certified at a minimum of once every three years of operation. Inspections, adjustments, and certifications must be performed by a qualified mechanic and done in accordance with the engine manufacturer's specifications and procedures.

**FILE COPY**

## CONTINUATION OF PERMIT TO OPERATE

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Raquel Puerta/Creighton
April 22, 1990

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
## 915[illegible] lair Drive El Monte, CA 91[illegible]1

APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE AND EXCAVATE AND
FOR PLANS REQUIRED BY THE EXECUTIVE OFFICER
FOR FEE INFORMATION AND SMALL BUSINESS EXEMPTION
SEE REVERSE SIDE

34055 (3)

65341 (5)

PLEASE TYPE OR PRINT

SCAQMD USE: SEC | TS | ID NUMBER 065431

1A. PERMIT TO BE ISSUED TO
United Rock Products Corporation
BUSINESS LICENSE NAME OF ORGANIZATION THAT IS TO RECEIVE PERMIT

1 B.
NAME (OR NAMES) OF OWNER OR PRINCIPAL PARTNERS DOING BUSINESS AS (DBA) ABOVE ORGANIZATION

2 A. MAILING ADDRESS
13131 Los Angeles Street | Irwindale | CA | 91706
NUMBER STREET | CITY OR COMMUNITY | STATE | ZIP CODE

3 A. EQUIPMENT LOCATION (IF SAME ENTER "SAME")
1245 East Arrow Highway | Irwindale | 91706 | 818-303-7755
NUMBER STREET | CITY OR COMMUNITY | ZIP

3 B.
Buena Vista Drive
NEAREST INTERSECTING STREET

4 A. CONTACT PERSON (INITIALS & NAME.)
H. Green

4 B. CONTACT PHONE NO. (AREA & NO.)
(818) 960-3948 213-365-6211

5. EQUIPMENT. APPLICATION IS HEREBY MADE FOR PERMIT TO OPERATE THE FOLLOWING EQUIPMENT
Internal Combustion Engine Greater than 50 Horsepower portable

6. IF THIS EQUIPMENT HAD A PREVIOUS WRITTEN PERMIT STATE NAME OF CORPORATION, COMPANY, OR INDIVIDUAL OWNER THAT OPERATED THIS EQUIPMENT AND STATE PREVIOUS AIR POLLUTION CONTROL DISTRICT PERMIT NUMBER
Blue Diamond Materials Div. (Sully Miller)
NAME | PREVIOUS PERMIT NUMBER

Rule 219

7. PERMIT APPLICATION FOR EQUIPMENT
- NEW CONSTRUCTION ☐
- ALTERATION ☐
- CHANGE OF LOCATION ☐
- REINSTATE NON-PAYMENT P.O. FEES DUE ☐
- CHANGE OF OWNERSHIP ☑
- EXISTING EQUIPMENT IN OPERATION WITHOUT PRIOR PERMIT ☒
- CHANGE OF CONDITIONS ☐

8. TYPE OF ORGANIZATION
- CORPORATION ☒
- PARTNERSHIP ☐
- INDIVIDUAL OWNER ☐
- LOCAL GOV'T AGENCY ☐
- STATE AGENCY ☐
- FEDERAL AGENCY ☐
- UTILITY ☐

9. ESTIMATED COST OF EQUIPMENT OR ALTERATION
BASIC EQUIPMENT $ N/A
AIR POLLUTION CONTROL EQUIPMENT $ N/A

10. FOR THE NEW CONSTRUCTION, ALTERATION, TRANSFER OF OWNERSHIP OR LOCATION, WHAT IS
ESTIMATED STARTING DATE? N/A
ESTIMATED COMPLETION DATE? N/A or: Prior to 1980 Install date

11. GENERAL NATURE OF BUSINESS
Mining and sales of construction aggregates

12. PRINCIPAL PRODUCT
rock and sand

13. DO YOU CLAIM CONFIDENTIALITY OF DATA?
YES ☐ NO ☒
IF YES STATE NATURE OF DATA ON SEPARATE SHEET

14 NORMAL OPERATING HOURS OF SUBJECT EQUIPMENT
HOURS/DAY 4
DAYS/WEEK 1
WEEKS/YEAR 12

15. HAS A CEQA DOCUMENT BEEN PREPARED FOR THIS PROJECT? YES ☐ NO ☒

15a. ARE ALL COMPANIES' FACILITIES IN CALIFORNIA IN COMPLIANCE WITH AIR POLLUTION RULES?
YES ☒ NO ☐

16. SIGNATURE OF RESPONSIBLE MEMBER OF ORGANIZATION
Horace Green

17. OFFICIAL TITLE OF SIGNER
Maintenance Supervisor

18. TYPED OR PRINTED NAME OF SIGNER
Horace Green

19 PHONE NO
818-960-3948

20. DATE
1/9/89

SCAQMD USE

| | | | | | | |
|---|---|---|---|---|---|---|
| SIC NO. | | EQUIP. CAT. NO. 016900 / | | | SCH/STEP 7A | APR 27 1989 |
| APPLICATION NO. 186860 | PERMIT NO | TYPE (B) OR C | WORK UNITS A/C P/O | ASSIGNMENT 13 UNIT ENGR | CLASS I (III) | |
| VALIDATION 03/20/89 2/8/89 | | FILING FEE $ 300.00 (4 of 4) | | CHECK OR MONEY ORDER NO. 500200 | | |

ENGINEERING REVIEW
Date 2/7/89 (Continued on reverse) Date
BY [illegible] BY

Form 400A - REVISED 8-84 PRIOR VERSIONS NOT VALID C-1

SEE REVERSE FOR FEES REQUIRED UPON FILING

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

## FILING FEES

Except as noted following, a $250 filing fee must accompany each application for Permit to Construct/Operate.

1. For small businesses the filing fee is $160. The small business declaration form below must be completed in order to be considered a small business.

2. Each application for change of ownership requires a $110 transfer fee.

3. All applicants, including state, local governmental and public districts, must pay a permit evaluation fee. Such fees are in addition to filing fees and change of ownership fees.

4. All state, local governmental agencies or public districts are exempt from paying filing fees and change of ownership fees.

SEE APPLICATION INSTRUCTIONS FORM 400-B FOR ADDITIONAL INSTRUCTIONS
Call (818) 572-6212 for assistance
SUPPLEMENTAL DATA FORMS REQUIRED

Special supplemental data forms must be completed for: BOILERS, LIQUID HEATERS, DEGREASERS, DRY CLEANING EQUIPMENT, OVENS, SPRAY BOOTHS AND STORAGE TANKS.

## SMALL BUSINESS DECLARATION

In order to be considered a small business as specified in Regulation XIII, this form must be completed. If not a small business, do not complete this form.

A "Small Business": is a business which is independently owned and operated and meets the following criteria or, if affiliated with another concern, the combined activities of both concerns meet these criteria:

The number of employees is 10 or less; and
The total annual receipts are $500,000 or less.

I hereby certify, under penalty of perjury, that the business enterprise containing the emission source(s) for which an SCAQMD Permit to Construct or Permit to Operate is being applied herein qualifies as a SMALL BUSINESS, based on compliance with the definition above:

| Signature of Applicant | Date | ( ) Telephone Number |
|---|---|---|
| Printed or Typed Signature | | Company Name |

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT - ENGINEERING DIVISION

*INTEGRATED COMPUTERIZED ASSISTED PERMIT PROCESSING (ICAPP)*

# CONSOLIDATED DATA ENTRY SHEET - RULE 219 EQUIPMENT

## INTERNAL COMBUSTION ENGINE

| | | | |
|---|---|---|---|
| APPLICATION No. | 186860 | ENGINEER: | CS |
| COMPANY: | UNITED ROCK PRODUCTS CORPORATION | I.D. No.: | 065341 |
| EQUIPMENT ADDRESS: | 13131 LOS ANGELES ST., IRWINDALE CA 91706 | DATE: | 04/22/90 |

| | |
|---|---|
| NEW SOURCE REVIEW: | *No New Source Review Required for previously-exempted Rule 219 Equipment.* |

| CONTAMINANT | rHC | NOx | SOx | CO | PM | OTHER | UnRHC |
|---|---|---|---|---|---|---|---|
| MAX LB/DAY | 0 | 0 | 0 | 0 | 0 | | |
| W/BACT | 0 | 0 | 0 | 0 | 0 | | |
| W/O BACT | 0 | 0 | 0 | 0 | 0 | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Reg XIII Exempt (Max), lb/day | | | | | | | |
| Reg XIII Exempt (Act), lb/day | | | | | | | |

| | | | |
|---|---|---|---|
| PERMIT TYPE: | B | **R U L E 2 1 9** | |
| SCHEDULE: | 1 | STEP: | E |

| | |
|---|---|
| Weeks Operated Per Year | 52 |

| AEIS EMISSIONS: | | rHC | tHC | NOx | SOx | CO | PM | Other |
|---|---|---|---|---|---|---|---|---|
| | R1 | 130 | 130 | 191 | 030 | 410 | 130 | |
| | R2 | 130 | 130 | 191 | 030 | 410 | 130 | |

| | Mon | Tues | Wed | Thurs | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|
| Daily Start Time | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Daily Stop Time | 20 | 20 | 20 | 20 | 20 | 20 | 20 |

## INSTRUCTIONS FOR PERMIT WORDING & FEE DATA

| NEED EIR? | NO |
|---|---|

**DISPOSITION**

| | |
|---|---|
| X | APPROVED |
| | DENIED |
| | CANCELLED - DON'T REFUND FILING FEE |
| | CANCELLED - REFUND FILING FEE |

**PERMIT UNIT WORDING**

| | |
|---|---|
| | BELOW |
| | ON FIELD REPORT DATED |
| | ON PAGE 1 OF PROCESS SHEETS |
| X | See Next Page |

**CONDITIONS**

| | |
|---|---|
| | NONE |
| | NUMBERS LISTED |
| | SPECIAL |
| X | SEE Next Page |

| SCHEDUL | 1-HP | -1000s BT | 3-KVA | 4-SQ FT | -GALLON | 6-GAS | 7-EXCEPTIONS |
|---|---|---|---|---|---|---|---|
| RATING | 80 | | | | | | |
| FEE | | | | | | | $150 |
| -> *Reduced Fee* | | | | | | TOTAL FEE | $150 |

*(Continued)-->*

HTF
5/16/90

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT - ENGINEERING DIVISION

*INTEGRATED COMPUTERIZED ASSISTED PERMIT PROCESSING (ICAPP)*

# CONSOLIDATED DATA ENTRY SHEET – RULE 219 EQUIPMENT

INTERNAL COMBUSTION ENGINE



## PERMIT UNIT WORDING:

INTERNAL COMBUSTION ENGINE, CUMMINS, DIESEL-FUELED,
MODEL NO. C464P160, SERIAL NO. 589-779, 4 CYLINDERS, FOUR CYCLE,
NATURALLY ASPIRATED, 80 BHP, WITH 1 EXHAUST.

## CONDITIONS:

[X] 1. Operation of this equipment must be conducted in compliance with all data and specifications submitted with the application under which this Permit is issued unless otherwise noted below.

[X] 2. This equipment must be properly maintained and kept in good operating conditions at all times.

[X] 3. The ignition timing of this engine shall be inspected, adjusted, and certified at a minimum of once every three years of operation. Inspections, adjustments, and certifications must be performed by a qualified mechanic and done in accordance with the engine manufacturer's specifications and procedures.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

ENGINEERING DIVISION

*INTEGRATED COMPUTER ASSISTED PERMIT PROCESSING (ICAPP)*

4/3

| PAGES | PAGE |
|---|---|
| 5 | 1 |
| APPL. No. | DATE |
| 186860 | 04/22/90 |
| PROCESSED | CHECKED B |
| CS | |

# PERMIT TO OPERATE – INTERNAL COMBUSTION ENGINE

***APPLICABILITY:** This processing form can only be used for previously Rule 219–exempted internal combustion engines rated between 50–500 BHP.*

APPLICANT'S NAME: UNITED ROCK PRODUCTS CORPORATION

MAILING ADDRESS: 13131 LOS ANGELES ST., IRWINDALE CA 91706

EQUIPMENT ADDRESS: Various Locations in the SCAQMD

EQUIPMENT DESCRIPTION (Application No. 186860):

**INTERNAL COMBUSTION ENGINE, CUMMINS, DIESEL–FUELED, MODEL NO. C464P160, SERIAL NO. 589–779, 4 CYLINDERS, FOUR CYCLE, NATURALLY ASPIRATED, 80 BHP, WITH 1 EXHAUST.**

**HISTORY:**

*This internal combustion engine was previously exempt from permit requirements. On June 3, 1988, the District's Board amended Rule 219 to include this equipment in the permit system. This engine was installed prior to June 3, 1988. Therefore, it is exempted from Best Available Control Technology (BACT) requirements and from having its emission accrued to the New Source Review (NSR) account (see memo from William J. Dennison, Director of Engineering, SCAQMD, dated July 18, 1988).*

*This application was submitted on February 8, 1989.*

## PROCESS DESCRIPTION:

| This internal combustion engine will supply mechanical energy to a(n): Mechanical Device. | | |
|---|---|---|
| Process: | Commercial | |
| | Emergency Service ? | No |
| | Flow Diagram Attached ? | No |
| | Portable Service ? | Yes |
| | Rental Unit ? | No |

| | hrs/day | days/wk | wks/yr |
|---|---|---|---|
| Max. Operating Schedule (Om): | 16 | 7 | 52 |
| Ave. Operating Schedule | 12 | 7 | 52 |
| | | | |

*(Continued)-->*

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

ENGINEERING DIVISION

*INTEGRATED COMPUTER ASSISTED PERMIT PROCESSING (ICAPP)*

| PAGES | PAGE |
|---|---|
| 5 | 2 |
| APPL. No. | DATE |
| 186860 | 04/22/90 |
| PROCESSED | CHECKED B |
| CS | |

## INTERNAL COMBUSTION ENGINE

DATA:

| | Average | Maximum | Source |
|---|---|---|---|
| Engine Brake Horsepower: | 60 | 80 | Applicant |
| @RPM of: | | 2100 | Applicant |

| Operating Schedule, O: | Oa | Om | |
|---|---|---|---|
| hour(s)/day: | 12 | 16 | Applicant/Condition |
| day(s)/week: | 7 | 7 | Applicant |
| week(s)/year: | 52 | 52 | Applicant |
| hours/year: | 4,368 | 5,824 | Condition |

| Fuel Consumption Rate: | Ave., FCRa | Max., FCRm |
|---|---|---|
| Diesel, gal/hr | 4 | 4 |

| | | | |
|---|---|---|---|
| Exhaust Flow Rate, F | F1(dscfm): | Not Provided | Applicant |
| | F2(acfm): | Not Provided | Applicant |
| Exhaust Temperature, T | T2, °F: | Not Provided | Applicant |
| Exhaust Pressure, P | P2, in Hg: | Not Provided | Applicant |
| Efficiency of NOx Control Device, ECF, % | | 0.0 | Applicant |

| Uncontrolled Emission Factors (EF) | | | | | | |
|---|---|---|---|---|---|---|
| Fuel | ROG | NOx | SOx | CO | PM | Source |
| Diesel | 0.032 | 0.469 | 0.0071 | 0.102 | 0.0335 | Table 3.3-1d |

| UNITS: | EF: | *lb/gal* | FCR: | *gal/hr* | O: | *hrs/day* |
|---|---|---|---|---|---|---|

## CALCULATIONS:

1. Emissions:

AEIS emissions are hourly emissions based on average (actual) equipment rating and operating schedule. NSR emissions are daily emissions based on maximum equipment rating and operating schedule.

*(Continued)-->*

# INTERNAL COMBUSTION ENGINE

| Emission | AEIS | NSR |
|---|---|---|
| Uncontrolled | R1 = EF x FCRa => lb/hr | EF x FCRm x Om => lb/day |
| Controlled | R2 = R1 x (1-ECF) => lb/hr | R1 x Om x (1-ECF) => lb/day |

| | |
|---|---|
| NSR Max | MAX = R2(NSR) x 1.1 => lb/day |

Where:

| | |
|---|---|
| R1 = | Uncontrolled emissions, lb/hr, lb/day |
| R2 = | Controlled emission, lb/hr, lb/day |
| EF = | Emission Factor, lb/gal or lb/scf |
| ECF = | Emission Control Factor |
| FCRa = | Average fuel consumption rate, gal/hr or scf/hr |
| FCRm = | Maximum fuel consumption rate, gal/hr or scf/hr |
| Om = | Maximum Time of Operation |
| MAX = | New Source Review (Regulation XIII) maximum emission |

## RESULTS:

| Emissions | AEIS, (lb/hr) | | | | |
|---|---|---|---|---|---|
| | EF x | FCRa = | R1 x | (1-ECF) = | R2 |
| ROG | 0.0320 | 4 | 0.128 | 1 | 0.128 |
| NOx | 0.4690 | 4 | 1.876 | 1 | 1.876 |
| SOx | 0.0071 | 4 | 0.028 | 1 | 0.028 |
| CO | 0.1020 | 4 | 0.408 | 1 | 0.408 |
| PM | 0.0335 | 4 | 0.134 | 1 | 0.134 |

| | NSR, (lb/day) | | | | | |
|---|---|---|---|---|---|---|
| | R1 (actual without BACT), R2 (actual with BACT). | | | | | |
| | EF x | FCRa x | Oa = | R1 x | (1-ECF) = | R2 |
| ROG | 0.0320 | 4 | 12 | 2 | 1 | 2 |
| NOx | 0.4690 | 4 | 12 | 23 | 1 | 23 |
| SOx | 0.0071 | 4 | 12 | 0 | 1 | 0 |
| CO | 0.1020 | 4 | 12 | 5 | 1 | 5 |
| PM | 0.0335 | 4 | 12 | 2 | 1 | 2 |

*(Continued)-->*

## INTERNAL COMBUSTION ENGINE

**RESULTS (Cont.)**

| Emissions | NSR (MAX), (lb/day) | | | | | |
|---|---|---|---|---|---|---|
| | EF x | FCRm x | Om | x (1-ECF) | x 1.1 = | MAX |
| ROG | 0.0320 | 4 | 16 | 1 | | 2 |
| NOx | 0.4690 | 4 | 16 | 1 | | 33 |
| SOx | 0.0071 | 4 | 16 | 1 | | 0 |
| CO | 0.1020 | 4 | 16 | 1 | | 7 |
| PM | 0.0335 | 4 | 16 | 1 | | 2 |

2. Exhaust Gas Flow Rate (dscfm), (if not available from data).

$$F1 = F2 \times [(T1 \times P2)/(T2 \times P1)] \times [1 - (M/100)]$$

where:

F1 = dry standard cubic feet per minute, dscfm
F2 = actual cubic feet per minute, acfm
T1 = standard temperature, degrees Rankine (60°F + 460)
T2 = exhaust temperature, degrees Rankine (60°F + 460)
P1 = standard pressure (absolute), in. Hg
P2 = exhaust pressure (absolute), in. Hg
M = percent moisture in exhaust gas (assume 7% - 10%)

NOTE: (29.92 in. Hg / 407 in. H20 / 1 atm.)

F1 = ***(See Below):***

Based upon the industry standard of 3.75 dscfm/BHP for diesel engines:
The Exhaust Flow Rate of 300.0 dscfm will be used.

3. Exhaust Gas Total Particulate Concentration (PC) - Rule 404

$$PC = [(R2)(7{,}000 \text{ grains/lb})] / [(F1)(60 \text{ min/hr})]$$

where

PC = particulate concentration, grains/dscf
R2 = particulate mass emission rate (maximum), lb/hr
F1 = dry standard cubic fee per minute, dscfm

| PC = | 0.052 | grains/dscf |
|---|---|---|

*(Continued)-->*

## INTERNAL COMBUSTION ENGINE

**RULES EVALUATION:**

**RULE 401** : Based on experience with similar equipment, this engine is expected to comply with the visible emission limits.

**RULE 402** : Based on experience with similar equipment, nuisance complaints are not expected.

**RULE 404** : For an exhaust volume of 300.0 dscfm, the rule allows a maximum total particulate concentration of 0.196 grains/dscf. Calculations indicate a particulate concentration of 0.052 grains/dscf. Compliance with Rule 404 is expected.

**RULE 431.2** : (Not Applicable)

**Rule 1110.1** : Rule 1110.1 does not apply to diesel or gasoline engines.

**CONCLUSIONS/RECOMMENDATIONS**

This engine is expected to comply with all applicable District Rules and Regulations. Therefore, the following is recommended:

*(X) Issue a Permit to Operate subject to the following conditions:*

1. Operation of this equipment must be conducted in compliance with all data and specifications submitted with the application under which this Permit is issued unless otherwise noted below.

2. This equipment must be properly maintained and kept in good operating conditions at all times.

3. The ignition timing of this engine shall be inspected, adjusted, and certified at a minimum of once every three years of operation. Inspections, adjustments, and certifications must be performed by a qualified mechanic and done in accordance with the engine manufacturer's specifications and procedures.

LA 18

# SCAQMD
# INTERNAL COMBUSTION ENGINE
# ADDITIONAL INFORMATION REQUEST FORM

## Application Information:

Company: United Rock Products Corp Application No. 186860
Contact Name: H. Green Telephone No. 818-960-3948

Jed

| | First Call | Second Call | Third Call |
|---|---|---|---|
| Date: | 3-2-90 | 3-6-90 | 3-7-90 |
| Time: | | 300 p. | 900 A |
| By: | | CB | CB |
| Action: | left msg for H. Green 818-768-0050 CB | left msg for H. Green CB | WL C/B w/ inf. 818-358-4558 ask 4 Aaron Brink |

**INFORMATION NEEDED:**

| | | Item No. |
|---|---|---|
| X | Model # C46P16C Serial # _____ | 2 |
| ____ | Eng. Use: ( ) Electric ( ) Compressor ( ) Pump Driver ____ Fire Pump ____ Flood Control Pump ____ Water Pump ____ Jet Ski | 3 |
| ____ | No. of Cylinderss _____ No. of Cycles _____ | 4 |
| ____ | Fuel Info: Air-Fuel Ratio _____ Fuel Type _____ | 5 |
| ____ | Fuel Comsumption: Gal/Hr _____ Cu Ft./Hr _____ Avg. Load % _____ | 6 |
| ____ | Engine Size Rating: BHP _____ RPM _____ | 8 |
| ____ | Other _____ | |

Final Disposition:

X Application Returned Completed ___ Application Returned Unprocessed

South Coast
AIR QUALITY MANAGEMENT DISTRICT

Rec'd 5-12-89

HEADQUARTERS, 9150 FLAIR DR., EL MONTE, CA 91731

Date MAY 3, 1989

Re: Company ID 065341

It has been brought to the attention of the Air Quality Management District that the name of your business has been changed from:

Old Name: UNITED ROCK & CONCRETE CORPORATION
To
New Name: UNITED ROCK PRODUCTS CORPORATION

Please confirm that this change should be made and that this is only a name change and not a change in the ownership of your business. New applications for each piece of equipment being operated by you must be filed with the Air Quality Management District if there has been any change in the ownership of your business.

Please fill the form at the bottom of this letter and return to the Air Quality Management District within 10 business days. If there are any questions, please contact Ms. Barbara Irby at (818)572-6274.

Sincerely
Barbara Irby
by: Annie
Barbara Irby
Supv. Office Assistant
Engineering Division

6181 - Eff.

---

The Name of my business is: United Rock Products Corporation

This is only a change in the name of my business. The ownership remains the name.

Howard Cox
Authorized Signature

5/10/89
Date

Press f5 to continue

ENG930 EMISSION THRESHOLD / NEWSOURCE

name: UNITED ROCK & CONCRETE CORP
address: 1245 E ARROW HWY
city: IRWINDALE I

company id: 065341
date: 04/28/89
user: RCU

INCREASE (+) DECREASE (-) SUBSEQUENT TO 10-8-76

| L# | I | M | date | appl | p/o | rl | RHC #/day | NOX #/day | SO2 #/day | CO #/day | PART #/day | LEAD #/day | UNRHC #/day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01 | | | 840105 | 116681 | C1 | 04 | | | | | 2 | | |
| 02 | | | 850107 | C31948 | C2 | 03 | | | | | | | |
| 03 | | | 850220 | 125992 | C1 | 04 | | | | | -409 | | |
| 04 | | | 850220 | 125994 | C1 | 04 | | | | | 1 | | |
| 05 | | | 850220 | 125996 | C1 | 04 | | | | | | | |
| 06 | | | 850220 | 125997 | C1 | 04 | 8 | 97 | 51 | 4 | 17269 | | |
| 07 | | | 850220 | 125999 | C1 | 04 | | | | | | | |
| 08 | | | 850220 | 126000 | C1 | 04 | | | | | 6 | | |
| 09 | | | 850220 | 126001 | C1 | 04 | 1 | 2 | 3 | 1 | 1 | | |
| 10 | | | 850220 | 126002 | C1 | 04 | | | | | -16762 | | |
| | | | | | | | | | | | | | |

| | RHC #/day | NOX #/day | SO2 #/day | CO #/day | PART #/day |
|---|---|---|---|---|---|
| TRADEOFF TOTAL | | | | | |
| exempt total | | | | | |
| TOTAL | 9 | 99 | 54 | 5 | 108 |

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
9150 FLAIR DR. EL MONTE, CA 91731

# INTERNAL COMBUSTION ENGINE INFORMATION TO ACCOMPANY PERMIT APPLICATION FORM 400-A
(SEE REVERSE SIDE FOR APPLICATION INSTRUCTIONS)

THIS FORM IS LIMITED TO EQUIPMENT WHICH WAS EXEMPT
FROM WRITTEN PERMIT PURSUANT TO RULE 219 PRIOR TO JUNE 3, 1988

1. BUSINESS LICENSE NAME:
United Rock Products Corporation

2. ENGINE MANUFACTURER, MODEL NUMBER & SERIAL NUMBER: (ATTACH MANUFACTURER'S CATALOG) if available
Cummins, 4 cyl. diesel, serial no. 589-779 C464P160 589-779

3. UTILIZATION OF ENGINE: [ ]ELECTRICAL GENERATOR DRIVER [ ]PUMP DRIVER
[ ]COMPRESSOR DRIVER [X]OTHER Auxilliary Engine - American Crane

4. ENGINE DESCRIPTION: NUMBER OF CYLINDERS 4 MOBILE UNIT.
[ ]TWO CYCLE OR [X]FOUR CYCLE
[ ]LEAN BURN OR [ ]RICH BURN
[ ]TURBOCHARGED [ ]AFTERCOOLED [ ]INTERCOOLED [ ]NATURALLY ASPIRATED

5. FUEL INFORMATION: AIR TO FUEL RATIO N/A
[ ]NATURAL GAS [ ]GASOLINE [ ]LPG [X]DIESEL OIL
[ ]DIGESTER GAS [ ]LANDFILL GAS [ ]OTHER _____

6. MAXIMUM RATED FULL LOAD FUEL CONSUMPTION: 4 (GAL/HR) OR _____ (CU.FT/HR)
AVERAGE LOAD PERCENTAGE: 75 %

7. ENERGY RECOVERY FROM EXHAUST: [ ]YES [X]NO
IF YES, PLEASE EXPLAIN:

8. ENGINE SIZE (MANUFACTURER'S RATING): 80 BHP @ 2100 RPM

9. CONTROL DEVICE: [ ]YES [X]NO
IF YES, PLEASE EXPLAIN:

10. STACK OR VENT DATA:
DIMENSIONS: HEIGHT ABOVE GRADE 20 (FT) HEIGHT ABOVE BUILDING _____ (FT)
CROSS SECTION*: DIAMETER _____ (IN) OR WIDTH _____ (IN) LENGTH _____ (IN)
EXHAUST TEMPERATURE N/A (°F)
STACK SERVES: a. [X]ONLY THIS EQUIPMENT EXHAUST FLOW RATE N/A (CFM)
b. [ ]OTHER EQUIPMENT ALSO** TOTAL FLOW RATE N/A (CFM)
* MEASURED AT THE ATMOSPHERIC EXHAUST OPENING
**IF THIS ITEM IS CHECKED, SUBMIT TYPE AND RATING OF ALL OTHER EQUIPMENT EXHAUSTED THROUGH THIS VENT OR STACK.

11. OPERATING SCHEDULE: 12 (HR/DAY) 7 (DAYS/WEEK) 52 (WEEKS/YEAR)
MAXIMUM OPERATING HOURS: 16 (HR/DAY)

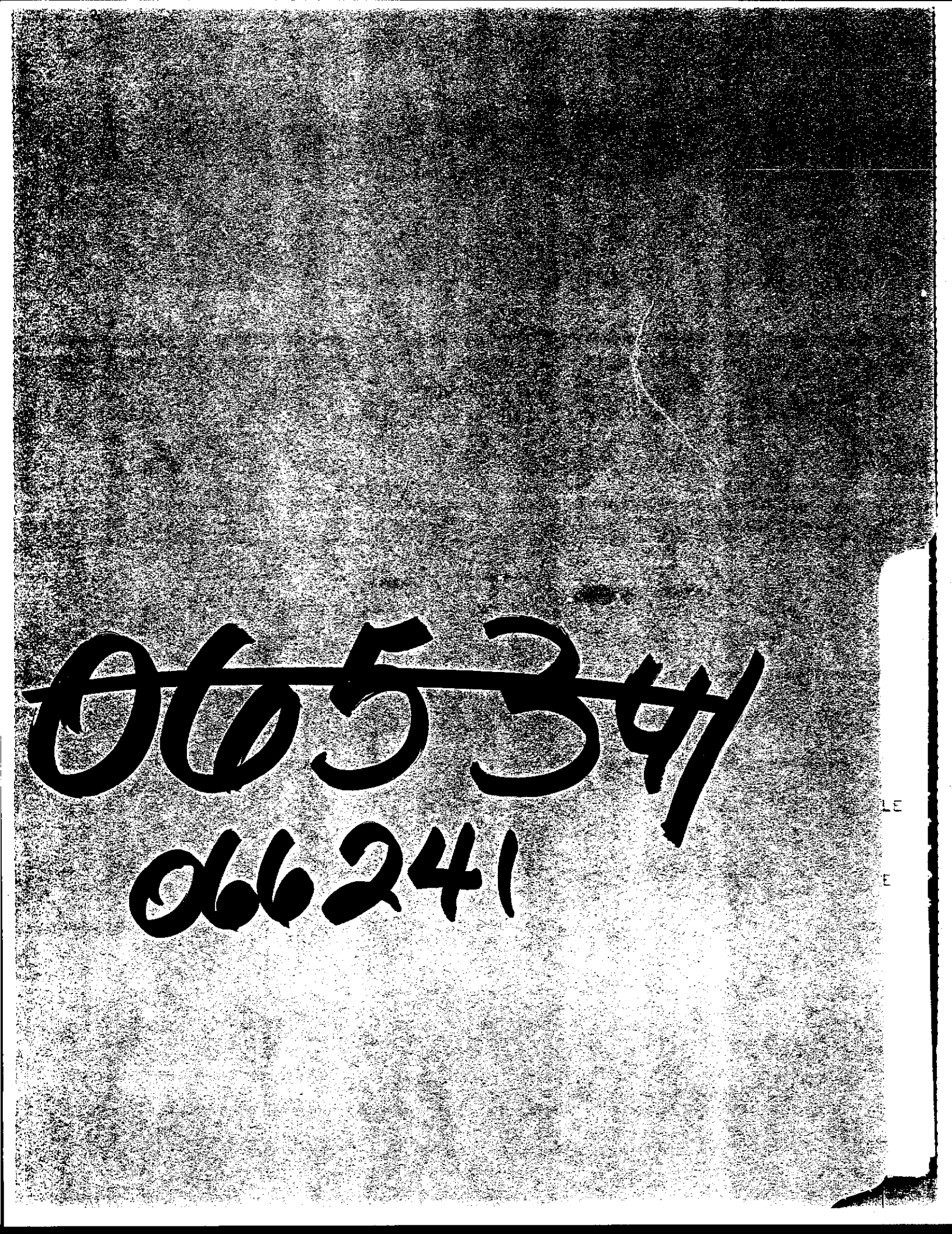
THE ABOVE INFORMATION IS SUBMITTED TO DESCRIBE THE USE OF THE EQUIPMENT FOR WHICH APPLICATION FOR PERMIT IS BEING MADE ON THE ACCOMPANYING FORM 400-A

SIGNATURE OF RESPONSIBLE MEMBER OF FIRM: Horace Green DATE 7/9/89

TYPE OR PRINT NAME AND OFFICIAL TITLE OF PERSON SIGNING THIS DATA FORM

NAME: Horace Green

TITLE: Maintenance Supervisor


065347
06241

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# PERMIT to CONSTRUCT/OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

PERMIT NO. R-M96595
A/N 231453
PAGE 1

**THIS INITIAL PERMIT MUST BE RENEWED BY 8/1 ANNUALLY UNLESS THE EQUIPMENT IS MOVED, OR CHANGES OWNERSHIP. IF THE BILLING FOR ANNUAL RENEWAL FEE (RULE 301.F) IS NOT RECEIVED BY THE EXPIRATION DATE, CONTACT THE DISTRICT.**

LEGAL OWNER OR OPERATOR: UNITED ROCK PRODUCTS

CO. ID.: 066241 SECTOR: SD

EQUIPMENT LOCATED AT: 1254 E ARROW HWY
IRWINDALE, CA 917060000

EQUIPMENT DESCRIPTION:
FUEL STORAGE AND DISPENSING FACILITY CONSISTING OF:

| | |
|---|---|
| 1. ONE | UNDERGROUND GASOLINE STORAGE TANK(S), (EACH) 6,000 GALLON CAPACITY, METHANOL COMPATIBLE |
| 2. ONE | GASOLINE DISPENSING NOZZLES VENTED TO VAPOR RECOVERY SYSTEM, BALANCE RETRACTOR |
| 3. TWO | UNDERGROUND DIESEL STORAGE TANK(S), (EACH) 12,000 GALLON CAPACITY, METHANOL COMPATIBLE |
| 4. THREE | DIESEL DISPENSING NOZZLES. |
| 5. ONE | UNDERGROUND WASTE OIL STORAGE TANK(S), (EACH) 1,000 GALLON CAPACITY. |

FILE COPY

PERMIT CONDITIONS:

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. AT LEAST ONE FUEL STORAGE TANK AT THIS FACILITY MUST BE METHANOL COMPATIBLE AND MUST BE U.L. APPROVED FOR METHANOL USE.

4. ANY SEALS, FITTINGS, AND PIPING WHICH WILL CONTACT, CONTAIN OR TRANSFER METHANOL IN UNDERGROUND PIPING TO AND FROM THE METHANOL COMPATIBLE STORAGE TANK MUST BE METHANOL COMPATIBLE.

5. ANY SEALS AND FITTINGS WHICH ARE INSTALLED IN ABOVE-GROUND PIPING IN DISPENSERS OR IN OTHER EQUIPMENT WHICH CAN BE EASILY CHANGED NEED NOT BE METHANOL COMPATIBLE BUT MUST BE CHANGED TO METHANOL COMPATIBLE MATERIALS BEFORE METHANOL IS STORED AND DISPENSED.

6. RECORDS MUST BE MAINTAINED AT THIS FACILITY WHICH CLEARLY MARK AND LOCATE THE POSITION OF THE METHANOL COMPATIBLE STORAGE TANK AND ITS PIPING, AND WHICH ALSO STATE THE TANK MANUFACTURER AND THE DATE OF INSTALLATION.

7. (EXCEPT FOR DIESEL TRANSFERS) PHASE I AND PHASE II VAPOR RECOVERY SYSTEMS MUST BE IN FULL OPERATION WHENEVER THIS FACILITY IS IN USE. SUCH SYSTEMS MUST BE INSTALLED, OPERATED AND MAINTAINED TO MEET ALL CARB CERTIFICATION REQUIREMENTS.

# PERMIT to CONSTRUCT/OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731



## CONTINUATION OF PERMIT TO CONSTRUCT/OPERATE

### NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO CONSTRUCT/OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

APPROVAL OF THE DEPARTMENT OF PUBLIC WORKS, THE DEPARTMENT OF BUILDING AND SAFETY, THE LOCAL FIRE DEPARTMENT AND/OR THE LOCAL TANK LAW IMPLEMENTING AGENCY IS REQUIRED BEFORE CONSTRUCTION IS STARTED.

THIS PERMIT TO CONSTRUCT/OPERATE IS BASED ON THE PLANS, SPECIFICATIONS, AND DATA SUBMITTED AS IT PERTAINS TO THE RELEASE OF AIR CONTAMINANTS AND CONTROL MEASURES TO REDUCE AIR CONTAMINANTS. NO APPROVAL OR OPINION CONCERNING SAFETY AND OTHER FACTORS IN DESIGN, CONSTRUCTION OR OPERATION OF THE EQUIPMENT IS EXPRESSED OR IMPLIED.

FILE COPY

EXECUTIVE OFFICER

BY RAQUEL PUERTA
09/13/90

**THIS ~~PERMIT~~ PERMIT TO OPERATE R-M96595 SUPERSEDES ~~PERMIT~~ Permit**

**TO OPERATE M96595 ISSUED 09/13/90**

MAILING ADDRESS:
UNITED ROCK PRODUCTS
1254 E ARROW HWY

INWINDALE, CA 917060000

DATE: 11/05/90
ID: 066241
SECTOR: SD

54-38
SD
CD

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
## 9150 FLAIR DRIVE, EL MONTE, CA 91731 (818)572-6212

## APPLICATION FOR PERMIT TO CONSTRUCT/OPERATE FOR FUEL STORAGE & DISPENSING FACILITY

1. BUSINESS LICENSE NAME: UNITED ROCK PRODUCTS — CORPORATION[X] PARTNERSHIP[ ] INDIV.OWNERSHIP[ ]

2. LOCATION ADDRESS: 1245 E. Arrow Hwy — LOCATION CITY: Irwindale — ZIP CODE: 91706

3. LOCATION COUNTY: LOS ANGELES[X]1 ORANGE[ ]2 RIVERSIDE[ ]3 SAN BERNARDINO[ ]4

4. MAILING ADDRESS: 4988 E. Firestone Bl — CITY: SouthGate — STATE: CA — ZIP CODE: 90280

5. APPLICATION TYPE: NEW FACILITY[ ]1 ALTERATION[X]2 CHANGE OF OWNERSHIP[ ]3 EXISTING DIESEL TANK[ ]4
CO. ID # _____ PREVIOUS PERMIT # _____
FOR ALTERATION: #TANKS ADD 4 REMOVE _____ REPLACE _____ #NOZZLES ADD 4 REMOVE _____
ADDITION OF PHASE I CONTROL _____ ADDITION OF PHASE II CONTROL _____ ADDITION OF SUBMERGED FILL _____

6. BUSINESS TYPE: (CHECK ONE BOX ONLY)
RETAIL [ ]1 CONSUMER ACCOUNT [ ]2 GOVERNMENT AGENCY [ ]3
FOR CONSUMER ACCOUNT AND GOVERNMENT AGENCY, DO YOU OWN ANY FLEET VEHICLES? YES[ ] NO[ ]
IF YES, TOTAL NUMBER OF FLEET VEHICLES: _____

7. BOARD OF EQUALIZATION NUMBER:

8. VAPOR RECOVERY SYSTEMS: (See Reverse Side For Instructions)
PHASE I ONLY[ ]1 PHASE II ONLY[ ]2 BOTH PHASE I & II[X]3 EXEMPT[ ]5

9. TANK AND NOZZLE INFORMATION: (Please List All Tanks And Nozzles On Premises)
(See Reverse Side For Instructions)

| TYPE | NUMBER OF TANKS | TANK CAPACITY (GALLONS) | THRUPUT (GAL/YEAR) | NUMBER OF NOZZLES | CONTROL TYPE (Phase II) | UNDERGROUND [1] OR ABOVEGROUND [2] |
|---|---|---|---|---|---|---|
| GASOLINE | 1 | 6,000 | | 1 | 91 | [1] |
| METHANOL | | | | | | [ ] |
| DIESEL | 2 | 12,000 | | 3 | | [1] |
| LPG | | | | | | [ ] |
| WASTE OIL | 1 | 1,000 | | | | [1] |
| OTHER | | | | | | |
| | | | | | | [ ] |

10. METHANOL COMPATIBLE TANK INFORMATION: (See Reverse Side For Instructions)
DO YOU HAVE ANY EXISTING METHANOL COMPATIBLE TANKS WHICH HAVE A FUEL STORAGE AND DISPENSING PERMIT? YES[X] NO[ ]
IF YES, PERMIT # _____
IF NO, YOU MUST SUBMIT CERTIFICATION FROM THE MANUFACTURER WITH THE APPLICATION FOR:
A. METHANOL TANKS
B. SEALS, FITTINGS AND PIPING

11. INSTALLATION DATE: 7-2-90 — 12. NOTICE TO COMPLY #:

SIGNATURE: _____ DATE: 6-22-90

PRINT NAME: EDDIE TAFOYA — TITLE: Sales Engineer — TELEPHONE: ( 213 ) 531-3200

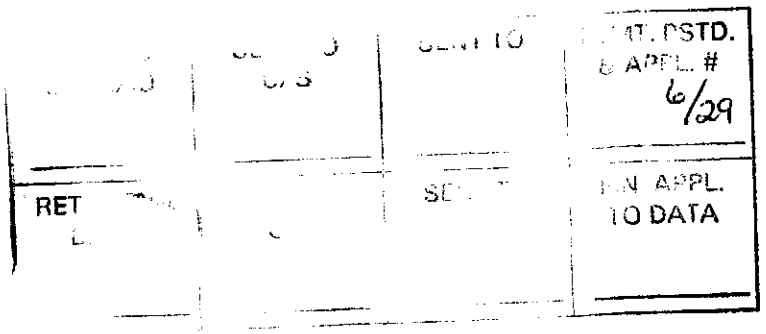
CONTRACTOR'S NAME, ADDRESS AND TELEPHONE NUMBER:
L. BLAIN CO. 16257 Illinois Ave Paramount, CA 90723

SCAQMD USE ONLY CO. ID#: 65341 — APPLICATION NO: 231453

TRANSACTION CODE: DATE: 6-26-90 — CHECK NO.: 2541 — AMOUNT: 75.00

UNITED ROCK 186857 (21) L. BLAIN CO. 16257 ILLINOIS AVE PARAMOUNT, CA 90723

1/89 - FORM 400




PROCESSED
JUN 29 RECD
DATA ENTRY UNIT
BY

11/5/90 F#

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

AEIS Permit/Application Move Authorization M96595

| Incorrect | Correct |
|---|---|
| Co. ID# 065341 | Co. ID# 066241 ✓ |
| Permit/Appl # 231453 M96595 | Permit/Appl # 231453 (10) M96595 9-13-90 |
| Name & Address | Name & Address |
| UNITED ROCK & CONCRETE CORP<br>1245 E ARROW HWY<br>IRWINDALE | UNITED ROCK PRODUCTS<br>1245 E ARROW HWY<br>IRWINDALE |

PROCESSED
OCT 30 1990
DATA ENTRY UNIT
BY

ENFORCEMENT DIVISION SECTION

Enforcement Initiator/Other _____ Date _____

Section Supervisor _____ Date _____

Principle Permit Process Clerk _____ Date _____

Engineering Data Entry _____ Date _____

Maria Cruz
Finance File Clerk

10/24/90
Date

PROCESSED
OCT 16 1990
CUSTOMER SERVICE UNIT
By

# ROUTING - REQUEST

TO: CONNIE YEE/ ENGR.

FROM: LEA ROSS/CUSTOMER SERVICE

ID#: 066241 UNITED ROCK PRODUCTS

PLEASE

____ REISSUE M96595 TO CORRECT COMPANY NAME TO

____ INACTIVATE UNITED ROCKS PRODUCTS AND CHANGE COMPANY ID 066241

CORRECTION

____ REACTIVATE

____ CANCEL MAIL CORRECTED P/O TO CUSTOMER AND FORWARD OTHER COPIES AS USUAL

_X_ FORWARD TO RECORDS

C/S INITIALS LYR October 16, 1990

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# PERMIT to CONSTRUCT/OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

PERMIT NO. M96595
A/N 231453
PAGE 1

**This initial permit must be renewed by 1/1 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.**

Legal Owner or Operator: UNITED ROCK & CONCRETE CORPORATION
CO. ID.: 065341 SECTOR: SD

Equipment Located At: 1245 E ARROW HWY
IRWINDALE, CA 917060000

Equipment Description:
Fuel Storage and Dispensing Facility Consisting of:

| | |
|---|---|
| 1. ONE | UNDERGROUND GASOLINE STORAGE TANK(S), (EACH) 6,000 GALLON CAPACITY, METHANOL COMPATIBLE |
| 2. ONE | GASOLINE DISPENSING NOZZLES VENTED TO VAPOR RECOVERY SYSTEM, BALANCE RETRACTOR |
| 3. TWO | UNDERGROUND DIESEL STORAGE TANK(S), (EACH) 12,000 GALLON CAPACITY, METHANOL COMPATIBLE |
| 4. THREE | DIESEL DISPENSING NOZZLES. |
| 5. ONE | UNDERGROUND WASTE OIL STORAGE TANK(S), (EACH) 1,000 GALLON CAPACITY. |

FILE COPY

PERMIT CONDITIONS:

1. Operation of this equipment must be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.

2. This equipment must be properly maintained and kept in good operating condition at all times.

3. At least one fuel storage tank at this facility must be METHANOL compatible and must be U.L. Approved for methanol use.

4. Any seals, fittings, and piping which will contact, contain or transfer methanol in underground piping to and from the methanol compatible storage tank must be methanol compatible.

5. Any seals and fittings which are installed in above-ground piping in dispensers or in other equipment which can be easily changed need not be methanol compatible but must be changed to methanol compatible materials before methanol is stored and dispensed.

6. Records must be maintained at this facility which clearly mark and locate the position of the methanol compatible storage tank and its piping, and which also state the tank manufacturer and the date of installation.

7. (Except for Diesel transfers) Phase I and Phase II Vapor Recovery Systems must be in full operation whenever this facility is in use. Such systems must be installed, operated and maintained to meet all CARB certification requirements.

# PERMIT to CONSTRUCT/OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

PERMIT NO.
M96595
A/N 231453
PAGE 2

Continuation of Permit to Construct/Operate

## NOTICE

In accordance with RULE 206, this permit to construct/operate or copy must be posted on or within 8 meters of the equipment.

This permit does not authorize the emission of air contaminants in excess of those allowed by Division 26 of the Health and safety code of the State of California or the rules of the Air Quality Management District. This permit cannot be considered as permission to violate existing laws, ordinances, regulations or statutes of other government agencies.

Approval of the Department of Public Works, the Department of Building and Safety, the local Fire Department and/or the local tank law implementing agency is required before construction is started.

This permit to construct/operate is based on the plans, specifications, and data submitted as it pertains to the release of air contaminants and control measures to reduce air contaminants. No approval or opinion concerning safety and other factors in design, construction or operation of the equipment is expressed or implied.

Executive Officer

By Raquel Puerta
09/13/90

FILE COPY

MAILING ADDRESS:
UNITED ROCK & CONCRETE CORPORATION
13131 LOS ANGELES STREET

IRWINDALE, CA 91706

DATE: 09/13/90
ID: 065341
SECTOR: SD

1 gas - 1 nozzle

346056/13

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
## 9150 FLAIR DRIVE, EL MONTE, CA 91731 (818)572-6212

## APPLICATION FOR PERMIT TO CONSTRUCT/OPERATE FOR FUEL STORAGE & DISPENSING FACILITY

1. BUSINESS LICENSE NAME: CORPORATION[ X ] PARTNERSHIP[ ] INDIV.OWNERSHIP[ ]
United Rock Products Corporation

2. LOCATION ADDRESS: 1245 East Arrow Highway | LOCATION CITY: Irwindale | ZIP CODE: 91706

3. LOCATION COUNTY: LOS ANGELES[ X ]1 ORANGE[ ]2 RIVERSIDE[ ]3 SAN BERNARDINO[ ]4

4. MAILING ADDRESS: 13131 Los Angeles Street | CITY: Irwindale | STATE: California | ZIP CODE: 91706

5. APPLICATION TYPE: NEW FACILITY[ ]1 ALTERATION[ ]2 CHANGE OF OWNERSHIP[ X ]3 EXISTING DIESEL TANK[ ]4
CO. ID # PREVIOUS PERMIT # 9008134
FOR ALTERATION: #TANKS ADD ____ REMOVE ____ REPLACE ____ #NOZZLES ADD ____ REMOVE ____
ADDITION OF PHASE I CONTROL ____ ADDITION OF PHASE II CONTROL ____ ADDITION OF SUBMERGED FILL ____

6. BUSINESS TYPE: (CHECK ONE BOX ONLY)
RETAIL [ ]1 CONSUMER ACCOUNT [ X ]2 GOVERNMENT AGENCY [ ]3
FOR CONSUMER ACCOUNT AND GOVERNMENT AGENCY, DO YOU OWN ANY FLEET VEHICLES? YES[ ] NO[ X ]
IF YES, TOTAL NUMBER OF FLEET VEHICLES: ____

7. BOARD OF EQUALIZATION NUMBER:

8. VAPOR RECOVERY SYSTEMS: (See Reverse Side For Instructions)
PHASE I ONLY[ ]1 PHASE II ONLY[ ]2 BOTH PHASE I & II[ X ]3 EXEMPT[ ]5

9. TANK AND NOZZLE INFORMATION: (Please List All Tanks And Nozzles On Premises)
(See Reverse Side For Instructions)

| TYPE | NUMBER OF TANKS | TANK CAPACITY (GALLONS) | THRUPUT (GAL/YEAR) | NUMBER OF NOZZLES | CONTROL TYPE (Phase II) | UNDERGROUND [ 1 ] OR ABOVEGROUND [ 2 ] |
|---|---|---|---|---|---|---|
| GASOLINE | 2 | 14,000 | 6,000 | 1 | 91 | [ 1 ] |
| METHANOL | - | | | | | [ ] |
| DIESEL | 5 | 50,000 | 50,000 | 4 | | [ 1 ] |
| LPG | - | | | | | [ ] |
| WASTE OIL | 1 | 5,000 | | | | [ 1 ] |
| OTHER | | | | | | |
| Lube Oil | 1 | 5,000 | 5,000 | 1 | N/A | [ 1 ] |

10. METHANOL COMPATIBLE TANK INFORMATION: (See Reverse Side For Instructions)
DO YOU HAVE ANY EXISTING METHANOL COMPATIBLE TANKS WHICH HAVE A FUEL STORAGE AND DISPENSING PERMIT? YES[ ] NO[ X ]
IF YES, PERMIT # ____
IF NO, YOU MUST SUBMIT CERTIFICATION FROM THE MANUFACTURER WITH THE APPLICATION FOR:
A. METHANOL TANKS
B. SEALS, FITTINGS AND PIPING

11. INSTALLATION DATE: N/A | 12. NOTICE TO COMPLY #: C 11541

SIGNATURE: Thomas S Tedesco | DATE:

PRINT NAME: Thomas S. Tedesco | TITLE: Chairman | TELEPHONE: ( ) 818 - 960-3948

CONTRACTOR'S NAME, ADDRESS AND TELEPHONE NUMBER:

346056

**SCAQMD USE ONLY** CO. ID#: ~~05481~~ 65341 APPLICATION NO: 186857

TRANSACTION CODE: TRANS. NO.: ____ 03/20/89 CHECK NO.: 500200 AMOUNT: 300.00

Blue Prints Materials Rec. NO

~~9801347 (12) 485 Tse~~ R461 APPS

(1 OF 4)

9/88 - FORM 450

Prev P/O Expired
SBNew

# APPLICATION INSTRUCTIONS FOR FUEL STORAGE & DISPENSING FACILITIES

WHO MUST APPLY FOR A PERMIT:

Any person installing, or using one or more fuel tanks with capacities of more than 251 gallons must apply. Gasoline is defined as any organic liquid (including petroleum distillates and methanol) having a Reid vapor pressure of 200 mm Hg (3.9 psi) or greater.

PROCESSED

WHEN TO APPLY:

Prior to installation or alteration and prior to use if ownership or location is changed.

HOW TO APPLY:

A. Use Form 450 for each facility to be constructed, altered or for changes of ownership.

L Dowyak

B. Except as noted, every applicant filing for a permit shall pay a filing fee of $75 at the time the application is filed.

1. When an application for change of ownership is filed within 12 months from the date of change, and a permit had previously been granted for such equipment; in lieu of filing fee and initial permit fee, the applicant shall pay only a transfer fee of $75.00 for each permit unit being transferred from one person to another, payable at the time the application is filed.
2. An application filing fee is not required from a state or local governmental agency or public district.

C. Make checks payable to South Coast AQMD.

D. Fill in blanks and give all information requested on Form 450. Submit the completed form, properly signed by a responsible member of the organization.

E. Any vapor-recovery system being installed must be of a type certified by the California Air Resources Board. Submit drawings which show vapor piping to be installed and give details of dispensing nozzles, vapor-return connectors and vapor processing systems (if any).

NOTICE:

Construction or operation prior to receipt of Permit to Construct/Operate constitutes a violation of the Rules and Regulations of the SCAQMD.

## INSTRUCTION CODES

8. VAPOR RECOVERY SYSTEMS:

Requirements of Rule 461:

Rule 461(a) regulates the transfer of gasoline from delivery truck to storage tanks and requires installation of submerged fill-pipes and vapor-return connectors (Phase I vapor recovery). These connectors allow gasoline vapors to be returned from the storage tank to the delivery truck and to be sent to the bulk terminal for processing.

Rule 461(b) regulates the transfer of gasoline into motor vehicle tanks larger than five gallons. A special fill nozzle and vapor piping allow gasoline vapors to be returned from the vehicle fuel tank to the storage tank or to vapor processing equipment (Phase II vapor recovery).

For aboveground gasoline tanks, the standard Phase I and Phase II vapor control systems must be altered for compliance. Rule 463 also requires a pressure-vacuum relief valve.

P A/I 3/29 60 4/7/24

FIN TO

SENT TO

SENT TO C/S

SENT TO DATA/ID

RET. FROM DATA

RET. FROM C/S

9. CONTROL TYPE FOR GASOLINE PHASE II VAPOR RECOVERY SYSTEMS:

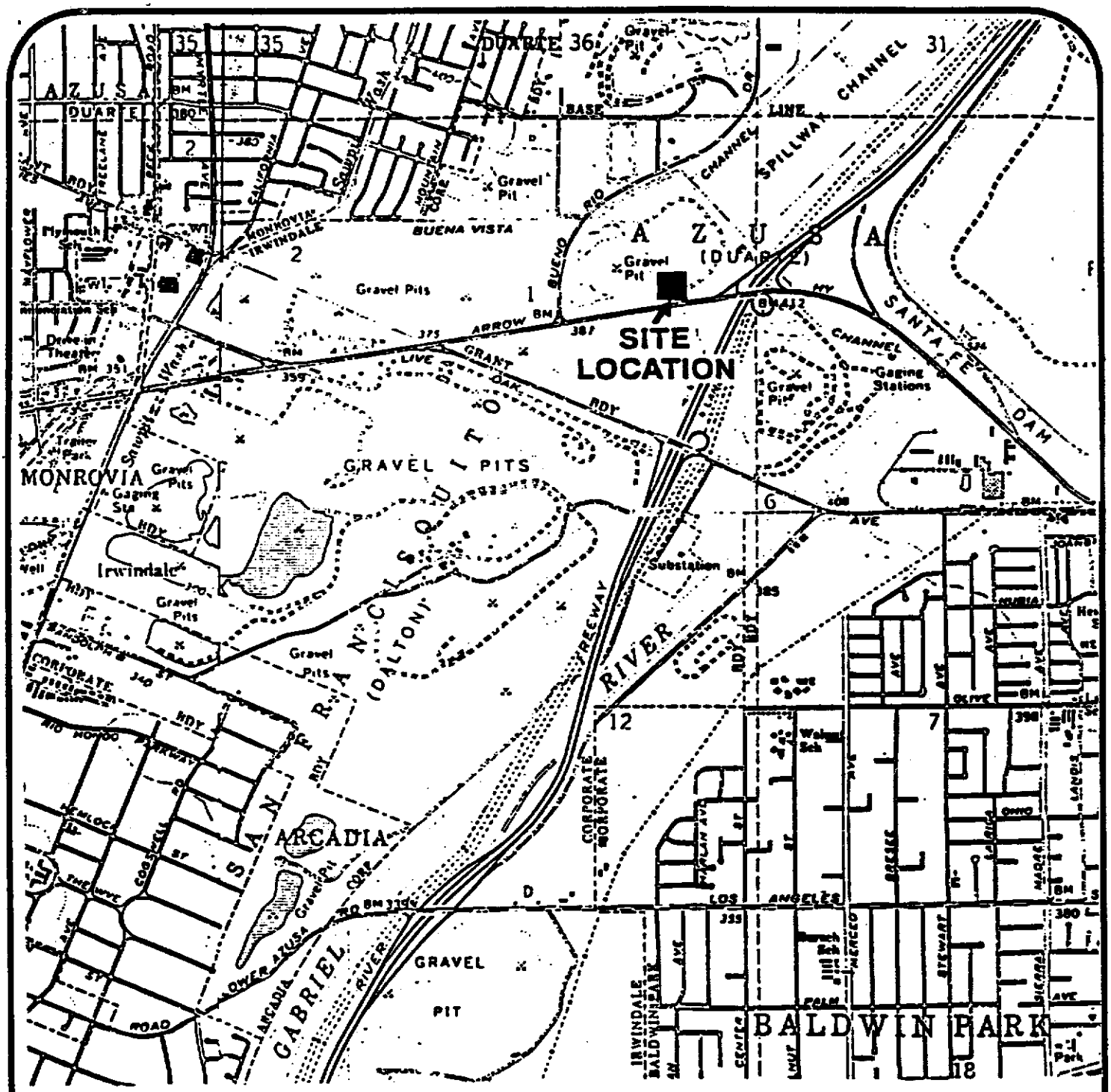
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Balance Retractor | (91) | Red Jacket Standard | (81) | Hirt Standard | (83) | Hasstech | (85) |
| Balance Hi Hose | (92) | Red Jacket Retractor | (82) | Hirt Retractor | (84) | Healy | (86) |
| Exempt | (70) | Red Jacket Hi Hose | (87) | Hirt Hi Hose | (88) | Healy Hi Hose | (89) |

10. METHANOL TANK AND PIPE REQUIREMENTS:

Rule 1170(c)(1) states that after July 1, 1988 a person shall not install or allow the installation of one or more new motor vehicle fuel storage tank(s) unless at least one such tank at any single motor vehicle fueling facility, along with all associated underground pipes is capable of safely storing and transporting methanol fuel, as evidenced by written certification from the manufacturer for the useful life of the tank.

Rule 1170(c)(2) requires certification from the manufacturer of the new motor vehicle fuel storage tank(s) shall meet Underwriters Laboratory (UL) standard 58 or 1316 as applicable to methanol fuel. Certification from the manufacturers of associated underground pipes shall meet any nationally established standard applicable to methanol fuel, and acceptable by the Executive officer.

Certification from the manufacturer of the tank must include Manufacturer's name, Business license name of purchaser and Tank equipment location. Certification from the manufacturer of the underground piping and fittings must include the Manufacturer's name. The certificates must be submitted with the application.



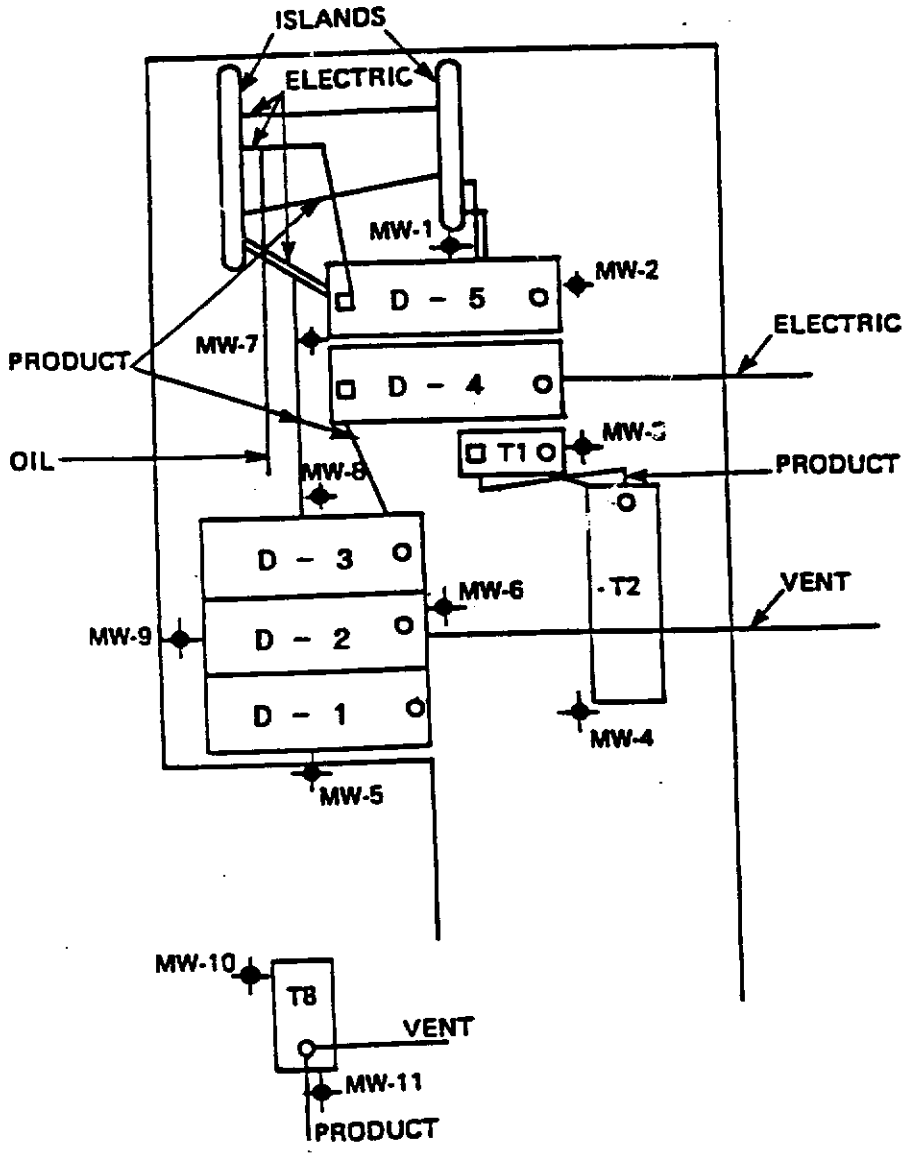

# LOCATION MAP

UNITED ROCK PRODUCTS CORP.
IRWINDALE, CALIF.

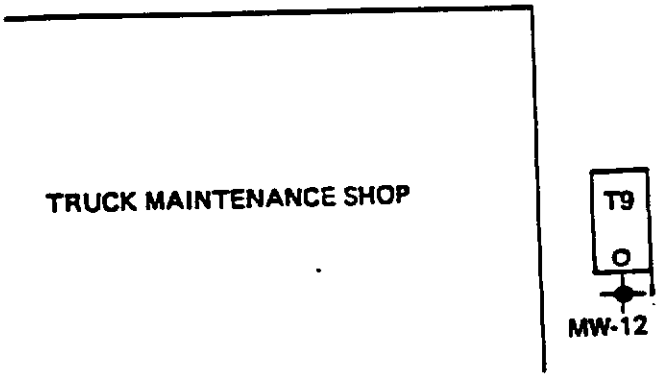
DATE: 2/9/89 | SCALE: 1" = 2000'

JRJ Associates

FIGURE 1




BOREHOLE, VADOSE WELL AND VAPOR PROBE LOCATIONS




SITE NOT TO SCALE
SCALE FOR TANKS
1 INCH = 25.4 FEET

**IRWINDALE FACILITY**

UNITED ROCK PRODUCTS CORP.
IRWINDALE, CALIF.

DATE: 2/9/89 | SCALE: NONE

JRJ Associates

FIGURE 2

JRJ Associates
Professionals in Waste Management and the Environment
Environmental Engineers
Civil Engineers
Safety Engineers

March 10, 1989

South Coast Air Quality Management District
9150 Flair Drive
El Monte, CA 91731

ATTN: Ms. Cheryl Marshall
Engineering Division

Dear Ms. Marshall:

**Subject: Resubmittal of Air Quality Permit Applications**
**- Fuel Storage and Dispensing Facility (1 application)**
**- Stationary Combustion Engine (3 applications)**

On behalf of United Rock Products Corporation I am resubmitting the subject applications for facilities at the URP Irwindale facilities. All facilities were previously owned by Blue Diamond Materials Corporation and were purchased in late 1988. The fuel transfer and storage facilities were under permit with the District previously.

Permits were never obtained for the stationary combustion engines because the previous owner was unaware of the requirement. As I indicated in our recent telephone conversation, URP has no information about the internal combustion engines other than that indicated on the application forms.

A check for $300.00 is also attached, to cover the application fees.

Please contact me at 213-831-8615 if you have questions or comments.

Respectfully,

Joseph B. Fulton
Senior Associate

enclosures

2515 S. WESTERN, SUITE 11, SAN PEDRO, CALIFORNIA 90732 • (213) 831-8615

modern welding company INCORPORATED
4141 N. BRAWLEY AVE. • FRESNO, CA 93722
FABRICATORS OF METAL PRODUCTS
(209) 275-9353

FAX: (209) 275-4381

RULE 1170 METHANOL COMPATIBLE FUEL STORAGE AND TRANSFER

MODERN WELDING COMPANY CERTIFIES IT'S UNDERWRITERS LABORATORIES LISTED STANDARD 58 UNDERGROUND STORAGE TANK TO BE TOTALLY CAPABLE OF SAFELY STORING METHANOL FUEL. THIS TANK IS CERTIFIED TO SAFELY STORE AND BE COMPATIBLE WITH 100% METHANOL FUEL.

Purchaser Name: UNITED ROCK PRODUCTS

Installers Name: L. BLAIN CO.

Users Name: UNITED ROCK PRODUCTS.

Installation Address: 1245 E. ARROW HWY.
IRWINDALE, CA. 91706.

Tanks: 2 - 12,000 GAL
1 - 6,000 GAL.
1 - 1,000 GAL.

UL Label# _____

Modern Welding Company, Inc
4141 North Brawley
Fresno, CA 93722

# technical bulletin

TO: U.L. MARKET
Number: 5 REVISED
June 19, 1987
Revised: July 15, 1988

Smith Fiberglass Products has completed laboratory testing on RED THREAD® II piping systems for service station applications. Smith Fiberglass Products recommends RED THREAD II pipe and fittings joined with DS-7014, DS-7024, and DS-7054 adhesive for all methanol and ethanol gasoline blends up to and including 100% methanol and 100% ethanol at temperatures up to 75°F.

We feel this will answer all questions regarding alcohol and alcohol/gasoline blends.

Kenneth J. Oswald
Project & Technical Support Supv.

KJO/ec

**L. BLAIN CO.**
State Contractor's License No. 271720
16257 ILLINOIS AVENUE
PARAMOUNT, CALIFORNIA 90723
(213) 531-3200

LONG BEACH CA
PM
25 JUN
1990
308 38

CONQUER
CYSTIC
FIBROSIS
USA
25
Yosemite

[redacted]

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

9150 Flair Drive, El Monte, CA 91731

## RECORD OF TELEPHONE CONVERSATION

United Rock Products Date 24 Sept 90
Appl. Name

213 531-3200 Appl. No. 231453
Applicant's Telephone No.

Eddie LaJoya Engineer
Person contacted and title

Sales Engineer Time

==========

Unable to speak to applicant at this time. ( )

A message was left for him to return call. ( )

Acknowledged receipt of application(s). ( )

Will contact applicant for (1) Appointment ASAP ( )

(2) Additional Info ( )

(3) ( )

Requested additional information: ( )

**CONVERSATION**

Eddie will call back 6 4 1:00 p.m.
10:55 A.M.

Gasoline - 4,000 gal.
Diesel - 30,000 gal

Tanks & Nothing Compatible

==========

# ROUTING - REQUEST

TO: CONNIE YEE/ ENGR.

FROM: LEA ROSS/CUSTOMER SERVICE

ID#: 066241 UNITED ROCK PRODUCTS

PLEASE

____ REISSUE M96595 TO CORRECT COMPANY NAME TO

____ INACTIVATE UNITED ROCKS PRODUCTS AND CHANGE COMPANY ID 066241

CORRECTION

____ REACTIVATE

____ CANCEL MAIL CORRECTED P/O TO CUSTOMER AND FORWARD OTHER COPIES AS USUAL

_X_ FORWARD TO RECORDS

C/S INITIALS LYR October 16, 1990

**L. BLAIN CO.**

2541

| | | |
|---|---|---|
| 6/25/90 | #1634 | $75.00 |

# SCAQMD Complaint Report

## Complaint 99579

Run Date: 9/14/2016 10:35:10

| | | | |
|---|---|---|---|
| Receive By: | KARLYNZ on 10/1/1992 23:50:00 | Assignment No: | 545468 |
| Assign By: | GARYB on 10/2/1996 07:56:05 | Inspector: | (RC06) |
| Dispatch On: | | Instruction: | |
| Team: | H | | |
| Type: | DUST | | |
| Inspection Date | | | |
| Description: | SMOKE AND DUST | | |

Instance Start Date:

Instance End Date:

## Complainant

First Name:

Address:

Phone:

## Alleged Source

Name: UNITED ROCK

Address: BATEMAN, DUARTE, CA 91010 (Sector CK)

## Actual Source

Name: UNITED ROCK PRODUCTS CORPORATION ID: 65341

Address: 1245 E ARROW HWY, IRWINDALE, CA 91706-1302 (Sector CK)

Facility TS: TS-11 Industrial: Sector-based Inspections

## Disposition

OC on 11/27/1996 08:47:00

## Inspector Comment

Facility was in operation during time of inspection. No dust/smoke observed at this time.

INSPECTOR: signature _____ DATE: _____

SUPERVISOR: signature _____ DATE: _____

User ID: lramos

# South Coast Air Quality Management District

## NC A12985

Run Date : 9/14/2016 10:31:14

### Company

| | |
|---|---|
| Facility: | UNITED ROCK PRODUCTS CORPORATION (ID: 65341) |
| Location Address: | 1245 E ARROW, HWY IRWINDALE |
| Mailing Address: | 1245 E ARROW, HWY, CA 91706-130 |
| AIRS ID | 06037CF302 |

### Violation

| | |
|---|---|
| Notice Issued Date: | 7/30/1993 |
| Violation Date: | 7/30/1993 |
| Serve To: | UNITED ROCK PRODUCTS CORP ORATION |
| Title: | |
| Issue By: | |
| Assignment No.: | 485853 |
| Compliance Achieved Date: | |
| Equipment Description: | IC ENGINE |
| Compliance Requirements: | SUBMIT 1110.2 COMPLIANCE |

### Disposition

| | |
|---|---|
| Final Action Code: | |
| Due Date: | |
| Violation Days: | 0 |

### Rule/Comment

1110.2 GAS & LIQUID FUELED INTERNAL COMBUSTION ENGINES
203 PERMIT OPERATE OR CONDITIONS

### Emittent

### Follow-Up

Status: Inspector ID: Inspection Date: Number:

### Device IDs.

### Inspector Comment

INSPECTOR: _____ DATE: _____
signature

SUPERVISOR: _____ DATE: _____
signature

User ID: lramos

# SCAQMD Complaint Report

## Complaint 126895

Run Date: 9/14/2016 10:35:29

| | | | |
|---|---|---|---|
| Receive By: | GRACEN on 9/29/1999 13:03:21 | Assignment No: | 599171 |
| Assign By: | LYNNB on 9/30/1999 08:10:58 | Inspector: | ARUN KUMAR (AG02) |
| Dispatch On: | 9/30/1999 | Instruction: | |
| Team: | I | | |
| Type: | DUST | | |
| Inspection Date | | | |
| Description: | HUGE CLOUDS OF DUST NOT WATERING DOWN | | |

Instance Start Date:

Instance End Date:

## Complainant

First Name:

Address:

Phone:

## Alleged Source

Name: SAND AND GRAVEL

Address: ARROW HWY, IRWINDALE, CA 91706 (Sector CK)

## Actual Source

Name: SULLY MILLER CONTRACTING CO ID: 34055

Address: 1245 E ARROW HWY, IRWINDALE, CA 91706-1302 (Sector CK)

Facility TS: TS-04 Cycle II RECLAIM/Non-Title V Facility

## Disposition

OC on 10/5/1999 10:00:28

## Inspector Comment

September 30, 1999

I telephoned Complainant. said that had noticed the large cloud of dust during jogging in the area, and the facility was not making any effort to control the dust.

I met Mr. Robert Warburner, Shift Supervisor At Sulley Miller (Blue Diamond) and informed him about the complaint. He said that he was aware of Rule 403 and they usually water the entire area five to six times a day to control the dust.

During inspection, I observed the paved and unpaved area of the facility was dry but I did not observe any dust leaving the property boundary. I discussed Rule 403 with him and informed him that I would be conducting surveillance in the area. Mr. Warburton instructed one of his employee to water the area immediately. I observed one water truck started watering the area. The wind was from the southwest, approximately 3-5 MPH.

Follow up needed.

INSPECTOR: signature _____ DATE: _____

SUPERVISOR: signature _____ DATE: _____

User ID: lramos

# South Coast Air Quality Management District

## NOV P34472

Run Date : 9/14/2016 10:32:37

### Company

| | |
|---|---|
| Facility: | UNITED ROCK PRODUCTS CORPORATION (ID: 65341) |
| Location Address: | 1245 E ARROW, HWY IRWINDALE, CA 91706-1302 |
| Mailing Address: | 1245 E ARROW, HWY IRWINDALE, CA 91706-1302 |
| AIRS ID | 06037CF302 |

### Violation

| | |
|---|---|
| Notice Issued Date: | 3/14/2002 |
| Violation Date: | 3/14/2002 |
| Serve To: | BRYAN STRAIGHT |
| Title: | CONTROLLER |
| Issue By: | RHONDA LAUGESON (Team: Y) |
| Assignment No.: | 693912 |
| Equipment Description: | |

Violation: FAILURE TO CONDUCT PHASE I AND II INITIAL REVERIFICATION TEST AS REQUIRED BY RULE 461.

### Disposition

| | |
|---|---|
| Final Action Code: | CLO 10/30/2002 00:00:00 |
| Achieved Date: | 03/14/2002 |
| Due Date: | |
| Violation Days: | 0 |

### Rule/Comment

461 e, 2, C

### Emittent

### Follow-Up

Status: INCOMP Inspector ID: RL04 Inspection Date: 03/14/02 00:00 Number:

### Lap Sample Numbers

### Device IDs.

### Inspector Comment

INSPECTOR: _____ DATE: _____
signature

SUPERVISOR: _____ DATE: _____
signature

User ID: lramos

# SCAQMD Notification Report

## Notification 41206

Run Date: 9/14/2016 12:27:50

| | | | | | |
|---|---|---|---|---|---|
| Receive By: | COLLEENC on 1/20/2003 14:32:00 | Assignment No: | 745290 | Inspection Date: | |
| Assign By: | | Inspector: | | | |
| Dispatch On: | | Disposition: | | | |
| Team: | T | AIRS ID: | 06065C0694 | | |
| Activity: | OTHER NOTIFICATIONS | Title V: | N | | |
| Instruction: | | | | | |

Description: PORTABLE ROCK CRUSHING. STATE REG. NO. 102523.

Instance Start Date: 01/14/2003 00:00 Instance End Date: 02/14/2003 00:00

## Notifier

Facility: 2542 RECYCLED BASE MATERIALS INC
First Name: STEVE Last Name: TIEN
Facility TS: TS-20 Industrial: Various Locations Equipment
Address: VARIOUS LOCATIONS IN SCAQMD, SUN VALLEY, CA 91352
Phone: (818)767-3088 (Work)

## Site Location

Facility: UNK
Facility TS:
Address: 1245 E ARROW HWY, IRWINDALE, CA 91706 (Sector CK)

## Inspector Comment

INSPECTOR: _____ DATE: _____
signature

SUPERVISOR: _____ DATE: _____
signature

User ID: lramos

# South Coast Air Quality Management District

## NOV P34396

Run Date : 9/14/2016 10:32:51

### Company

| | |
|---|---|
| Facility: | UNITED ROCK PRODUCTS CORPORATION (ID: 65341) |
| Location Address: | 1245 E ARROW, HWY IRWINDALE, CA 91706-1302 |
| Mailing Address: | 1245 E ARROW, HWY IRWINDALE, CA 91706-1302 |
| AIRS ID | 06037CF302 |

### Violation

| | |
|---|---|
| Notice Issued Date: | 9/2/2003 |
| Violation Date: | 5/30/2003 |
| Serve To: | FRANK KEOHANE |
| Title: | GENERAL MGR. |
| Issue By: | BERTHA A HERNANDEZ (Team: RC) |
| Assignment No.: | 785962 |
| Equipment Description: | |
| Violation: | UNITED ROCK PRODUCTS CAUSING OR ALLOWING PM 10 LEVELS TO EXCEED 50 MICROGRAMS PER CUBIC METER FOR THE FOLLOWING DATE MAY 30, 2003. |

### Disposition

| | |
|---|---|
| Final Action Code: | CLO 1/9/2008 00:00:00 |
| Achieved Date: | |
| Due Date: | |
| Violation Days: | 0 |

### Rule/Comment

403 d, 4

### Emittent

### Follow-Up

Status: Inspector ID: Inspection Date: Number:

### Lap Sample Numbers

### Device IDs.

### Inspector Comment

INSPECTOR: _____ DATE: _____

signature

SUPERVISOR: _____ DATE: _____

signature

User ID: lramos

# South Coast Air Quality Management District

## NC C88688

Run Date : 9/14/2016 10:31:01

### Company

| | |
|---|---|
| Facility: | UNITED ROCK PRODUCTS CORPORATION (ID: 65341) |
| Location Address: | 1245 E ARROW, HWY IRWINDALE, CA 91706-1302 |
| Mailing Address: | 1245 E ARROW, HWY IRWINDALE, CA 91706-1302 |
| AIRS ID | 06037CF302 |

### Violation

| | |
|---|---|
| Notice Issued Date: | 9/2/2003 |
| Violation Date: | 9/2/2003 |
| Serve To: | FRANK KEOHANE |
| Title: | GENERAL MGR. |
| Issue By: | BERTHA A HERNANDEZ (Team: RC) |
| Assignment No.: | 788594 |
| Compliance Achieved Date: | 09/04/2003 |
| Equipment Description: | |
| Compliance Requirements: | PROVIDE COPIES OF PRODUCTION RECORDS FOR THE PERIOD OF MAY 2003-JULY 2003. |

### Disposition

| | |
|---|---|
| Final Action Code: | CLO 9/4/2003 00:00:00 |
| Due Date: | 9/16/2003 |
| Violation Days: | 0 |

### Rule/Comment

42303

### Emittent

### Follow-Up

Status: INCOMP Inspector ID: BH02 Inspection Date: 09/04/03 00:00 Number:

### Device IDs.

### Inspector Comment

INSPECTOR: _____ DATE: _____

signature

SUPERVISOR: _____ DATE: _____

signature

User ID: lramos

# South Coast Air Quality Management District

## NC C88701

Run Date : 9/14/2016 10:30:48

### Company

| | |
|---|---|
| Facility: | UNITED ROCK PRODUCTS CORPORATION (ID: 65341) |
| Location Address: | 1245 E ARROW, HWY IRWINDALE, CA 91706-1302 |
| Mailing Address: | 1245 E ARROW, HWY IRWINDALE, CA 91706-1302 |
| AIRS ID | 06037CF302 |

### Violation

| | |
|---|---|
| Notice Issued Date: | 1/7/2004 |
| Violation Date: | 1/7/2004 |
| Serve To: | KEN BARKER |
| Title: | CONSULTANT |
| Issue By: | BERTHA A HERNANDEZ (Team: RC) |
| Assignment No.: | 808003 |
| Compliance Achieved Date: | 01/21/2004 |
| Equipment Description: | |
| Compliance Requirements: | PROVIDE PRODUCTION RECORDS FOR P/O D08807, D08808, D08809, D08810, D08811, D08812, D08813. PROVIDE OR ID LOCATION OF 3 ICE P/O D11493, D11492, D11490. |

### Disposition

| | |
|---|---|
| Final Action Code: | CLO 1/21/2004 00:00:00 |
| Due Date: | 1/21/2004 |
| Violation Days: | 0 |

### Rule/Comment

42303

### Emittent

### Follow-Up

Status: INCOMP Inspector ID: BH02 Inspection Date: 01/21/04 00:00 Number:

### Device IDs.

### Inspector Comment

INSPECTOR: _____ DATE: _____

signature

SUPERVISOR: _____ DATE: _____

signature

User ID: lramos

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

SCAQMD LIBRARY
87036766

# RULE 403 PM SAMPLING AROUND VARIOUS GRAVEL MINING OPERATIONS

**Report #MA2003-10**

Barry R. Wallerstein, D. Env.
Executive Officer

Carol Coy
Deputy Executive Officer
Engineering & Compliance

Peter Mieras
District Prosecutor

Edwin Pupka
Senior Enforcement Manager

Rudy Eden
Senior Laboratory & Analysis Manager

February 2004

ZSCAQMD
/MET
-2003-10

87036766

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## EXECUTIVE SUMMARY

The South Coast Air Quality Management District (AQMD) initiated a comprehensive air monitoring study in May 2003 to characterize air quality impacts of gravel mining activities in the Irwindale area.

Air quality impacts from gravel mining activities are regulated at federal and local levels. Such health-protective regulations help reduce public exposure to the smaller fugitive dust particles ($PM_{10}$) that become suspended in the air as the result of these activities.

At the local level, fugitive dust is regulated under AQMD Rule 403 – Fugitive Dust. As such, $PM_{10}$ ambient monitoring of the gravel mining activities follows the monitoring procedures provided in Rule 403. This procedure is different from the traditional ambient monitoring conducted in various communities since Rule 403 establishes a $PM_{10}$ upwind/downwind differential concentration level that facilities must meet.

$PM_{10}$ sampling was conducted at six of the largest gravel mining operations in Irwindale and Azusa. Sampling was initiated in May 2003 at United Rock/Sully Miller, Hanson Aggregate, Calmat/Vulcan Materials, Robertson's Ready Mix, Nu-Way Live Oak, and All American Asphalt. Results of sampling completed at these facilities through October 2003 is provided in this report.

$PM_{10}$ samples collected in the study were analyzed for total mass. Additionally, wind monitoring was conducted to describe air mass movement during sampling to determine upwind and downwind locations.

At each of the locations three five-hour samples were collected to determine compliance with AQMD Rule 403. This rule requires any facility with the potential to produce fugitive dust to take measures to limit those emissions to no more than 50 $\mu g/m^3$, measured as the difference between upwind and downwind ambient concentrations collected over a five-hour interval at or near the facility fence line.

In addition to the Rule 403 sampling, AQMD staff examined the $PM_{10}$ ambient measurements at several of its monitoring stations located near the gravel mining sites with measurements at sites further away to determine any correlations to particulate emissions from the gravel mining activities.

### Key Findings

#### Rule 403 Monitoring

1. Monitoring completed at four of the six sites indicate upwind/downwind $PM_{10}$ measured differences greater than the 50 $\mu g/m^3$ threshold established by AQMD Rule 403. The exceedances led AQMD to issue Notices of

Violation to the responsible facilities located at the sites (see below for further action).

2. Levels measured at the Live Oak Ave. site were highest during the latter part of the sampling period. This suggests a large source of the measured $PM_{10}$ is re-entrained road dust and is consistent with track out observed at several locations.

3. Results of upwind sampling at Robertson's Ready Mix and All American Asphalt suggest that unpaved access roads and track out to public streets may contribute significantly to ambient PM levels.

$PM_{10}$ Ambient Measurements

Comparison of $PM_{10}$ ambient measurements at the AQMD Azusa monitoring station indicate that PM10 measurements at Azusa are higher generally compared to measurements at other stations located in nearby areas. In addition, during the two days that Rule 403 violations were found during this study, violating facilities may have contributed significantly to the Azusa station's monitoring data. (See Table 2)

Compliance Enforcement Activities

1. Notices of Violation (NOVs) were issued to four of the six facilities operating at the time Rule 403 monitoring was conducted. Specifically, United Rock/Sully Miller, Hanson Aggregate, Calmat/Vulcan Materials, and Nu-Way Live Oak were issued NOVs.

2. The AQMD is in discussions with the four facilities and has requested the facilities to consider measures to mitigate the violations.

Future Actions/Activities

1. AQMD staff is continuing its monitoring of gravel mining activities at other locations in the South Coast Air Basin as part of Rule 403.

2. AQMD Chief Prosecutor's Office is pursuing appropriate remedy for the violations that have occurred to date.

3. AQMD staff is working with the City of Irwindale to implement an Interagency Workplan to enhance communication among the stakeholders and provide a schedule to implement mitigation measures.

4. AQMD staff will continue efforts to inform local jurisdictions where such mining activities or other dust-related activities occur to take steps to reduce potential dust emissions as early as possible.

## 1.0 INTRODUCTION

Rule 403 requires facilities to limit $PM_{10}$ emission to less than 50 $\mu g/m^3$ as measured by an upwind/downwind differential. These measurements are made using the techniques referred to in the rule that follow Federal Reference Methods for the collection of $PM_{10}$ as specified by the U.S. Environmental Protection Agency (EPA).

In order to determine how sand and gravel operations may be affecting local air quality, six aggregate processors were initially selected for monitoring. Monitoring was conducted on at least three separate days at each location. All samples were processed according to established procedures and analyzed in the AQMD laboratory.

## 2.0 RULE 403 GRAVEL MINING OPERATION $PM_{10}$ SAMPLING

Irwindale and Azusa are located in the northeastern part of the South Coast Air Basin commonly referred to as the Foothills. These communities are bounded on the north by the San Gabriel Mountains, on the east by the San Bernardino Mountains, and on the southeast by the Santa Ana Mountains. To the south, the foothills open into the San Gabriel River Valley. Elevations in the Azusa area range from 560 to 700 feet above mean sea level (msl) and in the Irwindale area range from 320 to 560 feet above msl. The San Gabriel Mountains rise to elevations over 10,000 feet above msl on the north while the Santa Ana Mountains reach elevations over 5,000 feet above msl and the San Bernardino Mountains reach elevations over 10,000 feet above msl. Irwindale and Azusa can be characterized as gentle and moderate foothill terrain in relation to their surroundings. The San Gabriel River Basin and its associated flood plains are the major influence on the topography in these areas. The gravel pits mine rock and soil deposits left by the San Gabriel River.

Like most cities in the South Coast Air Basin, Irwindale and Azusa are influenced by the sea breeze. Winds are predominantly from the southwest when the sea breeze is the strongest. In spring cloudiness will prevail over the coastal cities for longer periods, whereas Irwindale and Azusa may have fewer or higher, thin clouds due to daytime radiation heating. June is the time when "June gloom" may predominate the South Coast Air Basin. Clouds are present most of the day over widespread areas and can be trapped by inversions that lift only with sufficient radiation heating. In summer, cloudiness is virtually nonexistent in the inland areas. The predominant weather pattern is a high pressure system centered over the eastern Pacific Ocean which envelopes the entire California coastal region. Surface heating during the day draws marine air into the inland regions and, cooling after sunset, slows the onshore flow eventually reversing it for a few hours. Autumn is one of the most stagnant weather periods in Southern California. Synoptic-scale weather systems are still too weak to produce cloudy and rainy weather when they penetrate the San Gabriel Mountain range. Sea breezes are commonly counteracted by strong high pressure systems that build up over interior deserts causing wide-spread stagnation. Occasionally, the clockwise circulation of wind around these high pressure systems produces an intense, dry, east wind, known locally as a Santa Ana. Santa Ana winds can last a few hours or several days. During Santa Ana winds the South Coast Basin experiences higher concentrations of particulates than when the ocean breeze is the main influence.

Monitoring was conducted upwind and downwind at each quarry/aggregate processor on three separate days for five hours each day from May 2003 through October 2003. Monitoring sites were selected on the basis of wind data, source locations, and requirements of Rule 403. General area site maps are shown in Figures 1 and 2.

The local climatological wind collected at the Buena Vista Channel indicated that the predominant air flow is southwesterly and airflow is moderate through the sampling

periods. Based on this information sites were selected both upwind and downwind and are shown for each aggregate processor. Specific monitoring locations are shown in Figures 3 through 6.

High volume $PM_{10}$ samplers and one wind monitoring system were installed at the following locations:

United Rock Products
1245 Arrow Highway
Site #1 Alpha Street (upwind)
Site #2 Buena Vista Street (downwind)
Site #3 Flood Control Channel (downwind)
**(see Figure 3)**

Calmat/Vulcan Materials
16001 Foothill Blvd
Site #1 Lario San Gabriel River Trail Park (upwind)
Site #2 Construction Workers School (downwind)
**(see Figure 5)**

Hanson Aggregates
13550 Live Oak Avenue
Site #1 Irwindale Speedway (downwind)
Site #2 Clark Street (upwind)
**(see Figure 4)**

Robertson's Ready Mix,
13623 Live Oak, Irwindale
Site #1 13530 Live Oak Ave. (upwind)
Site #2 Flood Control Channel (downwind)
**(see Figure 6)**

Nu-Way Live Oak
13620 Live Oak Ln.
Site #2 Flood Control Channel (upwind)
Site #3 Nu-Way Live Oak (downwind)
**(see Figure 6)**

All American Asphalt
13646 Live Oak
Site #3 Nu-Way Live Oak (upwind)
Site #4 All American Asphalt (downwind)
**(see Figure 6)**

**$PM_{10}$ Sampling Procedures**

The $PM_{10}$ samplers used to collect the samples consist of a size-selective inlet (SSI) head, filter holder, blower motor, timer, flow controller with electronic probe, and Dickson airflow recorder. To collect suspended particles, the blower motor draws air through the SSI head onto an eight by ten inch quartz fiber filter. Air flows through the sampler and is maintained at a constant rate by an electronic probe which automatically adjusts motor speed to correct variations in line voltage, temperature, pressure and filter loading. The flow of air is calibrated and subsequently recorded on a paper chart recorder.

Once a sample has been collected it is returned to the laboratory, following chain-of-custody protocols, where $PM_{10}$ mass is determined. Ambient $PM_{10}$ mass is determined by subtracting the weight of the clean unsampled filter (measured in the laboratory prior to sampling) from the weight of the sampled filter containing the collected $PM_{10}$, to yield the mass of the $PM_{10}$ collected on the filter. This mass is then divided by the amount of air drawn through the filter to give the ambient concentration, expressed as mass per cubic meter ($\mu g/m^3$).

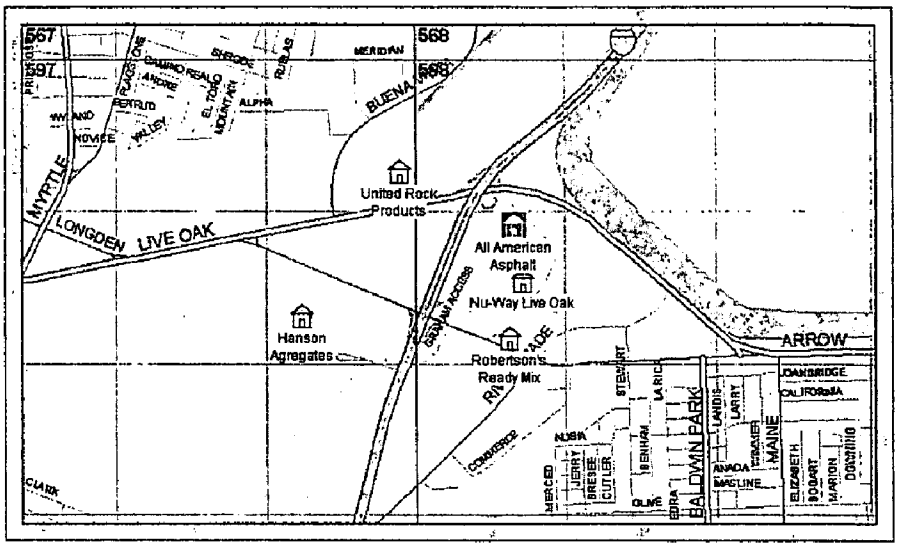



Figure 1. Irwindale Aggregate Processors

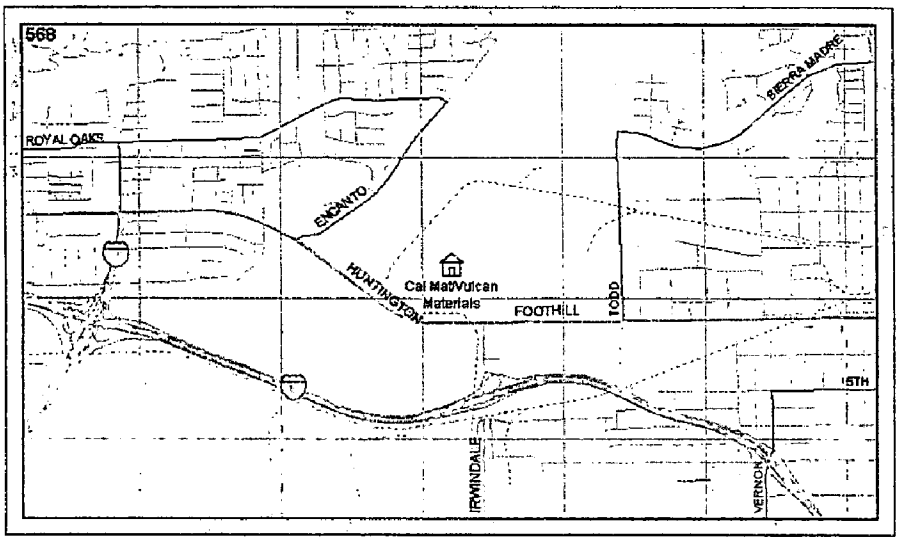



Figure 2. Azusa Aggregate Processor

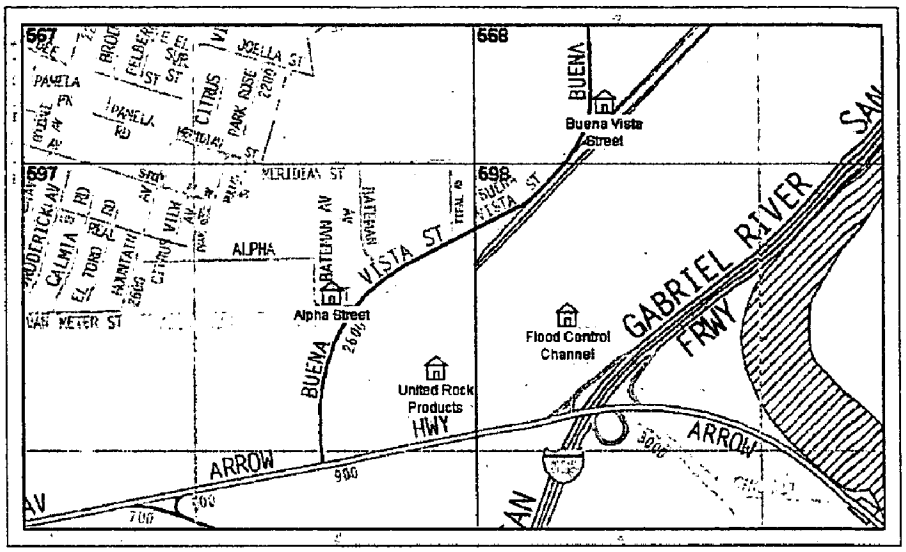



Figure 3. Sampling Locations for the United Rock/Sully Miller Operations
May 22, 2003 and June 16, 2003

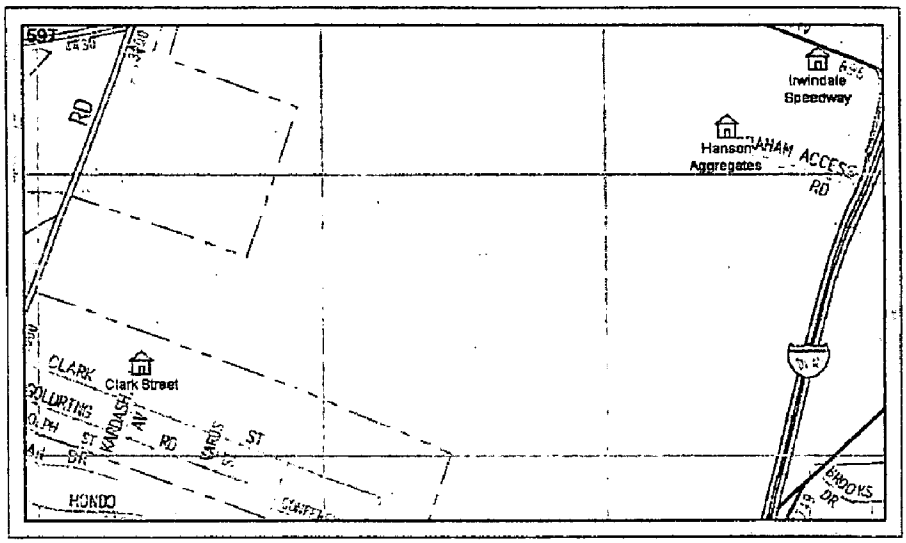



Figure 4. Sampling Locations for Hanson Aggregates - June 25, 30, and July 2, 2003

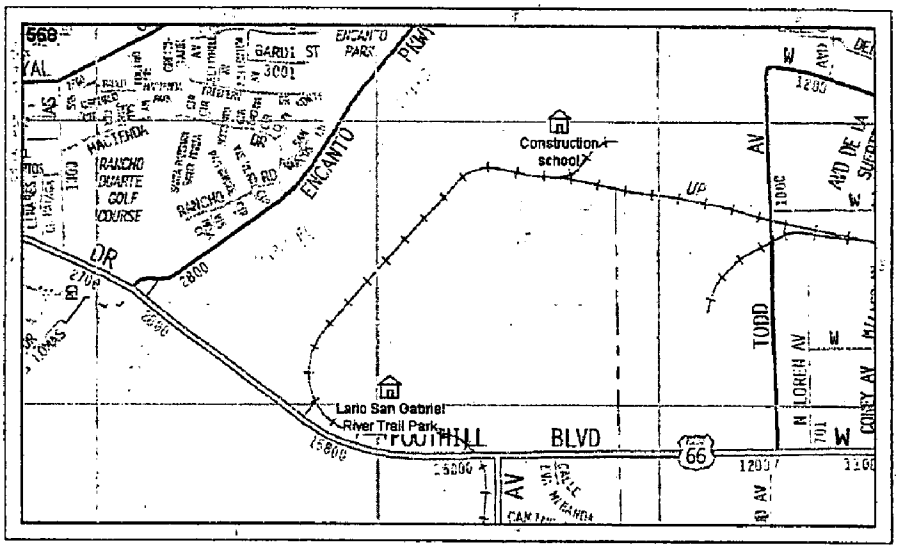



Figure 5. Sampling Locations for Calmat/Vulcan Materials - July 16, August 13 and 19, 2003

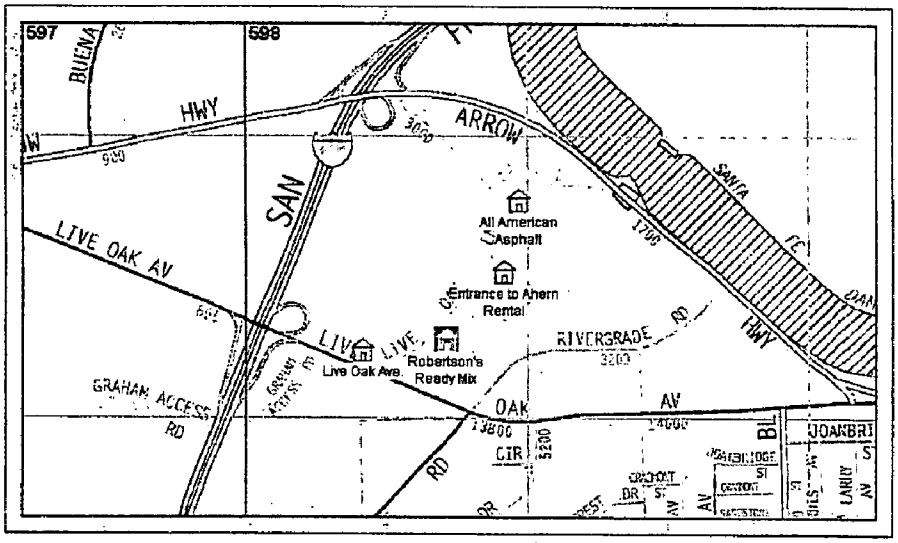



Figure 6. Sampling Locations for Robertson's Ready Mix/Nu-Way Live Oak/All American Asphalt - September 12, 18, 24, October 9 and 15, 2003

Since all of the sampling locations are in close proximity to one another, a wind system was installed on Flood Control property at the Buena Vista Channel in order to determine wind speed and direction for the area. The wind data collected is depicted in Figure 7 and indicates the predominant wind direction. Wind data specific to the sampling periods is located in Appendix A-1.

Wind data taken specific to the sampling period included in Appendix A-1 supports sampler placement at the selected sites. The wind data depicted is a picture of actual wind conditions at the time of sampling. This confirms that the sites selected were upwind and downwind. The chart depicts the direction that the wind is blowing from, as points of the compass.

**Monitoring Results**

Table 1 shows the results of the monitoring at the six locations. Rule 403 limits a facility with the potential to release fugitive dust to no more than 50$\mu g/m^3$, measured as the difference between simultaneous up and down wind sampling over a 5 hour monitoring interval. However, since there is a potential 10% error band in the sampling and analysis procedures, only values greater than 55 $\mu g/m^3$ are considered violations of the Rule. Sampling collected on five different periods exceeded Rule 403 upwind – downwind differential allowances. Those exceedances are further discussed in Chapter 3.

Table 1 also shows results from Robertson's Ready Mix and All American Asphalt where the upwind $PM_{10}$ values are greater than the downwind value. These events are noted by a number appearing in parenthesis in the table. Dust from the unpaved access roads and dust tracked out to public streets are the most likely cause of upwind $PM_{10}$ values being greater than downwind monitored $PM_{10}$ values. Potential control measures are discussed in Chapters 3 and 4 to prevent potential future violations. Lastly, many of the ambient measurements, including those upwind of the operations, are relatively high. This general condition for the area is further discussed in the next section of the report.

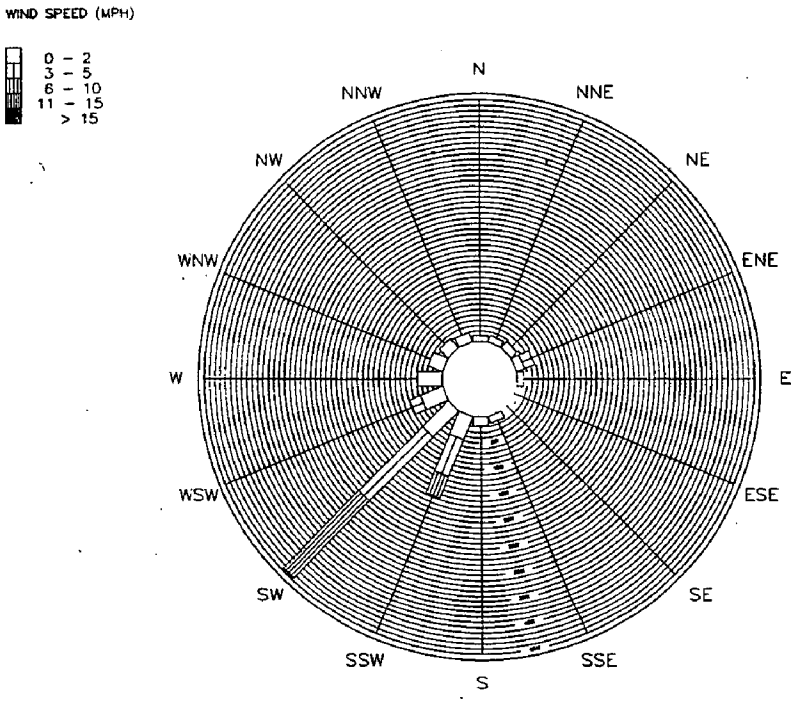



**Figure 7 – General Wind Patterns During the Monitoring Period**

Table 1. Rule 403 $PM_{10}$ Monitoring Results by Location ($ug/m^3$)

**(a) United Rock Products/Sully Miller/National Ready-Mix (Colas Inc.)**

| Date | Upwind | Downwind (1) | Downwind (2) | Difference upwind – downwind 1* | Difference upwind – downwind 2* |
|---|---|---|---|---|---|
| May 22, 2003 | 102 | 93 | 147 | (9) | 45 |
| May 30, 2003 | 71 | 63 | 131 | (8) | **60**** |
| June 16, 2003 | 99 | 91 | 132 | (8) | 33 |

**(b) Hanson Aggregates**

| Date | Upwind | Downwind | Difference upwind – downwind* |
|---|---|---|---|
| June 25, 2003 | 58 | 115 | **57**** |
| June 30, 2003 | 79 | 119 | 40 |
| July 2, 2003 | 66 | 166 | **100**** |

**(c) Calmat dba Vulcan Materials**

| Date | Upwind | Downwind | Difference upwind – downwind* |
|---|---|---|---|
| July 16, 2003 | 142 | 194 | 52 |
| August 13, 2003 | 83 | 167 | **84**** |
| August 19, 2003 | 88 | 114 | 26 |

Table 1. Concluded.

**(d) Robertson's Ready Mix**

| Date | Upwind | Downwind | Difference upwind – downwind* |
|---|---|---|---|
| Sept 12, 2003 | 188 | 126 | (62) |
| Sept 18, 2003 | 191 | 111 | (80) |
| Sept 24, 2003 | 191 | 114 | (77) |
| Oct. 9, 2003 | 202 | 122 | (80) |
| Oct 15, 2003 | 205 | 90 | (115) |

**(e) Nu-Way Live Oak**

| Date | Upwind | Downwind | Difference upwind – downwind* |
|---|---|---|---|
| Sept 12, 2003 | 126 | 153 | 27 |
| Sept 18, 2003 | 111 | 175 | 64 |
| Sept 24, 2003 | 114 | 146 | 32 |
| Oct 9, 2003 | 122 | 139 | 17 |
| Oct 15, 2003 | 90 | 170 | **80** |

**(f) All American Asphalt**

| Date | Upwind | Downwind | Difference upwind – downwind |
|---|---|---|---|
| Sept 12, 2003 | 153 | 143 | (10) |
| Sept 18, 2003 | 175 | 144 | (31) |
| Sept 24, 2003 | 146 | 136 | (10) |
| Oct 9, 2003 | 139 | 178 | 39 |
| Oct 15, 2003 | 170 | 151 | (19) |

* Values in parentheses indicate that the upwind particulate concentrations were higher than the downwind concentrations and did not violate Rule 403.

** Bold values denote violation of Rule 403 provisions.

**Ambient PM10 Monitoring**

The AQMD also routinely performs ambient air monitoring for $PM_{10}$ at many of its monitoring stations. Data are collected on a one-in-six day basis. The $PM_{10}$ measurements at the AQMD's routine monitoring stations cannot be directly compared with the Rule 403 monitoring because the routine measurements are collected on a 24-hour basis, whereas the Rule 403 measurements are collected on a five-hour basis. The $PM_{10}$ measurements at the Azusa monitoring station for July 2, 2003, August 13, 2003, and August 19, 2003 (the days when the one-in-six collection coincide with the Rule 403 monitoring) are presented in Table 2 along with measurements at other AQMD monitoring stations. The Azusa $PM_{10}$ data represent the average ambient particulate for the Azusa/Irwindale area. The measurements for these dates are in general agreement with the upwind sites and are much lower than the downwind sites of the facilities monitored. However, on two of the three days when violations were monitored, the $PM_{10}$ reported at Azusa tended to be higher than on the days where no violations occurred.

The Azusa air monitoring station is located approximately ¼ mile from the nearest sand and gravel handling operation. The station is part of the AQMD's $PM_{10}$ monitoring network. Table 2, below, shows the data from the entire $PM_{10}$ sampling network on sampling days that were coincident with monitoring conducted as a part of this Rule 403 air monitoring study. Although the data set is limited, it would appear to indicate that the Azusa air monitoring station is influenced by nearby sand and gravel handling operations and the higher PM10 concentrations, as compared to many other network sites may be indicative of operations at the nearby facility.

Table 2. Air Monitoring Data from AQMD $PM_{10}$ Network Sites ($ug/m^3$)*

| Station | July 2, 2003 | August 13, 2003 | August 19, 2003 |
|---|---|---|---|
| **Los Angeles County** | | | |
| Azusa | 80 | 89 | 56 |
| Burbank | 45 | 47 | 36 |
| Los Angeles | 48 | 49 | 34 |
| Long Beach | 33 | 40 | 24 |
| South Long Beach | No sample | 44 | 23 |
| Santa Clarita | 67 | 40 | 35 |
| Hawthorne | 44 | 39 | 27 |
| **San Bernardino County** | | | |
| Crestline | 32 | 32 | No sample |
| Fontana | 65 | 79 | 65 |
| Ontario | 52 | 58 | 36 |
| Redlands | 46 | 39 | 55 |
| San Bernardino | 53 | 60 | 52 |
| **Riverside County** | | | |
| Banning | No sample | 51 | 79 |
| Indio | 54 | 62 | 124 |
| Norco | 67 | 55 | 28 |
| Palm Springs | 30 | 43 | 108 |
| Perris | 60 | 64 | 51 |
| Rubidoux | 74 | 83 | 53 |
| **Orange County** | | | |
| Anaheim | 32 | 45 | 27 |
| Mission Viejo | 29 | 45 | 28 |

* 24-hour samples as opposed to 5-hour samples for Rule 403 compliance.

## 3.0 COMPLIANCE ACTION

Aggregate and gravel mining operations are governed by the following air quality rules and regulations:

- AQMD Rules 201 – Permit to Construct and Rule 203 - Permit to Operate (for equipment not subject to Rule 219 - Equipment Not Requiring a Written Permit Pursuant to Regulation II).
- AQMD Rule 401 and California Health & Safety Code § 41701 – Visible Emissions
- AQMD Rule 402 and California Health & Safety Code § 41700 – Public Nuisance
- AQMD Rule 403 – Fugitive Dust
- 40 CFR 60, Subpart OOO – Standards of Performance for Non-Metallic Mineral Processing Plants

AQMD Rule 403 applies to "any activity or man-made condition capable of generating fugitive dust, ..." including gravel mining, aggregate, and related activities. Such potential sources of fugitive dust are required "to prevent, reduce or mitigate their emissions... [in order] to reduce the amount of particulate matter entrained in the ambient air." In particular, Rule 403(d)(4) establishes a not-to-exceed health-protective $PM_{10}$ concentration limit, as well as a methodology for determining compliance with this limit, for air-entrained fugitive dust. Specifically, Rule 403 provides that "A person shall not cause or allow $PM_{10}$ levels to exceed 50 micrograms per cubic meter when determined, by simultaneous sampling, as the difference between upwind and downwind samples collected on high-volume particulate matter samplers or other U.S. EPA-approved equivalent method for $PM_{10}$ monitoring."

Sampling results shown in Table 1 show exceedances of the 50$\mu g/m^3$ $PM_{10}$ differential threshold on the following five occasions.

- At United Rock/Sully Miller on May 30, 2003, the $PM_{10}$ upwind/downwind differential threshold was **60$\mu g/m^3$** [71$\mu g/m^3$ (upwind)] – [131 $\mu g/m^3$ (downwind)], an exceedance of the 50$\mu g/m^3$ $PM_{10}$ differential threshold.
- At Hanson Aggregates on June 25, 2003, the $PM_{10}$ upwind/downwind differential threshold was **57$\mu g/m^3$** [58$\mu g/m^3$ (upwind)] – [115$\mu g/m^3$ (downwind)], an exceedance of the 50$\mu g/m^3$ $PM_{10}$ differential threshold.
- At Hanson Aggregates on July 2, 2003, the $PM_{10}$ upwind/downwind differential threshold was **100$\mu g/m^3$** [66$\mu g/m^3$ (upwind)] – [166$\mu g/m^3$ (downwind)], an exceedances of the 50$\mu g/m^3$ $PM_{10}$ differential threshold.

- At Calmat/Vulcan Materials on August 13, 2003, the $PM_{10}$ upwind/downwind differential threshold was **84µg/m³** [83µg/m³ (upwind)] – [167µg/m³ (downwind)], an exceedance of the 50µg/m³ $PM_{10}$ differential threshold.

- At the Nu-Way Live Oak on October 15, 2003 the $PM_{10}$ upwind/downwind differential threshold was **80 µg/m³** [90µg/m³ (upwind)] – [170µg/m³ (downwind)], an exceedance of the 50µg/m³ $PM_{10}$ differential threshold.

Notices of Violation (NOVs) were issued to the responsible parties as shown in Table 3 below.

Table 3. Issuance of Notices of Violation for $PM_{10}$ Sample Concentrations Exceeding 50µg/m3 [Rule 403(d)(4)]

| NOTICE OF VIOLATION | ISSUED TO | $PM_{10}$ SAMPLE CONCENTRATION | DATE OF $PM_{10}$ EXCEEDANCE |
|---|---|---|---|
| #P34396 | United Rock Products | 60 µg/m³ | 5-30-03 |
| #P34395 | Hanson Aggregates[1] | 57 µg/m³ | 6-25-03 |
| | | 100 µg/m³ | 7-02-03 |
| #P34397 | Calmat dba Vulcan Materials | 84 µg/m³ | 8-13-03 |
| #P41757 | Nu-Way Live Oak Landfill Inc | 80 µg/m³ | 10-15-03 |

In addition, at Nu-Way Live Oak Landfill Inc., on September 18, 2003, monitoring indicated a 64 µg/m³ difference between upwind and downwind sites. Although this difference exceeds the 50µg/m3 threshold required to prove a violation of Rule 403(d)(4), generator problems at sample site #3 foreshortening the sampling period from five to four hours invalidated sample results.

Upon settlement of these NOVs with the facilities, AQMD will disclose details of their resolution and disposition.

[1] Also cited for violation of Rule 403(f)(9): Failure to re-submit dust plan or statement of no change at least 60 days before plan expiration date.

## 4.0 MITIGATION OF CURRENT AIR QUALITY IMPACTS

Prior to settlement of their violations, a number of proactive measures are being implemented by the following facilities to reduce fugitive dust emissions from their sites:

United Rock Products

- Purchasing and operating a Tymco vacuum sweeper to reduce and prevent track out onto Arrow Hwy.
- Operating a full time water truck on site to water all unpaved roads inside the property.
- Improving dust controls on transfer points.
- Monitoring and controlling dust from storage piles.
- Operating a wash rack for drivers to wet down material before leaving facility.
- Operating a wheel washer to remove soil from vehicle tires as needed.
- Purchasing and installing a second clean track for the landfill quarry.

Hanson Aggregates

- Operating sweeper on site twice per day
- Operating three water trucks to dispense water as needed on all unpaved roads and storage sites near the speedway between the hours of 3:30 am through 8:00 pm. .
- Applying chemical stabilizers on all unpaved roadways as needed (Haul-EZ 02DL120-dust control with 81200-foaming agent commonly referred to as "fish oil")
- Installing netting at chain-link fence between Hanson and the Irwindale Speedway
- Installing irrigation lines on site running parallel to the Irwindale Speedway.
- Adding misters to form a curtain which prevents fugitive dust from crossing the property line.
- Planting pepper trees along the slope area.
- Constructing a rumble grate and waste water collecting system with wheel washer.
- Placing speed bumps on the roadways.

CalMat dba Vulcan Materials

- Treating all unpaved roads in summer with a chemical stabilizer called Westlake
- Paving entry road into aggregate plant with grinding recycled asphalt
- Daily operation of sweeper on Foothill Blvd 400 ft east and west of CalMat main entrance and south on Irwindale to the 210 Fwy.
- Operating an existing wheel washer at the main exit of the plant which automatically rinses and removes soil from tires as each vehicle leaves the facility.

Nu-Way Live Oak Landfill Inc.

Similar measures to those above will be discussed with Nu-Way to reduce emissions of fugitive dust associated with their operation.

AQMD compliance staff will continue its efforts at these and other gravel mining and aggregate operations in and around the Irwindale area to identify further strategies for mitigating fugitive dust emissions.

**Interagency Workplan**

In addition to additional monitoring, surveillance, and inspections conducted by AQMD staff to assure compliance with our health-protective emission standards, AQMD has proposed an Interagency Workplan that establishes:

- A policy for the exchange of information between AQMD staff and representatives from the City of Irwindale about fugitive dust and visible emission incidents
- A schedule for joint surveillance of aggregate and gravel mining operations by AQMD inspectors and City Code Enforcement staff
- A joint forum with City representatives and aggregate and gravel mining operators for ongoing discussion and feedback about further strategies for dust mitigation.

AQMD staff and representatives from the City of Irwindale participated in a joint planning session on January 20, 2004, to establish an implementation schedule with performance milestones and deliverables. These parties will convene a workshop with aggregate and gravel mining operators which will include training on AQMD fugitive dust rule requirements and mitigation strategies. Progress reports on milestones and deliverables will be provided to AQMD senior management.

**Prosecutor's Office Activities**

The enforcement function at the AQMD is shared between Engineering and Compliance and the Prosecutor's Office. Engineering and Compliance inspects and documents all observed violations, and the Prosecutor's Office reviews and resolves the violations. The Notices of Violation issued for violation of Rule 403 to Hanson Aggregates Irwindale Plant, Calmat Company dba Vulcan Materials, and United Rock Products have been reviewed and accepted for prosecution by the Prosecutor's Office. A Pre-suit letter has been sent to each facility requesting a written response. After these responses have been reviewed, each facility will be given an opportunity to meet with the assigned prosecutor to discuss resolution of the matter. In resolving these matters, in lieu of cash penalties paid to the AQMD, high priority will be given to implementing fugitive dust mitigation measures over and above those currently required. The settlement process typically takes several months to complete. Implementation of the mitigation measures will be scheduled for the earliest possible dates.

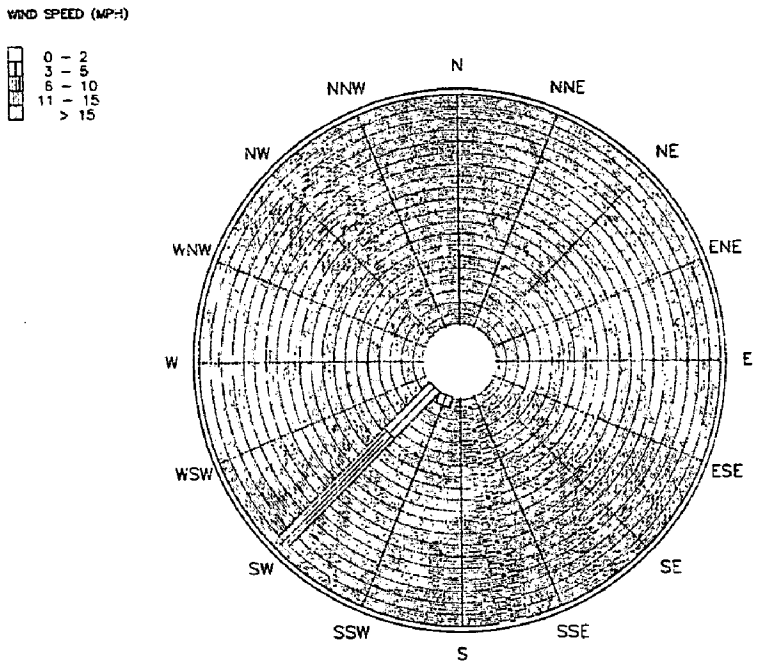
A Notice of Violation was also recently issued to Nu-way Liveoak Landfill. This Notice of Violation is currently being processed by the Engineering and Compliance Division and will thereafter be delivered to the District Prosecutor's Office for review and prosecution.

## 5.0 CONCLUSION

Fourteen sampling events were conducted from May 2003 to October 2003. These concentrated on aggregate processors in the Irwindale/Azusa area and examined six separate quarries. Of the fourteen sets of samples collected, five were found to be out of compliance with Rule 403. Enforcement actions have been taken with five NOVs issued to four of the six facilities monitored. To date, the affected facilities have taken some actions to mitigate the problem. AQMD staff is currently investigating the circumstances leading to the exceedances and will determine appropriate actions to resolve the NOVs.

AQMD staff will continue efforts to conduct Rule 403 monitoring at other mining operations in the region during the course of the year. In addition, the AQMD will conduct additional monitoring of the facilities discussed in this report to determine if the problems have been mitigated.

## APPENDIX 1
## WIND ROSE FOR FIVE HOUR SAMPLING PERIODS

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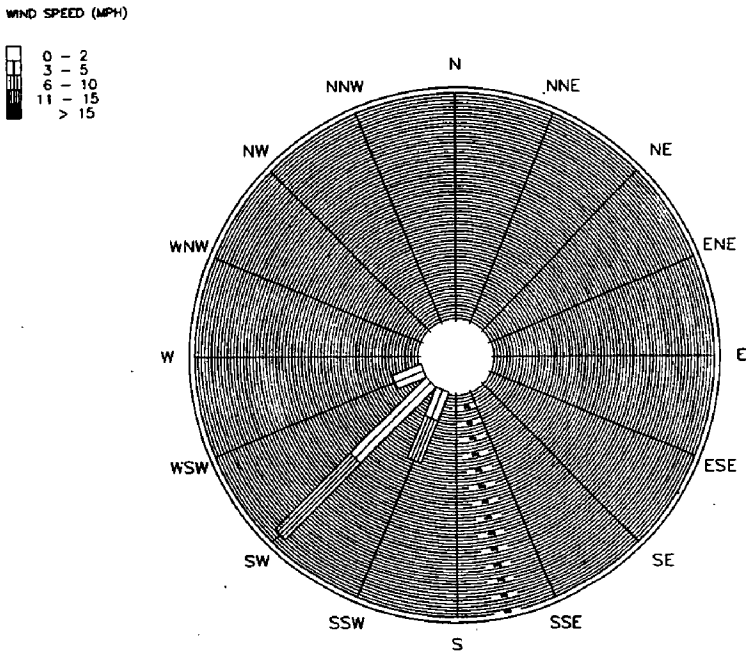
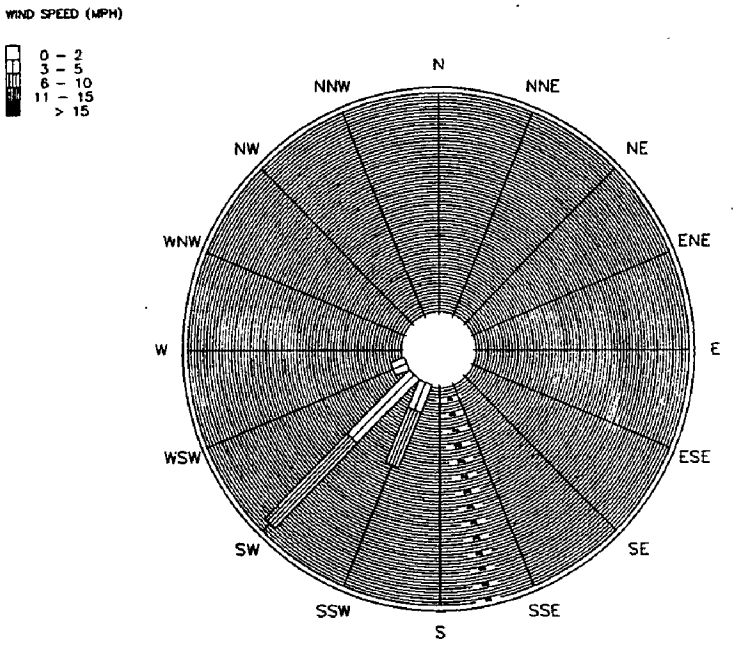



IRWINDALE, CA

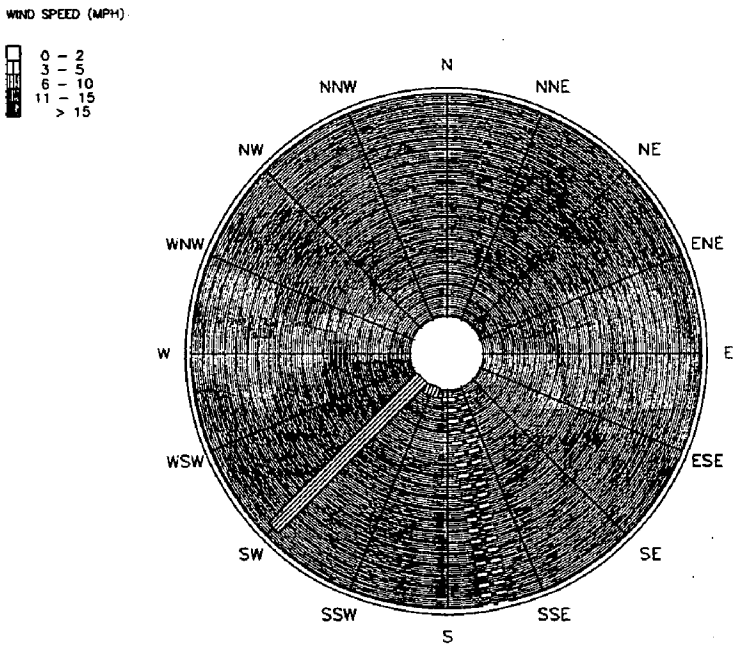
MAY 30, 2003 0900 – 1400 PST

A-3




IRWINDALE, CA
JUNE 16, 2003 09:30 - 14:30 PST

A-4




IRWINDALE, CA

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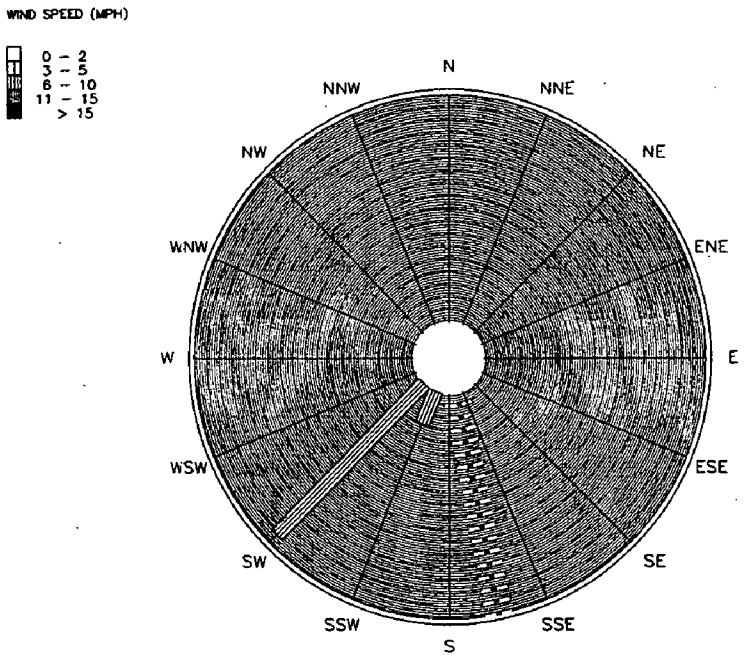
A - 5

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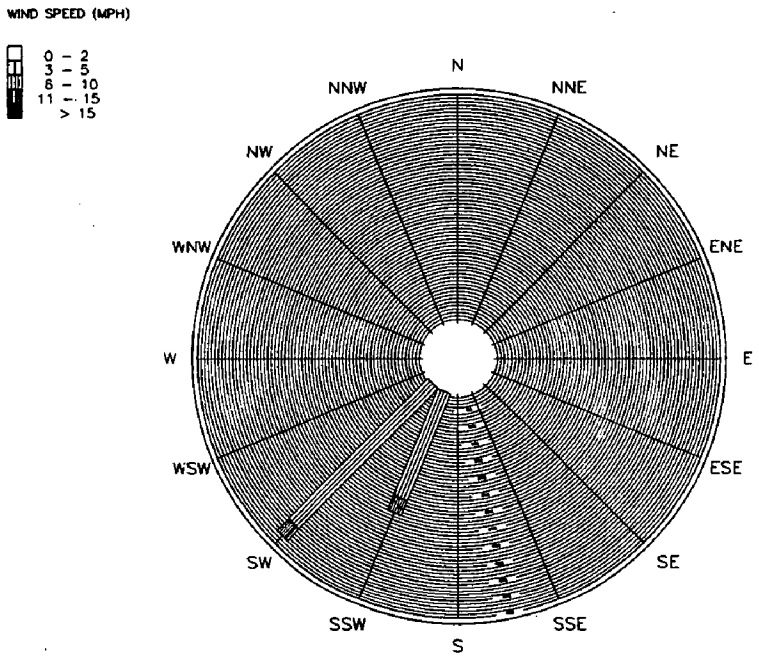
A - 6

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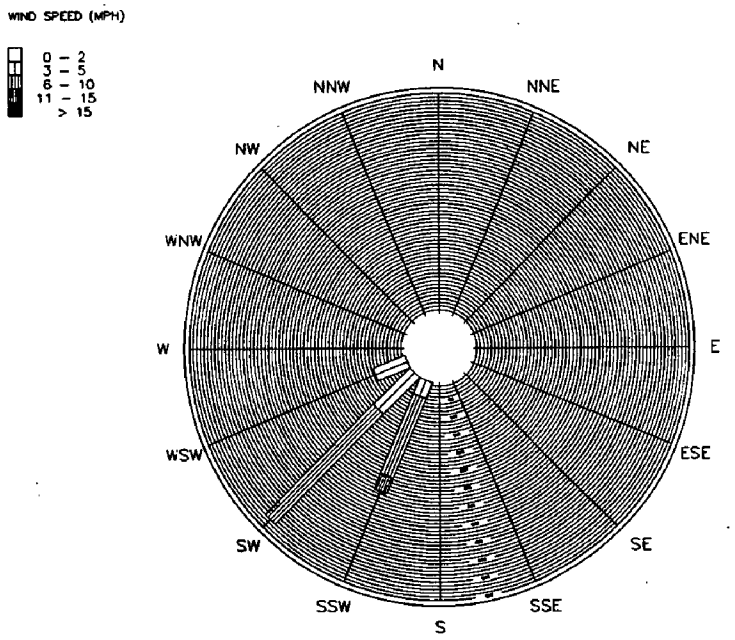
JULY 2, 2003 13:00 - 18:00 PST

A-7

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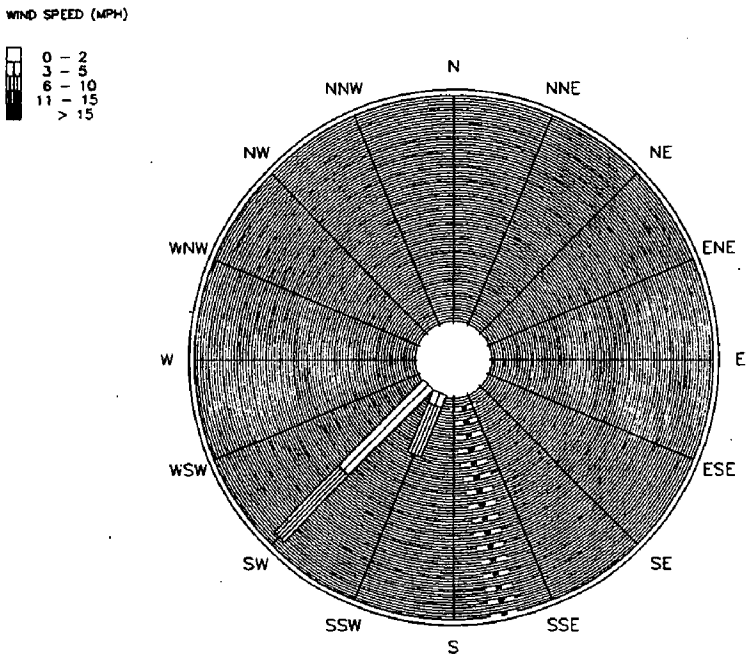
JULY 16, 2003 1000 – 1500 PST

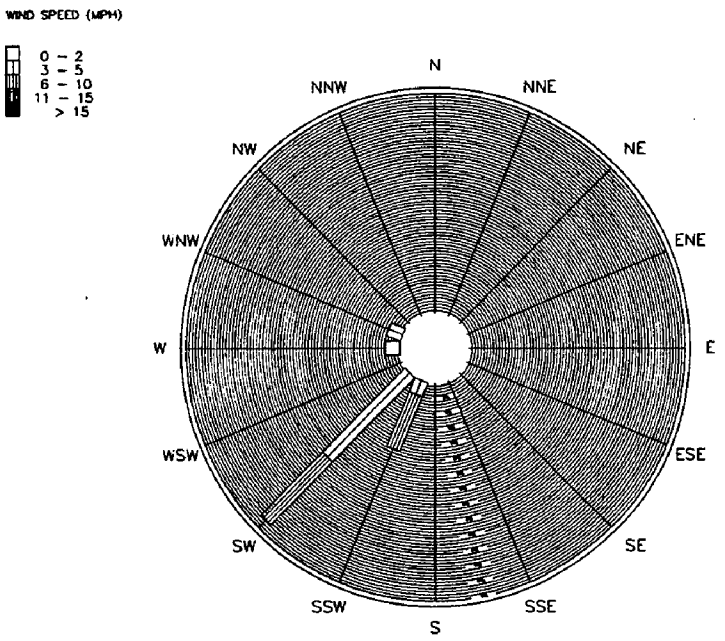
**A - 8**




IRWINDALE, CA

AUGUST 13, 2003 1000 – 1500 PST

A-9

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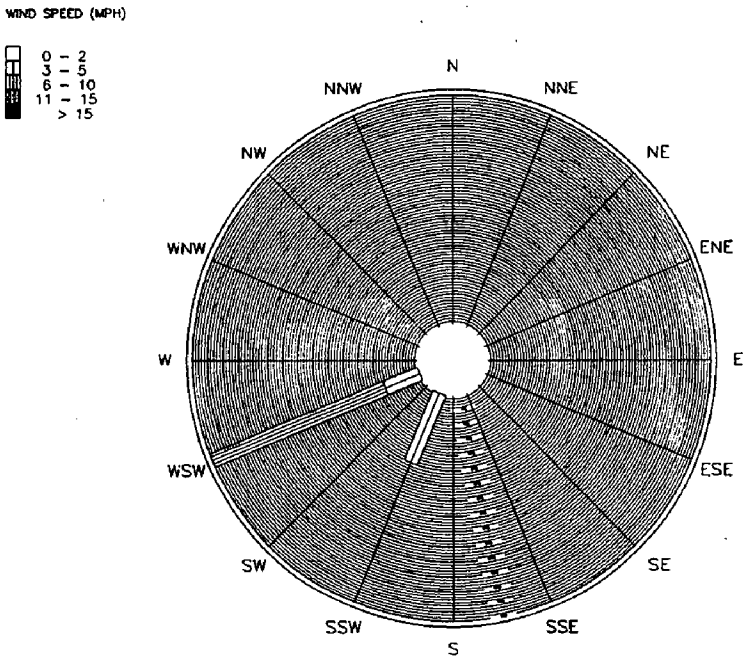


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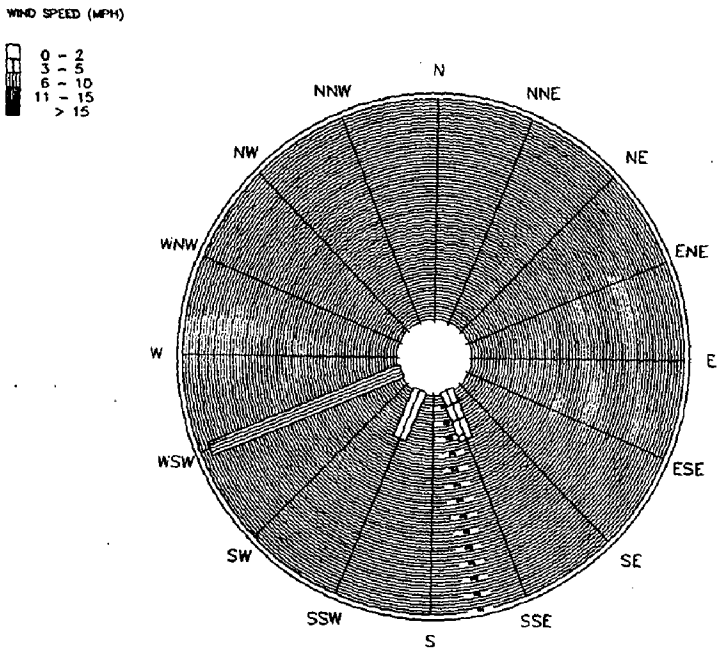
9/12/2003 1000 - 1500 PST

A - 11

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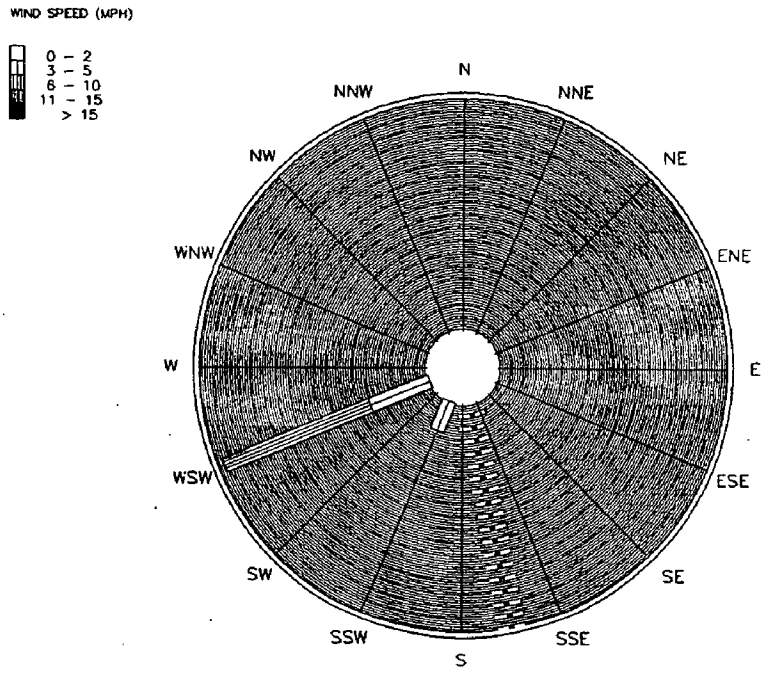
A - 12

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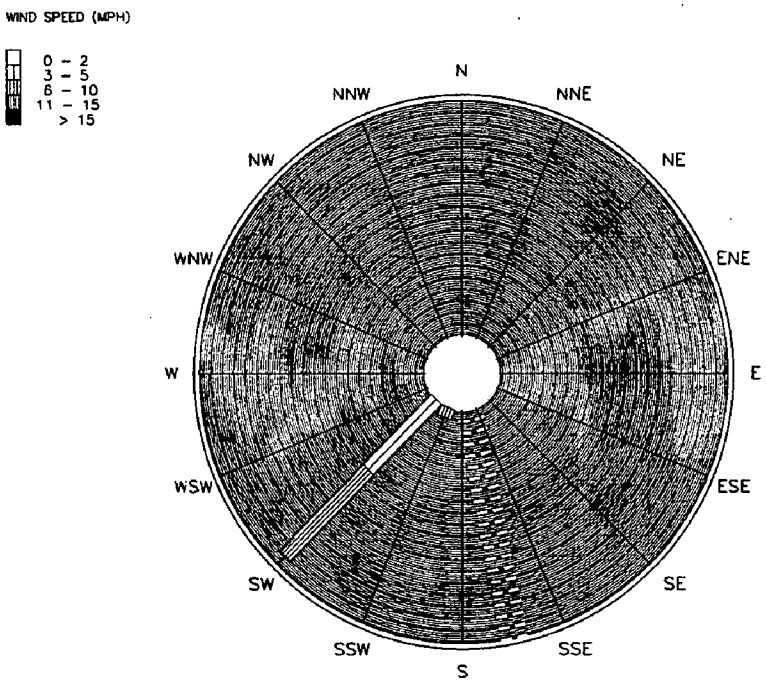
9/24/2003 1030 - 1530 PST

A - 13

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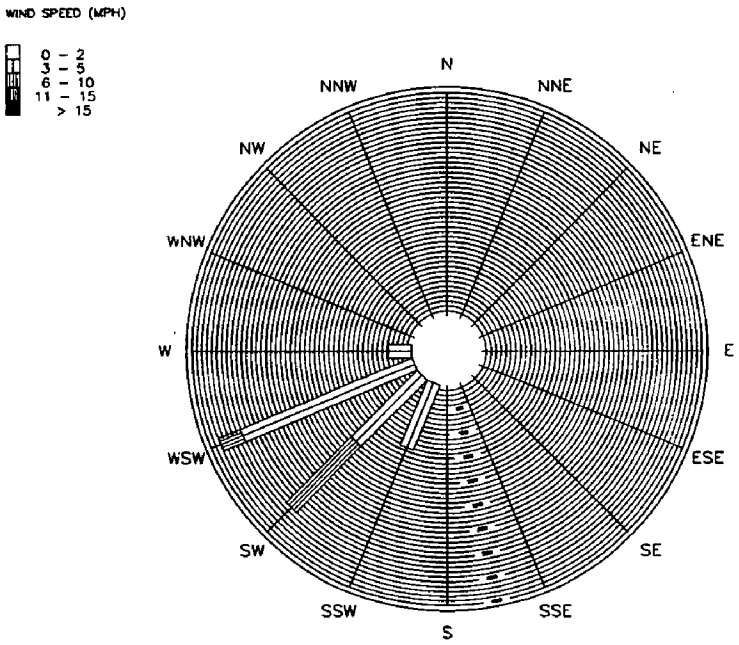


IRWINDALE, CA

10/15/2003 1030 – 1530 PST

**A - 15**

P/O Approved.
F71628
11-2-04 [illegible]

ROUTING RECORD

| DATE | FROM | TO | ACTION |
|---|---|---|---|
| 5-6-04 | RWM | RJS | CLASS III |
| 10-22-04 | RJS | RWM | ISSUE PO |
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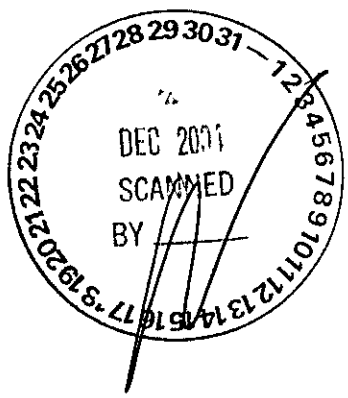
REFERENCE TO OTHER APCD RECORDS INCLUDING VARIANCES

M

DEC 2004
SCANNED
BY



APPL # 428834
I D # 65341

UNITED ROCK PRODUCTS CORPORATION
1245 E ARROW HWY
IRWINDALE
AGGREGATE SCREENING

Date 04/14/04

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive Diamond Bar CA 91765

# PERMIT TO OPERATE


Permit No
F71628
A/N 428834

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership
If the billing for the annual renewal fee (Rule 301 f) is not received by the expiration date, contact the District

Legal Owner
or Operator

UNITED ROCK PRODUCTS CORPORATION
1245 E ARROW HWY
IRWINDALE, CA 91706-1302

ID 65341

**Equipment Location** 1245 E ARROW HWY, IRWINDALE, CA 91706-1302

**Equipment Description**

AGGREGATE SCREENING PLANT NO II CONSISTING OF

1 FEED HOPPER, 20 TON CAPACITY

2 FEEDER BELT, 2'-0" W X 12'-0" L , 10 H P

3 BELT CONVEYOR, 2'-0" W X 60'-0" L , 10 H P

4 SCREEN, DUO VIBE, 6'-0" W X 12'-0" L , 5 H P

5 BELT CONVEYOR, 2'-0" W X 75'-0" L , 10 H P

6 LOAD OUT HOPPER, 30 TON CAPACITY

7 BELT CONVEYOR, 2'-0" W X 75'-0" L , 10 H P

**Conditions**

1 OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW

2 THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES

3 THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS

4 THIS EQUIPMENT SHALL NOT PROCESS MORE THAN 20,200 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH

5 RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST

**FILE COPY**

CONTINUATION OF PERMIT TO OPERATE

**NOTICE**

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUES OF OTHER GOVERNMENT AGENCIES

EXECUTIVE OFFICER

Dorris M Bailey

By Dorris M Bailey/RS06
11/2/2004

**FILE COPY**

South Coast Air Quality Management District
P O Box 4944
Diamond Bar CA 91765
(909) 396 2000

# APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE FORM 400 - A

**Non Title V Facilities** This form must be accompanied by one or more 400 E xx series forms(s) Complete this side of form only
**Title V Facilities** Complete both sides of this form Include additional forms as necessary

NC/NOV NUMBER
INSPECTOR SECTOR
ISSUE DATE

## Section I - Company Information

LEGAL NAME OF OPERATOR: United Rock Products Corporation — ☐ IRS OR ☐ S S Number

PERMIT TO BE ISSUED TO (SEE INSTRUCTIONS): United Rock Products Corporation

BUSINESS MAILING ADDRESS: 1245 East Arrow Highway Irwindale, CA 91706

PERMIT MAILING ADDRESS IF DIFFERENT FROM BUSINESS MAILING ADDRESS:

TYPE OF ORGANIZATION
☒ Corporation ☐ Limited Partnership ☐ Government Entity
☐ Individual ☐ General Partnership ☐ Other (Fill In)

ARE YOU A SMALL BUSINESS? (SEE INSTRUCTIONS) ☐ Yes ☒ No
AVERAGE ANNUAL GROSS RECEIPT $
NUMBER OF EMPLOYEES
IS YOUR BUSINESS 51 % OR MORE WOMAN/MINORITY OWNED? ☐ Yes ☐ No

**THIS SECTION IS REQUIRED FOR ALL APPLICATIONS FOR NEW CONSTRUCTION OR MAJOR MODIFICATIONS**
ARE ALL MAJOR SOURCES UNDER SAME OWNERSHIP IN CALIFORNIA IN COMPLIANCE WITH FEDERAL STATE AND LOCAL AIR POLLUTION CONTROL RULES? ☒ Yes ☐ No

ARE YOU THE OWNER OF THE EQUIPMENT UNDER THIS APPLICATION? ☒ Yes ☐ No ☐ IRS OR ☐ S S NUMBER
IF NO ENTER THE LEGAL NAME OF OWNER

## Section II - Facility Information

EQUIPMENT ADDRESS/LOCATION: 1245 East Arrow Highway (NUMBER/STREET)
Irwindale (CITY OR COMMUNITY) CA 91706 (ZIP CODE)

FACILITY NAME: Irwindale
FACILITY ID NUMBER: 0 6 5 3 4 1

PRINT NAME OF CONTACT PERSON: Frank Keohane
TITLE OF CONTACT PERSON:

TYPE OF BUSINESS AT THIS FACILITY: Aggregate Production
PRIMARY SIC CODE FOR THIS FACILITY: 1442
NUMBER OF EMPLOYEES AT THIS FACILITY:

CONTACT PERSON S TELEPHONE NUMBER: (626) 358-4558
CONTACT PERSON S FAX NUMBER: (626) 357-9508
CONTACT PERSON S E MAIL ADDRESS:

## Section III - Application Type

DESCRIPTION OF EQUIPMENT: Aggregate Screening PLANT II
PREVIOUS PERMIT #S:

APPLICATION FOR (SEE INSTRUCTIONS)
☒ NEW CONSTRUCTION
☐ EXISTING EQUIPMENT WITHOUT PERMIT
☐ EXISTING EQUIPMENT WITH EXPIRED PERMIT
☐ CHANGE OF LOCATION ☐ MODIFICATION ☐ CHANGE OF PERMITTEE ☐ CHANGE OF PERMIT CONDITION
☐ RECLAIM Processing Fee

ARE YOU SUBMITTING MULTIPLE APPLICATIONS FOR EQUIPMENT IDENTICAL TO THAT DESCRIBED ABOVE? ☐ Yes ☒ No

☐ **APPLICATION FOR NON TITLE V EQUIPMENT PERMIT CHECK THE SUPPLEMENTAL SERIES 400 E xx FORM(S) SUBMITTED WITH THIS 400 A FORM**

| | | | |
|---|---|---|---|
| ____ 400-E 1 | PARTICULATE MATTER (PM 10) CONTROL EQUIPMENT | ____ 400-E 13 | INTERNAL COMBUSTION EQUIPMENT |
| ____ 400 E 2 | VOLATILE ORGANIC COMPOUND (VOC) CONTROL EQUIPMENT | ____ 400-E 14 | OPEN PROCESS TANK |
| ____ 400-E 3 | SCRUBBER | ____ 400-E 14a | OPEN PROCESS TANK PROCESS LINE |
| ____ 400 E 4 | ABRASIVE BLASTING EQUIPMENT | ____ 400 E 15 | PRINTING EQUIPMENT |
| ____ 400-E 5 | DEGREASER | ____ 400 E 16 | SOLID MATERIALS STORAGE EQUIPMENT |
| ____ 400 E 7 | DRY CLEANING EQUIPMENT | ____ 400 E 17 | SPRAY BOOTH/OPEN SPRAY |
| ____ 400-E 8 | ETHYLENE OXIDE STERILIZER | ____ 400 E 17a | POWDER SPRAY BOOTH |
| ____ 400-E 9 | EXTERNAL COMBUSTION EQUIPMENT | ____ 400-E 18 | STORAGE TANK (LIQUID & GASEOUS MATERIAL) |
| ____ 400-E 10 | FOOD BROILER/FRYER | ____ 400-E 19 | WAVE SOLDER MACHINE |
| ____ 400-E 11 | FUEL DISPENSING AND STORAGE EQUIPMENT | ____ 400-E 20 | ASBESTOS REMOVAL EQUIPMENT |
| ____ 400 E 12 | GAS TURBINE | ____ NONE | ADDITIONAL INFORMATION SUBMITTED AS REQUESTED ON FORM 400 E-GI |

☐ **APPLICATION FOR TITLE V FACILITY PERMIT PROVIDE INFORMATION REQUESTED ON REVERSE SIDE OF THIS FORM**

**I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT**
SIGNATURE OF RESPONSIBLE OFFICIAL OF FIRM: Frank Keohane
TITLE OF RESPONSIBLE OFFICIAL OF FIRM: General Manager
DATE SIGNED: 4-12-04
TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL OF FIRM: Frank Keohane
RESPONSIBLE OFFICIALS TELEPHONE NUMBER: (626) 358-4558

**I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT**
SIGNATURE OF PREPARER IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM:
TITLE OF RESPONSIBLE OFFICIAL OF FIRM: Consultant
TYPE OR PRINT NAME OF PREPARER IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM: Kimba Spencer
PREPARER S TELEPHONE NUMBER: (562) 961-3494
DATE SIGNED: 4/7/04

**TITLE V FACILITIES ONLY: COMPLETE OTHER SIDE**

| AQMD USE ONLY | APPLICATION/TRACKING # | TYPE B C D | EQUIPMENT CATEGORY CODE | FEE SCHEDULE $ | VALIDATION |
|---|---|---|---|---|---|
| | 428834 | | | | MP 04 4/19/04 |

| ENG A R DATE | ENG A R DATE | CLASS I II III IV | ASSIGNMENT UNIT | ENGINEER | ENF SECT | CHECK/MONEY ORDER # | AMOUNT $ |
|---|---|---|---|---|---|---|---|
| | | | 5 | | | 013117 | 12,091.64 |

FORM 400-A Rev 3/98

(35803)

Job No & Form 8536-2

# TITLE V APPLICATION CERTIFICATION

**- TO BE COMPLETED BY TITLE V FACILITIES ONLY -**

## Section IV Title V Application

1 This is an application for a(n) (Check all applicable boxes and provide the requested information as appropriate)

a ☐ Initial Title V Permit

b ☐ Permit Renewal Provide current permit expiration date _____

c ☐ Administrative Permit Revision (Check all that apply)

- ☐ Change of Ownership (Complete and attach equipment specific Form 400 E xx series forms)
- ☐ Change of Facility Information
- ☐ Other, Please specify _____

d ☐ Other (Complete and attach equipment specific form 400-E-XX series form(s) to this form if your application involves permit action for new construction, change of location, non-administrative permit revision, alternative operating scenario (AOS), permit shield, streamlined permit conditions, or temporary source permit )

2 Is this facility required to prepare a Risk Management Plan (RMP) for another agency? ☐ Yes ☐ No

## Section V Title V Submittal Checklist

1 Enter the quantity of each type form submitted in the space provided

| | | | |
|---|---|---|---|
| _____ | 500 A2 | _____ | 500-F1 |
| _____ | 500-B | _____ | 500 F2 |
| _____ | 500 C1 | _____ | 500-F3 |
| _____ | 500-C2 | _____ | 500-F4 |
| _____ | 500-D | _____ | Other (specify) _____ |

2 Additional information referenced in this application submitted (Check **ALL** that apply)

a ☐ Existing Facility Permit
b ☐ Preliminary Facility Permit
c ☐ EFB Report for Year(s) _____
d ☐ None
e ☐ Other (Specify) _____

3 Supplemental information included with this application submittal (Check **ALL** that Apply)

a ☐ Facility Plot Plan
b ☐ MSDS Sheet(s)
c ☐ None
d ☐ Other (Specify) _____

| AQMD USE ONLY | APPLICATION TYPE | 30 DAY PUBLIC NOTICE START DATE | 30 DAY PUBLIC NOTICE END DATE | PUBLIC HEARING DATE | 45-DAY EPA REVIEW START DATE | 45-DAY EPA REVIEW END DATE |
|---|---|---|---|---|---|---|
| | INITIAL RENEWAL & SIGNIFICANT | | | | | |
| | MINOR & DE MINIMIS | | | | | |
| | ESTABLISH GENERAL PERMIT | | | | | |

**USE THE SECTIONS BELOW FOR TITLE V INITIAL AND RENEWAL APPLICATIONS ONLY**

| APPLICATION/TRACKING # | TYPE B C D | EQUIPMENT CATEGORY CODE | FEE SCHEDULE $ | VALIDATION |
|---|---|---|---|---|
| _ _ _ _ _ _ _ _ | | _ _ _ _ _ _ _ / _ _ _ | | |

| ENG A R DATE | ENG A R DATE | CLASS I III IV | ASSIGNMENT UNIT ENGINEER | ENF SECT | CHECK/MONEY ORDER AMOUNT # $ |
|---|---|---|---|---|---|
| | | | APR 14 4 | | |

FORM 400-A Rev 3/98

RECEIVED JAN 05

South Coast Air Quality
Management District
21865 East Copley Drive
Diamond Bar, CA 91765
(909) 396 2000

# CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) APPLICABILITY FORM 400 - CEQA

The SCAQMD is required by state law the California Environmental Quality Act (CEQA), to review discretionary permit project applications for potential air quality and other environmental impacts This form is a screening tool to assist the SCAQMD in clarifying whether or not the project' has the potential to generate significant adverse environmental impacts that might require preparation of a CEQA document [CEQA Guidelines §15060(a)] 2 Refer to the attached instructions for guidance in completing this form 3 For each Form 400-A application, also complete and submit one Form 400 CEQA If submitting multiple Form 400-A applications for the same project, only one 400 CEQA form is necessary for the entire project If you need assistance completing this form contact Lon Inga at (909) 396 3109

## FACILITY INFORMATION

**Facility Name** United Rock Products **Facility ID** (6-Digit) 065341

**Project Description** Aggregate production facility

## REVIEW FOR EXEMPTION FROM FURTHER CEQA ACTION

Check "Yes" or "No" as applicable

| | Yes | No | Is this application for: |
|---|---|---|---|
| A | ☐ | ☒ | **A request for a change of permittee only (without equipment modifications)?** |
| B | ☐ | ☒ | **Equipment certification or equipment registration?** |
| C | ☐ | ☒ | **A CEQA and/or NEPA document previously or currently prepared that specifically evaluates this project?** If yes, a permit cannot be issued until a Final CEQA document and Notice of Determination is submitted |
| D | ☐ | ☒ | **Equipment damaged as a result of a disaster during state of emergency?** |
| E | ☐ | ☒ | **A Title V permit renewal (without equipment modifications)?** |
| F | ☐ | ☒ | **A Title V administrative permit revision?** |
| G | ☐ | ☒ | **The conversion of an existing permit into an initial Title V permit?** |
| H | ☐ | ☒ | **A functionally identical permit unit replacement with no increase in rating or emissions?** |
| I | ☐ | ☒ | **A change of daily VOC permit limit to a monthly VOC permit limit?** |

If "**Yes**" is checked for any question above your application does not require additional evaluation for CEQA applicability Skip to page 2 "SIGNATURES" and sign and date this form

## REVIEW OF IMPACTS WHICH MAY TRIGGER CEQA

Complete Sections I V by checking "Yes" or "No" as applicable To avoid delays in processing your application(s), explain all "Yes" responses on a separate sheet and attach it to this form

| | Yes | No | Section I - General |
|---|---|---|---|
| 1 | ☐ | ☒ | **Has this project generated any known public controversy regarding potential adverse impacts that may be generated by the project?** Controversy may be construed as concerns raised by local groups at public meetings adverse media attention such as negative articles in newspapers or other periodical publications, local news programs, environmental justice issues, etc |
| 2 | ☐ | ☒ | **Is this project part of a larger project?** |
| | | | **Section II - Air Quality** |
| 3 | ☐ | ☒ | **Will there be any demolition, excavating, and/or grading construction activities that encompass an area exceeding** 20 000 **square feet?** |
| 4 | ☒ | ☐ | **Does this project include the open outdoor storage of dry bulk solid materials that could generate dust?** If Yes include a plot plan with the application package |

1 A project means the whole of an action which has a potential for resulting in physical change to the environment including construction activities clearing or grading of land improvements to existing structures and activities or equipment involving the issuance of a permit For example a project might include installation of a new or modification of an existing internal combustion engine dry-cleaning facility boiler gas turbine spray coating booth solvent cleaning tank, etc.

2 To download the CEQA guidelines visit http://ceres.ca.gov/env law/state.html.

3 To download this form and the instructions, visit http://www.aqmd.gov/ceqa.

| | Yes | No | |
|---|---|---|---|
| 5 | ☐ | ☒ | **Would this project result in noticeable off-site odors from activities that may not be subject to SCAQMD permit requirements?** For example compost materials or other types of greenwaste (i e lawn clippings tree trimmings, etc ) have the potential to generate odor complaints subject to Rule 402 Nuisance |
| 6 | ☐ | ☒ | **Does this project cause an increase of emissions from marine vessels, trains and/or airplanes?** |
| 7 | ☐ | ☒ | **Will the proposed project increase the QUANTITY of hazardous materials stored aboveground onsite or transported by mobile vehicle to or from the site by greater than or equal to the amounts associated with each compound on the attached Table 1?4** |
| | | | **Section III - Water Resources** |
| 8 | ☐ | ☒ | **Will the project increase demand for water at the facility by more than 5,000,000 gallons per day?** The following examples identify some but not all types of projects that may result in a "yes" answer to this question 1) projects that generate steam 2) projects that use water as part of the air pollution control equipment 3) projects that require water as part of the production process, 4) projects that require new or expansion of existing sewage treatment facilities, 5) projects where water demand exceeds the capacity of the local water purveyor to supply sufficient water for the project and 6) projects that require new or expansion of existing water supply facilities |
| 9 | ☐ | ☒ | **Will the project require construction of new water conveyance infrastructure?** Examples of such projects are when water demands exceed the capacity of the local water purveyor to supply sufficient water for the project, or require new or modified sewage treatment facilities such that the project requires new water lines sewage lines sewage hook ups etc |
| | | | **Section IV - Transportation / Circulation** |
| 10 | | | **Will the project result in** (Check all that apply) |
| | ☐ | ☒ | **a the need for more than 350 new employees?** |
| | ☐ | ☒ | **b an increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round-trips per day?** |
| | ☐ | ☒ | **c increase customer traffic by more than 700 visits per day?** |
| | | | **Section V - Noise** |
| 11 | ☐ | ☒ | **Will the project include equipment with a noise specification GREATER THAN 90 decibels (dB)?** |
| | | | **Section VI - Public Services** |
| 12 | | | **Will the project create a permanent need for new or additional public services in any of the following areas** (Check all that apply) |
| | ☐ | ☒ | **a Solid waste disposal?** Check 'No" if the projected potential amount of wastes generated by the project is less than five tons per day |
| | ☐ | ☒ | **b Hazardous waste disposal?** Check 'No" if the projected potential amount of hazardous wastes generated by the project is less than 42 cubic yards per day (or equivalent in pounds) |

**REMINDER For each Yes' checked in the sections above attach all pertinent information including but not limited to estimated quantities - volumes, weights, etc -

## SIGNATURES

I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE I UNDERSTAND THAT THIS FORM IS A SCREENING TOOL AND THAT THE SCAQMD RESERVES THE RIGHT TO CONSIDER OTHER PERTINENT INFORMATION IN DETERMINING CEQA APPLICABILITY

| SIGNATURE OF RESPONSIBLE OFFICIAL OF FIRM | TITLE OF RESPONSIBLE OFFICIAL OF FIRM | |
|---|---|---|
| Frank Keohane | General Manager | |
| TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL OF FIRM | RESPONSIBLE OFFICIAL'S TELEPHONE NUMBER | DATE Signed |
| Frank Keohane | (626) 358-4558 | |
| SIGNATURE OF PREPARER IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM | TITLE OF PREPARER | |
| | Consultant | |
| TYPE OR PRINT NAME OF PREPARER | PREPARER'S TELEPHONE NUMBER | DATE Signed |
| Kimba Spencer | (562) 961-3494 | 8/27/04 |

*THIS CONCLUDES FORM 400-CEQA INCLUDE THIS FORM AND THE ATTACHMENTS WITH FORM 400 A*

4 Table I Regulated Substances List and Threshold Quantities for Accidental Release Prevention can be found in the Instructions for Form 400 CEQA.

SCAQMD PERMIT PROCESSING SYSTEM (PPS)

# FEE DATA - SUMMARY SHEET

| | | | |
|---|---|---|---|
| Application No | 428834 | IRS/SS No | |
| Previous Application No | | Previous Permit No | |

| | | | | | |
|---|---|---|---|---|---|
| Company Name | UNITED ROCK PRODUCTS CORPORATION | | | Facility ID | 65341 |
| Equipment Street | 1245 E ARROWHWY , IRWINDALE CA 91706 | | | | |
| Equipment Desc | AGGREGATE SIZE CLASSIFICATION | | | | |
| Equipment Type | BASIC | | | Fee Charged by | B-CAT |
| B-CAT NO | 107850 | C-CAT NO | 00 | Fee Schedule | C |
| Facility Zone | 09 | Deemed Compl Date | 5/14/2004 | Public Notice | NO |

| | | | |
|---|---|---|---|
| Evaluation Type | PO NO PC (PENALTY WILL BE ASSESSED) | Small Business | ☐ |
| Disposition | Approve PO, Recommended by Engineer | Penalty | ☑ |
| Lead Appl No | | Identical Permit Unit | ☐ |

| | | | | | |
|---|---|---|---|---|---|
| Air quality Analysis | | | $0 00 | Filing Fee Paid | $0 00 |
| E I R | | | $0 00 | Permit Processing Fee Paid | $3,349 44 |
| Health Risk Assessment | | | $0 00 | Permit Processing Fee Calculated* | $3,349 44 |
| Significant Project | | | $0 00 | Permit Processing Fee Adjustment | $0 00 |
| Express Processing | Hours | 0 00 | $0 00 | | |
| Source Test Review | Hours | 0 00 | $0 00 | | |
| Time & Material | Hours | 0 00 | $0 00 | | |
| | | | | Total Additional Fee | $0 00 |
| | | | | Additional Charge | $0 00 |

COMMENTS

RECOMMENDED BY RAJENDRA SINGH DATE 10/14/2004

REVIEWED BY _____ DATE 10-29-04

ADJUSTED FOR SMALL BUSINESS IDENTICAL EQUIPMENT AND P/O NO P/C PENALTY

SCAQMD PERMIT PROCESSING SYSTEM (PPS)

# AEIS DATA SHEET

Company Name UNITED ROCK PRODUCTS CORPORATION
Facility ID 65341
Equipment Address 1245 E ARROW HWY
IRWINDALE CA 91706

Application Number 428834
Estimated Completion Date 10/14/04
Equipment Type Basic
Equipment Description AGGREGATE SIZE CLASSIFICATION
Equipment B-Cat 107850
Equipment C-Cat

| | Emissions | |
|---|---|---|
| Emittants | R1 LB/HR | R2 LB/HR |
| PM10 | 1 61 | 0 08 |

**Applicable Rules**

| | | |
|---|---|---|
| 1401 | 05/02/2003 | New Source Review of Toxic Air Contaminants |
| 401 | 11/09/2001 | Visible Emissions |
| 402 | 05/07/1976 | Nuisance |
| 405 | 02/07/1986 | Solid Particulate Matter - Weight |

| | Mon | Tue | Wed | Thu | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|
| Daily Start Times | 08 00 | 08 00 | 08 00 | 08 00 | 08 00 | 08 00 | 08 00 |
| Daily Stop Times | 16 00 | 16 00 | 16 00 | 16 00 | 16 00 | 16 00 | 16 00 |

User's Initials RS06 Date 10/14/04 Supervisor's Name _____ Review Date 10/29/04

# NSR DATA SUMMARY SHEET

Application No 428834
Application Type P/O no P/C
Application Status PENDAPPRV
Previous Apps,Dev,Permit # NONE

---

Company Name UNITED ROCK PRODUCTS CORPORATION
Company ID 65341
Address 1245 E ARROW HWY,IRWINDALE, CA 91706-1302
RECLAIM NO
RECLAIM Zone 02A
Air Basin SC
[redacted]ne 09
Title V NO

---

Device ID 0 - AGGREGATE-PROD
Estimated Completion Date 07-30-2004
Heat Input Capacity 0 Million BTU/hr
Priority Reserve NONE - No Priority Access Requested
Recommended Disposition 31 - PERMIT TO OPERATE GRANTED
PR Expiration
School Within 1000 Feet NO
Operating Weeks Per Year 52
Operating Days Per Week 7
Monday Operating Hours 08 00 to 16 00
Tuesday Operating Hours 08 00 to 16 00
Wednesday Operating Hours 08 00 to 16 00
Thursday Operating Hours 08 00 to 16 00
[redacted]riday Operating Hours 08 00 to 16 00
[redacted]aturday Operating Hours 08 00 to 16 00
Sunday Operating Hours 08 00 to 16 00

---

Emittant PM10
BACT
Cost Effectiveness NO
Source Type MINOR
Emis Increase 1
Modeling N/A
Public Notice N/A
CONTROLLED EMISSION
Max Hourly 0 08 lbs/hr
Max Daily 0 64 lbs/day
UNCONTROLLED EMISSION
Max Hourly 1 61 lbs/hr
Max Daily 12 88 lbs/day
CURRENT EMISSION
BACT 30 days Avg 1 lbs/day
Annual Emission 232 96 lbs/yr
District Exemption None

SUPERVISOR'S APPROVAL _____ SUPERVISOR'S REVIEW DATE 10.29.04

Processed By rsingh 10/15/2004 8 06 36 AM

# PERMIT TO CONSTRUCT/OPERATE EVALUATION

| | |
|---|---|
| Applicant's Name | UNITED ROCK PRODUCTS CORPORATION |
| Company I D | 65341 |
| Mailing Address | 1245 E ARROW HIGHWAY, IRWINDALE, CA 91706 |
| Equipment Address | 1245 E ARROW HIGHWAY, IRWINDALE, CA 91706 |

APPLICATION NUMBER 428833, 428834

## BACKGROUND

These applications were submitted for two aggregate screening plants operating without permits The company also operates a main aggregate plant, two rock pre-crushing systems, and a dry and a wet load out system The applications were received on 4/14/04 A check on the compliance data indicates one open violation and an open notice of compliance These will not affect the applications being processed here The facility is in an industrial area and there are no schools within 1000 feet of this facility

## EQUIPMENT DESCRIPTION

Application No 428833

AGGREGATE SCREENING PLANT NO I CONSISTING OF

1 FEED HOPPER, 20 TON CAPACITY

2 FEEDER BELT, 2'-6" W X 15'-0" L , 10 H P

3 BELT CONVEYOR, 2'-6" W X 75'-0" L , 10 H P

4 SCREEN, DUO VIBE, 6'-0" W X 12'-0" L , 5 H P

5 BELT CONVEYOR, 2'-6" W X 75'-0" L , 10 H P

6 LOAD OUT HOPPER, 30 TON CAPACITY

7 BELT CONVEYOR, 2'-6" W X 75'-0" L , 10 H P

Application No 428834

AGGREGATE SCREENING PLANT NO II CONSISTING OF

1 FEED HOPPER, 20 TON CAPACITY

2 FEEDER BELT, 2'-0" W X 12'-0" L , 10 H P

3 BELT CONVEYOR, 2'-0" W X 60'-0" L , 10 H P

4 SCREEN, DUO VIBE, 6'-0" W X 12'-0" L , 5 H P

5 BELT CONVEYOR, 2'-0" W X 75'-0" L , 10 H P

6 LOAD OUT HOPPER, 30 TON CAPACITY

7 BELT CONVEYOR, 2'-0" W X 75'-0" L , 10 H P

## PROCESS DESCRIPTION

The two screening plants are very similar in operation The attached flow diagrams show the material flow for the two systems The aggregate is dumped into a feeder hopper, travels via conveyor belts to a screen station The unders are placed in stockpiles and the overs are conveyed to a load out station The primary emissions from this equipment are particulate emissions at material transfer points and at the screening operations These emissions are controlled by water spray

## OPERATING SCHEDULE

| | | |
|---|---|---|
| A/N 428833 | Average / maximum | 8 hrs per day, 5 days per week, 52 weeks per year |
| A/N 428834 | Average / maximum | 8 hrs per day, 7 days per week, 52 weeks per year |

## EMISSION CALCULATIONS

Application No 428833

Throughput = 56 tons per hour
= 448 tons per day
= 9,900 tons / month (permit condition)

The emission calculations are presented in the attached spread sheet Emission factors used in these calculations are taken from AP-42, Table 11 19 2-2 for crushed stone processing (attached)
In this table, the controlled PM10 emission factors are based on use of water spray to control particulate emissions

From the attached spread sheet

R1 (PM10) = 8 6 lbs / day
= 1 075 lbs / hr @ 8 hrs / day

R2 (PM10) = 0 44 lbs / day
= 0 055 lbs / hr @ 8 hrs / day

Assuming PM10 = 50 % of PM

R1 (PM) = 2 x 1 075 lbs / hr
= 2 15 lbs / hr

R2 (PM) = 2 x 0 055 lbs / hr
= 0 11 lbs / hr

AEIS and NSR Emission Data

R1 (PM10) = 1 075 lb / hr
R2 (PM10) = 0 055 lb / hr

30-Day average (PM10) = (0 055 lbs / hr x 8 hrs / day x 22 days / month) / 30
= 0 32 lb / day

Annual average (PM10) = (0 055 lbs / hr x 8 hrs / day x 5 days / wk x 52 wks / yr )/2000
= 114 lbs / yr

Application No 428834

Throughput = 84 tons per hour
= 672 tons per day
= 20,200 tons / month (permit condition)

The emission calculations are presented in the attached spread sheet Emission factors used in these calculations are taken from AP-42, Table 11 19 2-2 for crushed stone processing (attached)
In this table, the controlled PM10 emission factors are based on use of water spray to control particulate emissions From the attached spread sheet

R1 (PM10) = 12 9 lbs / day
= 1 61 lbs / hr @ 8 hrs / day

R2 (PM10) = 0 66 lbs / day
= 0 08 lbs / hr @ 8 hrs / day

Assuming PM10 = 50 % of PM

R1 (PM) = 2 x 1 61 lbs / hr
= 3 22 lbs / hr
R2 (PM) = 2 x 0 08 lbs / hr
= 0 16 lbs / hr

AEIS and NSR Emission Data

R1 (PM10) = 1 61 lb / hr
R2 (PM10) = 0 08 lb / hr

30-Day average (PM10) = (0 08 lbs / hr x 8 hrs / day x 30 days / month) / 30
= 0 64 lb / day

Annual average (PM10) = (0 08 lbs / hr x 8 hrs / day x 7 days / wk x 52 wks / yr )/2000
= 233 lbs / yr

**RULES**

RULE 212 There are no schools within 1000 feet of the facility Public notice is not required

RULE 401 Visible emissions are not expected with proper maintenance and operation of this equipment Compliance is expected

RULE 402 Operation of this equipment is not expected to create a nuisance Compliance is expected

RULE 405 The PM emissions are small and much less than the rate allowed in Table 405 (a) of this rule Compliance is expected

REG XIII New Source Review

Subparagraph 1303(a) – BACT
PM10 emissions are controlled by water spray and the emissions are less than 1 lb / day Compliance is expected

Subparagraph 1303(b)(1) – Modeling
The PM10 emissions are less than 0 41 lb / hr screening limit specified in this rule Modeling is not required

Subparagraph 1303(b)(2) – Emission Offsets
The facility PTE for PM10 is not expected to exceed 4 tons per year No offsets are required

RULE 1401 Review of Toxic Air Contaminants
No toxic emissions are expected from this aggregate screening operation Compliance is expected

**CONCLUSIONS/RECOMMENDATIONS**

The equipment is expected to comply with all applicable AQMD rules and regulations Issue PO subject to permit conditions listed below

**Conditions**

Application No 428833

1 OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW

2 THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES

3 THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS

4 THIS PLANT SHALL NOT PROCESS MORE THAN 9,900 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH

5 RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST

Application No 428834

1 OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW

2 THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES

3 THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS

4 THIS PLANT SHALL NOT PROCESS MORE THAN 20,200 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH

5 RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST

Emission Calculations
A/N 428834, United Rock Products
Aggregate Screening

| Emission Factors-PM10, lbs / ton | R1* | R2* | |
|---|---|---|---|
| Transfer Points | 0 0014 | 0 000048 | |
| Crushing | | | |
| Screening | 0 015 | 0 00084 | |
| * From AP-42, Table 11 19 2-2 | | | |
| | | | |
| **Transfer point** | **Throughput (tons / day)** | **R1(PM10) lbs / day** | **R2 (PM10) lbs./ day** |
| | | | |
| Hopper 1 to Belt Conveyor 2 | 672 | * | * |
| Belt 2 to belt 3 | 672 | 0 9408 | 0 032256 |
| Belt 3 to Screen 4 | 672 | 0 9408 | 0 032256 |
| Screen 4 | 672 | 10 08 | 0 56448 |
| Screen 4 to Belt 5 | 336 | 0 4704 | 0 016128 |
| Belt 5 to Load Out 6 | 336 | * | * |
| Screen 4 to Belt 7 | 336 | 0 4704 | 0 016128 |
| Belt 7 to Pile | 336 | * | * |
| | | | |
| Total Emissions | | 12 9024 | 0 661248 |
| | | | |
| *The loading of the first conveyor belt and discharge from the last conveyor belt are not considered material transfer points | | | |

Table 11 19 2-2 (English Units) EMISSION FACTORS FOR CRUSHED STONE PROCESSING OPERATIONS[a]

| Source[b] | Total Particulate Matter | EMISSION FACTOR RATING | Total PM-10[c] | EMISSION FACTOR RATING |
|---|---|---|---|---|
| Screening (SCC 3-05-020-02,-03) | —[d] | | 0 015[e] | C |
| Screening (controlled) (SCC 3-05-020-02 03) | —[d] | | 0 00084[e] | C |
| Primary crushing (SCC 3-05-020-01) | 0 00070[f] | E | ND[g] | |
| Secondary crushing (SCC 3-05-020-02) | ND | | ND[g] | |
| Tertiary crushing (SCC 3-05-020 03) | —[d] | | 0 0024[h] | C |
| Primary crushing (controlled) (SCC 3 05-020-01) | ND | | ND[g] | NA |
| Secondary crushing (controlled) (SCC 3 05-020-02) | ND | | ND[g] | NA |
| Tertiary crushing (controlled) (SCC 3-05-020 03) | —[d] | | 0 00059[h] | C |
| Fines crushing[j] (SCC 3-05-020-05) | —[d] | | 0 015 | E |
| Fines crushing (controlled)[j] (SCC 3 05-020 05) | —[d] | | 0 0020 | E |
| Fines screening[j] (SCC 3 05-020-21) | —[d] | | 0 071 | E |
| Fines screening (controlled)[j] (SCC 3-05-020 21) | —[d] | | 0 0021 | E |
| Conveyor transfer point[k] (SCC 3 05-020-06) | —[d] | | 0 0014 | D |
| Conveyor transfer point (controlled)[k] (SCC 3-05-020 06) | —[d] | | 4 8x10 $^{-5}$ | D |
| Wet drilling unfragmented stone[m] (SCC 3-05-020 10) | ND | | 8 0x10 $^{-5}$ | E |
| Truck unloading fragmented stone[m] (SCC 3-05-020 31) | ND | | 1 6x10 $^{-5}$ | E |
| Truck loading--conveyor crushed stone[n] (SCC 3 05-020-32) | ND | | 0 00010 | E |

[a] Emission factors represent uncontrolled emissions unless noted Emission factors in lb/ton of material throughput SCC = Source Classification Code ND = no data

[b] Controlled sources (with wet suppression) are those that are part of the processing plant that employs current wet suppression technology similar to the study group The moisture content of the study group without wet suppression systems operating (uncontrolled) ranged from 0 21 to 1 3 percent and the same facilities operating wet suppression systems (controlled) ranged from 0 55 to 2 88 percent Due to carry over or the small amount of moisture required, it has been shown that each source, with the exception of crushers, does not need to employ direct water sprays Although the moisture content was the only variable measured, other process features may have as much influence on emissions from a given source Visual observations from each source under normal operating conditions are probably the best indicator of which emission factor is most appropriate Plants that employ sub-standard control measures as indicated by visual observations should use the uncontrolled factor with an appropriate control efficiency that best reflects the effectiveness of the controls employed.

[c] Although total suspended particulate (TSP) is not a measurable property from a process, some states may require estimates of TSP emissions No data are available to make these estimates However, relative ratios in AP-42 Sections 13 2 2 and 13 2 4 indicate that TSP emission factors may be estimated by multiplying PM-10 by 2 1

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
## Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev 0

Equipment or Process Rock – Aggregate Processing

| | Criteria Pollutants | | | | | |
|---|---|---|---|---|---|---|
| **Rating/Size** | **VOC** | **NOx** | **SOx** | **CO** | **$PM_{10}$** | **Inorganic** |
| All | | | | | Baghouse Venting Jaw Crushers, Cone Crushers, and Material Transfer Points Adjacent to and after these Items, and Water Sprays at Other Material Transfer Points (1990) | |

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

**Rajendra Singh**

**From** Taylor, Scott
**Sent** Monday, October 25, 2004 2 42 PM
**To** Rajendra Singh
**Subject** FW United Rock Products A/N 428833,428834,430411 430413,430416,430417

Raj

I have reviewed the draft Permits to Construct A/N 430417 equipment description 2 has a typo The bins should be identified as 1 thru 6 Otherwise, we have no other comments Please go ahead and finalize these permits We would like to pick them up when they are ready If you could have someone give me a call when they are ready I would appreciate it

*Scott Taylor*

*Justice & Associates*

*(562) 961-3494*

*Fax (562) 961-3493*

Transmittal

Via CON

**Justice & Associates**

4155 Outer Traffic Circle, Long Beach, CA 90804-2111 • (562) 961-3494 • Fax (562) 961-3493

# Document Transmittal

From **Kimba Spencer**

| | | | |
|---|---|---|---|
| Company | South Coast AQMD | Date | August 26, 2004 |
| Address | 21865 East Copley Drive | Our Job No | 8536 |
| City, State, Zip | Diamond Bar, CA 91765 | For | Approval ____ Record X |
| Attention | Rajendra Singh | Other | |

| Quantity | Description |
|---|---|
| 1 | Requested information |
| | |

## Comments

Raj

Enclosed find the information and forms you requested The signed CEQA form, the flow diagrams, and a marked-up copy of permit D08812

Please let me know if you have any questions

Best regards,



Kimba Spencer
Justice & Associates

CC Ken Barker, United Rock Products

## Rajendra Singh

**From** Rajendra Singh
**Sent** Wednesday, August 18, 2004 10 55 AM
**To** 'Spencer, Kimba'
**Subject** United Rock Products, ID # 65341

Hi Kimba
Please let me know the status of information I requested over a month ago to process the 8 applications from United Rock Products Please provide a date when this information will become available After I receive this date, AQMD will make a decision whether to reject these applications for lack of timely information or wait for the information
Thanks,
Raj Singh

-----Original Message-----
**From** Rajendra Singh
**Sent** Friday, July 16, 2004 4 35 PM
**To** 'Spencer, Kimba'
**Subject** FW United Rock Products, ID # 65341

Hi Kimba
Please provide the following information, in addition to the information requested in my email on 7/13/04

- A/N 430403 (item 4 in your letter) - The marked-up copy of permit # D08813 submitted with your application shows extensive changes It is recognized that these changes will result in lower overall emissions However, it will be prudent to calculate the new emissions and enter in the NSR data base so that the facility PTE limit of 4 tons / year is not unnecessarily penalized Therefore, this application should be considered a modification and not an administrative change and higher fee will apply We can bill CALMAT for the remaining fee when the permit is issued Please let me know if you have any problem with this assessment Also, please provide a flow diagram of the modified system

- A/N 430413 (item 6 in your letter) - A feeder belt is being added in the equipment list of permit # D08812 Please provide a flow diagram of the modified system

- A/N 430416 (item 7 in your letter) - A 30 ton feed hopper is being added in the equipment list of permit # D08808 Please provide a flow diagram of the modified system and indicate how much material goes thru the hopper and how much thru the gates under the storage bins

Please let me know by return email when the information requested in this and the previous email will be available

Thank you,

Raj Singh
Air Quality Engineer
South Coast Air Quality Management District
(909) 396-3099
(909) 396-3341- Fax

-----Original Message ----
**From** Rajendra Singh
**Sent** Tuesday, July 13, 2004 2 19 PM
**To** Spencer, Kimba'
**Subject** United Rock Products, ID # 65341

Hi Kimba

I need the following additional information to process the eight applications you submitted for United Rock Products, ID # 65341

- CEQA form for each application
- A/N 430418 (item 3 in your letter) - two Rock Pre-Crushing Systems (PO #s D08810 and D08807) are being consolidated into one permit unit Please provide a flow diagram for the combined system
- A/N 430413 (item 6 in your letter) - Drum Plant - a marked copy of permit # D08812 with corrections is missing in attachment G Please provide

Thank you,

Raj Singh
Air Quality Engineer
South Coast Air Quality Management District
(909) 396-3099
(909) 396-3341- Fax

**Justice** & *Associates*

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Las Vegas, NV 89102-0537
702 822 2111 Fax 702 822 2113

May 18, 2004

South Coast AQMD
21865 E Copley Drive
Diamond Bar, CA 91765

Attention Raj Singh

Subject United Rock Products (Facility ID# 65341)
Permit Issues

Dear Raj

In response to our telephone conversation on May 13, 2004, here are six (6) 400A Forms to accompany the package you are reviewing for United Rock Products

Please call if you have any questions at (562) 961-3494

Best regards,

Kimba Spencer
Justice & Associates

**Justice & Associates**

4155 Outer Traffic Circle
Long Beach, CA 90804-2111
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1401 S Arville St , Suite J
Las Vegas, NV 89102-0537
702 822 2111 Fax 702 822 2113

April 7, 2004

South Coast AQMD
21865 East Copley Drive
Diamond Bar, CA 91765

Attention Permit Services

Subject United Rock Products
(Facility ID #65341) Permit Issues

Enclosed are several applications and technical corrections for the United Rock Products, Irwindale facility Enclosed is a check in the amount of $17,091 64 to cover the application fees Under Attachment "A" is a fee schedule worksheet which describes the break down of the fees The following is a description of each application and/or correction and the supporting information

1 A new application for a stationary screening plant with a 56 TPH throughput This application is being submitted as a Class III application Attachment "B" following this letter includes the 400A form as well as emission calculations, an equipment list and a flow diagram This plant operates on grid power United Rock is requesting a production limit of 9,856 Tons Per Month (TPM) A/N 428833

2 A new application for a second stationary screening plant with an 84 TPH throughput This application is being submitted as a Class III application Attachment "C" following this letter includes the 400A form and supporting material for this application This plant operates on grid power United Rock is requesting a production limit of 20,160 TPM A/N 428834

3 Currently United Rock holds two permits for two separate Rock Pre-Crushing systems (D08810 and D08807) Although these two systems operate independently, both feed the same stock pile using two conveyors that are common to both systems Since this equipment uses common equipment, we are requesting the equipment and permit conditions on Permit D08807 be added to Permit D08810 Note that the Pioneer jaw crusher listed on permit D08807 is no longer in service and should not be included in the combined permit At the same time we are requesting that the daily limits be combined into one monthly limit of 624,000 tons/month ([11,200 TPD + 9,600 TPD] × 30 days/month = 624,000 TPM) AM 1304 18

This site operates a clamshell dredge While this equipment does not generate particulate emissions, several of the other permits for this facility included wet process equipment In order to be consistent with the other permits we have included a list of equipment for the dredge to be added to Permit D08810 The dredge includes the following equipment

| | | | |
|---|---|---|---|
| 1 | Belt Conveyor | 600' × 42" | 75 HP |
| 2 | Belt Conveyor | 350' × 42" | 125 HP |
| 3 | Belt Conveyor | 50' × 42" | 40 HP |
| 4 | Belt Conveyor | 650' × 42" | 275 HP |
| 5 | Belt Conveyor | 490' × 42" | 150 HP |
| 6 | Belt Conveyor | 130' × 42" | 75 HP |
| 7 | Belt Conveyor | 150' × 42" | 40 HP |
| 8 | Belt Conveyor | 150' × 42" | 40 HP |
| 9 | Belt Conveyor | 150' × 42" | 40 HP |
| 10 | Belt Conveyor | 150' × 42" | 40 HP |
| 11 | Belt Conveyor | 150' × 42" | 40 HP |
| 12 | Belt Conveyor | 150' × 42" | 40 HP |
| 13 | Belt Conveyor | 150' × 42" | 40 HP |
| 14 | Under Jaw Belt Conveyor | 60' × 42" | 30 HP |
| 15 | Conveyor A | 40' × 42" | 20 HP |
| 16 | Conveyor B | 40' × 42" | 20 HP |
| 17 | Svedala Screen | 6' × 20' | 40 HP |
| 18 | Svedala Screen | 6' × 20' | 40 HP |
| 19 | Svedala Screen | 6' × 20' | 40 HP |
| 20 | Svedala Screen | 6' × 20' | 40 HP |
| 21 | Svedala Screen | 5 5' × 15' | 30 HP |
| 22 | Svedala Screen | 5 5' × 15' | 30 HP |
| 23 | Plate Feeder | -- | -- |
| 24 | Jaw Crusher, Telesmith | 30' × 55" | 150 HP |

Both pre-crushing plants feed the primary surge pile using common conveyors Currently these conveyors do not appear to be covered on either permit As a result we request that two conveyors be added to Permit D08810 for the primary surge pile loading The following is the equipment description

| | | |
|---|---|---|
| Stacking Conveyor | 200' × 42" | 150 HP |
| Belt Conveyor | 275' × 42" | 125 HP |

Attachment "D" has the emission calculations for the additional conveyors

Rock Pre-crushing (Permit #D08810) requires a technical correction The jaw crushers specified on the permit as a 50 HP, KUE-KAN size 24" × 36" needs to be changed to a 150 HP, Minyu, size 40" × 42"

Attachment "D" includes marked-up copies of the facility permits showing the additional equipment and the corrections to the equipment descriptions and conditions

4 We are requesting a change to the Main Aggregate Plant's (Permit #D08813) existing production permit condition from a daily limit to a monthly limit A/N 430413

The existing permit conditions allow daily production of 24,000 TPD We are requesting a change to a monthly limit of 720,000 TPM (24,000 TPD × 30 days/month = 720,000 TPM)

The modification in production limit does not result in a change of emissions Attachment "E" includes a marked-up copy of the facility permit showing the additional equipment and the corrections to the equipment descriptions and conditions

5 The Base Plant (Permit # D08811) is outgrowing its production limits and United Rock is requesting to increase and change their daily limit to a monthly limit The permit currently has a daily processing limit of 3,200 tons We are requesting this be changed 150,000 tons per month Attachment "F" includes emission evaluation for both before and after the change in production A/N 430411

6 The Drum Plant permit (Permit # D08812) requires several technical corrections A feeder belt needs to be added to the equipment list The belt specifications are 45' L × 36" W and is 15 HP Additionally, the incline conveyor shows a horsepower of 40 and it should be changed to 50 HP The shuttle conveyor shows a horsepower of 5 and it should be 10 HP A/N 430413

The existing permit conditions allow a daily production of 4,000 tons We are requesting an increase and a change to a monthly limit of 180,000 tons per month With the addition of the conveyer and the increase in production, the emissions from this equipment will be increased by 172 80 lbs per year

Attachment "G" has a marked up copy of the permit with the corrections as well as emission calculations for both before and after the production increase

7 The Dry Loadout System (Permit # D08808) requires two technical corrections AN 430416
The horsepower on the discharge turnhead needs to be changed from 1 HP to 1 5 HP The permit is also missing a 30 Ton feed hopper which sits on top of belt conveyer C27 Material fed into the hopper will result in a like amount to be reduced from the gates that feed material to the conveyor As a result there are no additional emissions generated with the addition of the hopper

This facility is also outgrowing its production and United Rock would like to request an increase in production and a change from a daily limit to a monthly limit The current permit has a daily limit of 8,000 tons We are requesting this be changed to a monthly limit of 480 600 tons This increase in production will result in an annual emissions increase of 138 24 lbs per year

Attachment "H" has a marked up copy of the permit showing the correction as well as emission calculations for both before and after the production increase

8 The Wet Loadout System (Permit # D08809) requires a technical correction The AN 430417
horsepower on the discharge turnhead needs to be changed from 1 HP to 1 5 HP

This permit unit also has out grown its production United Rock would like to request an increase in production and a change from a daily limit to a monthly limit The current permit has a daily limit of 8,000 tons We are requesting this be changed to a monthly limit of 480,600 tons Since this facility processes only wet material the increase in production will not result in an increase in emissions

Attachment "I" has a marked up copy of the permit showing the correction

Below is a summary of the total emission increase that are a result of the changes in equipment or production

Emission Increase Summary

| | | |
|---|---|---|
| 1 | Screening Plant I | 83 97 lbs/year |
| 2 | Screening Plant II | 171 76 lbs/year |

| | | |
|---|---|---|
| 3 | Base Plant (D08811) | 155 52 lbs/year |
| 4 | Drum Plant (D08812) | 172 8 lbs/year |
| 5 | Dry Loadout (D08808) | 138 24 lbs/year |
| | Total | 722 29 lbs/year |
| | | 0 36 tons/year |

Currently, the facility's NSR balance shows that it is well below the offset threshold of 4 ton/year of PM (Please refer to Attachment "J") Based on the Emission Increase Summary the annual increase in emissions are 0 36 tons/year As a result, we do not anticipate these modifications requiring offsets

We trust this information will be sufficient to process these applications and requests If you have any questions, please call me at (562) 961-3494

Best regards,

Kimba Spencer
Justice & Associates

cc Ken Barker, United Rock Products

| **Attachments** | - | **Description** |
|---|---|---|
| "A" | - | Fee Schedule |
| "B' | - | Screening Plant I |
| "C" | - | Screening Plant II |
| "D" | - | Rock Pre-Crushing Systems (D08810) |
| "E" | - | Main Aggregate Plant (D08813) |
| "F" | - | Base Plant (D08811) |
| "G" | - | Drum Plant (D08812) |
| "H" | - | Dry Loadout System (D08808) |
| "I" | - | Wet Loadout System (D08809) |
| "J" | - | NSR Balance |

**Justice** & *Associates*

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# ATTACHMENT "A"

# FEE SCHEDULE

**Justice** & *Associates*

4155 Outer Traffic Circle
Long Beach, CA 90804-2111
(562) 961-3494 Fax (562) 961-3493

# FEE SCHEDULE WORK SHEET

(For permit processing in accordance with Rule 301)

Permits to be issued to: United Rock Products

Address: 1245 East Arrow Highway

City, State, Zip: Irwindale, CA 91706

| Quantity of Identical Units | Equipment/Process | Fee Schedule | Full Fee for First Permit Unit | + | 50% of Processing Fee for failure to obtain Permit to Construct | = | Total |
|---|---|---|---|---|---|---|---|
| 1 | Screening Plant | C | $2,232.96 | + | $1,116.48 | = | $3,349.44 |
| 1 | Screening Plant | C | $2,232.96 | + | $1,116.48 | = | $3,349.44 |
| 1 | Permit reissue (D08813) | N/A | $123.02 | + | -- | = | $123.02 |
| 1 | Aggregate Conveying (D08811) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Conveying (D08812) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Loading (D08808) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Loading (D08809) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Conveying (D08810) | D | $3,081.85 | + | $1,540.93 | = | $4,622.78 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Total Permit Processing Fee Due: $17,091.64

Comments:

**Justice** & *Associates*

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# ATTACHMENT "B"

# SCREENING PLANT I

Justice & Associates

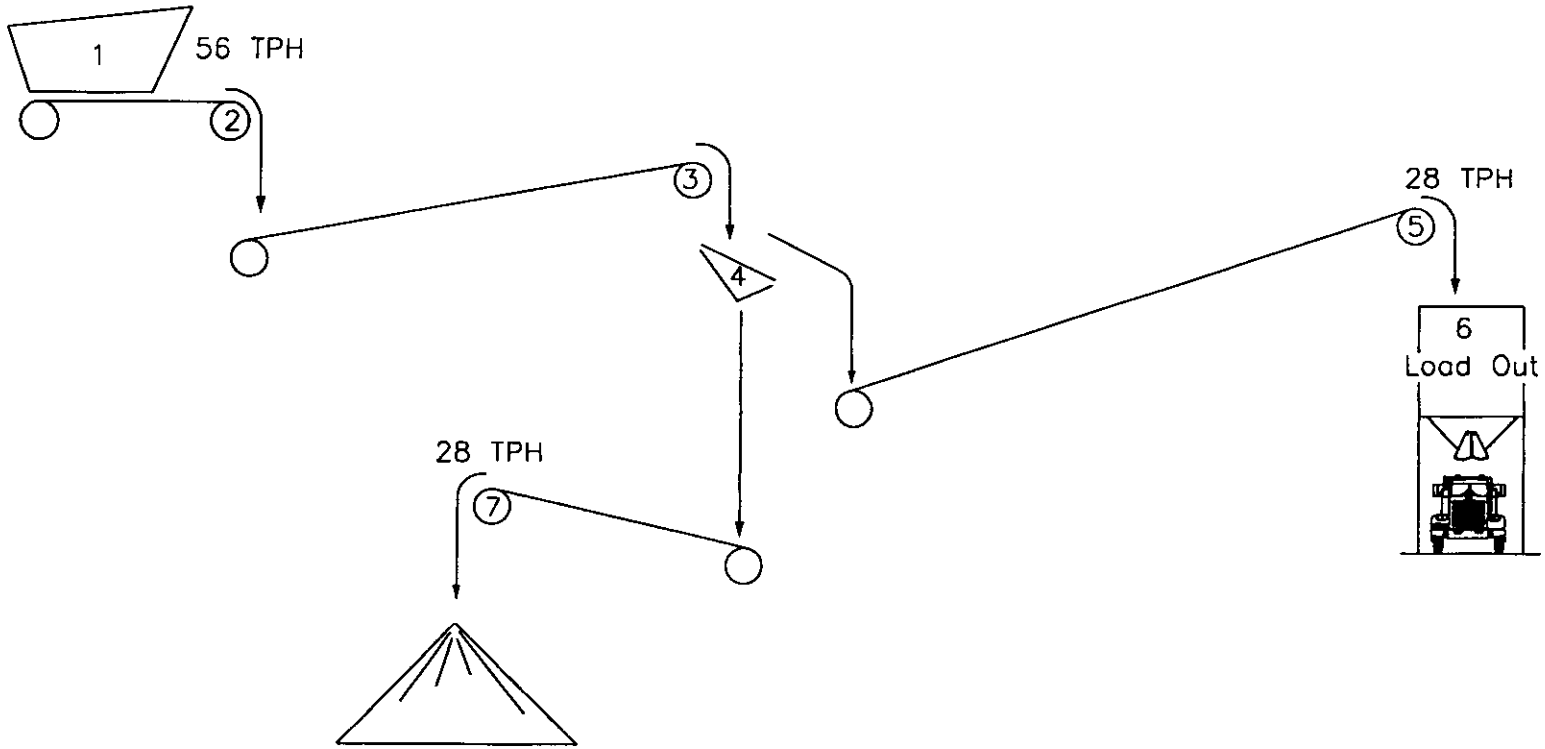
**United Rock**
**Screening Plant I - Equipment List**

| ID | Description | HP |
|---|---|---|
| 1 | Feeder Hopper - 20 Ton Capacity | |
| 2 | Feeder Belt 30" W ×15' L | 10 |
| 3 | Belt Conveyor 30" W × 75' L | 10 |
| 4 | Screen - DuoVibe 6' × 12' | 5 |
| 5 | Belt Conveyor 30" W × 75' L | 10 |
| 6 | Load Out Hopper - 30 Ton Capacity | |
| 7 | Belt Conveyor 30" W × 75' L | 10 |

## United Rock - Screening Plant I - Daily Emissions

| | Description | Throughput (ton/day) | × | $PM_{10}$ AP-42 Emission Factors (lb/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 1 | Hopper 1 to Belt Conveyor 2 | 448 | | -- | | -- |
| 2 | Belt Conveyor 2 to Belt Conveyor 3 | 448 | | 0 000048 | | 0 0215 |
| 3 | Belt Conveyor 3 to Screen 4 | 448 | | 0 000048 | | 0 0215 |
| 4 | Screen 4 | 448 | | 0 00059 | | 0 2643 |
| 5 | Screen 4 to Belt Conveyor 5 | 224 | | 0 000048 | | 0 0108 |
| 6 | Belt Conveyor 5 to Load Out 6 | 224 | | 0 000048 | | 0 0000 |
| 7 | Screen 4 to Belt Conveyor 7 | 224 | | 0 000048 | | 0 0000 |
| 8 | Belt Conveyor 7 to Pile | 224 | | -- | | -- |
| | | | | Total $PM_{10}$ (lb/day) | | 0 3181 |
| | | | | Aggregate Throughput (ton/day) | – | 448 |
| | | | | Process Emissions Factor (lb/ton) | | 0 00071 |

| Aggregate Throughput | | $PM_{10}$ Emissions Factor (lb/ton) | = | $PM_{10}$ Emission |
|---|---|---|---|---|
| 9,856 ton/month | × | 0 00071 | | 7 00 lb/month |
| 118272 ton/year | × | 0 00071 | | 83 97 lbs/yr |
| | | | | 0 04 tons/yr |




Justice & Associates
4155 Outer Traffic Circle Long Beach CA 90804
562-961-3494 Fax 562-961-3493

| DESCRIPTION | | | | |
|---|---|---|---|---|
| United Rock Products<br>Screening Plant 1 (Type 1) | | | | |
| JOB NO | CADCODE | DRAWN BY | DATE | DWG NO |
| 8536 | 8536 | KS | 3/10/04 | 8536FLOW |

# ATTACHMENT "C"

# SCREENING PLANT II

Justice & Associates

## United Rock
## Screening Plant II - Equipment List

| ID | Description | HP |
|---|---|---|
| 1 | Feeder Hopper - 20 Ton Capacity | |
| 2 | Feeder Belt 24" W ×12' L | 10 |
| 3 | Belt Conveyor 24" W × 60' L | 10 |
| 4 | Screen - DuoVibe 6' × 12' | 5 |
| 5 | Belt Conveyor 24" W × 75' L | 10 |
| 6 | Load Out Hopper - 30 Ton Capacity | |
| 7 | Belt Conveyor 24" W × 75' L | 10 |

**Justice** & *Associates*

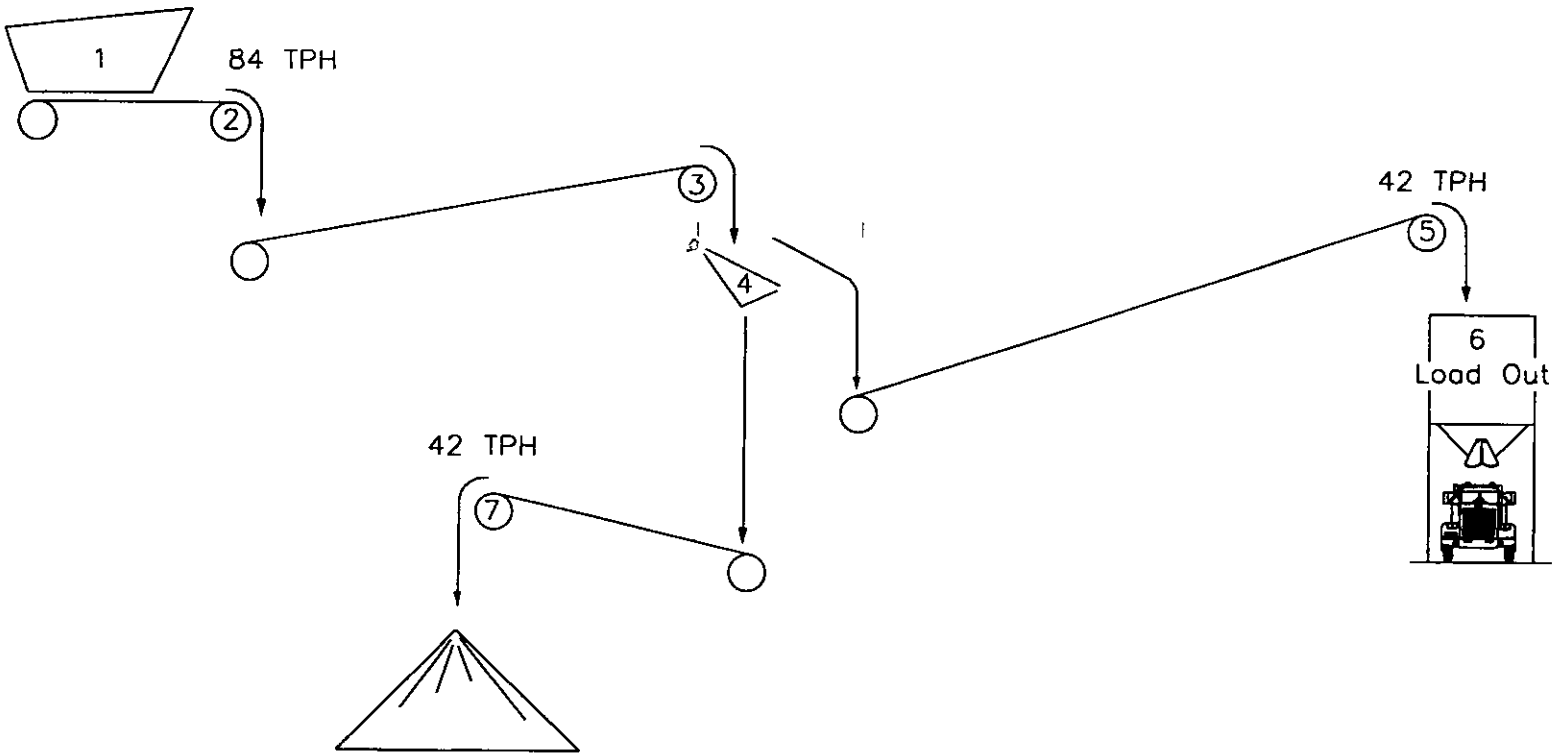
## United Rock - Screening Plant II- Daily Emissions

| | Description | Throughput (ton/day) | × | $PM_{10}$ AP-42 Emission Factors (lb/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 1 | Hopper 1 to Belt Conveyor 2 | 672 | | -- | | 0 0000 |
| 2 | Belt Conveyor 2 to Belt Conveyor 3 | 672 | | 0 000048 | | 0 0323 |
| 3 | Belt Conveyor 3 to Screen 4 | 672 | | 0 000048 | | 0 0323 |
| 4 | Screen 4 | 672 | | 0 00059 | | 0 3965 |
| 5 | Screen 4 to Belt Conveyor 5 | 336 | | 0 000048 | | 0 0161 |
| 6 | Belt Conveyor 5 to Load Out 6 | 336 | | 0 000048 | | 0 0000 |
| 7 | Screen 4 to Belt Conveyor 7 | 336 | | 0 000048 | | 0 0000 |
| 8 | Belt Conveyor 7 to Pile | 336 | | -- | | -- |
| | | | | Total $PM_{10}$ (lb/day) | | 0 4771 |
| | | | | Aggregate Throughput (ton/day) | – | 672 |
| | | | | Process Emissions Factor (lb/ton) | | 0 00071 |

| Aggregate Throughput | | $PM_{10}$ Emissions Factor (lb/ton) | = | $PM_{10-a}$ Emission |
|---|---|---|---|---|
| 20,160 ton/month | × | 0 00071 | | 14 31 lb/month |
| 241920 ton/year | × | 0 00071 | | 171 76 lbs/yr |
| | | | | 0 09 tons/yr |

8 hrs/day x 30 days/month

J:\UnitedRock\letter\853C letter KS doc




Justice & Associates
4155 Outer Traffic Circle Long Beach, CA 90804
562-961-3494 Fax 562-961-3493

| DESCRIPTION | | | | |
|---|---|---|---|---|
| United Rock Products<br>Screening Plant II (Type II) | | | | |
| JOB NO | CADCODE | DRAWN BY | DATE | DWG NO |
| 8536 | 8536 | KS | 3/10/04 | 8536FLOW |

P/O Approval
F71629
11-2-04 Melen

ROUTING RECORD

| DATE | FROM | TO | ACTION |
|---|---|---|---|
| 5-28-04 | RWM | RJS | CLASS I |
| 10-22-04 | RJS | RWM | ISSUE PO |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

REFERENCE TO OTHER APCD RECORDS INCLUDING VARIANCES

M




APPL # 430411
I D # 65341

UNITED ROCK PRODUCTS CORPORATION
1245 E ARROW HWY
IRWINDALE
AGGREGATE CONVEYING

Date 05/25/04

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

# PERMIT TO CONSTRUCT/OPERATE


Permit No.
F71629
A/N 430411

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership.
If the billing for the annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

ID 65341

Legal Owner
or Operator: UNITED ROCK PRODUCTS CORPORATION
1245 E ARROW HWY
IRWINDALE, CA 91706-1302

**Equipment Location:** 1245 E ARROW HWY, IRWINDALE, CA 91706-1302

**Equipment Description :**

BASE MATERIAL CONVEYING AND LOAD OUT SYSTEM CONSISTING OF:

1. TWO BELT CONVEYORS, C28 AND C29.
2. FIVE SURGE BINS, 10 CUBIC YARD EACH.
3. TWO BELT CONVEYORS, C30 AND C31.
4. TWO PUGMILL MIXERS, PM-1 AND PM-2, 100 H.P. EACH WITH TWO 7 1/2 H.P. WATER PUMPS.
5. TWO BELT CONVEYORS, C32 AND C33.
6. TWO TRUCK LOAD OUT BINS, 75 TONS EACH.

**Conditions :**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.
4. THIS EQUIPMENT SHALL NOT PROCESS MORE THAN 150,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.
5. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

**FILE COPY**

CONTINUATION OF PERMIT TO CONSTRUCT/OPERATE

**NOTICE**

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Dorris M Bailey

By Dorris M.Bailey/RS06
11/2/2004

**FILE COPY**

South Coast Air Quality Management District
P.O. Box 4944
Diamond Bar CA 91765
(909) 396-2000

# APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE FORM 400 - A

**Non-Title V Facilities:** This form must be accompanied by one or more 400-E-xx series forms(s). Complete this side of form only.
**Title V Facilities:** Complete both sides of this form. Include additional forms as necessary.

**NC/NOV NUMBER:**
**INSPECTOR** **SECTOR**
**ISSUE DATE**

## Section I - Company Information

LEGAL NAME OF OPERATOR: United Rock Products Corporation
☐ IRS OR ☐ S.S. Number

PERMIT TO BE ISSUED TO (SEE INSTRUCTIONS): United Rock Products Corporation

BUSINESS MAILING ADDRESS: 1245 East Arrow Highway, Irwindale, CA 91706

PERMIT MAILING ADDRESS, IF DIFFERENT FROM BUSINESS MAILING ADDRESS:

TYPE OF ORGANIZATION
☒ Corporation ☐ Limited Partnership ☐ Government Entity
☐ Individual ☐ General Partnership ☐ Other (Fill In):

ARE YOU A SMALL BUSINESS? (SEE INSTRUCTIONS) ☐ Yes ☒ No
AVERAGE ANNUAL GROSS RECEIPT $
NUMBER OF EMPLOYEES
IS YOUR BUSINESS 51 % OR MORE WOMAN/MINORITY OWNED? ☐ Yes ☐ No

**THIS SECTION IS REQUIRED FOR ALL APPLICATIONS FOR NEW CONSTRUCTION OR MAJOR MODIFICATIONS.**
ARE ALL MAJOR SOURCES UNDER SAME OWNERSHIP IN CALIFORNIA IN COMPLIANCE WITH FEDERAL, STATE, AND LOCAL AIR POLLUTION CONTROL RULES? ☒ Yes ☐ No

ARE YOU THE OWNER OF THE EQUIPMENT UNDER THIS APPLICATION? ☒ Yes ☐ No ☐ IRS OR ☐ S.S.NUMBER
IF NO, ENTER THE LEGAL NAME OF OWNER

## Section II - Facility Information

EQUIPMENT ADDRESS/LOCATION: 1245 East Arrow Highway (NUMBER/STREET)
Irwindale (CITY OR COMMUNITY) CA 91706 (ZIP CODE)
FACILITY NAME
FACILITY ID NUMBER 0 6 5 3 4 1

PRINT NAME OF CONTACT PERSON: Frank Keohane
TITLE OF CONTACT PERSON
TYPE OF BUSINESS AT THIS FACILITY: Aggregate Production
PRIMARY SIC CODE FOR THIS FACILITY: 1442
NUMBER OF EMPLOYEES AT THIS FACILITY
CONTACT PERSON'S TELEPHONE NUMBER: (626) 358-4558
CONTACT PERSON'S FAX NUMBER: (626) 357-9508
CONTACT PERSON'S E-MAIL ADDRESS

## Section III - Application Type

DESCRIPTION OF EQUIPMENT: Aggregate Conveying
PREVIOUS PERMIT #S: D08811

APPLICATION FOR (SEE INSTRUCTIONS):
☐ NEW CONSTRUCTION
☐ EXISTING EQUIPMENT WITHOUT PERMIT
☐ EXISTING EQUIPMENT WITH EXPIRED PERMIT
☐ CHANGE OF LOCATION ☐ RECLAIM Processing Fee
☐ MODIFICATION
☐ CHANGE OF PERMITTEE
☒ CHANGE OF PERMIT CONDITION

ARE YOU SUBMITTING MULTIPLE APPLICATIONS FOR EQUIPMENT IDENTICAL TO THAT DESCRIBED ABOVE? ☐ Yes ☒ No

☐ **APPLICATION FOR NON-TITLE V EQUIPMENT PERMIT. CHECK THE SUPPLEMENTAL SERIES 400-E-xx FORM(S) SUBMITTED WITH THIS 400-A FORM:**

| | | | |
|---|---|---|---|
| ____ 400-E-1 | • PARTICULATE MATTER (PM-10) CONTROL EQUIPMENT | ____ 400-E-13 | • INTERNAL COMBUSTION EQUIPMENT |
| ____ 400-E-2 | • VOLATILE ORGANIC COMPOUND (VOC) CONTROL EQUIPMENT | ____ 400-E-14 | • OPEN PROCESS TANK |
| ____ 400-E-3 | • SCRUBBER | ____ 400-E-14a | • OPEN PROCESS TANK; PROCESS LINE |
| ____ 400-E-4 | • ABRASIVE BLASTING EQUIPMENT | ____ 400-E-15 | • PRINTING EQUIPMENT |
| ____ 400-E-5 | • DEGREASER | ____ 400-E-16 | • SOLID MATERIALS STORAGE EQUIPMENT |
| ____ 400-E-7 | • DRY CLEANING EQUIPMENT | ____ 400-E-17 | • SPRAY BOOTH/OPEN SPRAY |
| ____ 400-E-8 | • ETHYLENE OXIDE STERILIZER' | ____ 400-E-17a | • POWDER SPRAY BOOTH |
| ____ 400-E-9 | • EXTERNAL COMBUSTION EQUIPMENT | ____ 400-E-18 | • STORAGE TANK (LIQUID & GASEOUS MATERIAL) |
| ____ 400-E- 10 | • FOOD BROILER/FRYER | ____ 400-E-19 | • WAVE SOLDER MACHINE |
| ____ 400-E-11 | • FUEL DISPENSING AND STORAGE EQUIPMENT | ____ 400-E-20 | • ASBESTOS REMOVAL EQUIPMENT |
| ____ 400-E-12 | • GAS TURBINE | ____ NONE | • ADDITIONAL INFORMATION SUBMITTED AS REQUESTED ON FORM 400-E-GI |

☐ **APPLICATION FOR TITLE V FACILITY PERMIT. PROVIDE INFORMATION REQUESTED ON REVERSE SIDE OF THIS FORM.**

**I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT.**
SIGNATURE OF RESPONSIBLE OFFICIAL OF FIRM: [signature]
TITLE OF RESPONSIBLE OFFICIAL OF FIRM: General Manager
TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL OF FIRM: Frank Keohane
RESPONSIBLE OFFICIALS TELEPHONE NUMBER: (626) 358-4558
DATE SIGNED: 5-18-04

**I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT.**
SIGNATURE OF PREPARER, IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM: [signature]
TITLE OF RESPONSIBLE OFFICIAL OF FIRM: Consultant
TYPE OR PRINT NAME OF PREPARER, IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM: Kimba Spencer
PREPARER'S TELEPHONE NUMBER: (562) 961-3494
DATE SIGNED: 5/18/04

*TITLE V FACILITIES ONLY: COMPLETE OTHER SIDE*

| AQMD USE ONLY | APPLICATION/TRACKING # | TYPE B C D | EQUIPMENT CATEGORY CODE: | FEE SCHEDULE: $ | VALIDATION |
|---|---|---|---|---|---|
| | 430411 | | | | NOV 25/04 |

| ENG. A R DATE | ENG. A R DATE | CLASS I III IV | ASSIGNMENT UNIT D ENGINEER | ENF SECT. | CHECK/MONEY ORDER # | AMOUNT $ |
|---|---|---|---|---|---|---|
| | | | | | | |

FORM 400-A, Rev. 3/98
(35805)
n e b
Job No. & Form 8536-2
N check

# TITLE V APPLICATION CERTIFICATION

**- TO BE COMPLETED BY TITLE V FACILITIES ONLY -**

## Section IV Title V Application

1. This is an application for a(n) (Check all applicable boxes and provide the requested information as appropriate):
   a. ☐ Initial Title V Permit
   b. ☐ Permit Renewal: Provide current permit expiration date: _____
   c. ☐ Administrative Permit Revision (Check all that apply)
      ☐ Change of Ownership. (Complete and attach equipment-specific Form 400-E-xx series forms)
      ☐ Change of Facility Information
      ☐ Other, Please specify: _____
   d. ☐ Other (Complete and attach equipment specific form 400-E-XX series form(s) to this form if your application involves permit action for new construction, change of location, non-administrative permit revision, alternative operating scenario (AOS), permit shield, streamlined permit conditions, or temporary source permit.)
2. Is this facility required to prepare a Risk Management Plan (RMP) for another agency? ☐ Yes ☐ No

## Section V Title V Submittal Checklist

1. Enter the quantity of each type form submitted in the space provided:

| | | | |
|---|---|---|---|
| _____ | 500-A2 | _____ | 500-F1 |
| _____ | 500-B | _____ | 500-F2 |
| _____ | 500-C1 | _____ | 500-F3 |
| _____ | 500-C2 | _____ | 500-F4 |
| _____ | 500-D | _____ | Other (specify): _____ |

2. Additional information referenced in this application submitted (Check **ALL** that apply):
   a. ☐ Existing Facility Permit
   b. ☐ Preliminary Facility Permit
   c. ☐ EFB Report for Year(s) _____
   d. ☐ None
   e. ☐ Other (Specify): _____
3. Supplemental information included with this application submittal (Check **ALL** that Apply):
   a. ☐ Facility Plot Plan
   b. ☐ MSDS Sheet(s)
   c. ☐ None
   d. ☐ Other (Specify): _____

**AQMD USE ONLY**

| APPLICATION TYPE | 30 DAY PUBLIC NOTICE START DATE | 30 DAY PUBLIC NOTICE END DATE | PUBLIC HEARING DATE | 45-DAY EPA REVIEW START DATE | 45-DAY EPA REVIEW END DATE |
|---|---|---|---|---|---|
| INITIAL, RENEWAL & SIGNIFICANT | | | | | |
| MINOR & DE MINIMIS | | | | | |
| ESTABLISH GENERAL PERMIT | | | | | |

**USE THE SECTIONS BELOW FOR TITLE V INITIAL AND RENEWAL APPLICATIONS ONLY:**

| APPLICATION/TRACKING # | TYPE B C D | EQUIPMENT CATEGORY CODE: ___ ___ ___ ___ / ___ ___ | FEE SCHEDULE: $ | VALIDATION |
|---|---|---|---|---|
| ENG. A R DATE | ENG. A R DATE | CLASS I III IV | ASSIGNMENT UNIT ENGINEER | ENF. SECT. | CHECK/MONEY ORDER AMOUNT # $ |

FORM 400-A, Rev. 3/98

4 MAY 21 P3:24

S.C.A.Q.M.D. ENGINEERING

South Coast Air Quality
Management District
21865 East Copley Drive
Diamond Bar, CA 91765
(909) 396- 2000

# CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) APPLICABILITY FORM 400 - CEQA

The SCAQMD is required by state law, the California Environmental Quality Act (CEQA), to review discretionary permit project applications for potential air quality and other environmental impacts. This form is a screening tool to assist the SCAQMD in clarifying whether or not the project[1] has the potential to generate significant adverse environmental impacts that might require preparation of a CEQA document [CEQA Guidelines §15060(a)].[2] Refer to the attached instructions for guidance in completing this form.[3] For each Form 400-A application, also complete and submit one Form 400-CEQA. If submitting multiple Form 400-A applications for the same project, only one 400-CEQA form is necessary for the entire project. If you need assistance completing this form, contact Lori Inga at (909) 396-3109.

## FACILITY INFORMATION

**Facility Name:** United Rock Products **Facility ID** (6-Digit): 065341

**Project Description:** Aggregate production facility.

## REVIEW FOR EXEMPTION FROM FURTHER CEQA ACTION

Check "Yes" or "No" as applicable

| | Yes | No | Is this application for: |
|---|---|---|---|
| A. | ☐ | ☒ | **A request for a change of permittee only (without equipment modifications)?** |
| B. | ☐ | ☒ | **Equipment certification or equipment registration?** |
| C. | ☐ | ☒ | **A CEQA and/or NEPA document previously or currently prepared that specifically evaluates this project?** If yes, a permit cannot be issued until a Final CEQA document and Notice of Determination is submitted. |
| D. | ☐ | ☒ | **Equipment damaged as a result of a disaster during state of emergency?** |
| E. | ☐ | ☒ | **A Title V permit renewal (without equipment modifications)?** |
| F. | ☐ | ☒ | **A Title V administrative permit revision?** |
| G. | ☐ | ☒ | **The conversion of an existing permit into an initial Title V permit?** |
| H. | ☐ | ☒ | **A functionally identical permit unit replacement with no increase in rating or emissions?** |
| I. | ☐ | ☒ | **A change of daily VOC permit limit to a monthly VOC permit limit?** |

If **"Yes"** is checked for any question above, your application does not require additional evaluation for CEQA applicability. Skip to page 2, "SIGNATURES" and sign and date this form.

## REVIEW OF IMPACTS WHICH MAY TRIGGER CEQA

Complete Sections I-V by checking "Yes" or "No" as applicable. To avoid delays in processing your application(s), explain all "Yes" responses on a separate sheet and attach it to this form.

| | Yes | No | Section I - General |
|---|---|---|---|
| 1. | ☐ | ☒ | **Has this project generated any known public controversy regarding potential adverse impacts that may be generated by the project?** Controversy may be construed as concerns raised by local groups at public meetings; adverse media attention such as negative articles in newspapers or other periodical publications, local news programs, environmental justice issues, etc. |
| 2. | ☐ | ☒ | **Is this project part of a larger project?** |
| | | | **Section II - Air Quality** |
| 3. | ☐ | ☒ | **Will there be any demolition, excavating, and/or grading construction activities that encompass an area exceeding 20,000 square feet?** |
| 4. | ☒ | ☐ | **Does this project include the open outdoor storage of dry bulk solid materials that could generate dust?** If Yes, include a plot plan with the application package. |

1. A "project" means the whole of an action which has a potential for resulting in physical change to the environment, including construction activities, clearing or grading of land, improvements to existing structures, and activities or equipment involving the issuance of a permit. For example, a project might include installation of a new, or modification of an existing internal combustion engine, dry-cleaning facility, boiler, gas turbine, spray coating booth, solvent cleaning tank, etc.
2. To download the CEQA guidelines, visit http://ceres.ca.gov/env_law/state.html.
3. To download this form and the instructions, visit http://www.aqmd.gov/ceqa.

| | Yes | No | |
|---|---|---|---|
| 5. | ☐ | ☒ | **Would this project result in noticeable off-site odors from activities that may not be subject to SCAQMD permit requirements?** For example, compost materials or other types of greenwaste (i.e., lawn clippings, tree trimmings, etc.) have the potential to generate odor complaints subject to Rule 402 - Nuisance. |
| 6. | ☐ | ☒ | **Does this project cause an increase of emissions from marine vessels, trains and/or airplanes?** |
| 7. | ☐ | ☒ | **Will the proposed project increase the QUANTITY of hazardous materials stored aboveground onsite or transported by mobile vehicle to or from the site by greater than or equal to the amounts associated with each compound on the attached Table 1?[4]** |
| | | | **Section III - Water Resources** |
| 8. | ☐ | ☒ | **Will the project increase demand for water at the facility by more than 5,000,000 gallons per day?** The following examples identify some, but not all, types of projects that may result in a "yes" answer to this question: 1) projects that generate steam; 2) projects that use water as part of the air pollution control equipment; 3) projects that require water as part of the production process; 4) projects that require new or expansion of existing sewage treatment facilities; 5) projects where water demand exceeds the capacity of the local water purveyor to supply sufficient water for the project; and 6) projects that require new or expansion of existing water supply facilities. |
| 9. | ☐ | ☒ | **Will the project require construction of new water conveyance infrastructure?** Examples of such projects are when water demands exceed the capacity of the local water purveyor to supply sufficient water for the project, or require new or modified sewage treatment facilities such that the project requires new water lines, sewage lines sewage hook ups etc |
| | | | **Section IV - Transportation / Circulation** |
| 10. | | | **Will the project result in** (Check all that apply): |
| | ☐ | ☒ | **a. the need for more than 350 new employees?** |
| | ☐ | ☒ | **b. an increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round-trips per day?** |
| | ☐ | ☒ | **c. increase customer traffic by more than 700 visits per day?** |
| | | | **Section V - Noise** |
| 11. | ☐ | ☒ | **Will the project include equipment with a noise specification GREATER THAN 90 decibels (dB)?** |
| | | | **Section VI - Public Services** |
| 12. | | | **Will the project create a permanent need for new or additional public services in any of the following areas** (Check all that apply): |
| | ☐ | ☒ | **a. Solid waste disposal?** Check "No" if the projected potential amount of wastes generated by the project is less than five tons per day. |
| | ☐ | ☒ | **b. Hazardous waste disposal?** Check "No" if the projected potential amount of hazardous wastes generated by the project is less than 42 cubic yards per day (or equivalent in pounds) |

**REMINDER For each 'Yes' checked in the sections above, attach all pertinent information including but not limited to estimated quantities - volumes, weights, etc -**

## SIGNATURES

I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. I UNDERSTAND THAT THIS FORM IS A SCREENING TOOL AND THAT THE SCAQMD RESERVES THE RIGHT TO CONSIDER OTHER PERTINENT INFORMATION IN DETERMINING CEQA APPLICABILITY.

| SIGNATURE OF RESPONSIBLE OFFICIAL OF FIRM: | TITLE OF RESPONSIBLE OFFICIAL OF FIRM: | |
|---|---|---|
| Frank Keohane | General Manager | |
| TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL OF FIRM: | RESPONSIBLE OFFICIAL'S TELEPHONE NUMBER: | DATE Signed: |
| Frank Keohane | (626) 358-4558 | |
| SIGNATURE OF PREPARER, IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM: | TITLE OF PREPARER: | |
| | Consultant | |
| TYPE OR PRINT NAME OF PREPARER: | PREPARER'S TELEPHONE NUMBER: | DATE Signed: |
| Kimba Spencer | (562) 961-3494 | 8/27/04 |

*THIS CONCLUDES FORM 400-CEQA. INCLUDE THIS FORM AND THE ATTACHMENTS WITH FORM 400-A.*

4. Table I - Regulated Substances List and Threshold Quantities for Accidental Release Prevention can be found in the Instructions for Form 400-CEQA.

SCAQMD PERMIT PROCESSING SYSTEM (PPS)

# FEE DATA - SUMMARY SHEET

| | | | |
|---|---|---|---|
| Application No : | 430411 | IRS/SS No: | |
| Previous Application No: | 185075 | Previous Permit No: | D08811 |

| | | | | | |
|---|---|---|---|---|---|
| Company Name : | UNITED ROCK PRODUCTS CORPORATION | | | Facility ID: | 65341 |
| Equipment Street: | 1245 E ARROWHWY , IRWINDALE CA 91706 | | | | |
| Equipment Desc : | AGGREGATE CONVEYING | | | | |
| Equipment Type : | BASIC | | | Fee Charged by: | B-CAT |
| B-CAT NO. : | 107200 | C-CAT NO: | 00 | Fee Schedule: | B |
| Facility Zone : | 09 | Deemed Compl. Date: | 6/10/2004 | Public Notice: | NO |

| | | | | | |
|---|---|---|---|---|---|
| Evaluation Type : | ALTERATION/MODIFICATION (PC/PO) | | | Small Business: | ☐ |
| Disposition : | Approve PC/PO, Recommended by Engineer | | | Penalty: | ☐ |
| Lead Appl. No : | | | | Identical Permit Unit: | ☐ |

| | | | | | |
|---|---|---|---|---|---|
| Air quality Analysis | | | $0.00 | Filing Fee Paid: | $0.00 |
| E.I.R | | | $0.00 | Permit Processing Fee Paid: | $1,411.74 |
| Health Risk Assessment | | | $0.00 | Permit Processing Fee Calculated*: | $1,411.74 |
| Significant Project | | | $0.00 | Permit Processing Fee Adjustment: | $0.00 |
| Express Processing | Hours: | 0.00 | $0.00 | | |
| Source Test Review | Hours: | 0.00 | $0.00 | | |
| Time & Material | Hours: | 0.00 | $0.00 | | |
| | | | | Total Additional Fee: | $0.00 |
| | | | | Additional Charge: | $0.00 |

COMMENTS:

RECOMMENDED BY: RAJENDRA SINGH DATE: 10/21/2004

REVIEWED BY: _____ DATE: 10-29-04

* ADJUSTED FOR SMALL BUSINESS, IDENTICAL EQUIPMENT AND P/O NO P/C PENALTY

SCAQMD PERMIT PROCESSING SYSTEM (PPS)

# AEIS DATA SHEET

Company Name : UNITED ROCK PRODUCTS CORPORATION
Facility ID : 65341
Equipment Address : 1245 E ARROW HWY
IRWINDALE CA 91706

Application Number : 430411
Equipment B-Cat : 107200
Estimated Completion Date : 10/21/04
Equipment C-Cat :
Equipment Type : Basic
Equipment Description : AGGREGATE CONVEYING

| | Emissions | |
|---|---|---|
| Emittants | R1 LB/HR | R2 LB/HR |
| PM10 | 1.46 | 0.05 |

**Applicable Rules**

| | | |
|---|---|---|
| 1401 | 05/02/2003 | New Source Review of Toxic Air Contaminants |
| 401 | 11/09/2001 | Visible Emissions |
| 402 | 05/07/1976 | Nuisance |
| 405 | 02/07/1986 | Solid Particulate Matter - Weight |

| | Mon | Tue | Wed | Thu | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|
| Daily Start Times : | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 |
| Daily Stop Times : | 24:00 | 24:00 | 24:00 | 24:00 | 24:00 | 24:00 | 24:00 |

User's Initials : RS06 Date: 10/21/04 Supervisor's Name : Miller Review Date : 10/29/04

# NSR DATA SUMMARY SHEET

Application No: 430411
Application Type: Alteration
Application Status: PENDAPPRV
Previous Apps,Dev,Permit #: 185075, 0 - x, NONE

---

Company Name: UNITED ROCK PRODUCTS CORPORATION
Company ID: 65341
Address: 1245 E ARROW HWY,IRWINDALE, CA 91706-1302
RECLAIM: NO
RECLAIM Zone: 02A
Air Basin: SC
[redacted]ne: 09
Title V: NO

---

Device ID: 0 - AGGREGATE-LOAD
Estimated Completion Date: 07-30-2004
Heat Input Capacity: 0 Million BTU/hr
Priority Reserve: NONE - No Priority Access Requested
Recommended Disposition: 31 - PERMIT TO OPERATE GRANTED
PR Expiration:
School Within 1000 Feet: NO
Operating Weeks Per Year: 52
Operating Days Per Week: 7
Monday Operating Hours: 00:00 to 24:00
Tuesday Operating Hours: 00:00 to 24:00
Wednesday Operating Hours: 00:00 to 24:00
Thursday Operating Hours: 00:00 to 24:00
[redacted]riday Operating Hours: 00:00 to 24:00
[redacted]aturday Operating Hours: 00:00 to 24:00
Sunday Operating Hours: 00:00 to 24:00

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Emittant: PM10
BACT:
Cost Effectiveness: NO
Source Type: MINOR
Emis Increase: 1
Modeling: N/A
Public Notice: N/A
CONTROLLED EMISSION
Max Hourly: 0.05 lbs/hr
Max Daily: 1.2 lbs/day
UNCONTROLLED EMISSION
Max Hourly: 1.46 lbs/hr
Max Daily: 35.04 lbs/day
CURRENT EMISSION
BACT 30 days Avg: 1 lbs/day
Annual Emission: 436.8 lbs/yr
District Exemption: None

SUPERVISOR'S APPROVAL: _____ SUPERVISOR'S REVIEW DATE: 10-29-04

Processed By: rsingh 10/22/2004 10:11:50 AM

# PERMIT TO CONSTRUCT/OPERATE EVALUATION,

| | |
|---|---|
| Applicant's Name | UNITED ROCK PRODUCTS CORPORATION |
| Company I.D. | 65341 |
| Mailing Address | 1245 E. ARROW HIGHWAY, IRWINDALE, CA 91706 |
| Equipment Address | 1245 E. ARROW HIGHWAY, IRWINDALE, CA 91706 |

**APPLICATION NUMBER** 430411, 430413, 430416, 430417

**BACKGROUND:**

These applications were submitted for change of condition of four aggregate processing systems. The company also operates two rock pre-crushing systems, and a dry and a wet load out system. According to the applicant, these aggregate processing systems were outgrowing their production limits and needed to increase their daily throughput limits. These applications were received on 4/14/04. A check on the compliance data base indicated three open notices, none of which will affect these applications. There are no schools within 1000 feet of the facility.

**EQUIPMENT DESCRIPTION:**

**Application No. 430411** ✓

BASE MATERIAL CONVEYING, STORAGE, AND LOAD OUT SYSTEM CONSISTING OF:

1. FIVE SURGE BINS, 10 CUBIC YARD CAPACITY EACH.

2. TWO PUGMILLS PM-1 AND PM-2, EACH WITH A 100 H.P. DRIVE AND A 7 1/2 H.P. WATER PUMP.

3. TWO LOAD OUT BINS, 75 TON CAPACITY EACH, WITH A PNEUMATICALLY OPERATED GATE.

4. SIX BELT CONVEYORS C-28, C-29, C-30, C-31, C-32, C-33, 180 H.P. TOTAL.

5. TWO AIR COMPRESSORS, 15 H.P. EACH.

**Application No. 430413**

AGGREGATE TRANSFER SYSTEM CONSISTING OF:

1. DUMP TRUCK RECEIVING HOPPER, UNDERGROUND, 10'-0" W. X 10'-0" L. X 10'-0" H.
2. DUMP TRUCK RECEIVING HOPPER, UNDERGROUND, 10'-0" W. X 10'-0" L. X 10'-0" H.
3. FEEDER BELT CONVEYOR, 3'-0" W. X 45'-0" L., 15 H.P.
4. BELT CONVEYOR, INCLINED, 50 H.P.
5. BELT CONVEYOR, SHUTTLE, 10 H.P., WITH A 1- 1/2 H.P. DRIVE.

**Application No. 430416**

CRUSHED AGGREGATE RECLAIMING, STORAGE, AND LOADOUT SYSTEM CONSISTING OF:

1. FEED HOPPER, 30 TON CAPACITY.
2. BELT CONVEYOR NO. 27, RECLAIMING, 300 HP, WITH A 1.5 HP DISCHARGE TURNHEAD.
3. SIX STORAGE BINS NOs. 7 THRU 12, EACH 200 TON CAPACITY WITH PNEUMATICALLY OPERATED GATES.
4. FOUR AIR COMPRESSORS, TWO 20 H.P. EACH, AND TWO 15 H.P. EACH.

**Application No. 430417**

WASHED SAND AND AGGREGATE RECLAIMING, STORAGE, AND LOADOUT SYSTEM CONSISTING OF:

1. BELT CONVEYOR NO. C-26, WASHED MATERIALS RECLAIMING, 250 H.P., WITH A 1.5 H.P. DISCHARGE TUNRNHEAD.
2. SIX STORAGE BINS NOs.1 7 THRU 6, EACH 200 TON CAPACITY, WITH PNEUMATICALLY OPERATED GATES.
3. FOUR AIR COMPRESSORS, TWO 20 H.P. EACH, AND TWO 15 H.P. EACH.

**PROCESS DESCRIPTION:**

Application No. 430411

This is an aggregate conveying, storage, and load out system. There is no change in the equipment. The applicant wants to increase the production limit from 3200 tons / day to 5000 tons / day (150,000 tons / month). The attached flow diagram shows the material flow for the system. The emissions from this

operation are particulate emissions at material transfer points. These emissions are controlled by wet suppression.

Application No. 430413

This is an aggregate transfer system that transfers material from dump trucks to a stock pile. In this modification, a new feeder belt is being installed in the system to transfer aggregate from the underground hoppers to an inclined conveyor and the motor horse power on the incline conveyor and shuttle conveyor will be increased. The applicant wants to increase the production limit from 4000 tons / day to 6000 tons / day (180,000 tons / month). The attached flow diagram shows the material flow for the system. The emissions from this operation are particulate emissions at material transfer points. These emissions are controlled by wet suppression.

Application No. 430416

This is an aggregate load out system that reclaims material from stock piles and transfers it to six storage bins. In this modification, a feed hopper is being added on the top of belt conveyor 27 and the motor horse power on the discharge turn head of this conveyor will be increased to 1.5 HP. The applicant wants to increase the production limit from 8000 tons / day to 16,000 tons / day (480,000 tons / month). The attached flow diagram shows the material flow for the system. The emissions from this operation are particulate emissions at material transfer points. These emissions are controlled by wet suppression.

Application No. 430417

This is the wet load out system that reclaims washed sand and aggregate from stock piles and transfers it to six storage bins. In this modification, motor horse power on the discharge turn head of the conveyor will be increased to 1.5 HP. The applicant wants to increase the production limit from 8000 tons / day to 16,000 tons / day (480,000 tons / month). The attached flow diagram shows the material flow for the system. Since the material is wet, the PM emissions from this operation will be insignificant.

**OPERATING SCHEDULE:**

Application Nos. 430411, 13, 16, 17

Average / maximum: 24 hrs. per day, 7 days per week, 52 weeks per year

**EMISSION CALCULATIONS:**

Application No. 430411

Throughput = 5000 tons per day
= 150,000 tons / month **(permit condition)**

The following PM10 emission factors are used from AP-42, Table 11.19.2-2 and Table 11.12-2 (attached).

Conveyor transfer points (uncontrolled) = 0.0014 lb./ ton
Conveyor transfer points (controlled-water spray) = 0.000048 lb./ ton

The loading of the first conveyor belt and discharge from the last conveyor belt to storage are not considered material transfer points.

| Transfer point. | Throughput (tons / day) | R1(PM10) lbs. / day | R2 (PM10) lbs./ day |
|---|---|---|---|
| Belt conveyors C28, C29 to surge bins | 5,000 | 7.0 | 0.24 |
| Surge bins to belt conveyors C30, C31 | 5,000 | 7.0 | 0.24 |
| Belt conveyors C30, C31 to Pug mills | 5,000 | 7.0 | 0.24 |
| Pug Mills to belt conveyors C32, C33 | 5,000 | 7.0 | 0.24 |
| Belt conveyors C32, C33 to load out hoppers | 5,000 | 7.0 | 0.24 |
| Total Emissions | | 35.0 | 1.2 |

R1 (PM10) = 35 lbs./ day
= 1.46 lbs./ hr

R2 (PM10) = 1.2 lbs./ day
= 0.05 lbs./ hr

Assuming PM10 = 50 % of PM

R1 (PM) = 2 x 1.46 lbs./ hr
= 2.92 lbs./ hr.

R2 (PM) = 2 x 0.05 lbs./ hr
= 0.10 lbs./ hr.

AEIS and NSR Emission Data

R1 (PM10) = 1.46 lb./ hr.
R2 (PM10) = 0.05 lb./ hr.

30-Day average (PM10) = (0.05 lbs./ hr. x 24 hrs./ day x 30 days / month) / 30
= 1.2 lb / day

Annual average (PM10) = (0.05 lbs./ hr. x 24 hrs./ day x 7 days / wk. x 52 wks./ yr.)
= 437 lbs./ yr.

Application No. 430413

Throughput = 6000 tons per day
= 180,000 tons / month (**permit condition**)

The following PM10 emission factors are used from AP-42, Table 11.19.2-2 and Table 11.12-2 (attached).

Conveyor transfer points (uncontrolled) = 0.0014 lb./ ton
Conveyor transfer points (controlled-water spray) = 0.000048 lb./ ton

The loading of the first conveyor belt and discharge from the last conveyor belt to storage are not considered material transfer points.

| **Transfer point.** | **Throughput (tons / day)** | **R1(PM10) lbs. / day** | **R2 (PM10) lbs./ day** |
|---|---|---|---|
| Dump trucks to receiving hoppers 1 &2 | 6,000 | 8.4 | 0.288 |
| Feeder conveyor 3 to incline conveyor 4 | 6,000 | 8.4 | 0.288 |
| Incline conveyor 4 to shuttle conveyor 5 | 6,000 | 8.4 | 0.288 |
| Shuttle conveyor 5 to stock pile | 6,000 | - | - |
| Total Emissions | | 25.2 | 0.864 |

R1 (PM10) = 25.2 lbs./ day
= 1.05 lbs./ hr

R2 (PM10) = 0.864 lbs./ day
= 0.036 lbs./ hr

Assuming PM10 = 50 % of PM

R1 (PM) = 2 x 1.05 lbs./ hr
= 2.1 lbs./ hr.

R2 (PM) = 2 x 0.036 lbs./ hr
= 0.072 lbs./ hr.

AEIS and NSR Emission Data

R1 (PM10) = 1.05 lb./ hr.
R2 (PM10) = 0.036 lb./ hr.

30-Day average (PM10) = (0.036 lbs./ hr. x 24 hrs./ day x 30 days / month) / 30
= 0.864lb / day

Annual average (PM10) = (0.036 lbs./ hr. x 24 hrs./ day x 7 days / wk. x 52 wks./ yr.)
= 314 lbs./ yr.

Application No. 430416

Throughput = 16,000 tons per day
= 480,000 tons / month (**permit condition**)

The following PM10 emission factors are used from AP-42, Table 11.19.2-2 and Table 11.12-2 (attached).

Conveyor transfer points (uncontrolled) = 0.0014 lb./ ton
Conveyor transfer points (controlled-water spray) = 0.000048 lb./ ton

The loading of the first conveyor belt and discharge from the last conveyor belt to storage are not considered material transfer points.

| **Transfer point.** | **Throughput (tons / day)** | **R1(PM10) lbs. / day** | **R2 (PM10) lbs./ day** |
|---|---|---|---|
| Stock piles and feed hopper to conveyor 27 | 8,000 | - | - |
| Conveyor 27 to storage bins | 8,000 | 11.2 | 0.384 |
| Total Emissions | | 11.2 | 0.384 |

R1 (PM10) = 11.2 lbs / day
= 0.47 lbs / hr

R2 (PM10) = 0.384 lbs / day
= 0.016 lbs / hr

Assuming PM10 = 50 % of PM

R1 (PM) = 2 x 0.47 lbs./ hr
= 0.94 lbs./ hr.

R2 (PM) = 2 x 0.016 lbs./ hr
= 0.032 lbs./ hr.

AEIS and NSR Emission Data

R1 (PM10) = 0.47 lb./ hr.
R2 (PM10) = 0.016 lb./ hr.

30-Day average (PM10) = (0.016 lbs./ hr. x 24 hrs./ day x 30 days / month) / 30
= 0.384lb / day

Annual average (PM10) = (0.016 lbs./ hr. x 24 hrs./ day x 7 days / wk. x 52 wks./ yr.)
= 140 lbs./ yr.

Application No. 430417

Throughput = 16,000 tons per day
= 480,000 tons / month **(permit condition)**

The system transfers washed sand and aggregate to storage bins using a belt conveyor with a turn head. Since the material is wet, the PM emissions will be insignificant.

R1 (PM, PM10) = 0 lb / hr
R2 (PM, PM10) = 0 lb / hr

**RULES:**

RULE 212 This is portable equipment. Public notice is not required.

RULE 401 Visible emissions are not expected with proper maintenance and operation of this equipment. Compliance is expected.

RULE 402 Operation of this equipment is not expected to create a nuisance. Compliance is expected.

RULE 405 The PM emissions are small and much less than the rate allowed in Table 405 (a) of this rule. Compliance is expected.

REG. XIII New Source Review

Subparagraph 1303(a) – BACT:
Water spray is used at material transfer points. BACT requirement is satisfied.

Subparagraph 1303(b)(1) – Modeling
The PM10 emissions are less than 0.41 lb./ hr. screening limit specified in this rule. Modeling is not required.

Subparagraph 1303(b)(2) – Emission Offsets
The facility PTE for PM10 is less than 4 tons per year. No offsets are required.

RULE 1401 Review of Toxic Air Contaminants
No toxic emissions are expected from these operations. Compliance is expected.

**CONCLUSIONS/RECOMMENDATIONS:**

The equipment is expected to comply with all applicable AQMD rules and regulations. Issue PO subject to permit conditions listed below:

**Conditions:**

Application No. 430411

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THIS PLANT SHALL NOT PROCESS MORE THAN 150,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

5. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

Application No. 430413

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THIS PLANT SHALL NOT PROCESS MORE THAN 180,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

5. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

Application No. 430416

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THIS PLANT SHALL NOT PROCESS MORE THAN 480,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

5. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

Application No. 430417

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3 THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THIS PLANT SHALL NOT PROCESS MORE THAN 480,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

5. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

Table 11.19.2-2 (English Units). EMISSION FACTORS FOR CRUSHED STONE PROCESSING OPERATIONS[a]

| Source[b] | Total Particulate Matter | EMISSION FACTOR RATING | Total PM-10[c] | EMISSION FACTOR RATING |
|---|---|---|---|---|
| Screening (SCC 3-05-020-02,-03) | —[d] | | 0.015[e] | C |
| Screening (controlled) (SCC 3-05-020-02-03) | —[d] | | 0.00084[e] | C |
| Primary crushing (SCC 3-05-020-01) | 0.00070[f] | E | ND[g] | |
| Secondary crushing (SCC 3-05-020-02) | ND | | ND[g] | |
| Tertiary crushing (SCC 3-05-020-03) | —[d] | | 0.0024[h] | C |
| Primary crushing (controlled) (SCC 3-05-020-01) | ND | | ND[g] | NA |
| Secondary crushing (controlled) (SCC 3-05-020-02) | ND | | ND[g] | NA |
| Tertiary crushing (controlled) (SCC 3-05-020-03) | —[d] | | 0.00059[h] | C |
| Fines crushing[j] (SCC 3-05-020-05) | —[d] | | 0.015 | E |
| Fines crushing (controlled)[j] (SCC 3-05-020-05) | —[d] | | 0.0020 | E |
| Fines screening[j] (SCC 3-05-020-21) | —[d] | | 0.071 | E |
| Fines screening (controlled)[j] (SCC 3-05-020-21) | —[d] | | 0.0021 | E |
| Conveyor transfer point[k] (SCC 3-05-020-06) | —[d] | | 0.0014 | D |
| Conveyor transfer point (controlled)[k] (SCC 3-05-020-06) | —[d] | | $4.8 \times 10^{-5}$ | D |
| Wet drilling: unfragmented stone[m] (SCC 3-05-020-10) | ND | | $8.0 \times 10^{-5}$ | E |
| Truck unloading: fragmented stone[m] (SCC 3-05-020-31) | ND | | $1.6 \times 10^{-5}$ | E |
| Truck loading--conveyor: crushed stone[n] (SCC 3-05-020-32) | ND | | 0.00010 | E |

[a] Emission factors represent uncontrolled emissions unless noted. Emission factors in lb/ton of material throughput. SCC = Source Classification Code. ND = no data.

[b] Controlled sources (with wet suppression) are those that are part of the processing plant that employs current wet suppression technology similar to the study group. The moisture content of the study group without wet suppression systems operating (uncontrolled) ranged from 0.21 to 1.3 percent and the same facilities operating wet suppression systems (controlled) ranged from 0.55 to 2.88 percent. Due to carry over or the small amount of moisture required, it has been shown that each source, with the exception of crushers, does not need to employ direct water sprays. Although the moisture content was the only variable measured, other process features may have as much influence on emissions from a given source. Visual observations from each source under normal operating conditions are probably the best indicator of which emission factor is most appropriate. Plants that employ sub-standard control measures as indicated by visual observations should use the uncontrolled factor with an appropriate control efficiency that best reflects the effectiveness of the controls employed.

[c] Although total suspended particulate (TSP) is not a measurable property from a process, some states may require estimates of TSP emissions. No data are available to make these estimates. However, relative ratios in AP-42 Sections 13.2.2 and 13.2.4 indicate that TSP emission factors may be estimated by multiplying PM-10 by 2.1.

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
## Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Rock – Aggregate Processing

| | Criteria Pollutants | | | | | |
|---|---|---|---|---|---|---|
| **Rating/Size** | **VOC** | **NOx** | **SOx** | **CO** | **$PM_{10}$** | **Inorganic** |
| All | | | | | Baghouse Venting Jaw Crushers, Cone Crushers, and Material Transfer Points Adjacent to and after these Items; and Water Sprays at Other Material Transfer Points (1990) | |

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

**Rajendra Singh**

**From:** Taylor, Scott
**Sent:** Monday, October 25, 2004 2:42 PM
**To:** Rajendra Singh
**Subject:** FW: United Rock Products A/N 428833,428834,430411,430413,430416,430417

Raj,

I have reviewed the draft Permits to Construct. A/N 430417 equipment description 2 has a typo. The bins should be identified as 1 thru 6. Otherwise, we have no other comments. Please go ahead and finalize these permits. We would like to pick them up when they are ready. If you could have someone give me a call when they are ready I would appreciate it.

*Scott Taylor*

*Justice & Associates*

*(562) 961-3494*

*Fax (562) 961-3493*

Transmittal

Via: CON

**Justice & Associates**

4155 Outer Traffic Circle, Long Beach, CA 90804-2111 • (562) 961-3494 • Fax (562) 961-3493

# Document Transmittal

From: **Kimba Spencer**

Company: South Coast AQMD
Address: 21865 East Copley Drive
City, State, Zip: Diamond Bar, CA 91765
Attention: Rajendra Singh

Date: August 26, 2004
Our Job No.: 8536
For: Approval ____ Record X
Other: ____

| Quantity | Description |
|---|---|
| 1 | Requested information |
| | |

Comments

Raj:

Enclosed find the information and forms you requested: The signed CEQA form, the flow diagrams, and a marked-up copy of permit D08812.

Please let me know if you have any questions.

Best regards,



Kimba Spencer
Justice & Associates

CC: Ken Barker, United Rock Products

## Rajendra Singh

**From:** Rajendra Singh
**Sent:** Wednesday, August 18, 2004 10:55 AM
**To:** 'Spencer, Kimba'
**Subject:** United Rock Products, ID # 65341

Hi Kimba
Please let me know the status of information I requested over a month ago to process the 8 applications from United Rock Products. Please provide a date when this information will become available. After I receive this date, AQMD will make a decision whether to reject these applications for lack of timely information or wait for the information.
Thanks,
Raj Singh

-----Original Message-----
**From:** Rajendra Singh
**Sent:** Friday, July 16, 2004 4:35 PM
**To:** 'Spencer, Kimba'
**Subject:** FW: United Rock Products, ID # 65341

Hi Kimba
Please provide the following information, in addition to the information requested in my email on 7/13/04:

- A/N 430403 (item 4 in your letter) - The marked-up copy of permit # D08813 submitted with your application shows extensive changes. It is recognized that these changes will result in lower overall emissions. However, it will be prudent to calculate the new emissions and enter in the NSR data base so that the facility PTE limit of 4 tons / year is not unnecessarily penalized. Therefore, this application should be considered a modification and not an administrative change and higher fee will apply. We can bill CALMAT for the remaining fee when the permit is issued. Please let me know if you have any problem with this assessment. Also, please provide a flow diagram of the modified system.

- A/N 430413 (item 6 in your letter) - A feeder belt is being added in the equipment list of permit # D08812. Please provide a flow diagram of the modified system.

- A/N 430416 (item 7 in your letter) - A 30 ton feed hopper is being added in the equipment list of permit # D08808. Please provide a flow diagram of the modified system and indicate how much material goes thru the hopper and how much thru the gates under the storage bins.

Please let me know by return email when the information requested in this and the previous email will be available.

Thank you,

Raj Singh
Air Quality Engineer
South Coast Air Quality Management District
(909) 396-3099
(909) 396-3341- Fax

-----Original Message-----
**From:** Rajendra Singh
**Sent:** Tuesday, July 13, 2004 2:19 PM
**To:** 'Spencer, Kimba'
**Subject:** United Rock Products, ID # 65341

Hi Kimba

I need the following additional information to process the eight applications you submitted for United Rock Products, ID # 65341.

- CEQA form for each application
- A/N 430418 (item 3 in your letter) - two Rock Pre-Crushing Systems (PO #s D08810 and D08807) are being consolidated into one permit unit. Please provide a flow diagram for the combined system.
- A/N 430413 (item 6 in your letter) - Drum Plant - a marked copy of permit # D08812 with corrections is missing in attachment G. Please provide.

Thank you,

Raj Singh
Air Quality Engineer
South Coast Air Quality Management District
(909) 396-3099
(909) 396-3341- Fax

**Justice** & *Associates*

4155 Outer Traffic Circle
Long Beach, CA 90804-2111
562.961.3494 Fax 562.961.3493

www.justiceassociates.com

1401 S. Arville St., Suite J
Las Vegas, NV 89102-0537
702.822.2111 Fax 702.822.2113

May 18, 2004

South Coast AQMD
21865 E. Copley Drive
Diamond Bar, CA 91765

Attention: Raj Singh

Subject: United Rock Products (Facility ID# 65341)
Permit Issues

Dear Raj:

In response to our telephone conversation on May 13, 2004, here are six (6) 400A Forms to accompany the package you are reviewing for United Rock Products.

Please call if you have any questions at (562) 961-3494.

Best regards,

Kimba Spencer
Justice & Associates

J:\UnitedRock\letters\8536 letter.doc

**Justice** & *Associates*

4155 Outer Traffic Circle
Long Beach, CA 90804-2111
562.961.3494 Fax 562.961.3493

www.justiceassociates.com

1401 S. Arville St., Suite J
Las Vegas, NV 89102-0537
702.822.2111 Fax 702.822.2113

April 7, 2004

South Coast AQMD
21865 East Copley Drive
Diamond Bar, CA 91765

Attention: Permit Services

Subject: United Rock Products
(Facility ID #65341) Permit Issues

Enclosed are several applications and technical corrections for the United Rock Products, Irwindale facility. Enclosed is a check in the amount of $17,091.64 to cover the application fees. Under Attachment "A" is a fee schedule worksheet which describes the break down of the fees. The following is a description of each application and/or correction and the supporting information.

1. A new application for a stationary screening plant with a 56 TPH throughput. A/N428833
This application is being submitted as a Class III application. Attachment "B" following this letter includes the 400A form as well as emission calculations, an equipment list and a flow diagram. This plant operates on grid power. United Rock is requesting a production limit of 9,856 Tons Per Month (TPM).

2. A new application for a second stationary screening plant with an 84 TPH throughput. A/N428834
This application is being submitted as a Class III application. Attachment "C" following this letter includes the 400A form and supporting material for this application. This plant operates on grid power. United Rock is requesting a production limit of 20,160 TPM.

3. Currently United Rock holds two permits for two separate Rock Pre-Crushing systems (D08810 and D08807). Although these two systems operate independently, both feed the same stock pile using two conveyors that are common to both systems. Since this equipment uses common equipment, we are requesting the equipment and permit conditions on Permit D08807 be added to Permit D08810. Note that the Pioneer jaw crusher listed on permit D08807 is no longer in service and should not be included in the combined permit. At the same time we are requesting that the daily limits be combined into one monthly limit of 624,000 tons/month ([11,200 TPD + 9,600 TPD] × 30 days/month = 624,000 TPM)

This site operates a clamshell dredge. While this equipment does not generate particulate emissions, several of the other permits for this facility included wet process equipment. In order to be consistent with the other permits we have included a list of equipment for the dredge to be added to Permit D08810. The dredge includes the following equipment:

| | | | |
|---|---|---|---|
| 1. | Belt Conveyor | 600' × 42" | 75 HP |
| 2. | Belt Conveyor | 350' × 42" | 125 HP |
| 3. | Belt Conveyor | 50' × 42" | 40 HP |
| 4. | Belt Conveyor | 650' × 42" | 275 HP |
| 5. | Belt Conveyor | 490' × 42" | 150 HP |
| 6. | Belt Conveyor | 130' × 42" | 75 HP |
| 7. | Belt Conveyor | 150' × 42" | 40 HP |
| 8. | Belt Conveyor | 150' × 42" | 40 HP |
| 9. | Belt Conveyor | 150' × 42" | 40 HP |
| 10. | Belt Conveyor | 150' × 42" | 40 HP |
| 11. | Belt Conveyor | 150' × 42" | 40 HP |
| 12. | Belt Conveyor | 150' × 42" | 40 HP |
| 13. | Belt Conveyor | 150' × 42" | 40 HP |
| 14. | Under Jaw Belt Conveyor | 60' × 42" | 30 HP |
| 15. | Conveyor A | 40' × 42" | 20 HP |
| 16. | Conveyor B | 40' × 42" | 20 HP |
| 17. | Svedala Screen | 6' × 20' | 40 HP |
| 18. | Svedala Screen | 6' × 20' | 40 HP |
| 19. | Svedala Screen | 6' × 20' | 40 HP |
| 20. | Svedala Screen | 6' × 20' | 40 HP |
| 21. | Svedala Screen | 5.5' × 15' | 30 HP |
| 22. | Svedala Screen | 5.5' × 15' | 30 HP |
| 23. | Plate Feeder | -- | -- |
| 24. | Jaw Crusher, Telesmith | 30' × 55" | 150 HP |

Both pre-crushing plants feed the primary surge pile using common conveyors. Currently these conveyors do not appear to be covered on either permit. As a result we request that two conveyors be added to Permit D08810 for the primary surge pile loading. The following is the equipment description:

| | | |
|---|---|---|
| Stacking Conveyor | 200' × 42" | 150 HP |
| Belt Conveyor | 275' × 42" | 125 HP |

Attachment "D" has the emission calculations for the additional conveyors.

Rock Pre-crushing (Permit #D08810) requires a technical correction. The jaw crushers specified on the permit as a 50 HP, KUE-KAN size 24" × 36" needs to be changed to a 150 HP, Minyu, size 40" × 42".

Attachment "D" includes marked-up copies of the facility permits showing the additional equipment and the corrections to the equipment descriptions and conditions.

4. We are requesting a change to the Main Aggregate Plant's (Permit #D08813) existing production permit condition from a daily limit to a monthly limit. A/N 430403

The existing permit conditions allow daily production of 24,000 TPD. We are requesting a change to a monthly limit of 720,000 TPM (24,000 TPD × 30 days/month = 720,000 TPM).

The modification in production limit does not result in a change of emissions. Attachment "E" includes a marked-up copy of the facility permit showing the additional equipment and the corrections to the equipment descriptions and conditions.

5. The Base Plant (Permit # D08811) is outgrowing its production limits and United Rock is requesting to increase and change their daily limit to a monthly limit. The permit currently has a daily processing limit of 3,200 tons. We are requesting this be changed 150,000 tons per month. Attachment "F" includes emission evaluation for both before and after the change in production. A/N 430411

6. The Drum Plant permit (Permit # D08812) requires several technical corrections. A feeder belt needs to be added to the equipment list. The belt specifications are 45' L × 36" W and is 15 HP. Additionally, the incline conveyor shows a horsepower of 40 and it should be changed to 50 HP. The shuttle conveyor shows a horsepower of 5 and it should be 10 HP. A/N 430413

The existing permit conditions allow a daily production of 4,000 tons. We are requesting an increase and a change to a monthly limit of 180,000 tons per month. With the addition of the conveyer and the increase in production, the emissions from this equipment will be increased by 172.80 lbs per year.

Attachment "G" has a marked up copy of the permit with the corrections as well as emission calculations for both before and after the production increase.

7. The Dry Loadout System (Permit # D08808) requires two technical corrections. A/N 430416 The horsepower on the discharge turnhead needs to be changed from 1 HP to 1.5 HP. The permit is also missing a 30 Ton feed hopper which sits on top of belt conveyer C27. Material fed into the hopper will result in a like amount to be reduced from the gates that feed material to the conveyor. As a result there are no additional emissions generated with the addition of the hopper.

This facility is also outgrowing its production and United Rock would like to request an increase in production and a change from a daily limit to a monthly limit. The current permit has a daily limit of 8,000 tons. We are requesting this be changed to a monthly limit of 480,600 tons. This increase in production will result in an annual emissions increase of 138.24 lbs per year.

Attachment "H" has a marked up copy of the permit showing the correction as well as emission calculations for both before and after the production increase.

8. The Wet Loadout System (Permit # D08809) requires a technical correction. The A/N 430417 horsepower on the discharge turnhead needs to be changed from 1 HP to 1.5 HP.

This permit unit also has out grown its production. United Rock would like to request an increase in production and a change from a daily limit to a monthly limit. The current permit has a daily limit of 8,000 tons. We are requesting this be changed to a monthly limit of 480,600 tons. Since this facility processes only wet material the increase in production will not result in an increase in emissions.

Attachment "I" has a marked up copy of the permit showing the correction.

Below is a summary of the total emission increase that are a result of the changes in equipment or production.

Emission Increase Summary

| | | |
|---|---|---|
| 1. | Screening Plant I | 83.97 lbs/year |
| 2. | Screening Plant II | 171.76 lbs/year |

| | | |
|---|---|---|
| 3. | Base Plant (D08811) | 155.52 lbs/year |
| 4. | Drum Plant (D08812) | 172.8 lbs/year |
| 5. | Dry Loadout (D08808) | 138.24 lbs/year |
| | Total | 722.29 lbs/year |
| | | 0.36 tons/year |

Currently, the facility's NSR balance shows that it is well below the offset threshold of 4 ton/year of PM (Please refer to Attachment "J"). Based on the Emission Increase Summary the annual increase in emissions are 0.36 tons/year. As a result, we do not anticipate these modifications requiring offsets.

We trust this information will be sufficient to process these applications and requests. If you have any questions, please call me at (562) 961-3494.

Best regards,

Kimba Spencer
Justice & Associates

cc: Ken Barker, United Rock Products

| **Attachments** | - | **Description** |
|---|---|---|
| "A" | - | Fee Schedule |
| "B" | - | Screening Plant I |
| "C" | - | Screening Plant II |
| "D" | - | Rock Pre-Crushing Systems (D08810) |
| "E" | - | Main Aggregate Plant (D08813) |
| "F" | - | Base Plant (D08811) |
| "G" | - | Drum Plant (D08812) |
| "H" | - | Dry Loadout System (D08808) |
| "I" | - | Wet Loadout System (D08809) |
| "J" | - | NSR Balance |

# ATTACHMENT "F"

# BASE PLANT
# (D08811)

**Justice** & *Associates*

## United Rock - Base Plant - Emissions Before Increase

### Emission Evaluation

| | Description | Thruput (ton/day) | x | $PM_{10}$ AP-42 Emission Factors (lb/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 1 | Conveyors C28 and C29 to Surge Bins | 3,200 | | 0.000048 | | 0.1536 |
| 2 | Surge Bins to Conveyors C30 and C31 | 3,200 | | 0.000048 | | 0.1536 |
| 3 | Conveyors C30 and C31 to Pug Mills | 3,200 | | 0.000048 | | 0.1536 |
| 4 | Pugmills to Conveyors C32 and C33 | 3,200 | | 0.000048 | | 0.1536 |
| 5 | Conveyors C32 and C33 to Loadout Hoppers | 3,200 | | 0.000048 | | 0.1536 |
| | | | | Total $PM_{10}$ (lb/day) | | 0.7680 |
| | | | | Aggregate Thruput (ton/day) | ÷ | 3200 |
| | | | | Process Emissions Factor (lb/ton) | | 0.00024 |

### Total Facility Emissions

| Aggregate Thruput | | | $PM_{10}$ Emissions Factor (lb/ton) | = | $PM_{10}$ Emission | |
|---|---|---|---|---|---|---|
| 96,000 | ton/month | x | 0.00024 | | 23.04 | lb/month |
| 1,152,000 | ton/year | x | 0.00024 | | 276.48 | lb/year |
| | | | | | 0.14 | tons/yr |

**Justice** & *Associates*

## United Rock - Base Plant - Emissions After Increase

### Emissions Evaluation

| | Description | Thruput (ton/day) | x | $PM_{10}$ AP-42 Emission Factors (lb/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 1 | Conveyors C28 and C29 to Surge Bins | 5,000 | | 0.000048 | | 0.2400 |
| 2 | Surge Bins to Conveyors C30 and C31 | 5,000 | | 0.000048 | | 0.2400 |
| 3 | Conveyors C30 and C31 to Pug Mills | 5,000 | | 0.000048 | | 0.2400 |
| 4 | Pugmills to Conveyors C32 and C33 | 5,000 | | 0.000048 | | 0.2400 |
| 5 | Conveyors C32 and C33 to Loadout Hoppers | 5,000 | | 0.000048 | | 0.2400 |
| | | | | Total $PM_{10}$ (lb/day) | | 1.2000 |
| | | | | Aggregate Thruput (ton/day) | ÷ | 5000 |
| | | | | Process Emissions Factor (lb/ton) | | 0.00024 |

### Total Facility Emissions

| Aggregate Thruput | | $PM_{10}$ Emissions Factor (lb/ton) | = | $PM_{10}$ Emission | |
|---|---|---|---|---|---|
| 150,000 | ton/month x | 0.00024 | | 36.00 | lb/month |
| 1,800,000 | ton/year x | 0.00024 | | 432.00 | lb/year |
| | | | | 0.22 | tons/yr |

### Summary of Emission Increase

| | $PM_{10}$ (lbs/year) | |
|---|---|---|
| Before | 276.48 | |
| After | 432.00 | |
| Increase | 155.52 | Total |

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D08811
A/N 185075
Page 1

**This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.**

**Legal Owner**
**Or Operator:** UNITED ROCK PRODUCTS CORPORATION

**ID** 65341

**Equipment**
**located at:** 1245 EAST ARROW HIGHWAY, IRWINDALE, CALIFORNIA

FILE COPY

**Equipment Description:**

BASE MATERIAL CONVEYING, STORAGE, AND LOADOUT SYSTEM CONSISTING OF:

1. FIVE SURGE BINS, 10 CU. YD. CAPACITY EACH.
2. TWO PUGMILLS, NOS. PM-1 AND PM-2, EACH WITH A 100 H.P. DRIVE AND A 7 1/2 H.P. WATER PUMP.
3. TWO LOADOUT BINS, EACH 75 TONS CAPACITY EACH WITH A PNEUMATICALLY OPERATED GATE.
4. SIX BELT CONVEYORS, NOS. C-28, C-29, C-30, C-31, C-32, C-33, 180 H.P. TOTAL.
5. TWO AIR COMPRESSORS, 15 H.P. EACH.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. NOT MORE THAN 3,200 TONS OF AGGREGATE SHALL BE PROCESSED IN ANY ONE DAY.
4. AGGREGATE CHARGED AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

**THIS PERMIT CONCLUDES ON THE NEXT PAGE.**

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731



**CONTINUATION OF PERMIT TO OPERATE**

**NOTICE**

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

FILE COPY

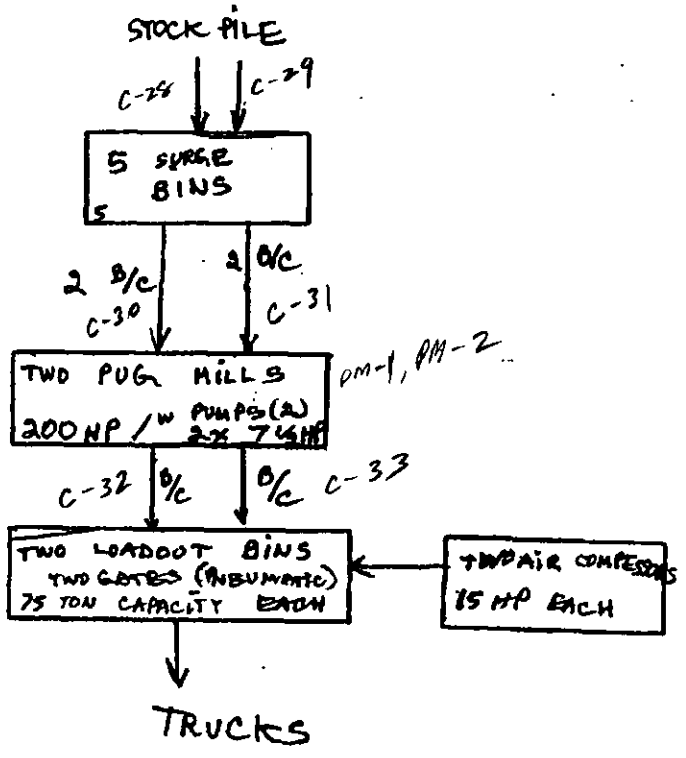
By Raquel Puerta/jas
July 6, 1989

UNITED ROCK PRODUCTS CORP.
ATTN: THOMAS S. TEDESCO
13131 LOS ANGELES ST.
IRWINDALE, CA. 91706

# BLOCK FLOW DIAGRAM

430411
A/N ~~185075~~

BASE MATERIAL CONVEYING, STORAGE AND LOADOUT SYSTEM



**Justice & Associates**

4155 Outer Traffic Circle
Long Beach, CA 90804-2111
(562) 961-3494 Fax (562) 961-3493

# FEE SCHEDULE WORK SHEET

(For permit processing in accordance with Rule 301)

Permits to be issued to: United Rock Products

Address: 1245 East Arrow Highway

City, State, Zip: Irwindale, CA 91706

| Quantity of Identical Units | Equipment/Process | Fee Schedule | Full Fee for First Permit Unit | + | 50% of Processing Fee for failure to obtain Permit to Construct | = | Total |
|---|---|---|---|---|---|---|---|
| 1 | Screening Plant | C | $2,232.96 | + | $1,116.48 | = | $3,349.44 |
| 1 | Screening Plant | C | $2,232.96 | + | $1,116.48 | = | $3,349.44 |
| 1 | Permit reissue (D08813) | N/A | $123.02 | + | -- | = | $123.02 |
| 1 | Aggregate Conveying (D08811) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Conveying (D08812) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Loading (D08808) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Loading (D08809) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Conveying (D08810) | D | $3,081.85 | + | $1,540.93 | = | $4,622.78 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Total Permit Processing Fee Due: $17,091.64

Comments:

PIO Approved.
F-71631
11-2-04 Miller

ROUTING RECORD

| DATE | FROM | TO | ACTION |
|---|---|---|---|
| 5-28-04 | RWM | RJS | CLASS F |
| 10-22-04 | RJS | RWM | ISSUE PO |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

REFERENCE TO OTHER APCD RECORDS INCLUDING VARIANCES

4




APPL # 430416
I D # 65341

UNITED ROCK PRODUCTS CORPORATION
1245 E ARROW HWY
IRWINDALE
AGGREGATE LOADING

Date 05/25/04

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

# PERMIT TO CONSTRUCT/OPERATE


Permit No.
F71631
A/N 430416

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership.
If the billing for the annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

ID 65341

Legal Owner
or Operator: UNITED ROCK PRODUCTS CORPORATION
1245 E ARROW HWY
IRWINDALE, CA 91706-1302

**Equipment Location:** 1245 E ARROW HWY, IRWINDALE, CA 91706-1302

**Equipment Description :**

CRUSHED AGGREGATE RECLAIMING, STORAGE, AND LOADOUT SYSTEM CONSISTING OF:

1. FEED HOPPER, 30 TON CAPACITY.
2. BELT CONVEYOR NO. 27, RECLAIMING, 300 HP, WITH A 1.5 HP DISCHARGE TURNHEAD.
3. SIX STORAGE BINS NOS. 7 THRU 12, EACH 200 TON CAPACITY WITH PNEUMATICALLY OPERATED GATES.

**Conditions :**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.
4. THIS EQUIPMENT SHALL NOT PROCESS MORE THAN 480,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.
5. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

**FILE COPY**

CONTINUATION OF PERMIT TO CONSTRUCT/OPERATE

**NOTICE**

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Dorris M Bailey

By Dorris M.Bailey/RS06
11/2/2004

**FILE COPY**

South Coast Air Quality Management District
P.O. Box 4944
Diamond Bar CA 91765
(909) 396-2000

# APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE FORM 400 - A

**Non-Title V Facilities:** This form must be accompanied by one or more 400-E-xx series forms(s). Complete this side of form only.
**Title V Facilities:** Complete both sides of this form. Include additional forms as necessary.

**NC/NOV NUMBER:**
**INSPECTOR** **SECTOR**
**ISSUE DATE**

## Section I - Company Information

LEGAL NAME OF OPERATOR: United Rock Products Corporation — ☐ IRS OR ☐ S.S. Number

PERMIT TO BE ISSUED TO (SEE INSTRUCTIONS): United Rock Products Corporation

BUSINESS MAILING ADDRESS: 1245 East Arrow Highway, Irwindale, CA 91706

PERMIT MAILING ADDRESS, IF DIFFERENT FROM BUSINESS MAILING ADDRESS:

TYPE OF ORGANIZATION
☒ Corporation ☐ Limited Partnership ☐ Government Entity
☐ Individual ☐ General Partnership ☐ Other (Fill In):

ARE YOU A SMALL BUSINESS? (SEE INSTRUCTIONS) ☐ Yes ☒ No
AVERAGE ANNUAL GROSS RECEIPT $
NUMBER OF EMPLOYEES
IS YOUR BUSINESS 51 % OR MORE WOMAN/MINORITY OWNED? ☐ Yes ☐ No

**THIS SECTION IS REQUIRED FOR ALL APPLICATIONS FOR NEW CONSTRUCTION OR MAJOR MODIFICATIONS.**
ARE ALL MAJOR SOURCES UNDER SAME OWNERSHIP IN CALIFORNIA IN COMPLIANCE WITH FEDERAL, STATE, AND LOCAL AIR POLLUTION CONTROL RULES? ☒ Yes ☐ No

ARE YOU THE OWNER OF THE EQUIPMENT UNDER THIS APPLICATION? ☒ Yes ☐ No ☐ IRS OR ☐ S.S.NUMBER
IF NO, ENTER THE LEGAL NAME OF OWNER

## Section II - Facility Information

EQUIPMENT ADDRESS/LOCATION: 1245 East Arrow Highway (NUMBER/STREET)
Irwindale (CITY OR COMMUNITY) CA 91706 (ZIP CODE)
FACILITY NAME: Irwindale
FACILITY ID NUMBER: 0 6 5 3 4 1

PRINT NAME OF CONTACT PERSON: Frank Keohane
TITLE OF CONTACT PERSON:
TYPE OF BUSINESS AT THIS FACILITY: Aggregate Production
PRIMARY SIC CODE FOR THIS FACILITY: 1442
NUMBER OF EMPLOYEES AT THIS FACILITY:
CONTACT PERSON'S TELEPHONE NUMBER: (626) 358-4558
CONTACT PERSON'S FAX NUMBER: (626) 357-9508
CONTACT PERSON'S E-MAIL ADDRESS:

## Section III - Application Type

DESCRIPTION OF EQUIPMENT: Aggregate Loading
PREVIOUS PERMIT #S: D08808

APPLICATION FOR (SEE INSTRUCTIONS):
☐ NEW CONSTRUCTION
☐ EXISTING EQUIPMENT WITHOUT PERMIT
☐ EXISTING EQUIPMENT WITH EXPIRED PERMIT
☐ CHANGE OF LOCATION ☐ RECLAIM Processing Fee
☐ MODIFICATION
☐ CHANGE OF PERMITTEE
☒ CHANGE OF PERMIT CONDITION

ARE YOU SUBMITTING MULTIPLE APPLICATIONS FOR EQUIPMENT IDENTICAL TO THAT DESCRIBED ABOVE? ☐ Yes ☒ No

☐ **APPLICATION FOR NON-TITLE V EQUIPMENT PERMIT. CHECK THE SUPPLEMENTAL SERIES 400-E-xx FORM(S) SUBMITTED WITH THIS 400-A FORM:**

| | | | |
|---|---|---|---|
| ____ | 400-E-1 • PARTICULATE MATTER (PM-10) CONTROL EQUIPMENT | ____ | 400-E-13 • INTERNAL COMBUSTION EQUIPMENT |
| ____ | 400-E-2 • VOLATILE ORGANIC COMPOUND (VOC) CONTROL EQUIPMENT | ____ | 400-E-14 • OPEN PROCESS TANK |
| ____ | 400-E-3 • SCRUBBER | ____ | 400-E-14a • OPEN PROCESS TANK; PROCESS LINE |
| ____ | 400-E-4 • ABRASIVE BLASTING EQUIPMENT | ____ | 400-E-15 • PRINTING EQUIPMENT |
| ____ | 400-E-5 • DEGREASER | ____ | 400-E-16 • SOLID MATERIALS STORAGE EQUIPMENT |
| ____ | 400-E-7 • DRY CLEANING EQUIPMENT | ____ | 400-E-17 • SPRAY BOOTH/OPEN SPRAY |
| ____ | 400-E-8 • ETHYLENE OXIDE STERILIZER | ____ | 400-E-17a • POWDER SPRAY BOOTH |
| ____ | 400-E-9 • EXTERNAL COMBUSTION EQUIPMENT | ____ | 400-E-18 • STORAGE TANK (LIQUID & GASEOUS MATERIAL) |
| ____ | 400-E-10 • FOOD BROILER/FRYER | ____ | 400-E-19 • WAVE SOLDER MACHINE |
| ____ | 400-E-11 • FUEL DISPENSING AND STORAGE EQUIPMENT | ____ | 400-E-20 • ASBESTOS REMOVAL EQUIPMENT |
| ____ | 400-E-12 • GAS TURBINE | ____ | NONE • ADDITIONAL INFORMATION SUBMITTED AS REQUESTED ON FORM 400-E-GI |

☐ **APPLICATION FOR TITLE V FACILITY PERMIT. PROVIDE INFORMATION REQUESTED ON REVERSE SIDE OF THIS FORM.**

**I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT.**
SIGNATURE OF RESPONSIBLE OFFICIAL OF FIRM: Frank P Keohane
TITLE OF RESPONSIBLE OFFICIAL OF FIRM: General Manager
TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL OF FIRM: Frank Keohane
RESPONSIBLE OFFICIALS TELEPHONE NUMBER: (626) 358-4558
DATE SIGNED: 5-18-04

**I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT.**
SIGNATURE OF PREPARER, IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM: Kimba Spencer
TITLE OF RESPONSIBLE OFFICIAL OF FIRM: Consultant
TYPE OR PRINT NAME OF PREPARER, IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM: Kimba Spencer
PREPARER'S TELEPHONE NUMBER: (562) 961-3494
DATE SIGNED: 5/18/04

**AQMD USE ONLY — TITLE V FACILITIES ONLY: COMPLETE OTHER SIDE**

| APPLICATION/TRACKING # | TYPE B C D | EQUIPMENT CATEGORY CODE: | FEE SCHEDULE: $ | VALIDATION |
|---|---|---|---|---|
| 430446 | | ____/__ | | 05/27/04 |

| ENG. A R DATE | ENG. A R DATE | CLASS I III IV | ASSIGNMENT UNIT | ENGINEER | ENF SECT. | CHECK/MONEY ORDER # | AMOUNT $ |
|---|---|---|---|---|---|---|---|
| | | | 0 | | | | |

FORM 400-A, Rev. 3/98

(35803) N Lvell Job No. & Form 8536-4

1 of 6

# TITLE V APPLICATION CERTIFICATION

**- TO BE COMPLETED BY TITLE V FACILITIES ONLY -**

## Section IV Title V Application

1. This is an application for a(n) (Check all applicable boxes and provide the requested information as appropriate):
   a. ☐ Initial Title V Permit
   b. ☐ Permit Renewal: Provide current permit expiration date: _____
   c. ☐ Administrative Permit Revision (Check all that apply)
      ☐ Change of Ownership. (Complete and attach equipment-specific Form 400-E-xx series forms)
      ☐ Change of Facility Information
      ☐ Other, Please specify: _____
   d. ☐ Other (Complete and attach equipment specific form 400-E-XX series form(s) to this form if your application involves permit action for new construction, change of location, non-administrative permit revision, alternative operating scenario (AOS), permit shield, streamlined permit conditions, or temporary source permit.)
2. Is this facility required to prepare a Risk Management Plan (RMP) for another agency? ☐ Yes ☐ No

## Section V Title V Submittal Checklist

1. Enter the quantity of each type form submitted in the space provided:

| | | | |
|---|---|---|---|
| _____ | 500-A2 | _____ | 500-F1 |
| _____ | 500-B | _____ | 500-F2 |
| _____ | 500-C1 | _____ | 500-F3 |
| _____ | 500-C2 | _____ | 500-F4 |
| _____ | 500-D | _____ | Other (specify): _____ |

2. Additional information referenced in this application submitted (Check **ALL** that apply):
   a. ☐ Existing Facility Permit
   b. ☐ Preliminary Facility Permit
   c. ☐ EFB Report for Year(s) _____
   d. ☐ None
   e. ☐ Other (Specify): _____
3. Supplemental information included with this application submittal (Check **ALL** that Apply):
   a. ☐ Facility Plot Plan
   b. ☐ MSDS Sheet(s)
   c. ☐ None
   d. ☐ Other (Specify): _____

**AQMD USE ONLY**

| APPLICATION TYPE | 30 DAY PUBLIC NOTICE START DATE | 30 DAY PUBLIC NOTICE END DATE | PUBLIC HEARING DATE | 45-DAY EPA REVIEW START DATE | 45-DAY EPA REVIEW END DATE |
|---|---|---|---|---|---|
| INITIAL, RENEWAL & SIGNIFICANT | | | | | |
| MINOR & DE MINIMIS | | | | | |
| ESTABLISH GENERAL PERMIT | | | | | |

**USE THE SECTIONS BELOW FOR TITLE V INITIAL AND RENEWAL APPLICATIONS ONLY:**

| APPLICATION/TRACKING # | TYPE B C D | EQUIPMENT CATEGORY CODE: ___ ___ ___ ___ / ___ ___ | FEE SCHEDULE: $ | VALIDATION |
|---|---|---|---|---|
| ___ ___ ___ ___ ___ ___ | | | | |

| ENG. A DATE | R | ENG. A DATE | R | CLASS I III IV | ASSIGNMENT UNIT | ENGINEER | ENF. SECT. | CHECK/MONEY ORDER AMOUNT # | $ |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

FORM 400-A, Rev. 3/98

4 MAY 21 P3:24
S.C.A.Q.M.D.
ENGINEERING

South Coast Air Quality
Management District
21865 East Copley Drive
Diamond Bar, CA 91765
(909) 396- 2000

# CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) APPLICABILITY FORM 400 - CEQA

The SCAQMD is required by state law, the California Environmental Quality Act (CEQA), to review discretionary permit project applications for potential air quality and other environmental impacts. This form is a screening tool to assist the SCAQMD in clarifying whether or not the project[1] has the potential to generate significant adverse environmental impacts that might require preparation of a CEQA document [CEQA Guidelines §15060(a)].[2] Refer to the attached instructions for guidance in completing this form.[3] For each Form 400-A application, also complete and submit one Form 400-CEQA. If submitting multiple Form 400-A applications for the same project, only one 400-CEQA form is necessary for the entire project. If you need assistance completing this form, contact Lori Inga at (909) 396-3109.

## FACILITY INFORMATION

**Facility Name:** United Rock Products **Facility ID** (6-Digit): 065341

**Project Description:** Aggregate production facility.

## REVIEW FOR EXEMPTION FROM FURTHER CEQA ACTION

Check "Yes" or "No" as applicable

| | Yes | No | Is this application for: |
|---|---|---|---|
| A. | ☐ | ☒ | **A request for a change of permittee only (without equipment modifications)?** |
| B. | ☐ | ☒ | **Equipment certification or equipment registration?** |
| C. | ☐ | ☒ | **A CEQA and/or NEPA document previously or currently prepared that specifically evaluates this project?** If yes, a permit cannot be issued until a Final CEQA document and Notice of Determination is submitted. |
| D. | ☐ | ☒ | **Equipment damaged as a result of a disaster during state of emergency?** |
| E. | ☐ | ☒ | **A Title V permit renewal (without equipment modifications)?** |
| F. | ☐ | ☒ | **A Title V administrative permit revision?** |
| G. | ☐ | ☒ | **The conversion of an existing permit into an initial Title V permit?** |
| H. | ☐ | ☒ | **A functionally identical permit unit replacement with no increase in rating or emissions?** |
| I. | ☐ | ☒ | **A change of daily VOC permit limit to a monthly VOC permit limit?** |

If **"Yes"** is checked for any question above, your application does not require additional evaluation for CEQA applicability. Skip to page 2, "SIGNATURES" and sign and date this form.

## REVIEW OF IMPACTS WHICH MAY TRIGGER CEQA

Complete Sections I-V by checking "Yes" or "No" as applicable. To avoid delays in processing your application(s), explain all "Yes" responses on a separate sheet and attach it to this form.

| | Yes | No | Section I - General |
|---|---|---|---|
| 1. | ☐ | ☒ | **Has this project generated any known public controversy regarding potential adverse impacts that may be generated by the project?** Controversy may be construed as concerns raised by local groups at public meetings; adverse media attention such as negative articles in newspapers or other periodical publications, local news programs, environmental justice issues, etc. |
| 2. | ☐ | ☒ | **Is this project part of a larger project?** |
| | | | **Section II - Air Quality** |
| 3. | ☐ | ☒ | **Will there be any demolition, excavating, and/or grading construction activities that encompass an area exceeding 20,000 square feet?** |
| 4. | ☒ | ☐ | **Does this project include the open outdoor storage of dry bulk solid materials that could generate dust?** If Yes, include a plot plan with the application package. |

1. A "project" means the whole of an action which has a potential for resulting in physical change to the environment, including construction activities, clearing or grading of land, improvements to existing structures, and activities or equipment involving the issuance of a permit. For example, a project might include installation of a new, or modification of an existing internal combustion engine, dry-cleaning facility, boiler, gas turbine, spray coating booth, solvent cleaning tank, etc.
2. To download the CEQA guidelines, visit http://ceres.ca.gov/env_law/state.html.
3. To download this form and the instructions, visit http://www.aqmd.gov/ceqa.

| | Yes | No | |
|---|---|---|---|
| 5. | ☐ | ☒ | **Would this project result in noticeable off-site odors from activities that may not be subject to SCAQMD permit requirements?** For example, compost materials or other types of greenwaste (i.e., lawn clippings, tree trimmings, etc.) have the potential to generate odor complaints subject to Rule 402 - Nuisance. |
| 6. | ☐ | ☒ | **Does this project cause an increase of emissions from marine vessels, trains and/or airplanes?** |
| 7. | ☐ | ☒ | **Will the proposed project increase the QUANTITY of hazardous materials stored aboveground onsite or transported by mobile vehicle to or from the site by greater than or equal to the amounts associated with each compound on the attached Table 1?[4]** |
| | | | **Section III - Water Resources** |
| 8. | ☐ | ☒ | **Will the project increase demand for water at the facility by more than 5,000,000 gallons per day?** The following examples identify some, but not all, types of projects that may result in a "yes" answer to this question: 1) projects that generate steam; 2) projects that use water as part of the air pollution control equipment; 3) projects that require water as part of the production process; 4) projects that require new or expansion of existing sewage treatment facilities; 5) projects where water demand exceeds the capacity of the local water purveyor to supply sufficient water for the project; and 6) projects that require new or expansion of existing water supply facilities. |
| 9. | ☐ | ☒ | **Will the project require construction of new water conveyance infrastructure?** Examples of such projects are when water demands exceed the capacity of the local water purveyor to supply sufficient water for the project, or require new or modified sewage treatment facilities such that the project requires new water lines, sewage lines sewage hook ups etc |
| | | | **Section IV - Transportation / Circulation** |
| 10. | | | **Will the project result in** (Check all that apply): |
| | ☐ | ☒ | **a. the need for more than 350 new employees?** |
| | ☐ | ☒ | **b. an increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round-trips per day?** |
| | ☐ | ☒ | **c. Increase customer traffic by more than 700 visits per day?** |
| | | | **Section V - Noise** |
| 11. | ☐ | ☒ | **Will the project include equipment with a noise specification GREATER THAN 90 decibels (dB)?** |
| | | | **Section VI - Public Services** |
| 12. | | | **Will the project create a permanent need for new or additional public services in any of the following areas** (Check all that apply): |
| | ☐ | ☒ | **a. Solid waste disposal?** Check "No" if the projected potential amount of wastes generated by the project is less than five tons per day. |
| | ☐ | ☒ | **b. Hazardous waste disposal?** Check "No" if the projected potential amount of hazardous wastes generated by the project is less than 42 cubic yards per day (or equivalent in pounds) |

**REMINDER For each 'Yes' checked in the sections above, attach all pertinent information including but not limited to estimated quantities - volumes, weights, etc -**

## SIGNATURES

I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. I UNDERSTAND THAT THIS FORM IS A SCREENING TOOL AND THAT THE SCAQMD RESERVES THE RIGHT TO CONSIDER OTHER PERTINENT INFORMATION IN DETERMINING CEQA APPLICABILITY.

| SIGNATURE OF RESPONSIBLE OFFICIAL OF FIRM: | TITLE OF RESPONSIBLE OFFICIAL OF FIRM: | |
|---|---|---|
| Frank Keohane | General Manager | |
| TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL OF FIRM: | RESPONSIBLE OFFICIAL'S TELEPHONE NUMBER: | DATE Signed: |
| Frank Keohane | (626) 358-4558 | |
| SIGNATURE OF PREPARER, IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM: | TITLE OF PREPARER: | |
| | Consultant | |
| TYPE OR PRINT NAME OF PREPARER: | PREPARER'S TELEPHONE NUMBER: | DATE Signed: |
| Kimba Spencer | (562) 961-3494 | 8/27/04 |

*THIS CONCLUDES FORM 400-CEQA. INCLUDE THIS FORM AND THE ATTACHMENTS WITH FORM 400-A.*

4. Table I - Regulated Substances List and Threshold Quantities for Accidental Release Prevention can be found in the Instructions for Form 400-CEQA.

SCAQMD PERMIT PROCESSING SYSTEM (PPS)

# FEE DATA - SUMMARY SHEET

| | | | |
|---|---|---|---|
| Application No : | 430416 | IRS/SS No: | |
| Previous Application No: | 185072 | Previous Permit No: | D08808 |

| | | | |
|---|---|---|---|
| Company Name : | UNITED ROCK PRODUCTS CORPORATION | Facility ID: | 65341 |
| Equipment Street: | 1245 E ARROWHWY , IRWINDALE CA 91706 | | |
| Equipment Desc : | AGGREGATE CONVEYING | | |

| | | | | | |
|---|---|---|---|---|---|
| Equipment Type : | BASIC | | | Fee Charged by: | B-CAT |
| B-CAT NO. : | 107200 | C-CAT NO: | 00 | Fee Schedule: | B |
| Facility Zone : | 09 | Deemed Compl. Date: | 6/10/2004 | Public Notice: | NO |

| | | | |
|---|---|---|---|
| Evaluation Type : | ALTERATION/MODIFICATION (PC/PO) | Small Business: | ☐ |
| Disposition : | Approve PC/PO, Recommended by Engineer | Penalty: | ☐ |
| Lead Appl. No : | | Identical Permit Unit: | ☐ |

| | | | | | |
|---|---|---|---|---|---|
| Air quality Analysis | | | $0.00 | Filing Fee Paid: | $0.00 |
| E.I.R | | | $0.00 | Permit Processing Fee Paid: | $1,411.74 |
| Health Risk Assessment | | | $0.00 | Permit Processing Fee Calculated*: | $1,411.74 |
| Significant Project | | | $0.00 | Permit Processing Fee Adjustment: | $0.00 |
| Express Processing | Hours: | 0.00 | $0.00 | | |
| Source Test Review | Hours: | 0.00 | $0.00 | | |
| Time & Material | Hours: | 0.00 | $0.00 | | |
| | | | | Total Additional Fee: | $0.00 |
| | | | | Additional Charge: | $0.00 |

COMMENTS:

RECOMMENDED BY: RAJENDRA SINGH DATE: 10/21/2004

REVIEWED BY: _____ DATE: 10-29-04

* ADJUSTED FOR SMALL BUSINESS, IDENTICAL EQUIPMENT AND P/O NO P/C PENALTY

SCAQMD PERMIT PROCESSING SYSTEM (PPS)

# AEIS DATA SHEET

Company Name : UNITED ROCK PRODUCTS CORPORATION
Facility ID : 65341
Equipment Address : 1245 E ARROW HWY
IRWINDALE CA 91706

Application Number : 430416
Equipment B-Cat : 107200
Estimated Completion Date : 10/21/04
Equipment C-Cat :
Equipment Type : Basic
Equipment Description : AGGREGATE CONVEYING

| | Emissions | |
|---|---|---|
| Emittants | R1 LB/HR | R2 LB/HR |
| PM10 | 0.47 | 0.02 |

**Applicable Rules**

| | | |
|---|---|---|
| 1401 | 05/02/2003 | New Source Review of Toxic Air Contaminants |
| 401 | 11/09/2001 | Visible Emissions |
| 402 | 05/07/1976 | Nuisance |
| 405 | 02/07/1986 | Solid Particulate Matter - Weight |

| | Mon | Tue | Wed | Thu | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|
| Daily Start Times : | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 |
| Daily Stop Times : | 24:00 | 24:00 | 24:00 | 24:00 | 24:00 | 24:00 | 24:00 |

User's Initials : RS06 Date: 10/21/04 Supervisor's Name : _____ Review Date : 10/29/04

# NSR DATA SUMMARY SHEET

Application No: 430416
Application Type: Alteration
Application Status: PENDAPPRV
Previous Apps,Dev,Permit #: 185072, 0 - x, NONE

---

Company Name: UNITED ROCK PRODUCTS CORPORATION
Company ID: 65341
Address: 1245 E ARROW HWY,IRWINDALE, CA 91706-1302
RECLAIM: NO
RECLAIM Zone: 02A
Air Basin: SC
[redacted]ne: 09
Title V: NO

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Device ID: 0 - AGGREGATE-LOAD
Estimated Completion Date: 07-30-2004
Heat Input Capacity: 0 Million BTU/hr
Priority Reserve: NONE - No Priority Access Requested
Recommended Disposition: 31 - PERMIT TO OPERATE GRANTED
PR Expiration:
School Within 1000 Feet: NO
Operating Weeks Per Year: 52
Operating Days Per Week: 7
Monday Operating Hours: 00:00 to 24:00
Tuesday Operating Hours: 00:00 to 24:00
Wednesday Operating Hours: 00:00 to 24:00
Thursday Operating Hours: 00:00 to 24:00
Friday Operating Hours: 00:00 to 24:00
[redacted]aturday Operating Hours: 00:00 to 24:00
Sunday Operating Hours: 00:00 to 24:00

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Emittant: PM10
BACT:
Cost Effectiveness: NO
Source Type: MINOR
Emis Increase: 0
Modeling: N/A
Public Notice: N/A
CONTROLLED EMISSION
Max Hourly: 0.02 lbs/hr
Max Daily: 0.48 lbs/day
UNCONTROLLED EMISSION
Max Hourly: 0.47 lbs/hr
Max Daily: 11.28 lbs/day
CURRENT EMISSION
BACT 30 days Avg: 0 lbs/day
Annual Emission: 174.72 lbs/yr
District Exemption: None

SUPERVISOR'S APPROVAL: _____ SUPERVISOR'S REVIEW DATE: 10-29-04

Processed By: rsingh 10/22/2004 10:20:24 AM

| SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT | PAGE | 1 of 9 |
|---|---|---|
| | APPL.NO. | 430411, 430413, 430416, 430417 |
| ENGINEERING AND COMPLIANCE DIVISION | PROCESSED BY: | R. Singh |
| | CHECKED BY | |
| APPLICATION PROCESSING AND CALCULATION | DATE | 7/16/04 |

# PERMIT TO CONSTRUCT/OPERATE EVALUATION

| | |
|---|---|
| Applicant's Name | UNITED ROCK PRODUCTS CORPORATION |
| Company I.D. | 65341 |
| Mailing Address | 1245 E. ARROW HIGHWAY, IRWINDALE, CA 91706 |
| Equipment Address | 1245 E. ARROW HIGHWAY, IRWINDALE, CA 91706 |

**APPLICATION NUMBER** 430411, 430413, 430416, 430417

**BACKGROUND:**

These applications were submitted for change of condition of four aggregate processing systems. The company also operates two rock pre-crushing systems, and a dry and a wet load out system. According to the applicant, these aggregate processing systems were outgrowing their production limits and needed to increase their daily throughput limits. These applications were received on 4/14/04. A check on the compliance data base indicated three open notices, none of which will affect these applications. There are no schools within 1000 feet of the facility.

**EQUIPMENT DESCRIPTION:**

**Application No. 430411**

BASE MATERIAL CONVEYING, STORAGE, AND LOAD OUT SYSTEM CONSISTING OF:

1. FIVE SURGE BINS, 10 CUBIC YARD CAPACITY EACH.

2. TWO PUGMILLS PM-1 AND PM-2, EACH WITH A 100 H.P. DRIVE AND A 7 1/2 H.P. WATER PUMP.

3. TWO LOAD OUT BINS, 75 TON CAPACITY EACH, WITH A PNEUMATICALLY OPERATED GATE.

4. SIX BELT CONVEYORS C-28, C-29, C-30, C-31, C-32, C-33, 180 H.P. TOTAL.

5. TWO AIR COMPRESSORS, 15 H.P. EACH.

**Application No. 430413**

AGGREGATE TRANSFER SYSTEM CONSISTING OF:

1. DUMP TRUCK RECEIVING HOPPER, UNDERGROUND, 10'-0" W. X 10'-0" L. X 10'-0" H.
2. DUMP TRUCK RECEIVING HOPPER, UNDERGROUND, 10'-0" W. X 10'-0" L. X 10'-0" H.
3. FEEDER BELT CONVEYOR, 3'-0" W. X 45'-0" L., 15 H.P.
4. BELT CONVEYOR, INCLINED, 50 H.P.
5. BELT CONVEYOR, SHUTTLE, 10 H.P., WITH A 1- 1/2 H.P. DRIVE.

**Application No. 430416**

CRUSHED AGGREGATE RECLAIMING, STORAGE, AND LOADOUT SYSTEM CONSISTING OF:

1. FEED HOPPER, 30 TON CAPACITY.
2. BELT CONVEYOR NO. 27, RECLAIMING, 300 HP, WITH A 1.5 HP DISCHARGE TURNHEAD.
3. SIX STORAGE BINS NOs. 7 THRU 12, EACH 200 TON CAPACITY WITH PNEUMATICALLY OPERATED GATES.
4. FOUR AIR COMPRESSORS, TWO 20 H.P. EACH, AND TWO 15 H.P. EACH.

**Application No. 430417**

WASHED SAND AND AGGREGATE RECLAIMING, STORAGE, AND LOADOUT SYSTEM CONSISTING OF:

1. BELT CONVEYOR NO. C-26, WASHED MATERIALS RECLAIMING, 250 H.P., WITH A 1.5 H.P. DISCHARGE TUNRNHEAD.
2. SIX STORAGE BINS NOs.1 7 THRU 6, EACH 200 TON CAPACITY, WITH PNEUMATICALLY OPERATED GATES.
3. FOUR AIR COMPRESSORS, TWO 20 H.P. EACH, AND TWO 15 H.P. EACH.

**PROCESS DESCRIPTION:**

Application No. 430411

This is an aggregate conveying, storage, and load out system. There is no change in the equipment. The applicant wants to increase the production limit from 3200 tons / day to 5000 tons / day (150,000 tons / month). The attached flow diagram shows the material flow for the system. The emissions from this

operation are particulate emissions at material transfer points. These emissions are controlled by wet suppression.

Application No. 430413

This is an aggregate transfer system that transfers material from dump trucks to a stock pile. In this modification, a new feeder belt is being installed in the system to transfer aggregate from the underground hoppers to an inclined conveyor and the motor horse power on the incline conveyor and shuttle conveyor will be increased. The applicant wants to increase the production limit from 4000 tons / day to 6000 tons / day (180,000 tons / month). The attached flow diagram shows the material flow for the system. The emissions from this operation are particulate emissions at material transfer points. These emissions are controlled by wet suppression.

Application No. 430416

This is an aggregate load out system that reclaims material from stock piles and transfers it to six storage bins. In this modification, a feed hopper is being added on the top of belt conveyor 27 and the motor horse power on the discharge turn head of this conveyor will be increased to 1.5 HP. The applicant wants to increase the production limit from 8000 tons / day to 16,000 tons / day (480,000 tons / month). The attached flow diagram shows the material flow for the system. The emissions from this operation are particulate emissions at material transfer points. These emissions are controlled by wet suppression.

Application No. 430417

This is the wet load out system that reclaims washed sand and aggregate from stock piles and transfers it to six storage bins. In this modification, motor horse power on the discharge turn head of the conveyor will be increased to 1.5 HP. The applicant wants to increase the production limit from 8000 tons / day to 16,000 tons / day (480,000 tons / month). The attached flow diagram shows the material flow for the system. Since the material is wet, the PM emissions from this operation will be insignificant.

**OPERATING SCHEDULE:**

Application Nos. 430411, 13, 16, 17

Average / maximum: 24 hrs. per day, 7 days per week, 52 weeks per year

**EMISSION CALCULATIONS:**

Application No. 430411

Throughput = 5000 tons per day
= 150,000 tons / month **(permit condition)**

The following PM10 emission factors are used from AP-42, Table 11.19.2-2 and Table 11.12-2 (attached).

Conveyor transfer points (uncontrolled) = 0.0014 lb./ ton
Conveyor transfer points (controlled-water spray) = 0.000048 lb./ ton

The loading of the first conveyor belt and discharge from the last conveyor belt to storage are not considered material transfer points.

| **Transfer point.** | **Throughput (tons / day)** | **R1(PM10) lbs. / day** | **R2 (PM10) lbs./ day** |
|---|---|---|---|
| Belt conveyors C28, C29 to surge bins | 5,000 | 7.0 | 0.24 |
| Surge bins to belt conveyors C30, C31 | 5,000 | 7.0 | 0.24 |
| Belt conveyors C30, C31 to Pug mills | 5,000 | 7.0 | 0.24 |
| Pug Mills to belt conveyors C32, C33 | 5,000 | 7.0 | 0.24 |
| Belt conveyors C32, C33 to load out hoppers | 5,000 | 7.0 | 0.24 |
| Total Emissions | | 35.0 | 1.2 |

R1 (PM10) = 35 lbs./ day
= 1.46 lbs./ hr

R2 (PM10) = 1.2 lbs./ day
= 0.05 lbs./ hr

Assuming PM10 = 50 % of PM

R1 (PM) = 2 x 1.46 lbs./ hr
= 2.92 lbs./ hr.

R2 (PM) = 2 x 0.05 lbs./ hr
= 0.10 lbs./ hr.

AEIS and NSR Emission Data

R1 (PM10) = 1.46 lb./ hr.
R2 (PM10) = 0.05 lb./ hr.

30-Day average (PM10) = (0.05 lbs./ hr. x 24 hrs./ day x 30 days / month) / 30
= 1.2 lb / day

Annual average (PM10) = (0.05 lbs./ hr. x 24 hrs./ day x 7 days / wk. x 52 wks./ yr.)
= 437 lbs./ yr.

Application No. 430413

Throughput = 6000 tons per day
= 180,000 tons / month **(permit condition)**

The following PM10 emission factors are used from AP-42, Table 11.19.2-2 and Table 11.12-2 (attached).

Conveyor transfer points (uncontrolled) = 0.0014 lb./ ton
Conveyor transfer points (controlled-water spray) = 0.000048 lb./ ton

The loading of the first conveyor belt and discharge from the last conveyor belt to storage are not considered material transfer points.

| **Transfer point.** | **Throughput (tons / day)** | **R1(PM10) lbs. / day** | **R2 (PM10) lbs./ day** |
|---|---|---|---|
| Dump trucks to receiving hoppers 1 &2 | 6,000 | 8.4 | 0.288 |
| Feeder conveyor 3 to incline conveyor 4 | 6,000 | 8.4 | 0.288 |
| Incline conveyor 4 to shuttle conveyor 5 | 6,000 | 8.4 | 0.288 |
| Shuttle conveyor 5 to stock pile | 6,000 | - | - |
| Total Emissions | | 25.2 | 0.864 |

R1 (PM10) = 25.2 lbs./ day
= 1.05 lbs./ hr

R2 (PM10) = 0.864 lbs./ day
= 0.036 lbs./ hr

Assuming PM10 = 50 % of PM

R1 (PM) = 2 x 1.05 lbs./ hr
= 2.1 lbs./ hr.

R2 (PM) = 2 x 0.036 lbs./ hr
= 0.072 lbs./ hr.

AEIS and NSR Emission Data

R1 (PM10) = 1.05 lb./ hr.
R2 (PM10) = 0.036 lb./ hr.

30-Day average (PM10) = (0.036 lbs./ hr. x 24 hrs./ day x 30 days / month) / 30
= 0.864lb / day

Annual average (PM10) = (0.036 lbs./ hr. x 24 hrs./ day x 7 days / wk. x 52 wks./ yr.)
= 314 lbs./ yr.

Application No. 430416

Throughput = 16,000 tons per day
= 480,000 tons / month **(permit condition)**

The following PM10 emission factors are used from AP-42, Table 11.19.2-2 and Table 11.12-2 (attached).

Conveyor transfer points (uncontrolled) = 0.0014 lb./ ton
Conveyor transfer points (controlled-water spray) = 0.000048 lb./ ton

The loading of the first conveyor belt and discharge from the last conveyor belt to storage are not considered material transfer points.

| **Transfer point.** | **Throughput (tons / day)** | **R1(PM10) lbs. / day** | **R2 (PM10) lbs./ day** |
|---|---|---|---|
| Stock piles and feed hopper to conveyor 27 | 8,000 | - | - |
| Conveyor 27 to storage bins | 8,000 | 11.2 | 0.384 |
| Total Emissions | | 11.2 | 0.384 |

R1 (PM10) = 11.2 lbs / day
= 0.47 lbs / hr

R2 (PM10) = 0.384 lbs / day
= 0.016 lbs / hr

Assuming PM10 = 50 % of PM

R1 (PM) = 2 x 0.47 lbs./ hr
= 0.94 lbs./ hr.

R2 (PM) = 2 x 0.016 lbs./ hr
= 0.032 lbs./ hr.

AEIS and NSR Emission Data

R1 (PM10) = 0.47 lb./ hr.
R2 (PM10) = 0.016 lb./ hr.

30-Day average (PM10) = (0.016 lbs./ hr. x 24 hrs./ day x 30 days / month) / 30
= 0.384lb / day

Annual average (PM10) = (0.016 lbs./ hr. x 24 hrs./ day x 7 days / wk. x 52 wks./ yr.)
= 140 lbs./ yr.

Application No. 430417

Throughput = 16,000 tons per day
= 480,000 tons / month **(permit condition)**

The system transfers washed sand and aggregate to storage bins using a belt conveyor with a turn head. Since the material is wet, the PM emissions will be insignificant.

R1 (PM, PM10) = 0 lb / hr
R2 (PM, PM10) = 0 lb / hr

**RULES:**

RULE 212 This is portable equipment. Public notice is not required.

RULE 401 Visible emissions are not expected with proper maintenance and operation of this equipment. Compliance is expected.

RULE 402 Operation of this equipment is not expected to create a nuisance. Compliance is expected.

RULE 405 The PM emissions are small and much less than the rate allowed in Table 405 (a) of this rule. Compliance is expected.

REG. XIII New Source Review

Subparagraph 1303(a) – BACT:
Water spray is used at material transfer points. BACT requirement is satisfied.

Subparagraph 1303(b)(1) – Modeling
The PM10 emissions are less than 0.41 lb./ hr. screening limit specified in this rule. Modeling is not required.

Subparagraph 1303(b)(2) – Emission Offsets
The facility PTE for PM10 is less than 4 tons per year. No offsets are required.

RULE 1401 Review of Toxic Air Contaminants
No toxic emissions are expected from these operations. Compliance is expected.

**CONCLUSIONS/RECOMMENDATIONS:**

The equipment is expected to comply with all applicable AQMD rules and regulations. Issue PO subject to permit conditions listed below:

**Conditions:**

Application No. 430411

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.
4. THIS PLANT SHALL NOT PROCESS MORE THAN 150,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.
5. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

Application No. 430413

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.
4. THIS PLANT SHALL NOT PROCESS MORE THAN 180,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

5. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

Application No. 430416

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THIS PLANT SHALL NOT PROCESS MORE THAN 480,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

5. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

Application No. 430417

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3 THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THIS PLANT SHALL NOT PROCESS MORE THAN 480,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

5. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

Table 11.19.2-2 (English Units). EMISSION FACTORS FOR CRUSHED STONE PROCESSING OPERATIONS[a]

| Source[b] | Total Particulate Matter | EMISSION FACTOR RATING | Total PM-10[c] | EMISSION FACTOR RATING |
|---|---|---|---|---|
| Screening (SCC 3-05-020-02,-03) | —[d] | | 0.015[e] | C |
| Screening (controlled) (SCC 3-05-020-02-03) | —[d] | | 0.00084[e] | C |
| Primary crushing (SCC 3-05-020-01) | 0.00070[f] | E | ND[g] | |
| Secondary crushing (SCC 3-05-020-02) | ND | | ND[g] | |
| Tertiary crushing (SCC 3-05-020-03) | —[d] | | 0.0024[h] | C |
| Primary crushing (controlled) (SCC 3-05-020-01) | ND | | ND[g] | NA |
| Secondary crushing (controlled) (SCC 3-05-020-02) | ND | | ND[g] | NA |
| Tertiary crushing (controlled) (SCC 3-05-020-03) | —[d] | | 0.00059[h] | C |
| Fines crushing[j] (SCC 3-05-020-05) | —[d] | | 0.015 | E |
| Fines crushing (controlled)[j] (SCC 3-05-020-05) | —[d] | | 0.0020 | E |
| Fines screening[j] (SCC 3-05-020-21) | —[d] | | 0.071 | E |
| Fines screening (controlled)[j] (SCC 3-05-020-21) | —[d] | | 0.0021 | E |
| Conveyor transfer point[k] (SCC 3-05-020-06) | —[d] | | 0.0014 | D |
| Conveyor transfer point (controlled)[k] (SCC 3-05-020-06) | —[d] | | $4.8 \times 10^{-5}$ | D |
| Wet drilling: unfragmented stone[m] (SCC 3-05-020-10) | ND | | $8.0 \times 10^{-5}$ | E |
| Truck unloading: fragmented stone[m] (SCC 3-05-020-31) | ND | | $1.6 \times 10^{-5}$ | E |
| Truck loading--conveyor: crushed stone[n] (SCC 3-05-020-32) | ND | | 0.00010 | E |

[a] Emission factors represent uncontrolled emissions unless noted. Emission factors in lb/ton of material throughput. SCC = Source Classification Code. ND = no data.

[b] Controlled sources (with wet suppression) are those that are part of the processing plant that employs current wet suppression technology similar to the study group. The moisture content of the study group without wet suppression systems operating (uncontrolled) ranged from 0.21 to 1.3 percent and the same facilities operating wet suppression systems (controlled) ranged from 0.55 to 2.88 percent. Due to carry over or the small amount of moisture required, it has been shown that each source, with the exception of crushers, does not need to employ direct water sprays. Although the moisture content was the only variable measured, other process features may have as much influence on emissions from a given source. Visual observations from each source under normal operating conditions are probably the best indicator of which emission factor is most appropriate. Plants that employ sub-standard control measures as indicated by visual observations should use the uncontrolled factor with an appropriate control efficiency that best reflects the effectiveness of the controls employed.

[c] Although total suspended particulate (TSP) is not a measurable property from a process, some states may require estimates of TSP emissions. No data are available to make these estimates. However, relative ratios in AP-42 Sections 13.2.2 and 13.2.4 indicate that TSP emission factors may be estimated by multiplying PM-10 by 2.1.

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
## Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Rock – Aggregate Processing

| | Criteria Pollutants | | | | | |
|---|---|---|---|---|---|---|
| **Rating/Size** | **VOC** | **NOx** | **SOx** | **CO** | **$PM_{10}$** | **Inorganic** |
| All | | | | | Baghouse Venting Jaw Crushers, Cone Crushers, and Material Transfer Points Adjacent to and after these Items; and Water Sprays at Other Material Transfer Points (1990) | |

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

**Rajendra Singh**

**From:** Taylor, Scott
**Sent:** Monday, October 25, 2004 2:42 PM
**To:** Rajendra Singh
**Subject:** FW: United Rock Products A/N 428833,428834,430411,430413,430416,430417

Raj,

I have reviewed the draft Permits to Construct. A/N 430417 equipment description 2 has a typo. The bins should be identified as 1 thru 6. Otherwise, we have no other comments. Please go ahead and finalize these permits. We would like to pick them up when they are ready. If you could have someone give me a call when they are ready I would appreciate it.

*Scott Taylor*

*Justice & Associates*

*(562) 961-3494*

*Fax (562) 961-3493*

Transmittal

Via: CON

**Justice & Associates**

4155 Outer Traffic Circle, Long Beach, CA 90804-2111 • (562) 961-3494 • Fax (562) 961-3493

# Document Transmittal

From: **Kimba Spencer**

Company: South Coast AQMD
Date: August 26, 2004
Address: 21865 East Copley Drive
Our Job No.: 8536
City, State, Zip: Diamond Bar, CA 91765
For: Approval ____ Record X
Attention: Rajendra Singh
Other:

| Quantity | Description |
|---|---|
| 1 | Requested information |
| | |

## Comments

Raj:

Enclosed find the information and forms you requested: The signed CEQA form, the flow diagrams, and a marked-up copy of permit D08812.

Please let me know if you have any questions.

Best regards,



Kimba Spencer
Justice & Associates

CC: Ken Barker, United Rock Products

## Rajendra Singh

**From:** Rajendra Singh
**Sent:** Wednesday, August 18, 2004 10:55 AM
**To:** 'Spencer, Kimba'
**Subject:** United Rock Products, ID # 65341

Hi Kimba
Please let me know the status of information I requested over a month ago to process the 8 applications from United Rock Products. Please provide a date when this information will become available. After I receive this date, AQMD will make a decision whether to reject these applications for lack of timely information or wait for the information.
Thanks,
Raj Singh

-----Original Message-----
**From:** Rajendra Singh
**Sent:** Friday, July 16, 2004 4:35 PM
**To:** 'Spencer, Kimba'
**Subject:** FW: United Rock Products, ID # 65341

Hi Kimba
Please provide the following information, in addition to the information requested in my email on 7/13/04:

- A/N 430403 (item 4 in your letter) - The marked-up copy of permit # D08813 submitted with your application shows extensive changes. It is recognized that these changes will result in lower overall emissions. However, it will be prudent to calculate the new emissions and enter in the NSR data base so that the facility PTE limit of 4 tons / year is not unnecessarily penalized. Therefore, this application should be considered a modification and not an administrative change and higher fee will apply. We can bill CALMAT for the remaining fee when the permit is issued. Please let me know if you have any problem with this assessment. Also, please provide a flow diagram of the modified system.

- A/N 430413 (item 6 in your letter) - A feeder belt is being added in the equipment list of permit # D08812. Please provide a flow diagram of the modified system.

- A/N 430416 (item 7 in your letter) - A 30 ton feed hopper is being added in the equipment list of permit # D08808. Please provide a flow diagram of the modified system and indicate how much material goes thru the hopper and how much thru the gates under the storage bins.

Please let me know by return email when the information requested in this and the previous email will be available.

Thank you,

Raj Singh
Air Quality Engineer
South Coast Air Quality Management District
(909) 396-3099
(909) 396-3341- Fax

-----Original Message-----
**From:** Rajendra Singh
**Sent:** Tuesday, July 13, 2004 2:19 PM
**To:** 'Spencer, Kimba'
**Subject:** United Rock Products, ID # 65341

Hi Kimba

I need the following additional information to process the eight applications you submitted for United Rock Products, ID # 65341.

- CEQA form for each application
- A/N 430418 (item 3 in your letter) - two Rock Pre-Crushing Systems (PO #s D08810 and D08807) are being consolidated into one permit unit. Please provide a flow diagram for the combined system.
- A/N 430413 (item 6 in your letter) - Drum Plant - a marked copy of permit # D08812 with corrections is missing in attachment G. Please provide.

Thank you,

Raj Singh
Air Quality Engineer
South Coast Air Quality Management District
(909) 396-3099
(909) 396-3341- Fax

**Justice** & *Associates*

4155 Outer Traffic Circle
Long Beach, CA 90804-2111
562.961.3494 Fax 562.961.3493

www.justiceassociates.com

1401 S. Arville St., Suite J
Las Vegas, NV 89102-0537
702.822.2111 Fax 702.822.2113

May 18, 2004

South Coast AQMD
21865 E. Copley Drive
Diamond Bar, CA 91765

Attention: Raj Singh

Subject: United Rock Products (Facility ID# 65341)
Permit Issues

Dear Raj:

In response to our telephone conversation on May 13, 2004, here are six (6) 400A Forms to accompany the package you are reviewing for United Rock Products.

Please call if you have any questions at (562) 961-3494.

Best regards,

Kimba Spencer
Justice & Associates

J:\UnitedRock\letters\8536 letter.doc

**Justice** & *Associates*

4155 Outer Traffic Circle
Long Beach, CA 90804-2111
562.961.3494 Fax 562.961.3493

www.justiceassociates.com

1401 S. Arville St., Suite J
Las Vegas, NV 89102-0537
702.822.2111 Fax 702.822.2113

April 7, 2004

South Coast AQMD
21865 East Copley Drive
Diamond Bar, CA 91765

Attention: Permit Services

Subject: United Rock Products
(Facility ID #65341) Permit Issues

Enclosed are several applications and technical corrections for the United Rock Products, Irwindale facility. Enclosed is a check in the amount of $17,091.64 to cover the application fees. Under Attachment "A" is a fee schedule worksheet which describes the break down of the fees. The following is a description of each application and/or correction and the supporting information.

1. A new application for a stationary screening plant with a 56 TPH throughput. A/N 428833 This application is being submitted as a Class III application. Attachment "B" following this letter includes the 400A form as well as emission calculations, an equipment list and a flow diagram. This plant operates on grid power. United Rock is requesting a production limit of 9,856 Tons Per Month (TPM).

2. A new application for a second stationary screening plant with an 84 TPH throughput. A/N 428834 This application is being submitted as a Class III application. Attachment "C" following this letter includes the 400A form and supporting material for this application. This plant operates on grid power. United Rock is requesting a production limit of 20,160 TPM.

3. Currently United Rock holds two permits for two separate Rock Pre-Crushing systems (D08810 and D08807). Although these two systems operate independently, both feed the same stock pile using two conveyors that are common to both systems. Since this equipment uses common equipment, we are requesting the equipment and permit conditions on Permit D08807 be added to Permit D08810. Note that the Pioneer jaw crusher listed on permit D08807 is no longer in service and should not be included in the combined permit. At the same time we are requesting that the daily limits be combined into one monthly limit of 624,000 tons/month ([11,200 TPD + 9,600 TPD] × 30 days/month = 624,000 TPM)

AM 1430 418

This site operates a clamshell dredge. While this equipment does not generate particulate emissions, several of the other permits for this facility included wet process equipment. In order to be consistent with the other permits we have included a list of equipment for the dredge to be added to Permit D08810. The dredge includes the following equipment:

| | | | |
|---|---|---|---|
| 1. | Belt Conveyor | 600' × 42" | 75 HP |
| 2. | Belt Conveyor | 350' × 42" | 125 HP |
| 3. | Belt Conveyor | 50' × 42" | 40 HP |
| 4. | Belt Conveyor | 650' × 42" | 275 HP |
| 5. | Belt Conveyor | 490' × 42" | 150 HP |
| 6. | Belt Conveyor | 130' × 42" | 75 HP |
| 7. | Belt Conveyor | 150' × 42" | 40 HP |
| 8. | Belt Conveyor | 150' × 42" | 40 HP |
| 9. | Belt Conveyor | 150' × 42" | 40 HP |
| 10. | Belt Conveyor | 150' × 42" | 40 HP |
| 11. | Belt Conveyor | 150' × 42" | 40 HP |
| 12. | Belt Conveyor | 150' × 42" | 40 HP |
| 13. | Belt Conveyor | 150' × 42" | 40 HP |
| 14. | Under Jaw Belt Conveyor | 60' × 42" | 30 HP |
| 15. | Conveyor A | 40' × 42" | 20 HP |
| 16. | Conveyor B | 40' × 42" | 20 HP |
| 17. | Svedala Screen | 6' × 20' | 40 HP |
| 18. | Svedala Screen | 6' × 20' | 40 HP |
| 19. | Svedala Screen | 6' × 20' | 40 HP |
| 20. | Svedala Screen | 6' × 20' | 40 HP |
| 21. | Svedala Screen | 5.5' × 15' | 30 HP |
| 22. | Svedala Screen | 5.5' × 15' | 30 HP |
| 23. | Plate Feeder | -- | -- |
| 24. | Jaw Crusher, Telesmith | 30' × 55" | 150 HP |

Both pre-crushing plants feed the primary surge pile using common conveyors. Currently these conveyors do not appear to be covered on either permit. As a result we request that two conveyors be added to Permit D08810 for the primary surge pile loading. The following is the equipment description:

| | | |
|---|---|---|
| Stacking Conveyor | 200' × 42" | 150 HP |
| Belt Conveyor | 275' × 42" | 125 HP |

Attachment "D" has the emission calculations for the additional conveyors.

Rock Pre-crushing (Permit #D08810) requires a technical correction. The jaw crushers specified on the permit as a 50 HP, KUE-KAN size 24" × 36" needs to be changed to a 150 HP, Minyu, size 40" × 42".

Attachment "D" includes marked-up copies of the facility permits showing the additional equipment and the corrections to the equipment descriptions and conditions.

4. We are requesting a change to the Main Aggregate Plant's (Permit #D08813) existing production permit condition from a daily limit to a monthly limit. A/N 430403

The existing permit conditions allow daily production of 24,000 TPD. We are requesting a change to a monthly limit of 720,000 TPM (24,000 TPD × 30 days/month = 720,000 TPM).

The modification in production limit does not result in a change of emissions. Attachment "E" includes a marked-up copy of the facility permit showing the additional equipment and the corrections to the equipment descriptions and conditions.

5. The Base Plant (Permit # D08811) is outgrowing its production limits and United Rock is requesting to increase and change their daily limit to a monthly limit. The permit currently has a daily processing limit of 3,200 tons. We are requesting this be changed 150,000 tons per month. Attachment "F" includes emission evaluation for both before and after the change in production. A/N 430411

6. The Drum Plant permit (Permit # D08812) requires several technical corrections. A feeder belt needs to be added to the equipment list. The belt specifications are 45' L × 36" W and is 15 HP. Additionally, the incline conveyor shows a horsepower of 40 and it should be changed to 50 HP. The shuttle conveyor shows a horsepower of 5 and it should be 10 HP. A/N 430413

The existing permit conditions allow a daily production of 4,000 tons. We are requesting an increase and a change to a monthly limit of 180,000 tons per month. With the addition of the conveyer and the increase in production, the emissions from this equipment will be increased by 172.80 lbs per year.

Attachment "G" has a marked up copy of the permit with the corrections as well as emission calculations for both before and after the production increase.

7. The Dry Loadout System (Permit # D08808) requires two technical corrections. A/N 430416 The horsepower on the discharge turnhead needs to be changed from 1 HP to 1.5 HP. The permit is also missing a 30 Ton feed hopper which sits on top of belt conveyer C27. Material fed into the hopper will result in a like amount to be reduced from the gates that feed material to the conveyor. As a result there are no additional emissions generated with the addition of the hopper.

This facility is also outgrowing its production and United Rock would like to request an increase in production and a change from a daily limit to a monthly limit. The current permit has a daily limit of 8,000 tons. We are requesting this be changed to a monthly limit of 480,600 tons. This increase in production will result in an annual emissions increase of 138.24 lbs per year.

Attachment "H" has a marked up copy of the permit showing the correction as well as emission calculations for both before and after the production increase.

8. The Wet Loadout System (Permit # D08809) requires a technical correction. The A/N 430417 horsepower on the discharge turnhead needs to be changed from 1 HP to 1.5 HP.

This permit unit also has out grown its production. United Rock would like to request an increase in production and a change from a daily limit to a monthly limit. The current permit has a daily limit of 8,000 tons. We are requesting this be changed to a monthly limit of 480,600 tons. Since this facility processes only wet material the increase in production will not result in an increase in emissions.

Attachment "I" has a marked up copy of the permit showing the correction.

Below is a summary of the total emission increase that are a result of the changes in equipment or production.

Emission Increase Summary

| | | |
|---|---|---|
| 1. | Screening Plant I | 83.97 lbs/year |
| 2. | Screening Plant II | 171.76 lbs/year |

| | | |
|---|---|---|
| 3. | Base Plant (D08811) | 155.52 lbs/year |
| 4. | Drum Plant (D08812) | 172.8 lbs/year |
| 5. | Dry Loadout (D08808) | 138.24 lbs/year |
| | Total | 722.29 lbs/year |
| | | 0.36 tons/year |

Currently, the facility's NSR balance shows that it is well below the offset threshold of 4 ton/year of PM (Please refer to Attachment "J"). Based on the Emission Increase Summary the annual increase in emissions are 0.36 tons/year. As a result, we do not anticipate these modifications requiring offsets.

We trust this information will be sufficient to process these applications and requests. If you have any questions, please call me at (562) 961-3494.

Best regards,

Kimba Spencer
Justice & Associates

cc: Ken Barker, United Rock Products

| **Attachments** | - | **Description** |
|---|---|---|
| "A" | - | Fee Schedule |
| "B" | - | Screening Plant I |
| "C" | - | Screening Plant II |
| "D" | - | Rock Pre-Crushing Systems (D08810) |
| "E" | - | Main Aggregate Plant (D08813) |
| "F" | - | Base Plant (D08811) |
| "G" | - | Drum Plant (D08812) |
| "H" | - | Dry Loadout System (D08808) |
| "I" | - | Wet Loadout System (D08809) |
| "J" | - | NSR Balance |

# ATTACHMENT "H"

# DRY LOADOUT SYSTEM
# (D08808)

**Justice** & *Associates*

## United Rock - Dry Loadout - Emissions Before Increase

### Emission Evaluation

| | Description | Thruput (ton/day) | x | $PM_{10}$ AP-42 Emission Factors (lb/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 2 | Belt Conveyor to Receiving Hoppers | 8,000 | | 0.000048 | | 0.3840 |
| | | | | Total $PM_{10}$ (lb/day) | | 0.3840 |
| | | | | Aggregate Thruput (ton/day) | ÷ | 8000 |
| | | | | Process Emissions Factor (lb/ton) | | 0.000048 |

### Total Facility Emissions

| Aggregate Thruput | | $PM_{10}$ Emissions Factor (lb/ton) | = | $PM_{10}$ Emission | |
|---|---|---|---|---|---|
| 240,000 | ton/month | x 0.000048 | | 11.52 | lb/month |
| 2,880,000 | ton/year | x 0.000048 | | 138.24 | lbs/yr |
| | | | | 0.07 | tons/yr |

**Justice** & *Associates*

## United Rock - Dry Loadout - Emissions After Increase

### Emission Evaluation

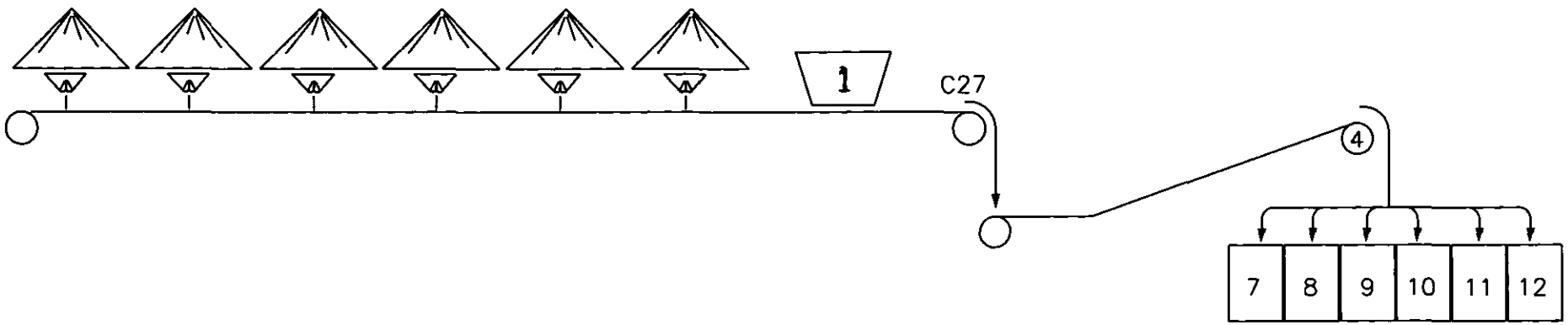
| | Description | Thruput (ton/day) | x | $PM_{10}$ AP-42 Emission Factors (lb/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 1 | Belt Conveyor to Receiving Hoppers | 16,000 | | 0.000048 | | 0.7680 |
| | | | | Total $PM_{10}$ (lb/day) | | 0.7680 |
| | | | | Aggregate Thruput (ton/day) | ÷ | 16000 |
| | | | | Process Emissions Factor (lb/ton) | | 0.000048 |

### Total Facility Emissions

| Aggregate Thruput | | $PM_{10}$ Emissions Factor (lb/ton) | = | $PM_{10}$ Emission | |
|---|---|---|---|---|---|
| 480,000 | ton/month x | 0.000048 | | 23.04 | lb/month |
| 5,760,000 | ton/year x | 0.000048 | | 276.48 | lbs/yr |
| | | | | 0.14 | tons/yr |

### Summary of Emission Increase

| | $PM_{10}$ (lbs/year) | |
|---|---|---|
| Before | 138.24 | |
| After | 276.48 | |
| Increase | 138.24 | Total |




Justice & Associates
4155 Outer Traffic Circle, Long Beach, CA 90804
562-961-3494 Fax 562-961-3493

| DESCRIPTION | | | | |
|---|---|---|---|---|
| United Rock Products<br>Dry Loadout System (D08808) | | | | |
| JOB NO. | CADCODE | DRAWN BY: | DATE | DWG. NO. |
| 8536 | 8536-5 | KS | 8/23/04 | 8536-5 |

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D08808
A/N 185072
Page 1

**This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.**

---

**Legal Owner**
**Or Operator:** UNITED ROCK PRODUCTS CORPORATION

ID 65341

Day Road

**Equipment**
**located at:** 1245 EAST ARROW HIGHWAY, IRWINDALE, CALIFORNIA

**Equipment Description:**

CRUSHED AGGREGATE RECLAIMING, STORAGE AND LOADOUT SYSTEM CONSISTING OF:

1. BELT CONVEYOR NO. 27, RECLAIMING, 300 H.P. WITH A 1.5 H.P. DISCHARGE TURNHEAD.

2. SIX STORAGE BINS, NOS. 7 THROUGH 12; 200 TONS CAPACITY EACH, WITH PNEUMATICALLY OPERATED GATES.

3. FOUR AIR COMPRESSORS, TWO 20 H.P. AND TWO 15 H.P.

**Conditions:** 30Ton feedhopper

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. NOT MORE THAN 8000 TONS OF AGGREGATE SHALL BE PROCESSED IN ANY ONE DAY.

4. AGGREGATE CHARGED AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METER OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTIN LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Raquel Puerta/jas
July 6, 1989

UNITED ROCK PRODUCTS CORP.
ATTN: THOMAS S. TEDESCO
13131 LOS ANGELES ST.
IRWINDALE, CA. 91706

**Justice & Associates**

4155 Outer Traffic Circle
Long Beach, CA 90804-2111
(562) 961-3494 Fax (562) 961-3493

# FEE SCHEDULE WORK SHEET

(For permit processing in accordance with Rule 301)

Permits to be issued to: United Rock Products

Address: 1245 East Arrow Highway

City, State, Zip: Irwindale, CA 91706

| Quantity of Identical Units | Equipment/Process | Fee Schedule | Full Fee for First Permit Unit | + | 50% of Processing Fee for failure to obtain Permit to Construct | = | Total |
|---|---|---|---|---|---|---|---|
| 1 | Screening Plant | C | $2,232.96 | + | $1,116.48 | = | $3,349.44 |
| 1 | Screening Plant | C | $2,232.96 | + | $1,116.48 | = | $3,349.44 |
| 1 | Permit reissue (D08813) | N/A | $123.02 | + | -- | = | $123.02 |
| 1 | Aggregate Conveying (D08811) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Conveying (D08812) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Loading (D08808) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Loading (D08809) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Conveying (D08810) | D | $3,081.85 | + | $1,540.93 | = | $4,622.78 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Total Permit Processing Fee Due: $17,091.64

Comments:

PIO Approved.
F 71632
11-2-04

ROUTING RECORD

| DATE | FROM | TO | ACTION |
|---|---|---|---|
| 5-28-04 | R&M | RJS | CLASS I |
| 10-22-04 | RJS | RWM | ISSUE PO |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

REFERENCE TO OTHER APCD RECORDS INCLUDING VARIANCES

M




APPL # 430417
I D # 65341

UNITED ROCK PRODUCTS CORPORATION
1245 E ARROW HWY
IRWINDALE
AGGREGATE LOADING

Date 05/25/04

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

# PERMIT TO CONSTRUCT/OPERATE


Permit No.
F71632
A/N 430417

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership.
If the billing for the annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

ID 65341

Legal Owner
or Operator: UNITED ROCK PRODUCTS CORPORATION
1245 E ARROW HWY
IRWINDALE, CA 91706-1302

**Equipment Location:** 1245 E ARROW HWY, IRWINDALE, CA 91706-1302

**Equipment Description :**

WASHED SAND AND AGGREGATE RECLAIMING, STORAGE, AND LOADOUT SYSTEM CONSISTING OF:

1. BELT CONVEYOR NO. C-26, WASHED MATERIALS RECLAIMING, 250 H.P., WITH A 1.5 H.P. DISCHARGE TURNHEAD.

2. SIX STORAGE BINS NOS. 1 THRU 6, EACH 200 TON CAPACITY, WITH PNEUMATICALLY OPERATED GATES.

**Conditions :**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THIS EQUIPMENT SHALL NOT PROCESS MORE THAN 480,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

5. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

**FILE COPY**

CONTINUATION OF PERMIT TO CONSTRUCT/OPERATE

**NOTICE**

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Dorris M Bailey

By Dorris M.Bailey/RS06
11/2/2004

**FILE COPY**

South Coast Air Quality Management District
P.O. Box 4944
Diamond Bar CA 91765
(909) 396-2000

# APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE FORM 400 - A

**Non-Title V Facilities:** This form must be accompanied by one or more 400-E-xx series forms(s). Complete this side of form only.
**Title V Facilities:** Complete both sides of this form. Include additional forms as necessary.

NC/NOV NUMBER:
INSPECTOR SECTOR
ISSUE DATE

## Section I - Company Information

LEGAL NAME OF OPERATOR: United Rock Products Corporation — ☐ IRS OR ☐ S.S. Number

PERMIT TO BE ISSUED TO (SEE INSTRUCTIONS): United Rock Products Corporation

BUSINESS MAILING ADDRESS: 1245 East Arrow Highway, Irwindale, CA 91706

PERMIT MAILING ADDRESS, IF DIFFERENT FROM BUSINESS MAILING ADDRESS:

TYPE OF ORGANIZATION
☒ Corporation ☐ Limited Partnership ☐ Government Entity
☐ Individual ☐ General Partnership ☐ Other (Fill In):

ARE YOU A SMALL BUSINESS? (SEE INSTRUCTIONS) ☐ Yes ☒ No
AVERAGE ANNUAL GROSS RECEIPT $
NUMBER OF EMPLOYEES
IS YOUR BUSINESS 51 % OR MORE WOMAN/MINORITY OWNED? ☐ Yes ☐ No

**THIS SECTION IS REQUIRED FOR ALL APPLICATIONS FOR NEW CONSTRUCTION OR MAJOR MODIFICATIONS.**
ARE ALL MAJOR SOURCES UNDER SAME OWNERSHIP IN CALIFORNIA IN COMPLIANCE WITH FEDERAL, STATE, AND LOCAL AIR POLLUTION CONTROL RULES? ☒ Yes ☐ No

ARE YOU THE OWNER OF THE EQUIPMENT UNDER THIS APPLICATION? ☒ Yes ☐ No ☐ IRS OR ☐ S.S.NUMBER
IF NO, ENTER THE LEGAL NAME OF OWNER

## Section II - Facility Information

EQUIPMENT ADDRESS/LOCATION: 1245 East Arrow Highway (NUMBER/STREET)
Irwindale (CITY OR COMMUNITY) CA 91706 (ZIP CODE)
FACILITY NAME: Irwindale
FACILITY ID NUMBER: 0 6 5 3 4 1
PRINT NAME OF CONTACT PERSON: Frank Keohane
TITLE OF CONTACT PERSON:
TYPE OF BUSINESS AT THIS FACILITY: Aggregate Production
PRIMARY SIC CODE FOR THIS FACILITY: 1442
NUMBER OF EMPLOYEES AT THIS FACILITY:
CONTACT PERSON'S TELEPHONE NUMBER: (626) 358-4558
CONTACT PERSON'S FAX NUMBER: (626) 357-9508
CONTACT PERSON'S E-MAIL ADDRESS:

## Section III - Application Type

DESCRIPTION OF EQUIPMENT: Aggregate Loading
PREVIOUS PERMIT #S: D08809

APPLICATION FOR (SEE INSTRUCTIONS):
☐ NEW CONSTRUCTION
☐ EXISTING EQUIPMENT WITHOUT PERMIT
☐ EXISTING EQUIPMENT WITH EXPIRED PERMIT
☐ CHANGE OF LOCATION ☐ RECLAIM Processing Fee
☐ MODIFICATION
☐ CHANGE OF PERMITTEE
☒ CHANGE OF PERMIT CONDITION

ARE YOU SUBMITTING MULTIPLE APPLICATIONS FOR EQUIPMENT IDENTICAL TO THAT DESCRIBED ABOVE? ☐ Yes ☒ No

☐ **APPLICATION FOR NON-TITLE V EQUIPMENT PERMIT. CHECK THE SUPPLEMENTAL SERIES 400-E-xx FORM(S) SUBMITTED WITH THIS 400-A FORM:**

| | | | |
|---|---|---|---|
| ____ 400-E-1 | • PARTICULATE MATTER (PM-10) CONTROL EQUIPMENT | ____ 400-E-13 | • INTERNAL COMBUSTION EQUIPMENT |
| ____ 400-E-2 | • VOLATILE ORGANIC COMPOUND (VOC) CONTROL EQUIPMENT | ____ 400-E-14 | • OPEN PROCESS TANK |
| ____ 400-E-3 | • SCRUBBER | ____ 400-E-14a | • OPEN PROCESS TANK; PROCESS LINE |
| ____ 400-E-4 | • ABRASIVE BLASTING EQUIPMENT | ____ 400-E-15 | • PRINTING EQUIPMENT |
| ____ 400-E-5 | • DEGREASER | ____ 400-E-16 | • SOLID MATERIALS STORAGE EQUIPMENT |
| ____ 400-E-7 | • DRY CLEANING EQUIPMENT | ____ 400-E-17 | • SPRAY BOOTH/OPEN SPRAY |
| ____ 400-E-8 | • ETHYLENE OXIDE STERILIZER' | ____ 400-E-17a | • POWDER SPRAY BOOTH |
| ____ 400-E-9 | • EXTERNAL COMBUSTION EQUIPMENT | ____ 400-E-18 | • STORAGE TANK (LIQUID & GASEOUS MATERIAL) |
| ____ 400-E- 10 | • FOOD BROILER/FRYER | ____ 400-E-19 | • WAVE SOLDER MACHINE |
| ____ 400-E-11 | • FUEL DISPENSING AND STORAGE EQUIPMENT | ____ 400-E-20 | • ASBESTOS REMOVAL EQUIPMENT |
| ____ 400-E-12 | • GAS TURBINE | ____ NONE | • ADDITIONAL INFORMATION SUBMITTED AS REQUESTED ON FORM 400-E-GI |

☐ **APPLICATION FOR TITLE V FACILITY PERMIT. PROVIDE INFORMATION REQUESTED ON REVERSE SIDE OF THIS FORM.**

**I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT.**
SIGNATURE OF RESPONSIBLE OFFICIAL OF FIRM: [signature] TITLE OF RESPONSIBLE OFFICIAL OF FIRM: General Manager
TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL OF FIRM: Frank Keohane
RESPONSIBLE OFFICIALS TELEPHONE NUMBER: (626) 358-4558
DATE SIGNED: 5-18-04

**I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT.**
SIGNATURE OF PREPARER, IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM: [signature] TITLE OF RESPONSIBLE OFFICIAL OF FIRM: Consultant
TYPE OR PRINT NAME OF PREPARER, IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM: Kimba Spencer
PREPARER'S TELEPHONE NUMBER: (562) 961-3494
DATE SIGNED: 5/18/04

*TITLE V FACILITIES ONLY: COMPLETE OTHER SIDE*

| AQMD USE ONLY | APPLICATION/TRACKING # | TYPE B C D | EQUIPMENT CATEGORY CODE: | FEE SCHEDULE: $ | VALIDATION |
|---|---|---|---|---|---|
| | 430417 | | | | 05/05/04 |

| ENG. A R DATE | ENG. A R DATE | CLASS I III IV | ASSIGNMENT UNIT | ENGINEER | ENF SECT. | CHECK/MONEY ORDER # | AMOUNT $ |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

FORM 400-A, Rev. 3/98

(35803)

Job No. & Form 8536-5

# TITLE V APPLICATION CERTIFICATION

**- TO BE COMPLETED BY TITLE V FACILITIES ONLY -**

## Section IV Title V Application

1. This is an application for a(n) (Check all applicable boxes and provide the requested information as appropriate):
   a. ☐ Initial Title V Permit
   b. ☐ Permit Renewal: Provide current permit expiration date: _____
   c. ☐ Administrative Permit Revision (Check all that apply)
      ☐ Change of Ownership. (Complete and attach equipment-specific Form 400-E-xx series forms)
      ☐ Change of Facility Information
      ☐ Other, Please specify: _____
   d. ☐ Other (Complete and attach equipment specific form 400-E-XX series form(s) to this form if your application involves permit action for new construction, change of location, non-administrative permit revision, alternative operating scenario (AOS), permit shield, streamlined permit conditions, or temporary source permit.)
2. Is this facility required to prepare a Risk Management Plan (RMP) for another agency? ☐ Yes ☐ No

## Section V Title V Submittal Checklist

1. Enter the quantity of each type form submitted in the space provided:

| | | | |
|---|---|---|---|
| _____ | 500-A2 | _____ | 500-F1 |
| _____ | 500-B | _____ | 500-F2 |
| _____ | 500-C1 | _____ | 500-F3 |
| _____ | 500-C2 | _____ | 500-F4 |
| _____ | 500-D | _____ | Other (specify): _____ |

2. Additional information referenced in this application submitted (Check **ALL** that apply):
   a. ☐ Existing Facility Permit
   b. ☐ Preliminary Facility Permit
   c. ☐ EFB Report for Year(s) _____
   d. ☐ None
   e. ☐ Other (Specify): _____
3. Supplemental information included with this application submittal (Check **ALL** that Apply):
   a. ☐ Facility Plot Plan
   b. ☐ MSDS Sheet(s)
   c. ☐ None
   d. ☐ Other (Specify): _____

**AQMD USE ONLY**

| APPLICATION TYPE | 30 DAY PUBLIC NOTICE START DATE | 30 DAY PUBLIC NOTICE END DATE | PUBLIC HEARING DATE | 45-DAY EPA REVIEW START DATE | 45-DAY EPA REVIEW END DATE |
|---|---|---|---|---|---|
| INITIAL, RENEWAL & SIGNIFICANT | | | | | |
| MINOR & DE MINIMIS | | | | | |
| ESTABLISH GENERAL PERMIT | | | | | |

**USE THE SECTIONS BELOW FOR TITLE V INITIAL AND RENEWAL APPLICATIONS ONLY:**

| APPLICATION/TRACKING # | TYPE B C D | EQUIPMENT CATEGORY CODE: ___ ___ ___ ___ ___ / ___ ___ | FEE SCHEDULE: $ | VALIDATION |
|---|---|---|---|---|
| ENG. A DATE R | ENG. A DATE R | CLASS I III IV | ASSIGNMENT UNIT ENGINEER | ENF. SECT. | CHECK/MONEY ORDER AMOUNT # $ |

FORM 400-A, Rev. 3/98

4 MAY 21 P3:24
S.C.A.Q.M.D. ENGINEERING

South Coast Air Quality
Management District
21865 East Copley Drive
Diamond Bar, CA 91765
(909) 396- 2000

# CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) APPLICABILITY FORM 400 - CEQA

The SCAQMD is required by state law, the California Environmental Quality Act (CEQA), to review discretionary permit project applications for potential air quality and other environmental impacts. This form is a screening tool to assist the SCAQMD in clarifying whether or not the project[1] has the potential to generate significant adverse environmental impacts that might require preparation of a CEQA document [CEQA Guidelines §15060(a)].[2] Refer to the attached instructions for guidance in completing this form.[3] For each Form 400-A application, also complete and submit one Form 400-CEQA. If submitting multiple Form 400-A applications for the same project, only one 400-CEQA form is necessary for the entire project. If you need assistance completing this form, contact Lori Inga at (909) 396-3109.

## FACILITY INFORMATION

**Facility Name:** United Rock Products **Facility ID** (6-Digit): 065341

**Project Description:** Aggregate production facility.

## REVIEW FOR EXEMPTION FROM FURTHER CEQA ACTION

Check "Yes" or "No" as applicable

| | Yes | No | Is this application for: |
|---|---|---|---|
| A. | ☐ | ☒ | **A request for a change of permittee only (without equipment modifications)?** |
| B. | ☐ | ☒ | **Equipment certification or equipment registration?** |
| C. | ☐ | ☒ | **A CEQA and/or NEPA document previously or currently prepared that specifically evaluates this project?** If yes, a permit cannot be issued until a Final CEQA document and Notice of Determination is submitted. |
| D. | ☐ | ☒ | **Equipment damaged as a result of a disaster during state of emergency?** |
| E. | ☐ | ☒ | **A Title V permit renewal (without equipment modifications)?** |
| F. | ☐ | ☒ | **A Title V administrative permit revision?** |
| G. | ☐ | ☒ | **The conversion of an existing permit into an initial Title V permit?** |
| H. | ☐ | ☒ | **A functionally identical permit unit replacement with no increase in rating or emissions?** |
| I. | ☐ | ☒ | **A change of daily VOC permit limit to a monthly VOC permit limit?** |

If "Yes" is checked for any question above, your application does not require additional evaluation for CEQA applicability. Skip to page 2, "SIGNATURES" and sign and date this form.

## REVIEW OF IMPACTS WHICH MAY TRIGGER CEQA

Complete Sections I-V by checking "Yes" or "No" as applicable. To avoid delays in processing your application(s), explain all "Yes" responses on a separate sheet and attach it to this form.

| | Yes | No | Section I - General |
|---|---|---|---|
| 1. | ☐ | ☒ | **Has this project generated any known public controversy regarding potential adverse impacts that may be generated by the project?** Controversy may be construed as concerns raised by local groups at public meetings; adverse media attention such as negative articles in newspapers or other periodical publications, local news programs, environmental justice issues, etc. |
| 2. | ☐ | ☒ | **Is this project part of a larger project?** |
| | | | **Section II - Air Quality** |
| 3. | ☐ | ☒ | **Will there be any demolition, excavating, and/or grading construction activities that encompass an area exceeding 20,000 square feet?** |
| 4. | ☒ | ☐ | **Does this project include the open outdoor storage of dry bulk solid materials that could generate dust?** If Yes, include a plot plan with the application package. |

1. A "project" means the whole of an action which has a potential for resulting in physical change to the environment, including construction activities, clearing or grading of land, improvements to existing structures, and activities or equipment involving the issuance of a permit. For example, a project might include installation of a new, or modification of an existing internal combustion engine, dry-cleaning facility, boiler, gas turbine, spray coating booth, solvent cleaning tank, etc.
2. To download the CEQA guidelines, visit http://ceres.ca.gov/env_law/state.html.
3. To download this form and the instructions, visit http://www.aqmd.gov/ceqa.

| | Yes | No | |
|---|---|---|---|
| 5. | ☐ | ☒ | **Would this project result in noticeable off-site odors from activities that may not be subject to SCAQMD permit requirements?** For example, compost materials or other types of greenwaste (i.e., lawn clippings, tree trimmings, etc.) have the potential to generate odor complaints subject to Rule 402 - Nuisance. |
| 6. | ☐ | ☒ | **Does this project cause an increase of emissions from marine vessels, trains and/or airplanes?** |
| 7. | ☐ | ☒ | **Will the proposed project increase the QUANTITY of hazardous materials stored aboveground onsite or transported by mobile vehicle to or from the site by greater than or equal to the amounts associated with each compound on the attached Table 1?[4]** |
| | | | **Section III - Water Resources** |
| 8. | ☐ | ☒ | **Will the project increase demand for water at the facility by more than 5,000,000 gallons per day?** The following examples identify some, but not all, types of projects that may result in a "yes" answer to this question: 1) projects that generate steam; 2) projects that use water as part of the air pollution control equipment; 3) projects that require water as part of the production process; 4) projects that require new or expansion of existing sewage treatment facilities; 5) projects where water demand exceeds the capacity of the local water purveyor to supply sufficient water for the project; and 6) projects that require new or expansion of existing water supply facilities. |
| 9. | ☐ | ☒ | **Will the project require construction of new water conveyance infrastructure?** Examples of such projects are when water demands exceed the capacity of the local water purveyor to supply sufficient water for the project, or require new or modified sewage treatment facilities such that the project requires new water lines, sewage lines sewage hook ups etc |
| | | | **Section IV - Transportation / Circulation** |
| 10. | | | **Will the project result in** (Check all that apply): |
| | ☐ | ☒ | **a. the need for more than 350 new employees?** |
| | ☐ | ☒ | **b. an increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round-trips per day?** |
| | ☐ | ☒ | **c. increase customer traffic by more than 700 visits per day?** |
| | | | **Section V - Noise** |
| 11. | ☐ | ☒ | **Will the project include equipment with a noise specification GREATER THAN 90 decibels (dB)?** |
| | | | **Section VI - Public Services** |
| 12. | | | **Will the project create a permanent need for new or additional public services in any of the following areas** (Check all that apply): |
| | ☐ | ☒ | **a. Solid waste disposal?** Check "No" if the projected potential amount of wastes generated by the project is less than five tons per day. |
| | ☐ | ☒ | **b. Hazardous waste disposal?** Check "No" if the projected potential amount of hazardous wastes generated by the project is less than 42 cubic yards per day (or equivalent in pounds) |

**REMINDER For each 'Yes' checked in the sections above, attach all pertinent information including but not limited to estimated quantities - volumes, weights, etc -**

## SIGNATURES

I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. I UNDERSTAND THAT THIS FORM IS A SCREENING TOOL AND THAT THE SCAQMD RESERVES THE RIGHT TO CONSIDER OTHER PERTINENT INFORMATION IN DETERMINING CEQA APPLICABILITY.

| SIGNATURE OF RESPONSIBLE OFFICIAL OF FIRM: | TITLE OF RESPONSIBLE OFFICIAL OF FIRM: | |
|---|---|---|
| Frank Keohane | General Manager | |
| TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL OF FIRM: | RESPONSIBLE OFFICIAL'S TELEPHONE NUMBER: | DATE Signed: |
| Frank Keohane | (626) 358-4558 | |
| SIGNATURE OF PREPARER, IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM: | TITLE OF PREPARER: | |
| | Consultant | |
| TYPE OR PRINT NAME OF PREPARER: | PREPARER'S TELEPHONE NUMBER: | DATE Signed: |
| Kimba Spencer | (562) 961-3494 | 8/27/04 |

*THIS CONCLUDES FORM 400-CEQA. INCLUDE THIS FORM AND THE ATTACHMENTS WITH FORM 400-A.*

4. Table I - Regulated Substances List and Threshold Quantities for Accidental Release Prevention can be found in the Instructions for Form 400-CEQA.

# SCAQMD PERMIT PROCESSING SYSTEM (PPS)

## FEE DATA - SUMMARY SHEET

| | | | |
|---|---|---|---|
| Application No : | 430417 | IRS/SS No: | |
| Previous Application No: | 185073 | Previous Permit No: | D08809 |

| | | | |
|---|---|---|---|
| Company Name : | UNITED ROCK PRODUCTS CORPORATION | Facility ID: | 65341 |
| Equipment Street: | 1245 E ARROWHWY , IRWINDALE CA 91706 | | |
| Equipment Desc : | AGGREGATE CONVEYING | | |

| | | | | | |
|---|---|---|---|---|---|
| Equipment Type : | BASIC | | | Fee Charged by: | B-CAT |
| B-CAT NO. : | 107200 | C-CAT NO: | 00 | Fee Schedule: | B |
| Facility Zone : | 09 | Deemed Compl. Date: | 6/10/2004 | Public Notice: | NO |

| | | | |
|---|---|---|---|
| Evaluation Type : | ALTERATION/MODIFICATION (PC/PO) | Small Business: | ☐ |
| Disposition : | Approve PC/PO, Recommended by Engineer | Penalty: | ☐ |
| Lead Appl. No : | | Identical Permit Unit: | ☐ |

| | | | | | |
|---|---|---|---|---|---|
| Air quality Analysis | | | $0.00 | Filing Fee Paid: | $0.00 |
| E.I.R | | | $0.00 | Permit Processing Fee Paid: | $1,411.74 |
| Health Risk Assessment | | | $0.00 | Permit Processing Fee Calculated*: | $1,411.74 |
| Significant Project | | | $0.00 | Permit Processing Fee Adjustment: | $0.00 |
| Express Processing | Hours: | 0.00 | $0.00 | | |
| Source Test Review | Hours: | 0.00 | $0.00 | | |
| Time & Material | Hours: | 0.00 | $0.00 | | |
| | | | | Total Additional Fee: | $0.00 |
| | | | | Additional Charge: | $0.00 |

COMMENTS:

RECOMMENDED BY: RAJENDRA SINGH DATE: 10/21/2004

REVIEWED BY: _____ DATE: 10-29-04

* ADJUSTED FOR SMALL BUSINESS, IDENTICAL EQUIPMENT AND P/O NO P/C PENALTY

SCAQMD PERMIT PROCESSING SYSTEM (PPS)

# AEIS DATA SHEET

Company Name : UNITED ROCK PRODUCTS CORPORATION
Facility ID : 65341
Equipment Address : 1245 E ARROW HWY
IRWINDALE CA 91706

Application Number : 430417
Equipment B-Cat : 107200
Estimated Completion Date : 10/21/04
Equipment C-Cat :
Equipment Type : Basic
Equipment Description : AGGREGATE CONVEYING

| | Emissions | |
|---|---|---|
| Emittants | R1 LB/HR | R2 LB/HR |
| PM10 | 0.01 | 0.01 |

**Applicable Rules**

| | | |
|---|---|---|
| 1401 | 05/02/2003 | New Source Review of Toxic Air Contaminants |
| 401 | 11/09/2001 | Visible Emissions |
| 402 | 05/07/1976 | Nuisance |
| 405 | 02/07/1986 | Solid Particulate Matter - Weight |

| | Mon | Tue | Wed | Thu | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|
| Daily Start Times : | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 |
| Daily Stop Times : | 24:00 | 24:00 | 24:00 | 24:00 | 24:00 | 24:00 | 24:00 |

User's Initials : RS06 Date: 10/21/04 Supervisor's Name : _____ Review Date : 10/29/04

# NSR DATA SUMMARY SHEET

Application No: 430417
Application Type: Alteration
Application Status: PENDAPPRV
Previous Apps,Dev,Permit #: 185073, 0 - x, NONE

---

Company Name: UNITED ROCK PRODUCTS CORPORATION
Company ID: 65341
Address: 1245 E ARROW HWY,IRWINDALE, CA 91706-1302
RECLAIM: NO
RECLAIM Zone: 02A
Air Basin: SC
[redacted]ne: 09
Title V: NO

---

Device ID: 0 - AGGREGATE-LOAD
Estimated Completion Date: 07-30-2004
Heat Input Capacity: 0 Million BTU/hr
Priority Reserve: NONE - No Priority Access Requested
Recommended Disposition: 31 - PERMIT TO OPERATE GRANTED
PR Expiration:
School Within 1000 Feet: NO
Operating Weeks Per Year: 52
Operating Days Per Week: 7
Monday Operating Hours: 00:00 to 24:00
Tuesday Operating Hours: 00:00 to 24:00
Wednesday Operating Hours: 00:00 to 24:00
Thursday Operating Hours: 00:00 to 24:00
Friday Operating Hours: 00:00 to 24:00
[redacted]aturday Operating Hours: 00:00 to 24:00
Sunday Operating Hours: 00:00 to 24:00

---

Emittant: PM10
BACT:
Cost Effectiveness: NO
Source Type: MINOR
Emis Increase: 0
Modeling: N/A
Public Notice: N/A
CONTROLLED EMISSION
Max Hourly: 0 lbs/hr
Max Daily: 0 lbs/day
UNCONTROLLED EMISSION
Max Hourly: 0 lbs/hr
Max Daily: 0 lbs/day
CURRENT EMISSION
BACT 30 days Avg: 0 lbs/day
Annual Emission: 0 lbs/yr
District Exemption: None

SUPERVISOR'S APPROVAL: _____ SUPERVISOR'S REVIEW DATE: 10-25-04.

Processed By: rsingh 10/22/2004 10:23:18 AM

# PERMIT TO CONSTRUCT/OPERATE EVALUATION,

| | |
|---|---|
| Applicant's Name | UNITED ROCK PRODUCTS CORPORATION |
| Company I.D. | 65341 |
| Mailing Address | 1245 E. ARROW HIGHWAY, IRWINDALE, CA 91706 |
| Equipment Address | 1245 E. ARROW HIGHWAY, IRWINDALE, CA 91706 |

**APPLICATION NUMBER** 430411, 430413, 430416, 430417

**BACKGROUND:**

These applications were submitted for change of condition of four aggregate processing systems. The company also operates two rock pre-crushing systems, and a dry and a wet load out system. According to the applicant, these aggregate processing systems were outgrowing their production limits and needed to increase their daily throughput limits. These applications were received on 4/14/04. A check on the compliance data base indicated three open notices, none of which will affect these applications. There are no schools within 1000 feet of the facility.

**EQUIPMENT DESCRIPTION:**

**Application No. 430411**

BASE MATERIAL CONVEYING, STORAGE, AND LOAD OUT SYSTEM CONSISTING OF:

1. FIVE SURGE BINS, 10 CUBIC YARD CAPACITY EACH.

2. TWO PUGMILLS PM-1 AND PM-2, EACH WITH A 100 H.P. DRIVE AND A 7 1/2 H.P. WATER PUMP.

3. TWO LOAD OUT BINS, 75 TON CAPACITY EACH, WITH A PNEUMATICALLY OPERATED GATE.

4. SIX BELT CONVEYORS C-28, C-29, C-30, C-31, C-32, C-33, 180 H.P. TOTAL.

5. TWO AIR COMPRESSORS, 15 H.P. EACH.

**Application No. 430413**

AGGREGATE TRANSFER SYSTEM CONSISTING OF:

1. DUMP TRUCK RECEIVING HOPPER, UNDERGROUND, 10'-0" W. X 10'-0" L. X 10'-0" H.
2. DUMP TRUCK RECEIVING HOPPER, UNDERGROUND, 10'-0" W. X 10'-0" L. X 10'-0" H.
3. FEEDER BELT CONVEYOR, 3'-0" W. X 45'-0" L., 15 H.P.
4. BELT CONVEYOR, INCLINED, 50 H.P.
5. BELT CONVEYOR, SHUTTLE, 10 H.P., WITH A 1- 1/2 H.P. DRIVE.

**Application No. 430416**

CRUSHED AGGREGATE RECLAIMING, STORAGE, AND LOADOUT SYSTEM CONSISTING OF:

1. FEED HOPPER, 30 TON CAPACITY.
2. BELT CONVEYOR NO. 27, RECLAIMING, 300 HP, WITH A 1.5 HP DISCHARGE TURNHEAD.
3. SIX STORAGE BINS NOs. 7 THRU 12, EACH 200 TON CAPACITY WITH PNEUMATICALLY OPERATED GATES.
4. FOUR AIR COMPRESSORS, TWO 20 H.P. EACH, AND TWO 15 H.P. EACH.

**Application No. 430417**

WASHED SAND AND AGGREGATE RECLAIMING, STORAGE, AND LOADOUT SYSTEM CONSISTING OF:

1. BELT CONVEYOR NO. C-26, WASHED MATERIALS RECLAIMING, 250 H.P., WITH A 1.5 H.P. DISCHARGE TUNRNHEAD.
2. SIX STORAGE BINS NOs.1 7 THRU 6, EACH 200 TON CAPACITY, WITH PNEUMATICALLY OPERATED GATES.
3. FOUR AIR COMPRESSORS, TWO 20 H.P. EACH, AND TWO 15 H.P. EACH.

**PROCESS DESCRIPTION:**

Application No. 430411

This is an aggregate conveying, storage, and load out system. There is no change in the equipment. The applicant wants to increase the production limit from 3200 tons / day to 5000 tons / day (150,000 tons / month). The attached flow diagram shows the material flow for the system. The emissions from this

operation are particulate emissions at material transfer points. These emissions are controlled by wet suppression.

Application No. 430413

This is an aggregate transfer system that transfers material from dump trucks to a stock pile. In this modification, a new feeder belt is being installed in the system to transfer aggregate from the underground hoppers to an inclined conveyor and the motor horse power on the incline conveyor and shuttle conveyor will be increased. The applicant wants to increase the production limit from 4000 tons / day to 6000 tons / day (180,000 tons / month). The attached flow diagram shows the material flow for the system. The emissions from this operation are particulate emissions at material transfer points. These emissions are controlled by wet suppression.

Application No. 430416

This is an aggregate load out system that reclaims material from stock piles and transfers it to six storage bins. In this modification, a feed hopper is being added on the top of belt conveyor 27 and the motor horse power on the discharge turn head of this conveyor will be increased to 1.5 HP. The applicant wants to increase the production limit from 8000 tons / day to 16,000 tons / day (480,000 tons / month). The attached flow diagram shows the material flow for the system. The emissions from this operation are particulate emissions at material transfer points. These emissions are controlled by wet suppression.

Application No. 430417

This is the wet load out system that reclaims washed sand and aggregate from stock piles and transfers it to six storage bins. In this modification, motor horse power on the discharge turn head of the conveyor will be increased to 1.5 HP. The applicant wants to increase the production limit from 8000 tons / day to 16,000 tons / day (480,000 tons / month). The attached flow diagram shows the material flow for the system. Since the material is wet, the PM emissions from this operation will be insignificant.

**OPERATING SCHEDULE:**

Application Nos. 430411, 13, 16, 17

Average / maximum: 24 hrs. per day, 7 days per week, 52 weeks per year

**EMISSION CALCULATIONS:**

Application No. 430411

Throughput = 5000 tons per day
= 150,000 tons / month (**permit condition**)

The following PM10 emission factors are used from AP-42, Table 11.19.2-2 and Table 11.12-2 (attached).

Conveyor transfer points (uncontrolled) = 0.0014 lb./ ton
Conveyor transfer points (controlled-water spray) = 0.000048 lb./ ton

The loading of the first conveyor belt and discharge from the last conveyor belt to storage are not considered material transfer points.

| **Transfer point.** | **Throughput (tons / day)** | **R1(PM10) lbs. / day** | **R2 (PM10) lbs./ day** |
|---|---|---|---|
| Belt conveyors C28, C29 to surge bins | 5,000 | 7.0 | 0.24 |
| Surge bins to belt conveyors C30, C31 | 5,000 | 7.0 | 0.24 |
| Belt conveyors C30, C31 to Pug mills | 5,000 | 7.0 | 0.24 |
| Pug Mills to belt conveyors C32, C33 | 5,000 | 7.0 | 0.24 |
| Belt conveyors C32, C33 to load out hoppers | 5,000 | 7.0 | 0.24 |
| Total Emissions | | 35.0 | 1.2 |

R1 (PM10) = 35 lbs./ day
= 1.46 lbs./ hr

R2 (PM10) = 1.2 lbs./ day
= 0.05 lbs./ hr

Assuming PM10 = 50 % of PM

R1 (PM) = 2 x 1.46 lbs./ hr
= 2.92 lbs./ hr.

R2 (PM) = 2 x 0.05 lbs./ hr
= 0.10 lbs./ hr.

AEIS and NSR Emission Data

R1 (PM10) = 1.46 lb./ hr.
R2 (PM10) = 0.05 lb./ hr.

30-Day average (PM10) = (0.05 lbs./ hr. x 24 hrs./ day x 30 days / month) / 30
= 1.2 lb / day

Annual average (PM10) = (0.05 lbs./ hr. x 24 hrs./ day x 7 days / wk. x 52 wks./ yr.)
= 437 lbs./ yr.

Application No. 430413

Throughput = 6000 tons per day
= 180,000 tons / month (**permit condition**)

The following PM10 emission factors are used from AP-42, Table 11.19.2-2 and Table 11.12-2 (attached).

Conveyor transfer points (uncontrolled) = 0.0014 lb./ ton
Conveyor transfer points (controlled-water spray) = 0.000048 lb./ ton

The loading of the first conveyor belt and discharge from the last conveyor belt to storage are not considered material transfer points.

| **Transfer point.** | **Throughput (tons / day)** | **R1(PM10) lbs. / day** | **R2 (PM10) lbs./ day** |
|---|---|---|---|
| Dump trucks to receiving hoppers 1 &2 | 6,000 | 8.4 | 0.288 |
| Feeder conveyor 3 to incline conveyor 4 | 6,000 | 8.4 | 0.288 |
| Incline conveyor 4 to shuttle conveyor 5 | 6,000 | 8.4 | 0.288 |
| Shuttle conveyor 5 to stock pile | 6,000 | - | - |
| Total Emissions | | 25.2 | 0.864 |

R1 (PM10) = 25.2 lbs./ day
= 1.05 lbs./ hr

R2 (PM10) = 0.864 lbs./ day
= 0.036 lbs./ hr

Assuming PM10 = 50 % of PM

R1 (PM) = 2 x 1.05 lbs./ hr
= 2.1 lbs./ hr.

R2 (PM) = 2 x 0.036 lbs./ hr
= 0.072 lbs./ hr.

AEIS and NSR Emission Data

R1 (PM10) = 1.05 lb./ hr.
R2 (PM10) = 0.036 lb./ hr.

30-Day average (PM10) = (0.036 lbs./ hr. x 24 hrs./ day x 30 days / month) / 30
= 0.864lb / day

Annual average (PM10) = (0.036 lbs./ hr. x 24 hrs./ day x 7 days / wk. x 52 wks./ yr.)
= 314 lbs./ yr.

Application No. 430416

Throughput = 16,000 tons per day
= 480,000 tons / month (**permit condition**)

The following PM10 emission factors are used from AP-42, Table 11.19.2-2 and Table 11.12-2 (attached).

Conveyor transfer points (uncontrolled) = 0.0014 lb./ ton
Conveyor transfer points (controlled-water spray) = 0.000048 lb./ ton

The loading of the first conveyor belt and discharge from the last conveyor belt to storage are not considered material transfer points.

| **Transfer point.** | **Throughput (tons / day)** | **R1(PM10) lbs. / day** | **R2 (PM10) lbs./ day** |
|---|---|---|---|
| Stock piles and feed hopper to conveyor 27 | 8,000 | - | - |
| Conveyor 27 to storage bins | 8,000 | 11.2 | 0.384 |
| Total Emissions | | 11.2 | 0.384 |

R1 (PM10) = 11.2 lbs / day
= 0.47 lbs / hr

R2 (PM10) = 0.384 lbs / day
= 0.016 lbs / hr

Assuming PM10 = 50 % of PM

R1 (PM) = 2 x 0.47 lbs./ hr
= 0.94 lbs./ hr.

R2 (PM) = 2 x 0.016 lbs./ hr
= 0.032 lbs./ hr.

AEIS and NSR Emission Data

R1 (PM10) = 0.47 lb./ hr.
R2 (PM10) = 0.016 lb./ hr.

30-Day average (PM10) = (0.016 lbs./ hr. x 24 hrs./ day x 30 days / month) / 30
= 0.384lb / day

Annual average (PM10) = (0.016 lbs./ hr. x 24 hrs./ day x 7 days / wk. x 52 wks./ yr.)
= 140 lbs./ yr.

Application No. 430417

Throughput = 16,000 tons per day
= 480,000 tons / month **(permit condition)**

The system transfers washed sand and aggregate to storage bins using a belt conveyor with a turn head. Since the material is wet, the PM emissions will be insignificant.

R1 (PM, PM10) = 0 lb / hr
R2 (PM, PM10) = 0 lb / hr

**RULES:**

RULE 212 This is portable equipment. Public notice is not required.

RULE 401 Visible emissions are not expected with proper maintenance and operation of this equipment. Compliance is expected.

RULE 402 Operation of this equipment is not expected to create a nuisance. Compliance is expected.

RULE 405 The PM emissions are small and much less than the rate allowed in Table 405 (a) of this rule. Compliance is expected.

REG. XIII New Source Review

Subparagraph 1303(a) – BACT:
Water spray is used at material transfer points. BACT requirement is satisfied.

Subparagraph 1303(b)(1) – Modeling
The PM10 emissions are less than 0.41 lb./ hr. screening limit specified in this rule. Modeling is not required.

Subparagraph 1303(b)(2) – Emission Offsets
The facility PTE for PM10 is less than 4 tons per year. No offsets are required.

RULE 1401 Review of Toxic Air Contaminants
No toxic emissions are expected from these operations. Compliance is expected.

**CONCLUSIONS/RECOMMENDATIONS:**

The equipment is expected to comply with all applicable AQMD rules and regulations. Issue PO subject to permit conditions listed below:

**Conditions:**

Application No. 430411

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THIS PLANT SHALL NOT PROCESS MORE THAN 150,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

5. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

Application No. 430413

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THIS PLANT SHALL NOT PROCESS MORE THAN 180,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

5. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

Application No. 430416

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THIS PLANT SHALL NOT PROCESS MORE THAN 480,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

5. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

Application No. 430417

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3 THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THIS PLANT SHALL NOT PROCESS MORE THAN 480,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

5. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

Table 11.19.2-2 (English Units). EMISSION FACTORS FOR CRUSHED STONE PROCESSING OPERATIONS[a]

| Source[b] | Total Particulate Matter | EMISSION FACTOR RATING | Total PM-10[c] | EMISSION FACTOR RATING |
|---|---|---|---|---|
| Screening (SCC 3-05-020-02,-03) | —[d] | | 0.015[e] | C |
| Screening (controlled) (SCC 3-05-020-02-03) | —[d] | | 0.00084[e] | C |
| Primary crushing (SCC 3-05-020-01) | 0.00070[f] | E | ND[g] | |
| Secondary crushing (SCC 3-05-020-02) | ND | | ND[g] | |
| Tertiary crushing (SCC 3-05-020-03) | —[d] | | 0.0024[h] | C |
| Primary crushing (controlled) (SCC 3-05-020-01) | ND | | ND[g] | NA |
| Secondary crushing (controlled) (SCC 3-05-020-02) | ND | | ND[g] | NA |
| Tertiary crushing (controlled) (SCC 3-05-020-03) | —[d] | | 0.00059[h] | C |
| Fines crushing[j] (SCC 3-05-020-05) | —[d] | | 0.015 | E |
| Fines crushing (controlled)[j] (SCC 3-05-020-05) | —[d] | | 0.0020 | E |
| Fines screening[j] (SCC 3-05-020-21) | —[d] | | 0.071 | E |
| Fines screening (controlled)[j] (SCC 3-05-020-21) | —[d] | | 0.0021 | E |
| Conveyor transfer point[k] (SCC 3-05-020-06) | —[d] | | 0.0014 | D |
| Conveyor transfer point (controlled)[k] (SCC 3-05-020-06) | —[d] | | $4.8 \times 10^{-5}$ | D |
| Wet drilling: unfragmented stone[m] (SCC 3-05-020-10) | ND | | $8.0 \times 10^{-5}$ | E |
| Truck unloading: fragmented stone[m] (SCC 3-05-020-31) | ND | | $1.6 \times 10^{-5}$ | E |
| Truck loading--conveyor: crushed stone[n] (SCC 3-05-020-32) | ND | | 0.00010 | E |

[a] Emission factors represent uncontrolled emissions unless noted. Emission factors in lb/ton of material throughput. SCC = Source Classification Code. ND = no data.

[b] Controlled sources (with wet suppression) are those that are part of the processing plant that employs current wet suppression technology similar to the study group. The moisture content of the study group without wet suppression systems operating (uncontrolled) ranged from 0.21 to 1.3 percent and the same facilities operating wet suppression systems (controlled) ranged from 0.55 to 2.88 percent. Due to carry over or the small amount of moisture required, it has been shown that each source, with the exception of crushers, does not need to employ direct water sprays. Although the moisture content was the only variable measured, other process features may have as much influence on emissions from a given source. Visual observations from each source under normal operating conditions are probably the best indicator of which emission factor is most appropriate. Plants that employ sub-standard control measures as indicated by visual observations should use the uncontrolled factor with an appropriate control efficiency that best reflects the effectiveness of the controls employed.

[c] Although total suspended particulate (TSP) is not a measurable property from a process, some states may require estimates of TSP emissions. No data are available to make these estimates. However, relative ratios in AP-42 Sections 13.2.2 and 13.2.4 indicate that TSP emission factors may be estimated by multiplying PM-10 by 2.1.

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
## Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Rock – Aggregate Processing

| | Criteria Pollutants | | | | | |
|---|---|---|---|---|---|---|
| **Rating/Size** | **VOC** | **NOx** | **SOx** | **CO** | **$PM_{10}$** | **Inorganic** |
| All | | | | | Baghouse Venting Jaw Crushers, Cone Crushers, and Material Transfer Points Adjacent to and after these Items; and Water Sprays at Other Material Transfer Points (1990) | |

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

**Rajendra Singh**

**From:** Taylor, Scott
**Sent:** Monday, October 25, 2004 2:42 PM
**To:** Rajendra Singh
**Subject:** FW: United Rock Products A/N 428833,428834,430411,430413,430416,430417

Raj,

I have reviewed the draft Permits to Construct. A/N 430417 equipment description 2 has a typo. The bins should be identified as 1 thru 6. Otherwise, we have no other comments. Please go ahead and finalize these permits. We would like to pick them up when they are ready. If you could have someone give me a call when they are ready I would appreciate it.

*Scott Taylor*

*Justice & Associates*

*(562) 961-3494*

*Fax (562) 961-3493*

Transmittal

Via: CON

**Justice & Associates**

4155 Outer Traffic Circle, Long Beach, CA 90804-2111 • (562) 961-3494 • Fax (562) 961-3493

# Document Transmittal

From: **Kimba Spencer**

Company: South Coast AQMD
Date: August 26, 2004
Address: 21865 East Copley Drive
Our Job No.: 8536
City, State, Zip: Diamond Bar, CA 91765
For: Approval ____ Record X
Attention: Rajendra Singh
Other: ____

| Quantity | Description |
|---|---|
| 1 | Requested information |
| | |

## Comments

Raj:

Enclosed find the information and forms you requested: The signed CEQA form, the flow diagrams, and a marked-up copy of permit D08812.

Please let me know if you have any questions.

Best regards,



Kimba Spencer
Justice & Associates

CC: Ken Barker, United Rock Products

## Rajendra Singh

**From:** Rajendra Singh
**Sent:** Wednesday, August 18, 2004 10:55 AM
**To:** 'Spencer, Kimba'
**Subject:** United Rock Products, ID # 65341

Hi Kimba
Please let me know the status of information I requested over a month ago to process the 8 applications from United Rock Products. Please provide a date when this information will become available. After I receive this date, AQMD will make a decision whether to reject these applications for lack of timely information or wait for the information.
Thanks,
Raj Singh

-----Original Message-----
**From:** Rajendra Singh
**Sent:** Friday, July 16, 2004 4:35 PM
**To:** 'Spencer, Kimba'
**Subject:** FW: United Rock Products, ID # 65341

Hi Kimba
Please provide the following information, in addition to the information requested in my email on 7/13/04:

- A/N 430403 (item 4 in your letter) - The marked-up copy of permit # D08813 submitted with your application shows extensive changes. It is recognized that these changes will result in lower overall emissions. However, it will be prudent to calculate the new emissions and enter in the NSR data base so that the facility PTE limit of 4 tons / year is not unnecessarily penalized. Therefore, this application should be considered a modification and not an administrative change and higher fee will apply. We can bill CALMAT for the remaining fee when the permit is issued. Please let me know if you have any problem with this assessment. Also, please provide a flow diagram of the modified system.

- A/N 430413 (item 6 in your letter) - A feeder belt is being added in the equipment list of permit # D08812. Please provide a flow diagram of the modified system.

- A/N 430416 (item 7 in your letter) - A 30 ton feed hopper is being added in the equipment list of permit # D08808. Please provide a flow diagram of the modified system and indicate how much material goes thru the hopper and how much thru the gates under the storage bins.

Please let me know by return email when the information requested in this and the previous email will be available.

Thank you,

Raj Singh
Air Quality Engineer
South Coast Air Quality Management District
(909) 396-3099
(909) 396-3341- Fax

-----Original Message-----
**From:** Rajendra Singh
**Sent:** Tuesday, July 13, 2004 2:19 PM
**To:** 'Spencer, Kimba'
**Subject:** United Rock Products, ID # 65341

Hi Kimba

I need the following additional information to process the eight applications you submitted for United Rock Products, ID # 65341.

- CEQA form for each application
- A/N 430418 (item 3 in your letter) - two Rock Pre-Crushing Systems (PO #s D08810 and D08807) are being consolidated into one permit unit. Please provide a flow diagram for the combined system.
- A/N 430413 (item 6 in your letter) - Drum Plant - a marked copy of permit # D08812 with corrections is missing in attachment G. Please provide.

Thank you,

Raj Singh
Air Quality Engineer
South Coast Air Quality Management District
(909) 396-3099
(909) 396-3341- Fax

**Justice** & *Associates*

4155 Outer Traffic Circle
Long Beach, CA 90804-2111
562.961.3494 Fax 562.961.3493

www.justiceassociates.com

1401 S. Arville St., Suite J
Las Vegas, NV 89102-0537
702.822.2111 Fax 702.822.2113

May 18, 2004

South Coast AQMD
21865 E. Copley Drive
Diamond Bar, CA 91765

Attention: Raj Singh

Subject: United Rock Products (Facility ID# 65341)
Permit Issues

Dear Raj:

In response to our telephone conversation on May 13, 2004, here are six (6) 400A Forms to accompany the package you are reviewing for United Rock Products.

Please call if you have any questions at (562) 961-3494.

Best regards,

Kimba Spencer
Justice & Associates

**Justice & Associates**

4155 Outer Traffic Circle
Long Beach, CA 90804-2111
562.961.3494 Fax 562.961.3493

www.justiceassociates.com

1401 S. Arville St., Suite J
Las Vegas, NV 89102-0537
702.822.2111 Fax 702.822.2113

April 7, 2004

South Coast AQMD
21865 East Copley Drive
Diamond Bar, CA 91765

Attention: Permit Services

Subject: United Rock Products
(Facility ID #65341) Permit Issues

Enclosed are several applications and technical corrections for the United Rock Products, Irwindale facility. Enclosed is a check in the amount of $17,091.64 to cover the application fees. Under Attachment "A" is a fee schedule worksheet which describes the break down of the fees. The following is a description of each application and/or correction and the supporting information.

1. A new application for a stationary screening plant with a 56 TPH throughput. A/N 428833
This application is being submitted as a Class III application. Attachment "B" following this letter includes the 400A form as well as emission calculations, an equipment list and a flow diagram. This plant operates on grid power. United Rock is requesting a production limit of 9,856 Tons Per Month (TPM).

2. A new application for a second stationary screening plant with an 84 TPH throughput. A/N 428834
This application is being submitted as a Class III application. Attachment "C" following this letter includes the 400A form and supporting material for this application. This plant operates on grid power. United Rock is requesting a production limit of 20,160 TPM.

3. Currently United Rock holds two permits for two separate Rock Pre-Crushing systems (D08810 and D08807). Although these two systems operate independently, both feed the same stock pile using two conveyors that are common to both systems. Since this equipment uses common equipment, we are requesting the equipment and permit conditions on Permit D08807 be added to Permit D08810. Note that the Pioneer jaw crusher listed on permit D08807 is no longer in service and should not be included in the combined permit. At the same time we are requesting that the daily limits be combined into one monthly limit of 624,000 tons/month ([11,200 TPD + 9,600 TPD] × 30 days/month = 624,000 TPM)

AN 430418

This site operates a clamshell dredge. While this equipment does not generate particulate emissions, several of the other permits for this facility included wet process equipment. In order to be consistent with the other permits we have included a list of equipment for the dredge to be added to Permit D08810. The dredge includes the following equipment:

| | | | |
|---|---|---|---|
| 1. | Belt Conveyor | 600' × 42" | 75 HP |
| 2. | Belt Conveyor | 350' × 42" | 125 HP |
| 3. | Belt Conveyor | 50' × 42" | 40 HP |
| 4. | Belt Conveyor | 650' × 42" | 275 HP |
| 5. | Belt Conveyor | 490' × 42" | 150 HP |
| 6. | Belt Conveyor | 130' × 42" | 75 HP |
| 7. | Belt Conveyor | 150' × 42" | 40 HP |
| 8. | Belt Conveyor | 150' × 42" | 40 HP |
| 9. | Belt Conveyor | 150' × 42" | 40 HP |
| 10. | Belt Conveyor | 150' × 42" | 40 HP |
| 11. | Belt Conveyor | 150' × 42" | 40 HP |
| 12. | Belt Conveyor | 150' × 42" | 40 HP |
| 13. | Belt Conveyor | 150' × 42" | 40 HP |
| 14. | Under Jaw Belt Conveyor | 60' × 42" | 30 HP |
| 15. | Conveyor A | 40' × 42" | 20 HP |
| 16. | Conveyor B | 40' × 42" | 20 HP |
| 17. | Svedala Screen | 6' × 20' | 40 HP |
| 18. | Svedala Screen | 6' × 20' | 40 HP |
| 19. | Svedala Screen | 6' × 20' | 40 HP |
| 20. | Svedala Screen | 6' × 20' | 40 HP |
| 21. | Svedala Screen | 5.5' × 15' | 30 HP |
| 22. | Svedala Screen | 5.5' × 15' | 30 HP |
| 23. | Plate Feeder | -- | -- |
| 24. | Jaw Crusher, Telesmith | 30' × 55" | 150 HP |

Both pre-crushing plants feed the primary surge pile using common conveyors. Currently these conveyors do not appear to be covered on either permit. As a result we request that two conveyors be added to Permit D08810 for the primary surge pile loading. The following is the equipment description:

| | | |
|---|---|---|
| Stacking Conveyor | 200' × 42" | 150 HP |
| Belt Conveyor | 275' × 42" | 125 HP |

Attachment "D" has the emission calculations for the additional conveyors.

Rock Pre-crushing (Permit #D08810) requires a technical correction. The jaw crushers specified on the permit as a 50 HP, KUE-KAN size 24" × 36" needs to be changed to a 150 HP, Minyu, size 40" × 42".

Attachment "D" includes marked-up copies of the facility permits showing the additional equipment and the corrections to the equipment descriptions and conditions.

4. We are requesting a change to the Main Aggregate Plant's (Permit #D08813) existing production permit condition from a daily limit to a monthly limit. A/N 430403

The existing permit conditions allow daily production of 24,000 TPD. We are requesting a change to a monthly limit of 720,000 TPM (24,000 TPD × 30 days/month = 720,000 TPM).

The modification in production limit does not result in a change of emissions. Attachment "E" includes a marked-up copy of the facility permit showing the additional equipment and the corrections to the equipment descriptions and conditions.

5. The Base Plant (Permit # D08811) is outgrowing its production limits and United Rock is requesting to increase and change their daily limit to a monthly limit. The permit currently has a daily processing limit of 3,200 tons. We are requesting this be changed 150,000 tons per month. Attachment "F" includes emission evaluation for both before and after the change in production. A/N 430411

6. The Drum Plant permit (Permit # D08812) requires several technical corrections. A feeder belt needs to be added to the equipment list. The belt specifications are 45' L × 36" W and is 15 HP. Additionally, the incline conveyor shows a horsepower of 40 and it should be changed to 50 HP. The shuttle conveyor shows a horsepower of 5 and it should be 10 HP. A/N 430413

The existing permit conditions allow a daily production of 4,000 tons. We are requesting an increase and a change to a monthly limit of 180,000 tons per month. With the addition of the conveyer and the increase in production, the emissions from this equipment will be increased by 172.80 lbs per year.

Attachment "G" has a marked up copy of the permit with the corrections as well as emission calculations for both before and after the production increase.

7. The Dry Loadout System (Permit # D08808) requires two technical corrections. A/N 430416 The horsepower on the discharge turnhead needs to be changed from 1 HP to 1.5 HP. The permit is also missing a 30 Ton feed hopper which sits on top of belt conveyer C27. Material fed into the hopper will result in a like amount to be reduced from the gates that feed material to the conveyor. As a result there are no additional emissions generated with the addition of the hopper.

   This facility is also outgrowing its production and United Rock would like to request an increase in production and a change from a daily limit to a monthly limit. The current permit has a daily limit of 8,000 tons. We are requesting this be changed to a monthly limit of 480,600 tons. This increase in production will result in an annual emissions increase of 138.24 lbs per year.

   Attachment "H" has a marked up copy of the permit showing the correction as well as emission calculations for both before and after the production increase.

8. The Wet Loadout System (Permit # D08809) requires a technical correction. The A/N 430417 horsepower on the discharge turnhead needs to be changed from 1 HP to 1.5 HP.

   This permit unit also has out grown its production. United Rock would like to request an increase in production and a change from a daily limit to a monthly limit. The current permit has a daily limit of 8,000 tons. We are requesting this be changed to a monthly limit of 480,600 tons. Since this facility processes only wet material the increase in production will not result in an increase in emissions.

   Attachment "I" has a marked up copy of the permit showing the correction.

Below is a summary of the total emission increase that are a result of the changes in equipment or production.

*Emission Increase Summary*

| | | |
|---|---|---|
| 1. | Screening Plant I | 83.97 lbs/year |
| 2. | Screening Plant II | 171.76 lbs/year |

| | | |
|---|---|---|
| 3. | Base Plant (D08811) | 155.52 lbs/year |
| 4. | Drum Plant (D08812) | 172.8 lbs/year |
| 5. | Dry Loadout (D08808) | 138.24 lbs/year |
| | Total | 722.29 lbs/year |
| | | 0.36 tons/year |

Currently, the facility's NSR balance shows that it is well below the offset threshold of 4 ton/year of PM (Please refer to Attachment "J"). Based on the Emission Increase Summary the annual increase in emissions are 0.36 tons/year. As a result, we do not anticipate these modifications requiring offsets.

We trust this information will be sufficient to process these applications and requests. If you have any questions, please call me at (562) 961-3494.

Best regards,

Kimba Spencer
Justice & Associates

cc: Ken Barker, United Rock Products

| **Attachments** | - | **Description** |
|---|---|---|
| "A" | - | Fee Schedule |
| "B" | - | Screening Plant I |
| "C" | - | Screening Plant II |
| "D" | - | Rock Pre-Crushing Systems (D08810) |
| "E" | - | Main Aggregate Plant (D08813) |
| "F" | - | Base Plant (D08811) |
| "G" | - | Drum Plant (D08812) |
| "H" | - | Dry Loadout System (D08808) |
| "I" | - | Wet Loadout System (D08809) |
| "J" | - | NSR Balance |

# ATTACHMENT "I"

# WET LOADOUT SYSTEM
# (D08809)

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D08809
A/N 185073
Page 1

**This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.**

**Legal Owner**
**Or Operator:** UNITED ROCK PRODUCTS CORPORATION

ID 65341

**Equipment**
**located at:** 1245 EAST ARROW HIGHWAY, IRWINDALE, CALIFORNIA

**Equipment Description:**

WASHED SAND AND AGGREGATE RECLAIMING, STORAGE, AND LOADOUT SYSTEM CONSISTING OF:

1. BELT CONVEYOR NO. C-26, WASHED MATERIALS RECLAIMING, 250 H.P. WITH A 1.5 H.P. DISCHARGE TURNHEAD.

2. SIX STORAGE BINS, NOS. 1 THROUGH 6; 200 TON CAPACITY EACH, WITH PNEUMATICALLY OPERATED GATES.

3. FOUR AIR COMPRESSORS, TWO 20 H.P. AND TWO 15 H.P.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. NOT MORE THAN 8000 TONS OF SAND AND AGGREGATE SHALL BE PROCESSED IN ANY ONE DAY.

4. AGGREGATE CHARGED AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METE OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTI LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

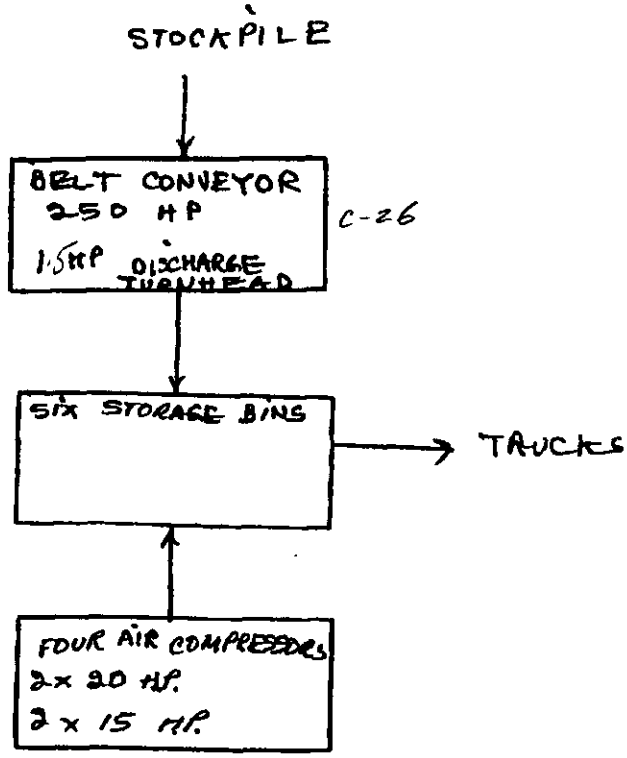
By Raquel Puerta/jas
July 6, 1989

UNITED ROCK PRODUCTS CORP.
ATTN: THOMAS S. TEDESCO
13131 LOS ANGELES ST.
IRWINDALE, CA. 91706

# BLOCK FLOW DIAGRAM

430417
AIN ~~185073~~

WASHED SAND AND AGGREGATE RECLAIMING, STORAGE, & LOADOUT SYSTEM




AA
5-31-87

# ATTACHMENT "J"

# NSR BALANCE

SOUTH COAST AQMD

# AQMD C.P.P. Facility Information

Company ID: **65341**

Name : **UNITED ROCK PRODUCTS CORPORATION**
1245 ARROW HWY E
IRWINDALE CA 91706-1302

Telephone : (626) 3584558

Mail Address (optional)
1245 ARROW HWY E
IRWINDALE CA 91706-1302

| Chart of Accounts | Emission ID | Balance (lbs/day) |
|---|---|---|
| Emissions from new unit | PM10 | -2.000 |

| Appl # | Device ID | Permit # | Application Type | Application Status |
|---|---|---|---|---|
| 185071 | 0 | D08807 | Change of Ownership | PERMIT TO OPERATE GRANTED |
| 185072 | 0 | D08808 | Change of Ownership | PERMIT TO OPERATE GRANTED |
| 185073 | 0 | D08809 | Change of Ownership | PERMIT TO OPERATE GRANTED |
| 185074 | 0 | D08810 | Change of Ownership | PERMIT TO OPERATE GRANTED |
| 185075 | 0 | D08811 | Change of Ownership | PERMIT TO OPERATE GRANTED |
| 185076 | 0 | D08812 | Change of Ownership | PERMIT TO OPERATE GRANTED |
| 185077 | 0 | D08813 | Change of Ownership | PERMIT TO OPERATE GRANTED |
| 185084 | 0 | D16721 | Change of Ownership | PERMIT TO OPERATE GRANTED |
| 185085 | 0 | D17134 | Permit to Operate | PERMIT TO OPERATE GRANTED |
| 185086 | 0 | | Permit to Operate | APPLICATION CANCELLED, KEEP FILING FEES |
| 185087 | 0 | D16722 | Change of Ownership | PERMIT TO OPERATE GRANTED |
| 185088 | 0 | D16723 | Change of Ownership | PERMIT TO OPERATE GRANTED |
| 185089 | 0 | D16724 | Change of Ownership | PERMIT TO OPERATE GRANTED |
| 186857 | 0 | | Permit to Operate | APPLICATION CANCELLED, REFUND ALL FEES |

| | | | | |
|---|---|---|---|---|
| 186858 | 0 | D14490 | Rule 219 Application | PERMIT TO OPERATE GRANTED |
| 186859 | 0 | D14492 | Rule 219 Application | PERMIT TO OPERATE GRANTED |
| 186860 | 0 | D14493 | Rule 219 Application | PERMIT TO OPERATE GRANTED |
| 231453 | 0 | M96595 | Alteration | PERMIT TO OPERATE GRANTED |
| 279903 | 0 | | Plans & Excavation | BANKING/ PLAN GRANTED |

19 row(s)

Previous Page

*Last Update: 3/10/04*

*URL: http://ozone/cgi-bin/cpp/cpp?objtype=cppid&objopr=query*

Need information or have a question? - webinquiry@aqmd.gov
To report a problem with the website - webeditor@aqmd.gov
21865 Copley Drive - Diamond Bar, California 91765
(800) CUT-SMOG (288-7664) - (909) 396-2000

**Justice** & *Associates*

4155 Outer Traffic Circle
Long Beach, CA 90804-2111
(562) 961-3494 Fax (562) 961-3493

# FEE SCHEDULE WORK SHEET

(For permit processing in accordance with Rule 301)

Permits to be issued to: United Rock Products

Address: 1245 East Arrow Highway

City, State, Zip: Irwindale, CA 91706

| Quantity of Identical Units | Equipment/Process | Fee Schedule | Full Fee for First Permit Unit | + | 50% of Processing Fee for failure to obtain Permit to Construct | = | Total |
|---|---|---|---|---|---|---|---|
| 1 | Screening Plant | C | $2,232.96 | + | $1,116.48 | = | $3,349.44 |
| 1 | Screening Plant | C | $2,232.96 | + | $1,116.48 | = | $3,349.44 |
| 1 | Permit reissue (D08813) | N/A | $123.02 | + | -- | = | $123.02 |
| 1 | Aggregate Conveying (D08811) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Conveying (D08812) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Loading (D08808) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Loading (D08809) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Conveying (D08810) | D | $3,081.85 | + | $1,540.93 | = | $4,622.78 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Total Permit Processing Fee Due: $17,091.64

Comments:

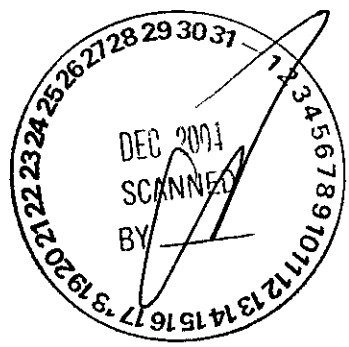
P/O Approved.
F71627
11-2-04

ROUTING RECORD

| DATE | FROM | TO | ACTION |
|---|---|---|---|
| 5-6-04 | RWM | RJS | CLASS III |
| 10-22-04 | RJS | RWM | ISSUE PO |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

REFERENCE TO OTHER APCD RECORDS INCLUDING VARIANCES

M




APPL # 428833
I D # 65341

UNITED ROCK PRODUCTS CORPORATION
1245 E ARROW HWY
IRWINDALE
AGGREGATE SCREENING

Date 04/14/04

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

# PERMIT TO OPERATE


Permit No
F71627
A/N 428833

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership
If the billing for the annual renewal fee (Rule 301 f) is not received by the expiration date, contact the District

ID 65341

Legal Owner
or Operator

UNITED ROCK PRODUCTS CORPORATION
1245 E ARROW HWY
IRWINDALE, CA 91706-1302

**Equipment Location** 1245 E ARROW HWY, IRWINDALE, CA 91706-1302

**Equipment Description**

AGGREGATE SCREENING PLANT NO 1 CONSISTING OF

1 FEED HOPPER, 20 TON CAPACITY

2 FEEDER BELT, 2'-6" W X 15'-0" L , 10 H P

3 BELT CONVEYOR, 2'-6" W X 75'-0" L , 10 H P

4 SCREEN, DUO VIBE, 6'-0" W X 12'-0" L , 5 H P

5 BELT CONVEYOR, 2'-6" W X 75'-0" L , 10 H P

6 LOAD OUT HOPPER, 30 TON CAPACITY

7 BELT CONVEYOR, 2'-6" W X 75'-0" L , 10 H P

**Conditions**

1 OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW

2 THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES

3 THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS

4 THIS PEQUIPMENT SHALL NOT PROCESS MORE THAN 9,900 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH

5 RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST

**FILE COPY**

CONTINUATION OF PERMIT TO OPERATE

**NOTICE**

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUES OF OTHER GOVERNMENT AGENCIES

EXECUTIVE OFFICER

Dorris M Bailey

By Dorris M Bailey/RS06
11/2/2004

**FILE COPY**

South Coast Air Quality Management District
P O Box 4944
Diamond Bar CA 91765
(909) 396 2000

# APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE FORM 400 - A

**Non Title V Facilities** This form must be accompanied by one or more 400 E xx series forms(s) Complete this side of form only
**Title V Facilities** Complete both sides of this form Include additional forms as necessary

NC/NOV NUMBER
INSPECTOR SECTOR
ISSUE DATE

## Section I - Company Information

LEGAL NAME OF OPERATOR: United Rock Products Corporation
☐ IRS OR ☐ S S Number

PERMIT TO BE ISSUED TO (SEE INSTRUCTIONS): United Rock Products Corporation

BUSINESS MAILING ADDRESS: 1245 East Arrow Highway Irwindale, CA 91706

PERMIT MAILING ADDRESS IF DIFFERENT FROM BUSINESS MAILING ADDRESS:

TYPE OF ORGANIZATION
☒ Corporation ☐ Limited Partnership ☐ Government Entity
☐ Individual ☐ General Partnership ☐ Other (Fill In)

ARE YOU A SMALL BUSINESS? (SEE INSTRUCTIONS) ☐ Yes ☒ No
AVERAGE ANNUAL GROSS RECEIPT $
NUMBER OF EMPLOYEES
IS YOUR BUSINESS 51 % OR MORE WOMAN/MINORITY OWNED? ☐ Yes ☐ No

**THIS SECTION IS REQUIRED FOR ALL APPLICATIONS FOR NEW CONSTRUCTION OR MAJOR MODIFICATIONS**
ARE ALL MAJOR SOURCES UNDER SAME OWNERSHIP IN CALIFORNIA IN COMPLIANCE WITH FEDERAL STATE AND LOCAL AIR POLLUTION CONTROL RULES? ☒ Yes ☐ No

ARE YOU THE OWNER OF THE EQUIPMENT UNDER THIS APPLICATION? ☒ Yes ☐ No ☐ IRS OR ☐ S S NUMBER
IF NO ENTER THE LEGAL NAME OF OWNER

## Section II - Facility Information

EQUIPMENT ADDRESS/LOCATION: 1245 East Arrow Highway (NUMBER/STREET)
Irwindale (CITY OR COMMUNITY) CA 91706 (ZIP CODE)
FACILITY NAME: Irwindale
FACILITY ID NUMBER: 0 6 5 3 4 1

PRINT NAME OF CONTACT PERSON: Frank Keohane
TITLE OF CONTACT PERSON:
TYPE OF BUSINESS AT THIS FACILITY: Aggregate Production
PRIMARY SIC CODE FOR THIS FACILITY: 1442
NUMBER OF EMPLOYEES AT THIS FACILITY:
CONTACT PERSON S TELEPHONE NUMBER: (626) 358-4558
CONTACT PERSON S FAX NUMBER: (626) 357-9508
CONTACT PERSON S E MAIL ADDRESS:

## Section III - Application Type

DESCRIPTION OF EQUIPMENT: Aggregate Screening Plant I
PREVIOUS PERMIT #S

APPLICATION FOR (SEE INSTRUCTIONS)
☒ NEW CONSTRUCTION
☒ EXISTING EQUIPMENT WITHOUT PERMIT
☐ EXISTING EQUIPMENT WITH EXPIRED PERMIT
☐ CHANGE OF LOCATION ☐ MODIFICATION ☐ CHANGE OF PERMITTEE ☐ CHANGE OF PERMIT CONDITION
☐ RECLAIM Processing Fee

ARE YOU SUBMITTING MULTIPLE APPLICATIONS FOR EQUIPMENT IDENTICAL TO THAT DESCRIBED ABOVE? ☐ Yes ☒ No

☐ **APPLICATION FOR NON TITLE V EQUIPMENT PERMIT CHECK THE SUPPLEMENTAL SERIES 400-E xx FORM(S) SUBMITTED WITH THIS 400-A FORM**

| | | | |
|---|---|---|---|
| ____ 400-E 1 | PARTICULATE MATTER (PM 10) CONTROL EQUIPMENT | ____ 400 E 13 | INTERNAL COMBUSTION EQUIPMENT |
| ____ 400 E 2 | VOLATILE ORGANIC COMPOUND (VOC) CONTROL EQUIPMENT | ____ 400 E 14 | OPEN PROCESS TANK |
| ____ 400-E 3 | SCRUBBER | ____ 400 E 14a | OPEN PROCESS TANK PROCESS LINE |
| ____ 400 E-4 | ABRASIVE BLASTING EQUIPMENT | ____ 400 E 15 | PRINTING EQUIPMENT |
| ____ 400 E 5 | DEGREASER | ____ 400-E 16 | SOLID MATERIALS STORAGE EQUIPMENT |
| ____ 400 E 7 | DRY CLEANING EQUIPMENT | ____ 400 E 17 | SPRAY BOOTH/OPEN SPRAY |
| ____ 400-E-8 | ETHYLENE OXIDE STERILIZER | ____ 400 E 17a | POWDER SPRAY BOOTH |
| ____ 400-E 9 | EXTERNAL COMBUSTION EQUIPMENT | ____ 400-E 18 | STORAGE TANK (LIQUID & GASEOUS MATERIAL) |
| ____ 400-E 10 | FOOD BROILER/FRYER | ____ 400 E 19 | WAVE SOLDER MACHINE |
| ____ 400-E 11 | FUEL DISPENSING AND STORAGE EQUIPMENT | ____ 400 E 20 | ASBESTOS REMOVAL EQUIPMENT |
| ____ 400 E 12 | GAS TURBINE | ____ NONE | ADDITIONAL INFORMATION SUBMITTED AS REQUESTED ON FORM 400-E-GI |

☐ **APPLICATION FOR TITLE V FACILITY PERMIT PROVIDE INFORMATION REQUESTED ON REVERSE SIDE OF THIS FORM**

**I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT**
SIGNATURE OF RESPONSIBLE OFFICIAL OF FIRM: Frank Keohane
TITLE OF RESPONSIBLE OFFICIAL OF FIRM: General Manager
DATE SIGNED: 4-12-04
TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL OF FIRM: Frank Keohane
RESPONSIBLE OFFICIALS TELEPHONE NUMBER: (626) 358-4558

**I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT**
SIGNATURE OF PREPARER IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM:
TITLE OF RESPONSIBLE OFFICIAL OF FIRM: Consultant
TYPE OR PRINT NAME OF PREPARER IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM: Kimba Spencer
PREPARERS TELEPHONE NUMBER: (562) 961-3494
DATE SIGNED: 4/9/04

**TITLE V FACILITIES ONLY: COMPLETE OTHER SIDE**

| AQMD USE ONLY | APPLICATION/TRACKING # | TYPE B C D | EQUIPMENT CATEGORY CODE | FEE SCHEDULE $ | VALIDATION |
|---|---|---|---|---|---|
| | 428833 | | | | 10 04/11/04 |

| ENG A R DATE | ENG A R DATE | CLASS I III IV | ASSIGNMENT UNIT 0 ENGINEER | ENF SECT | CHECK/MONEY ORDER # | AMOUNT $ |
|---|---|---|---|---|---|---|
| | | | | | 013179 | 12091.64 |

FORM 400 A Rev 3/98

(35803)

Job No & Form 85361

1 1 2

# TITLE V APPLICATION CERTIFICATION

**- TO BE COMPLETED BY TITLE V FACILITIES ONLY -**

## Section IV Title V Application

1 This is an application for a(n) (Check all applicable boxes and provide the requested information as appropriate)

a ☐ Initial Title V Permit

b ☐ Permit Renewal Provide current permit expiration date _____

c ☐ Administrative Permit Revision (Check all that apply)

- ☐ Change of Ownership (Complete and attach equipment specific Form 400 E xx series forms)
- ☐ Change of Facility Information
- ☐ Other, Please specify _____

d ☐ Other (Complete and attach equipment specific form 400-E-XX series form(s) to this form if your application involves permit action for new construction, change of location, non-administrative permit revision, alternative operating scenario (AOS), permit shield, streamlined permit conditions, or temporary source permit )

2 Is this facility required to prepare a Risk Management Plan (RMP) for another agency? ☐ Yes ☐ No

## Section V Title V Submittal Checklist

1 Enter the quantity of each type form submitted in the space provided

| | | | |
|---|---|---|---|
| _____ | 500-A2 | _____ | 500-F1 |
| _____ | 500-B | _____ | 500 F2 |
| _____ | 500 C1 | _____ | 500 F3 |
| _____ | 500 C2 | _____ | 500-F4 |
| _____ | 500-D | _____ | Other (specify) _____ |

2 Additional information referenced in this application submitted (Check **ALL** that apply)

a ☐ Existing Facility Permit
b ☐ Preliminary Facility Permit
c ☐ EFB Report for Year(s) _____
d ☐ None
e ☐ Other (Specify) _____

3 Supplemental information included with this application submittal (Check **ALL** that Apply)

a ☐ Facility Plot Plan
b ☐ MSDS Sheet(s)
c ☐ None
d ☐ Other (Specify) _____

**AQMD USE ONLY**

| APPLICATION TYPE | 30 DAY PUBLIC NOTICE START DATE | 30 DAY PUBLIC NOTICE END DATE | PUBLIC HEARING DATE | 45 DAY EPA REVIEW START DATE | 45 DAY EPA REVIEW END DATE |
|---|---|---|---|---|---|
| INITIAL RENEWAL & SIGNIFICANT | | | | | |
| MINOR & DE MINIMIS | | | | | |
| ESTABLISH GENERAL PERMIT | | | | | |

**USE THE SECTIONS BELOW FOR TITLE V INITIAL AND RENEWAL APPLICATIONS ONLY**

| APPLICATION/TRACKING # | TYPE B C D | EQUIPMENT CATEGORY CODE | FEE SCHEDULE $ | VALIDATION |
|---|---|---|---|---|
| | | | | |

| ENG A R DATE | ENG A R DATE | CLASS I III IV | ASSIGNMENT UNIT ENGINEER | ENF SECT | CHECK/MONEY ORDER AMOUNT # $ |
|---|---|---|---|---|---|
| | | | | | |

FORM 400-A Rev 3/98

South Coast Air Quality
Management District
21865 East Copley Drive
Diamond Bar CA 91765
(909) 396 2000

# CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) APPLICABILITY FORM 400 - CEQA

The SCAQMD is required by state law the California Environmental Quality Act (CEQA) to review discretionary permit project applications for potential air quality and other environmental impacts This form is a screening tool to assist the SCAQMD in clarifying whether or not the project' has the potential to generate significant adverse environmental impacts that might require preparation of a CEQA document [CEQA Guidelines §15060(a)] 2 Refer to the attached instructions for guidance in completing this form 3 For each Form 400-A application, also complete and submit one Form 400-CEQA If submitting multiple Form 400 A applications for the same project only one 400 CEQA form is necessary for the entire project If you need assistance completing this form, contact Lori Inga at (909) 396 3109

## FACILITY INFORMATION

**Facility Name** United Rock Products **Facility ID** (6-Digit) 065341

**Project Description** Aggregate production facility

## REVIEW FOR EXEMPTION FROM FURTHER CEQA ACTION

Check ' Yes" or 'No as applicable

| | Yes | No | Is this application for... |
|---|---|---|---|
| A | ☐ | ☒ | **A request for a change of permittee only (without equipment modifications)?** |
| B | ☐ | ☒ | **Equipment certification or equipment registration?** |
| C | ☐ | ☒ | **A CEQA and/or NEPA document previously or currently prepared that specifically evaluates this project?** If yes, a permit cannot be issued until a Final CEQA document and Notice of Determination is submitted |
| D | ☐ | ☒ | **Equipment damaged as a result of a disaster during state of emergency?** |
| E | ☐ | ☒ | **A Title V permit renewal (without equipment modifications)?** |
| F | ☐ | ☒ | **A Title V administrative permit revision?** |
| G | ☐ | ☒ | **The conversion of an existing permit into an initial Title V permit?** |
| H | ☐ | ☒ | **A functionally identical permit unit replacement with no increase in rating or emissions?** |
| I | ☐ | ☒ | **A change of daily VOC permit limit to a monthly VOC permit limit?** |

If **"Yes"** is checked for any question above your application does not require additional evaluation for CEQA applicability Skip to page 2 "SIGNATURES" and sign and date this form

## REVIEW OF IMPACTS WHICH MAY TRIGGER CEQA

Complete Sections I V by checking "Yes" or "No" as applicable To avoid delays in processing your application(s), explain all "Yes" responses on a separate sheet and attach it to this form

| | Yes | No | Section I - General |
|---|---|---|---|
| 1 | ☐ | ☒ | **Has this project generated any known public controversy regarding potential adverse impacts that may be generated by the project?** Controversy may be construed as concerns raised by local groups at public meetings adverse media attention such as negative articles in newspapers or other periodical publications, local news programs, environmental justice issues etc |
| 2 | ☐ | ☒ | **Is this project part of a larger project?** |
| | | | **Section II - Air Quality** |
| 3 | ☐ | ☒ | **Will there be any demolition, excavating, and/or grading construction activities that encompass an area exceeding** 20 000 **square feet?** |
| 4 | ☒ | ☐ | **Does this project include the open outdoor storage of dry bulk solid materials that could generate dust?** If Yes include a plot plan with the application package |

1 A project means the whole of an action which has a potential for resulting in physical change to the environment including construction activities clearing or grading of land improvements to existing structures and activities or equipment involving the issuance of a permit For example a project might include installation of a new or modification of an existing internal combustion engine dry-cleaning facility boiler gas turbine spray coating booth solvent cleaning tank, etc

2 To download the CEQA guidelines visit http://ceres.ca.gov/env law/state.html.

3 To download this form and the instructions, visit http //www.aqmd.gov/ceqa

| | Yes | No | |
|---|---|---|---|
| 5 | ☐ | ☒ | **Would this project result in noticeable off-site odors from activities that may not be subject to SCAQMD permit requirements?** For example compost materials or other types of greenwaste (i e lawn clippings tree trimmings, etc ) have the potential to generate odor complaints subject to Rule 402 Nuisance |
| 6 | ☐ | ☒ | **Does this project cause an increase of emissions from marine vessels, trains and/or airplanes?** |
| 7 | ☐ | ☒ | **Will the proposed project increase the QUANTITY of hazardous materials stored aboveground onsite or transported by mobile vehicle to or from the site by greater than or equal to the amounts associated with each compound on the attached Table 1?4** |
| | | | **Section III - Water Resources** |
| 8 | ☐ | ☒ | **Will the project increase demand for water at the facility by more than 5,000,000 gallons per day?** The following examples identify some but not all, types of projects that may result in a "yes" answer to this question 1) projects that generate steam 2) projects that use water as part of the air pollution control equipment 3) projects that require water as part of the production process, 4) projects that require new or expansion of existing sewage treatment facilities 5) projects where water demand exceeds the capacity of the local water purveyor to supply sufficient water for the project and 6) projects that require new or expansion of existing water supply facilities |
| 9 | ☐ | ☒ | **Will the project require construction of new water conveyance infrastructure?** Examples of such projects are when water demands exceed the capacity of the local water purveyor to supply sufficient water for the project or require new or modified sewage treatment facilities such that the project requires new water lines sewage lines sewage hook ups etc |
| | | | **Section IV - Transportation / Circulation** |
| 10 | | | **Will the project result in** (Check all that apply) |
| | ☐ | ☒ | **a the need for more than 350 new employees?** |
| | ☐ | ☒ | **b an increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round-trips per day?** |
| | ☐ | ☒ | **c increase customer traffic by more than 700 visits per day?** |
| | | | **Section V - Noise** |
| 11 | ☐ | ☒ | **Will the project include equipment with a noise specification GREATER THAN 90 decibels (dB)?** |
| | | | **Section VI - Public Services** |
| 12 | | | **Will the project create a permanent need for new or additional public services in any of the following areas** (Check all that apply) |
| | ☐ | ☒ | **a Solid waste disposal?** Check "No" if the projected potential amount of wastes generated by the project is less than five tons per day |
| | ☐ | ☒ | **b Hazardous waste disposal?** Check "No" if the projected potential amount of hazardous wastes generated by the project is less than 42 cubic yards per day (or equivalent in pounds) |

* REMINDER For each "Yes" checked in the sections above attach all pertinent information including but not limited to estimated quantities ~ volumes, weights, etc ~"

## SIGNATURES

I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE I UNDERSTAND THAT THIS FORM IS A SCREENING TOOL AND THAT THE SCAQMD RESERVES THE RIGHT TO CONSIDER OTHER PERTINENT INFORMATION IN DETERMINING CEQA APPLICABILITY

| SIGNATURE OF RESPONSIBLE OFFICIAL OF FIRM | TITLE OF RESPONSIBLE OFFICIAL OF FIRM | |
|---|---|---|
| Frank Keohane | General Manager | |
| TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL OF FIRM | RESPONSIBLE OFFICIAL S TELEPHONE NUMBER | DATE Signed |
| Frank Keohane | (626) 358-4558 | |
| SIGNATURE OF PREPARER IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM | TITLE OF PREPARER | |
| | Consultant | |
| TYPE OR PRINT NAME OF PREPARER | PREPARER S TELEPHONE NUMBER | DATE Signed |
| Kimba Spencer | (562) 961-3494 | 8/27/04 |

*THIS CONCLUDES FORM 400-CEQA INCLUDE THIS FORM AND THE ATTACHMENTS WITH FORM 400 A*

4 Table I Regulated Substances List and Threshold Quantities for Accidental Release Prevention can be found in the Instructions for Form 400-CEQA

# SCAQMD PERMIT PROCESSING SYSTEM (PPS)

## FEE DATA - SUMMARY SHEET

| | | | |
|---|---|---|---|
| Application No | 428833 | IRS/SS No | |
| Previous Application No | | Previous Permit No | |

| | | | |
|---|---|---|---|
| Company Name | UNITED ROCK PRODUCTS CORPORATION | Facility ID | 65341 |
| Equipment Street | 1245 E ARROWHWY , IRWINDALE CA 91706 | | |
| Equipment Desc | AGGREGATE SIZE CLASSIFICATION | | |
| Equipment Type | BASIC | Fee Charged by | B-CAT |
| B-CAT NO | 107850 | C-CAT NO | 00 |
| Facility Zone | 09 | Deemed Compl Date | 5/14/2004 |
| | | Fee Schedule | C |
| | | Public Notice | NO |

| | | | |
|---|---|---|---|
| Evaluation Type | PO NO PC (PENALTY WILL BE ASSESSED) | Small Business | ☐ |
| Disposition | Approve PO, Recommended by Engineer | Penalty | ☑ |
| Lead Appl No | | Identical Permit Unit | ☐ |

| | | | | | |
|---|---|---|---|---|---|
| Air quality Analysis | | | $0 00 | Filing Fee Paid | $0 00 |
| E I R | | | $0 00 | Permit Processing Fee Paid | $3,349 44 |
| Health Risk Assessment | | | $0 00 | Permit Processing Fee Calculated* | $3,349 44 |
| Significant Project | | | $0 00 | Permit Processing Fee Adjustment | $0 00 |
| Express Processing | Hours | 0 00 | $0 00 | | |
| Source Test Review | Hours | 0 00 | $0 00 | | |
| Time & Material | Hours | 0 00 | $0 00 | | |
| | | | | Total Additional Fee | $0 00 |
| | | | | Additional Charge | $0 00 |

COMMENTS

RECOMMENDED BY **RAJENDRA SINGH** DATE **10/14/2004**

REVIEWED BY _____ DATE 10-29-04

* ADJUSTED FOR SMALL BUSINESS IDENTICAL EQUIPMENT AND P/O NO P/C PENALTY

SCAQMD PERMIT PROCESSING SYSTEM (PPS)

# AEIS DATA SHEET

Company Name UNITED ROCK PRODUCTS CORPORATION
Facility ID 65341
Equipment Address 1245 E ARROW HWY
IRWINDALE CA 91706

Application Number 428833
Estimated Completion Date 10/14/04
Equipment Type Basic
Equipment Description AGGREGATE SIZE CLASSIFICATION
Equipment B-Cat 107850
Equipment C-Cat

| | Emissions | |
|---|---|---|
| Emittants | R1 LB/HR | R2 LB/HR |
| PM10 | 1 08 | 0 06 |

**Applicable Rules**

| | | |
|---|---|---|
| 1401 | 05/02/2003 | New Source Review of Toxic Air Contaminants |
| 401 | 11/09/2001 | Visible Emissions |
| 402 | 05/07/1976 | Nuisance |
| 405 | 02/07/1986 | Solid Particulate Matter - Weight |

| | Mon | Tue | Wed | Thu | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|
| Daily Start Times | 08 00 | 08 00 | 08 00 | 08 00 | 08 00 | 00 00 | 00 00 |
| Daily Stop Times | 16 00 | 16 00 | 16 00 | 16 00 | 16 00 | 00 00 | 00 00 |

User's Initials RS06 Date 10/14/04 Supervisor's Name _____ Review Date 10/29/04

# NSR DATA SUMMARY SHEET

Application No 428833
Application Type P/O no P/C
Application Status PENDAPPRV
Previous Apps,Dev,Permit # NONE

Company Name UNITED ROCK PRODUCTS CORPORATION
Company ID 65341
Address 1245 E ARROW HWY,IRWINDALE, CA 91706-1302
RECLAIM NO
RECLAIM Zone 02A
Air Basin SC
Zone 09
Title V NO

Device ID 0 - AGGREGATE-PROD
Estimated Completion Date 07-30-2004
Heat Input Capacity 0 Million BTU/hr
Priority Reserve NONE - No Priority Access Requested
Recommended Disposition 31 - PERMIT TO OPERATE GRANTED
PR Expiration
School Within 1000 Feet NO
Operating Weeks Per Year 52
Operating Days Per Week 5
Monday Operating Hours 08 00 to 16 00
Tuesday Operating Hours 08 00 to 16 00
Wednesday Operating Hours 08 00 to 16 00
Thursday Operating Hours 08 00 to 16 00
Friday Operating Hours 08 00 to 16 00
Saturday Operating Hours 00 00 to 00 00
Sunday Operating Hours 00 00 to 00 00

Emittant PM10
BACT
Cost Effectiveness NO
Source Type MINOR
Emis Increase 0
Modeling N/A
Public Notice N/A
CONTROLLED EMISSION
Max Hourly 0 06 lbs/hr
Max Daily 0 48 lbs/day
UNCONTROLLED EMISSION
Max Hourly 1 08 lbs/hr
Max Daily 8 64 lbs/day
CURRENT EMISSION
BACT 30 days Avg 0 lbs/day
Annual Emission 124 8 lbs/yr
District Exemption None

SUPERVISOR'S APPROVAL _____ SUPERVISOR'S REVIEW DATE 10-29-04

Processed By rsingh 10/15/2004 8 04 15 AM

# PERMIT TO CONSTRUCT/OPERATE EVALUATION,

| | |
|---|---|
| Applicant's Name | UNITED ROCK PRODUCTS CORPORATION |
| Company I D | 65341 |
| Mailing Address | 1245 E ARROW HIGHWAY, IRWINDALE, CA 91706 |
| Equipment Address | 1245 E ARROW HIGHWAY, IRWINDALE, CA 91706 |
| APPLICATION NUMBER | 428833, 428834 |

## BACKGROUND

These applications were submitted for two aggregate screening plants operating without permits The company also operates a main aggregate plant, two rock pre-crushing systems, and a dry and a wet load out system The applications were received on 4/14/04 A check on the compliance data indicates one open violation and an open notice of compliance These will not affect the applications being processed here The facility is in an industrial area and there are no schools within 1000 feet of this facility

## EQUIPMENT DESCRIPTION:

Application No 428833

AGGREGATE SCREENING PLANT NO I CONSISTING OF

1 FEED HOPPER, 20 TON CAPACITY

2 FEEDER BELT, 2'-6" W X 15'-0" L , 10 H P

3 BELT CONVEYOR, 2'-6" W X 75'-0" L , 10 H P

4 SCREEN, DUO VIBE, 6'-0" W X 12'-0" L , 5 H P

5 BELT CONVEYOR, 2'-6" W X 75'-0" L , 10 H P

6 LOAD OUT HOPPER, 30 TON CAPACITY

7 BELT CONVEYOR, 2'-6" W X 75'-0" L , 10 H P

Application No 428834

AGGREGATE SCREENING PLANT NO II CONSISTING OF

1 FEED HOPPER, 20 TON CAPACITY

2 FEEDER BELT, 2'-0" W X 12'-0" L , 10 H P

3 BELT CONVEYOR, 2'-0" W X 60'-0" L , 10 H P

4 SCREEN, DUO VIBE, 6'-0" W X 12'-0" L , 5 H P

5 BELT CONVEYOR, 2'-0" W X 75'-0" L , 10 H P

6 LOAD OUT HOPPER, 30 TON CAPACITY

7 BELT CONVEYOR, 2'-0" W X 75'-0" L , 10 H P

## PROCESS DESCRIPTION

The two screening plants are very similar in operation The attached flow diagrams show the material flow for the two systems The aggregate is dumped into a feeder hopper, travels via conveyor belts to a screen station The unders are placed in stockpiles and the overs are conveyed to a load out station The primary emissions from this equipment are particulate emissions at material transfer points and at the screening operations These emissions are controlled by water spray

## OPERATING SCHEDULE

| | | |
|---|---|---|
| A/N 428833 | Average / maximum | 8 hrs per day, 5 days per week, 52 weeks per year |
| A/N 428834 | Average / maximum | 8 hrs per day, 7 days per week, 52 weeks per year |

## EMISSION CALCULATIONS

Application No 428833

Throughput = 56 tons per hour
= 448 tons per day
= 9,900 tons / month (permit condition)

The emission calculations are presented in the attached spread sheet Emission factors used in these calculations are taken from AP-42, Table 11 19 2-2 for crushed stone processing (attached)
In this table, the controlled PM10 emission factors are based on use of water spray to control particulate emissions

From the attached spread sheet

R1 (PM10) = 8 6 lbs / day
= 1 075 lbs / hr @ 8 hrs / day

R2 (PM10) = 0 44 lbs / day
= 0 055 lbs / hr @ 8 hrs / day

Assuming PM10 = 50 % of PM

R1 (PM) = 2 x 1 075 lbs / hr
= 2 15 lbs / hr

R2 (PM) = 2 x 0 055 lbs / hr
= 0 11 lbs./ hr

AEIS and NSR Emission Data

R1 (PM10) = 1 075 lb./ hr
R2 (PM10) = 0 055 lb / hr

30-Day average (PM10) = (0 055 lbs / hr x 8 hrs / day x 22 days / month) / 30
= 0 32 lb / day

Annual average (PM10) = (0 055 lbs / hr x 8 hrs / day x 5 days / wk x 52 wks / yr ) ~~/2000~~
= 114 lbs / yr

Application No 428834

Throughput = 84 tons per hour
= 672 tons per day
= 20,200 tons / month (permit condition)

The emission calculations are presented in the attached spread sheet Emission factors used in these calculations are taken from AP-42, Table 11 19 2-2 for crushed stone processing (attached)
In this table, the controlled PM10 emission factors are based on use of water spray to control particulate emissions From the attached spread sheet

R1 (PM10) = 12 9 lbs / day
= 1 61 lbs / hr @ 8 hrs / day

R2 (PM10) = 0 66 lbs / day
= 0 08 lbs / hr @ 8 hrs / day

Assuming PM10 = 50 % of PM

R1 (PM) = 2 x 1 61 lbs / hr
= 3 22 lbs / hr
R2 (PM) = 2 x 0 08 lbs / hr
= 0 16 lbs / hr

AEIS and NSR Emission Data

R1 (PM10) = 1 61 lb / hr
R2 (PM10) = 0 08 lb / hr

30-Day average (PM10) = (0 08 lbs / hr x 8 hrs / day x 30 days / month) / 30
= 0 64 lb / day

Annual average (PM10) = (0 08 lbs / hr x 8 hrs / day x 7 days / wk x 52 wks / yr )/2000
= 233 lbs./ yr

**RULES**

RULE 212 There are no schools within 1000 feet of the facility Public notice is not required

RULE 401 Visible emissions are not expected with proper maintenance and operation of this equipment Compliance is expected

RULE 402 Operation of this equipment is not expected to create a nuisance Compliance is expected

RULE 405 The PM emissions are small and much less than the rate allowed in Table 405 (a) of this rule Compliance is expected

REG XIII New Source Review

Subparagraph 1303(a) – BACT
PM10 emissions are controlled by water spray and the emissions are less than 1 lb / day Compliance is expected

Subparagraph 1303(b)(1) – Modeling
The PM10 emissions are less than 0 41 lb / hr screening limit specified in this rule Modeling is not required

Subparagraph 1303(b)(2) – Emission Offsets
The facility PTE for PM10 is not expected to exceed 4 tons per year No offsets are required

RULE 1401 Review of Toxic Air Contaminants
No toxic emissions are expected from this aggregate screening operation Compliance is expected

**CONCLUSIONS/RECOMMENDATIONS**

The equipment is expected to comply with all applicable AQMD rules and regulations Issue PO subject to permit conditions listed below

**Conditions**

Application No 428833

1 OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW

2 THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES

3 THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS

4 THIS PLANT SHALL NOT PROCESS MORE THAN 9,900 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH

5 RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST

Application No 428834

1 OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW

2 THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES

3 THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS

4 THIS PLANT SHALL NOT PROCESS MORE THAN 20,200 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH

5 RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST

Emission Calculations
A/N 428833, United Rock Products
Aggregate Screening

| Emission Factors-PM10, lbs / ton | R1* | R2* | |
|---|---|---|---|
| Transfer Points | 0 0014 | 0 000048 | |
| Crushing | | | |
| Screening | 0 015 | 0 00084 | |
| * From AP-42, Table 11 19 2-2 | | | |
| | | | |
| **Transfer point** | **Throughput (tons / day)** | **R1(PM10) lbs / day** | **R2 (PM10) lbs / day** |
| | | | |
| Hopper 1 to Belt Conveyor 2 | 448 | * | * |
| Belt 2 to belt 3 | 448 | 0 6272 | 0 021504 |
| Belt 3 to Screen 4 | 448 | 0 6272 | 0 021504 |
| Screen 4 | 448 | 6 72 | 0 37632 |
| Screen 4 to Belt 5 | 224 | 0 3136 | 0 010752 |
| Belt 5 to Load Out 6 | 224 | * | * |
| Screen 4 to Belt 7 | 224 | 0 3136 | 0 010752 |
| Belt 7 to Pile | 448 | * | * |
| | | | |
| Total Emissions | | 8 6016 | 0 440832 |
| | | | |
| *The loading of the first conveyor belt and discharge from the last conveyor belt are not considered material transfer points | | | |

Table 11 19 2-2 (English Units) EMISSION FACTORS FOR CRUSHED STONE PROCESSING OPERATIONS[a]

| Source[b] | Total Particulate Matter | EMISSION FACTOR RATING | Total PM 10[c] | EMISSION FACTOR RATING |
|---|---|---|---|---|
| Screening (SCC 3-05-020-02 -03) | —[d] | | 0 015[e] | C |
| Screening (controlled) (SCC 3-05-020 02-03) | —[d] | | 0 00084[e] | C |
| Primary crushing (SCC 3 05-020-01) | 0 00070[f] | E | ND[g] | |
| Secondary crushing (SCC 3-05-020 02) | ND | | ND[g] | |
| Tertiary crushing (SCC 3-05 020 03) | —[d] | | 0 0024[h] | C |
| Primary crushing (controlled) (SCC 3 05 020 01) | ND | | ND[g] | NA |
| Secondary crushing (controlled) (SCC 3 05-020-02) | ND | | ND[g] | NA |
| Tertiary crushing (controlled) (SCC 3-05-020-03) | —[d] | | 0 00059[h] | C |
| Fines crushing[j] (SCC 3 05-020 05) | —[d] | | 0 015 | E |
| Fines crushing (controlled)[j] (SCC 3-05-020-05) | —[d] | | 0 0020 | E |
| Fines screening[j] (SCC 3-05 020-21) | —[d] | | 0 071 | E |
| Fines screening (controlled)[j] (SCC 3 05 020 21) | —[d] | | 0 0021 | E |
| Conveyor transfer point[k] (SCC 3-05-020 06) | —[d] | | 0 0014 | D |
| Conveyor transfer point (controlled)[k] (SCC 3-05 020-06) | —[d] | | 4 8x10 $^{-5}$ | D |
| Wet drilling unfragmented stone[m] (SCC 3 05-020-10) | ND | | 8 0x10 $^{-5}$ | E |
| Truck unloading fragmented stone[m] (SCC 3 05-020 31) | ND | | 1 6x10 $^{-5}$ | E |
| Truck loading conveyor crushed stone[n] (SCC 3 05 020 32) | ND | | 0 00010 | E |

[a] Emission factors represent uncontrolled emissions unless noted Emission factors in lb/ton of material throughput SCC = Source Classification Code ND = no data

[b] Controlled sources (with wet suppression) are those that are part of the processing plant that employs current wet suppression technology similar to the study group The moisture content of the study group without wet suppression systems operating (uncontrolled) ranged from 0 21 to 1 3 percent and the same facilities operating wet suppression systems (controlled) ranged from 0 55 to 2 88 percent Due to carry over or the small amount of moisture required, it has been shown that each source, with the exception of crushers, does not need to employ direct water sprays Although the moisture content was the only variable measured, other process features may have as much influence on emissions from a given source Visual observations from each source under normal operating conditions are probably the best indicator of which emission factor is most appropriate Plants that employ sub-standard control measures as indicated by visual observations should use the uncontrolled factor with an appropriate control efficiency that best reflects the effectiveness of the controls employed

[c] Although total suspended particulate (TSP) is not a measurable property from a process, some states may require estimates of TSP emissions No data are available to make these estimates However, relative ratios in AP-42 Sections 13 2 2 and 13 2 4 indicate that TSP emission factors may be estimated by multiplying PM-10 by 2 1

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
## Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev 0

Equipment or Process Rock – Aggregate Processing

| | Criteria Pollutants | | | | | |
|---|---|---|---|---|---|---|
| **Rating/Size** | **VOC** | **NOx** | **SOx** | **CO** | **$PM_{10}$** | **Inorganic** |
| All | | | | | Baghouse Venting Jaw Crushers, Cone Crushers, and Material Transfer Points Adjacent to and after these Items, and Water Sprays at Other Material Transfer Points (1990) | |

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

**Rajendra Singh**

**From** Taylor, Scott
**Sent** Monday, October 25, 2004 2 42 PM
**To** Rajendra Singh
**Subject** FW United Rock Products A/N 428833,428834,430411,430413,430416,430417

Raj

I have reviewed the draft Permits to Construct A/N 430417 equipment description 2 has a typo The bins should be identified as 1 thru 6 Otherwise, we have no other comments Please go ahead and finalize these permits We would like to pick them up when they are ready If you could have someone give me a call when they are ready I would appreciate it

*Scott Taylor*

*Justice & Associates*

*(562) 961-3494*

*Fax (562) 961-3493*

Transmittal

Via CON

**Justice & Associates**

4155 Outer Traffic Circle, Long Beach, CA 90804 2111 • (562) 961-3494 • Fax (562) 961-3493

# Document Transmittal

From **Kimba Spencer**

Company South Coast AQMD
Address 21865 East Copley Drive
City, State, Zip Diamond Bar, CA 91765
Attention Rajendra Singh

Date August 26, 2004
Our Job No 8536
For Approval ____ Record X
Other ____

| Quantity | Description |
|---|---|
| 1 | Requested information |
| | |

Comments

Raj

Enclosed find the information and forms you requested The signed CEQA form, the flow diagrams, and a marked-up copy of permit D08812

Please let me know if you have any questions

Best regards,

Kimba Spencer
Justice & Associates

CC Ken Barker, United Rock Products

## Rajendra Singh

**From** Rajendra Singh
**Sent** Wednesday, August 18, 2004 10 55 AM
**To** 'Spencer, Kimba'
**Subject** United Rock Products, ID # 65341

Hi Kimba
Please let me know the status of information I requested over a month ago to process the 8 applications from United Rock Products Please provide a date when this information will become available After I receive this date, AQMD will make a decision whether to reject these applications for lack of timely information or wait for the information
Thanks
Raj Singh

-- Original Message----
**From** Rajendra Singh
**Sent** Friday, July 16, 2004 4 35 PM
**To** 'Spencer, Kimba'
**Subject** FW United Rock Products, ID # 65341

Hi Kimba
Please provide the following information, in addition to the information requested in my email on 7/13/04

- A/N 430403 (item 4 in your letter) - The marked-up copy of permit # D08813 submitted with your application shows extensive changes It is recognized that these changes will result in lower overall emissions However, it will be prudent to calculate the new emissions and enter in the NSR data base so that the facility PTE limit of 4 tons / year is not unnecessarily penalized Therefore, this application should be considered a modification and not an administrative change and higher fee will apply We can bill CALMAT for the remaining fee when the permit is issued Please let me know if you have any problem with this assessment Also, please provide a flow diagram of the modified system

- A/N 430413 (item 6 in your letter) - A feeder belt is being added in the equipment list of permit # D08812 Please provide a flow diagram of the modified system

- A/N 430416 (item 7 in your letter) - A 30 ton feed hopper is being added in the equipment list of permit # D08808 Please provide a flow diagram of the modified system and indicate how much material goes thru the hopper and how much thru the gates under the storage bins

Please let me know by return email when the information requested in this and the previous email will be available

Thank you,

Raj Singh
Air Quality Engineer
South Coast Air Quality Management District
(909) 396-3099
(909) 396-3341- Fax

----Original Message ----
**From** Rajendra Singh
**Sent** Tuesday, July 13, 2004 2 19 PM
**To** Spencer, Kimba'
**Subject** United Rock Products, ID # 65341

Hi Kimba

I need the following additional information to process the eight applications you submitted for United Rock Products, ID # 65341

- CEQA form for each application
- A/N 430418 (item 3 in your letter) - two Rock Pre-Crushing Systems (PO #s D08810 and D08807) are being consolidated into one permit unit Please provide a flow diagram for the combined system
- A/N 430413 (item 6 in your letter) - Drum Plant - a marked copy of permit # D08812 with corrections is missing in attachment G Please provide

Thank you,

Raj Singh
Air Quality Engineer
South Coast Air Quality Management District
(909) 396-3099
(909) 396-3341- Fax

**Justice & Associates**

4155 Outer Traffic Circle
Long Beach, CA 90804-2111
562.961.3494 Fax 562.961.3493

www.justiceassociates.com

1401 S. Arville St., Suite J
Las Vegas, NV 89102-0537
702.822.2111 Fax 702.822.2113

May 18, 2004

South Coast AQMD
21865 E. Copley Drive
Diamond Bar, CA 91765

Attention: Raj Singh

Subject: United Rock Products (Facility ID# 65341)
Permit Issues

Dear Raj:

In response to our telephone conversation on May 13, 2004, here are six (6) 400A Forms to accompany the package you are reviewing for United Rock Products.

Please call if you have any questions at (562) 961-3494.

Best regards,

Kimba Spencer
Justice & Associates

**Justice & Associates**

4155 Outer Traffic Circle
Long Beach, CA 90804-2111
562.961.3494 Fax 562.961.3493

www.justiceassociates.com

1401 S. Arville St., Suite J
Las Vegas, NV 89102-0537
702.822.2111 Fax 702.822.2113

April 7, 2004

South Coast AQMD
21865 East Copley Drive
Diamond Bar, CA 91765

Attention: Permit Services

*Subject:* *United Rock Products*
(Facility ID #65341) Permit Issues

Enclosed are several applications and technical corrections for the United Rock Products, Irwindale facility. Enclosed is a check in the amount of $17,091.64 to cover the application fees. Under Attachment "A" is a fee schedule worksheet which describes the break down of the fees. The following is a description of each application and/or correction and the supporting information.

1. A new application for a stationary screening plant with a 56 TPH throughput. A/N 428833 This application is being submitted as a Class III application. Attachment "B" following this letter includes the 400A form as well as emission calculations, an equipment list and a flow diagram. This plant operates on grid power. United Rock is requesting a production limit of 9,856 Tons Per Month (TPM).

2. A new application for a second stationary screening plant with an 84 TPH throughput. A/N 428834 This application is being submitted as a Class III application. Attachment "C" following this letter includes the 400A form and supporting material for this application. This plant operates on grid power. United Rock is requesting a production limit of 20,160 TPM.

AIN 430 418

3. Currently United Rock holds two permits for two separate Rock Pre-Crushing systems (D08810 and D08807). Although these two systems operate independently, both feed the same stock pile using two conveyors that are common to both systems. Since this equipment uses common equipment, we are requesting the equipment and permit conditions on Permit D08807 be added to Permit D08810. Note that the Pioneer jaw crusher listed on permit D08807 is no longer in service and should not be included in the combined permit. At the same time we are requesting that the daily limits be combined into one monthly limit of 624,000 tons/month ([11,200 TPD + 9,600 TPD] × 30 days/month = 624,000 TPM)

This site operates a clamshell dredge. While this equipment does not generate particulate emissions, several of the other permits for this facility included wet process equipment. In order to be consistent with the other permits we have included a list of equipment for the dredge to be added to Permit D08810. The dredge includes the following equipment:

| | | | |
|---|---|---|---|
| 1. | Belt Conveyor | 600' × 42" | 75 HP |
| 2. | Belt Conveyor | 350' × 42" | 125 HP |
| 3. | Belt Conveyor | 50' × 42" | 40 HP |
| 4. | Belt Conveyor | 650' × 42" | 275 HP |
| 5. | Belt Conveyor | 490' × 42" | 150 HP |
| 6. | Belt Conveyor | 130' × 42" | 75 HP |
| 7. | Belt Conveyor | 150' × 42" | 40 HP |
| 8. | Belt Conveyor | 150' × 42" | 40 HP |
| 9. | Belt Conveyor | 150' × 42" | 40 HP |
| 10. | Belt Conveyor | 150' × 42" | 40 HP |
| 11. | Belt Conveyor | 150' × 42" | 40 HP |
| 12. | Belt Conveyor | 150' × 42" | 40 HP |
| 13. | Belt Conveyor | 150' × 42" | 40 HP |
| 14. | Under Jaw Belt Conveyor | 60' × 42" | 30 HP |
| 15. | Conveyor A | 40' × 42" | 20 HP |
| 16. | Conveyor B | 40' × 42" | 20 HP |
| 17. | Svedala Screen | 6' × 20' | 40 HP |
| 18. | Svedala Screen | 6' × 20' | 40 HP |
| 19. | Svedala Screen | 6' × 20' | 40 HP |
| 20. | Svedala Screen | 6' × 20' | 40 HP |
| 21. | Svedala Screen | 5.5' × 15' | 30 HP |
| 22. | Svedala Screen | 5.5' × 15' | 30 HP |
| 23. | Plate Feeder | -- | -- |
| 24. | Jaw Crusher, Telesmith | 30' × 55" | 150 HP |

Both pre-crushing plants feed the primary surge pile using common conveyors. Currently these conveyors do not appear to be covered on either permit. As a result we request that two conveyors be added to Permit D08810 for the primary surge pile loading. The following is the equipment description:

| | | |
|---|---|---|
| Stacking Conveyor | 200' × 42" | 150 HP |
| Belt Conveyor | 275' × 42" | 125 HP |

Attachment "D" has the emission calculations for the additional conveyors.

Rock Pre-crushing (Permit #D08810) requires a technical correction. The jaw crushers specified on the permit as a 50 HP, KUE-KAN size 24" × 36" needs to be changed to a 150 HP, Minyu, size 40" × 42".

Attachment "D" includes marked-up copies of the facility permits showing the additional equipment and the corrections to the equipment descriptions and conditions.

4. We are requesting a change to the Main Aggregate Plant's (Permit #D08813) existing production permit condition from a daily limit to a monthly limit. A/N 430403

The existing permit conditions allow daily production of 24,000 TPD. We are requesting a change to a monthly limit of 720,000 TPM (24,000 TPD × 30 days/month = 720,000 TPM).

The modification in production limit does not result in a change of emissions. Attachment "E" includes a marked-up copy of the facility permit showing the additional equipment and the corrections to the equipment descriptions and conditions.

5. The Base Plant (Permit # D08811) is outgrowing its production limits and United Rock is requesting to increase and change their daily limit to a monthly limit. The permit currently has a daily processing limit of 3,200 tons. We are requesting this be changed 150,000 tons per month. Attachment "F" includes emission evaluation for both before and after the change in production. A/N 430411

6. The Drum Plant permit (Permit # D08812) requires several technical corrections. A feeder belt needs to be added to the equipment list. The belt specifications are 45' L × 36" W and is 15 HP. Additionally, the incline conveyor shows a horsepower of 40 and it should be changed to 50 HP. The shuttle conveyor shows a horsepower of 5 and it should be 10 HP. A/N 430413

The existing permit conditions allow a daily production of 4,000 tons. We are requesting an increase and a change to a monthly limit of 180,000 tons per month. With the addition of the conveyer and the increase in production, the emissions from this equipment will be increased by 172.80 lbs per year.

Attachment "G" has a marked up copy of the permit with the corrections as well as emission calculations for both before and after the production increase.

7. The Dry Loadout System (Permit # D08808) requires two technical corrections. AIN 430416 The horsepower on the discharge turnhead needs to be changed from 1 HP to 1.5 HP. The permit is also missing a 30 Ton feed hopper which sits on top of belt conveyer C27. Material fed into the hopper will result in a like amount to be reduced from the gates that feed material to the conveyor. As a result there are no additional emissions generated with the addition of the hopper.

   This facility is also outgrowing its production and United Rock would like to request an increase in production and a change from a daily limit to a monthly limit. The current permit has a daily limit of 8,000 tons. We are requesting this be changed to a monthly limit of 480,600 tons. This increase in production will result in an annual emissions increase of 138.24 lbs per year.

   Attachment "H" has a marked up copy of the permit showing the correction as well as emission calculations for both before and after the production increase.

8. The Wet Loadout System (Permit # D08809) requires a technical correction. The AIN 430417 horsepower on the discharge turnhead needs to be changed from 1 HP to 1.5 HP.

   This permit unit also has out grown its production. United Rock would like to request an increase in production and a change from a daily limit to a monthly limit. The current permit has a daily limit of 8,000 tons. We are requesting this be changed to a monthly limit of 480,600 tons. Since this facility processes only wet material the increase in production will not result in an increase in emissions.

   Attachment "I" has a marked up copy of the permit showing the correction.

Below is a summary of the total emission increase that are a result of the changes in equipment or production.

Emission Increase Summary

| | | |
|---|---|---|
| 1. | Screening Plant I | 83.97 lbs/year |
| 2. | Screening Plant II | 171.76 lbs/year |

| | | |
|---|---|---|
| 3. | Base Plant (D08811) | 155.52 lbs/year |
| 4. | Drum Plant (D08812) | 172.8 lbs/year |
| 5. | Dry Loadout (D08808) | 138.24 lbs/year |
| | Total | 722.29 lbs/year |
| | | 0.36 tons/year |

Currently, the facility's NSR balance shows that it is well below the offset threshold of 4 ton/year of PM (Please refer to Attachment "J"). Based on the Emission Increase Summary the annual increase in emissions are 0.36 tons/year. As a result, we do not anticipate these modifications requiring offsets.

We trust this information will be sufficient to process these applications and requests. If you have any questions, please call me at (562) 961-3494.

Best regards,

Kimba Spencer
Justice & Associates

cc: Ken Barker, United Rock Products

| **Attachments** | - | **Description** |
|---|---|---|
| "A" | - | Fee Schedule |
| "B" | - | Screening Plant I |
| "C" | - | Screening Plant II |
| "D" | - | Rock Pre-Crushing Systems (D08810) |
| "E" | - | Main Aggregate Plant (D08813) |
| "F" | - | Base Plant (D08811) |
| "G" | - | Drum Plant (D08812) |
| "H" | - | Dry Loadout System (D08808) |
| "I" | - | Wet Loadout System (D08809) |
| "J" | - | NSR Balance |

**Justice & Associates**

4155 Outer Traffic Circle
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Las Vegas, NV 89102-0537
702.822.2111 Fax 702.822.2113

# ATTACHMENT "A"

# FEE SCHEDULE

**Justice & Associates**

4155 Outer Traffic Circle
Long Beach, CA 90804-2111
(562) 961-3494 Fax (562) 961-3493

# FEE SCHEDULE WORK SHEET

(For permit processing in accordance with Rule 301)

Permits to be issued to: United Rock Products

Address: 1245 East Arrow Highway

City, State, Zip: Irwindale, CA 91706

| Quantity of Identical Units | Equipment/Process | Fee Schedule | Full Fee for First Permit Unit | + | 50% of Processing Fee for failure to obtain Permit to Construct | = | Total |
|---|---|---|---|---|---|---|---|
| 1 | Screening Plant | C | $2,232.96 | + | $1,116.48 | = | $3,349.44 |
| 1 | Screening Plant | C | $2,232.96 | + | $1,116.48 | = | $3,349.44 |
| 1 | Permit reissue (D08813) | N/A | $123.02 | + | -- | = | $123.02 |
| 1 | Aggregate Conveying (D08811) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Conveying (D08812) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Loading (D08808) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Loading (D08809) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Conveying (D08810) | D | $3,081.85 | + | $1,540.93 | = | $4,622.78 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Total Permit Processing Fee Due: $17,091.64

Comments:

**Justice** & *Associates*

4155 Outer Traffic Circle
Long Beach, CA 90804-2111
562.961.3494 Fax 562.961.3493

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Las Vegas, NV 89102-0537
702.822.2111 Fax 702.822.2113

# ATTACHMENT "B"

# SCREENING PLANT I

**United Rock**
**Screening Plant I - Equipment List**

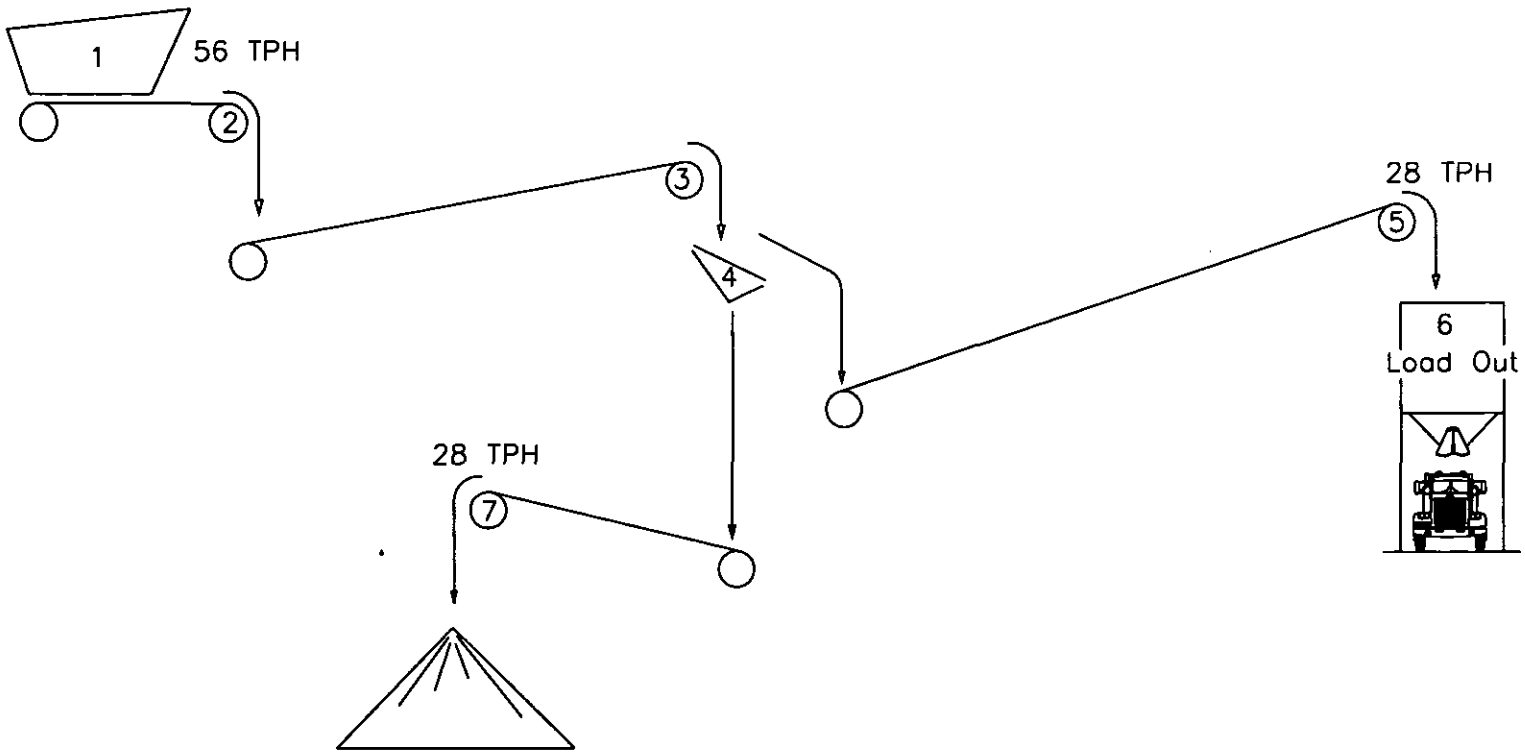
| ID | Description | HP |
|---|---|---|
| 1 | Feeder Hopper - 20 Ton Capacity | |
| 2 | Feeder Belt 30" W ×15' L | 10 |
| 3 | Belt Conveyor 30" W × 75' L | 10 |
| 4 | Screen - DuoVibe 6' × 12' | 5 |
| 5 | Belt Conveyor 30" W × 75' L | 10 |
| 6 | Load Out Hopper - 30 Ton Capacity | |
| 7 | Belt Conveyor 30" W × 75' L | 10 |

**United Rock - Screening Plant I - Daily Emissions**

| | Description | Throughput (ton/day) | × | $PM_{10}$ AP-42 Emission Factors (lb/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 1 | Hopper 1 to Belt Conveyor 2 | 448 | | -- | | -- |
| 2 | Belt Conveyor 2 to Belt Conveyor 3 | 448 | | 0.000048 | | 0.0215 |
| 3 | Belt Conveyor 3 to Screen 4 | 448 | | 0.000048 | | 0.0215 |
| 4 | Screen 4 | 448 | | 0.00059 | | 0.2643 |
| 5 | Screen 4 to Belt Conveyor 5 | 224 | | 0.000048 | | 0.0108 |
| 6 | Belt Conveyor 5 to Load Out 6 | 224 | | 0.000048 | | 0.0000 |
| 7 | Screen 4 to Belt Conveyor 7 | 224 | | 0.000048 | | 0.0000 |
| 8 | Belt Conveyor 7 to Pile | 224 | | -- | | -- |
| | | | | Total $PM_{10}$ (lb/day) | | 0.3181 |
| | | | | Aggregate Throughput (ton/day) | ÷ | 448 |
| | | | | Process Emissions Factor (lb/ton) | | 0.00071 |

| Aggregate Throughput | | $PM_{10}$ Emissions Factor (lb/ton) | = | $PM_{10}$ Emission |
|---|---|---|---|---|
| 9,856 ton/month | × | 0.00071 | | 7.00 lb/month |
| 118272 ton/year | × | 0.00071 | | 83.97 lbs/yr |
| | | | | 0.04 tons/yr |

448 tons/day x 22 days/month




Justice & Associates
4155 Outer Traffic Circle, Long Beach, CA 90804
562-961-3494 Fax 562-961-3493

| DESCRIPTION | | | | |
|---|---|---|---|---|
| United Rock Products<br>Screening Plant I (Type I) | | | | |
| JOB NO. | CADCODE | DRAWN BY: | DATE | DWG. NO. |
| 8536 | 8536 | KS | 3/10/04 | 8536FLOW |

# ATTACHMENT "C"

# SCREENING PLANT II

**United Rock**
***Screening Plant II - Equipment List***

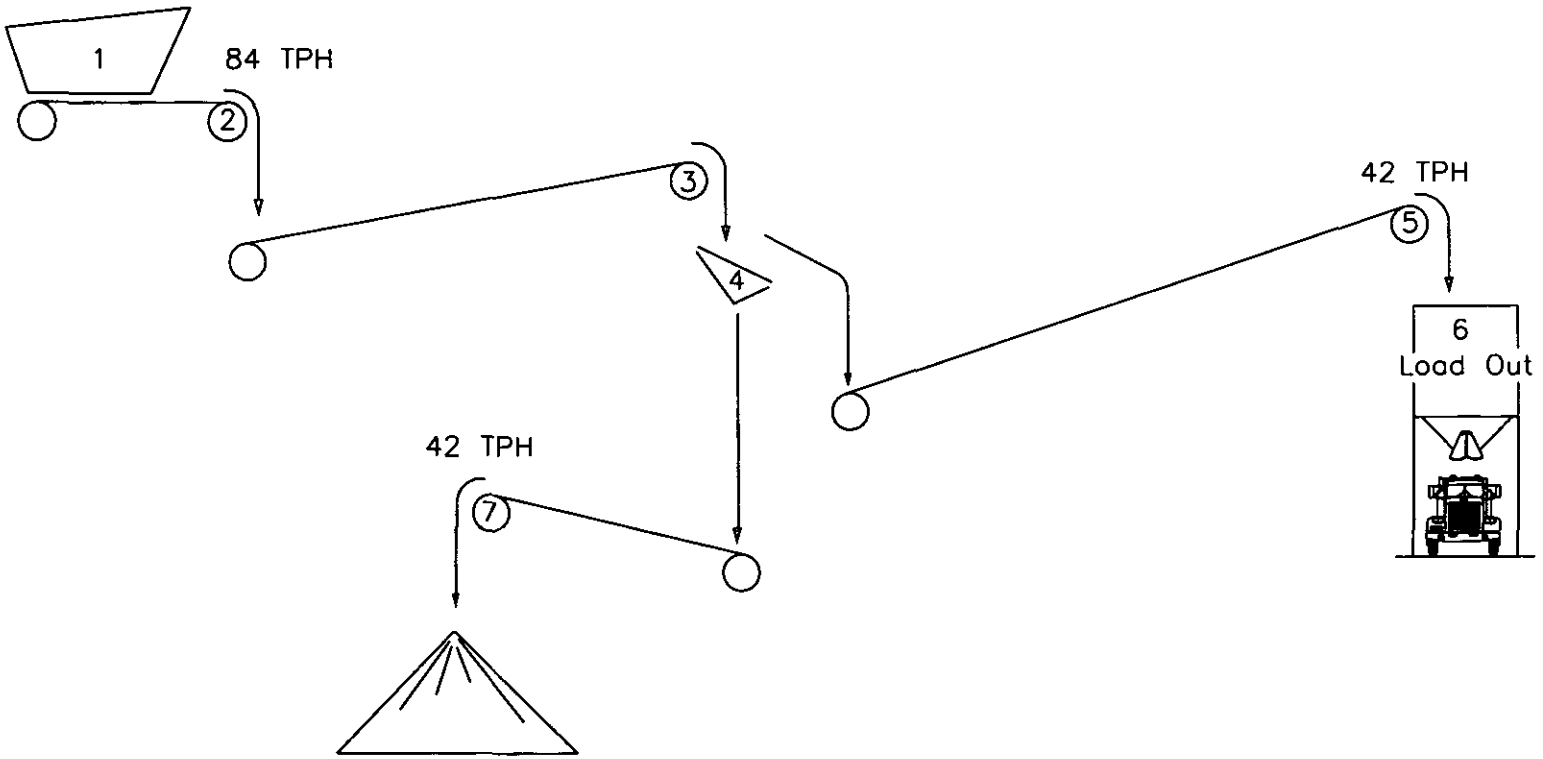
| ID | Description | HP |
|---|---|---|
| 1 | Feeder Hopper - 20 Ton Capacity | |
| 2 | Feeder Belt 24" W ×12' L | 10 |
| 3 | Belt Conveyor 24" W × 60' L | 10 |
| 4 | Screen - DuoVibe 6' × 12' | 5 |
| 5 | Belt Conveyor 24" W × 75' L | 10 |
| 6 | Load Out Hopper - 30 Ton Capacity | |
| 7 | Belt Conveyor 24" W × 75' L | 10 |

## United Rock - Screening Plant II- Daily Emissions

| | Description | Throughput (ton/day) | × | $PM_{10}$ AP-42 Emission Factors (lb/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 1 | Hopper 1 to Belt Conveyor 2 | 672 | | -- | | 0.0000 |
| 2 | Belt Conveyor 2 to Belt Conveyor 3 | 672 | | 0.000048 | | 0.0323 |
| 3 | Belt Conveyor 3 to Screen 4 | 672 | | 0.000048 | | 0.0323 |
| 4 | Screen 4 | 672 | | 0.00059 | | 0.3965 |
| 5 | Screen 4 to Belt Conveyor 5 | 336 | | 0.000048 | | 0.0161 |
| 6 | Belt Conveyor 5 to Load Out 6 | 336 | | 0.000048 | | 0.0000 |
| 7 | Screen 4 to Belt Conveyor 7 | 336 | | 0.000048 | | 0.0000 |
| 8 | Belt Conveyor 7 to Pile | 336 | | -- | | -- |
| | | | | Total $PM_{10}$ (lb/day) | | 0.4771 |
| | | | | Aggregate Throughput (ton/day) | ÷ | 672 |
| | | | | Process Emissions Factor (lb/ton) | | 0.00071 |

| Aggregate Throughput | | $PM_{10}$ Emissions Factor (lb/ton) | = | $PM_{10}$ Emission |
|---|---|---|---|---|
| 20,160 ton/month | × | 0.00071 | | 14.31 lb/month |
| 241920 ton/year | × | 0.00071 | | 171.76 lbs/yr |
| | | | | 0.09 tons/yr |

672 tons/day × 30 days/month




Justice & Associates
4155 Outer Traffic Circle, Long Beach, CA 90804
562-961-3494 Fax 562-961-3493

| DESCRIPTION | | | | |
|---|---|---|---|---|
| United Rock Products<br>Screening Plant II (Type II) | | | | |
| JOB NO. | CADCODE | DRAWN BY: | DATE | DWG. NO. |
| 8536 | 8536 | KS | 3/10/04 | 8536FLOW |

# ATTACHMENT "D"

# ROCK PRE-CRUSHING SYSTEMS

**Justice** & *Associates*

## United Rock - Pre-Crushing Plant Emissions

Emissions from Added Conveyors

| | Description | Thruput (ton/day) | x | $PM_{10}$ AP-42 Emission Factors (lb/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 1 | *Stacking Conveyor to Belt Conveyor* | *20,800* | | *0.000048* | | *0.9984* |
| 2 | Belt Conveyor to Pile | 20,800 | | -- | | -- |
| | | | | Total PM10 (lb/day) | | 0.9984 |
| | | | | Aggregate Thruput (ton/day) | ÷ | 20800 |
| | | | | Process Emissions Factor (lb/ton) | | 0.000048 |

| Aggregate Thruput | | $PM_{10}$ Emissions Factor (lb/ton) | = | $PM_{10}$ Emission | |
|---|---|---|---|---|---|
| 624,000 | ton/month | x 0.000048 | | 29.95 | lb/month |
| *7,488,000* | *ton/year* | x *0.000048* | | *359.42* | *lbs/yr* |
| | | | | 0.18 | tons/yr |

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D08810
A/N 185074
Page 1

**This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.**

**Legal Owner**
**Or Operator:** UNITED ROCK PRODUCTS CORPORATION

ID 65341

all Pit

**Equipment**
**located at:** 1245 EAST ARROW HIGHWAY, IRWINDALE, CALIFORNIA

**Equipment Description:** With vibrating grizzly

ROCK PRE-CRUSHING, CONVEYING, AND STACKING SYSTEM NO. 1, CONSISTING OF:

1. RECEIVING HOPPER, ~~WITH A PNEUMATICALLY OPERATED RECIPROCATING PLATE FEEDER.~~
2. JAW CRUSHER, ~~KUE-KAN, OAKLAND~~ Minyu 40 42 150, SIZE ~~24~~ X ~~36~~, ~~50~~ H.P.
3. THREE BELT CONVEYORS, 175 H.P. TOTAL.

**Conditions:** Please see following page for additional equipment

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. NOT MORE THAN 11,200 TONS OF AGGREGATE SHALL BE PROCESSED IN ANY ONE DAY.
4. AGGREGATE CHARGED AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METE OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTI LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Raquel Puerta/jas
July 6, 1989

UNITED ROCK PRODUCTS CORP.
ATTN: THOMAS S. TEDESCO
13131 LOS ANGELES ST.
IRWINDALE, CA. 91706

Additional equipment to be added to Permit #D08810

**Rock Pre-crushing Equipment:** (from permit D08807)

1. Receiving Hopper with vibrating grizzly
2. Eight Belt Conveyors, 800 HP total
3. Stacking Conveyor 200' × 42", 150 HP
4. Belt Conveyor 275' × 42", 125 HP

**Dredge Equipment:** (new wet equipment)

| | | | |
|---|---|---|---|
| 1 | Belt Conveyor | 600' × 42" | 75 HP |
| 2 | Belt Conveyor | 350' × 42" | 125 HP |
| 3 | Belt Conveyor | 50' × 42" | 40 HP |
| 4 | Belt Conveyor | 650' × 42" | 275 HP |
| 5 | Belt Conveyor | 490' × 42" | 150 HP |
| 6 | Belt Conveyor | 130' × 42" | 75 HP |
| 7 | Belt Conveyor | 150' × 42" | 40 HP |
| 8 | Belt Conveyor | 150' × 42" | 40 HP |
| 9 | Belt Conveyor | 150' × 42" | 40 HP |
| 10 | Belt Conveyor | 150' × 42" | 40 HP |
| 11 | Belt Conveyor | 150' × 42" | 40 HP |
| 12 | Belt Conveyor | 150' × 42" | 40 HP |
| 13 | Belt Conveyor | 150' × 42" | 40 HP |
| 14 | Under Jaw Belt Conveyor | 60' × 42" | 30 HP |
| 15 | Conveyor A | 40' × 42" | 20 HP |
| 16 | Conveyor B | 40' × 42" | 20 HP |
| 17 | Svedala Screen | 6' × 20' | 40 HP |
| 18 | Svedala Screen | 6' × 20' | 40 HP |
| 19 | Svedala Screen | 6' × 20' | 40 HP |
| 20 | Svedala Screen | 6' × 20' | 40 HP |
| 21 | Svedala Screen | 5.5 × 15' | 30 HP |
| 22 | Svedala Screen | 5.5' × 15' | 30 HP |
| 23 | Plate Feeder | -- | -- |
| 24 | Jaw Crusher, Telesmith | 30' × 55" | 150 HP |

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D08807
A/N 185071
Page 1

**This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.**

**Legal Owner**
**Or Operator:** UNITED ROCK PRODUCTS CORPORATION

ID 65341

**Equipment**
**located at:** 1245 EAST ARROW HIGHWAY, IRWINDALE, CALIFORNIA

**Equipment Description:**

ROCK PRE-CRUSHING, CONVEYING, AND STACKING SYSTEM NO. 2 CONSISTING OF:

1. RECEIVING HOPPER WITH RECIPROCATING PLATE FEEDER, PNEUMATICALLY OPERATED.
2. ~~JAW-CRUSHER, PIONEER, SIZE 35 X 46, 200 H.P.~~
3. EIGHT BELT CONVEYORS, 800 H.P. TOTAL.

move equipment to permit D08810

**Conditions:**

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. NOT MORE THAN 9600 TONS OF AGGREGATE SHALL BE PROCESSED IN ANY DAY.
4. AGGREGATE CHARGED AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Raquel Puerta/jas
July 6, 1989

UNITED ROCK PRODUCTS CORP.
ATTN: THOMAS S. TEDESCO
13131 LOS ANGELES ST.
IRWINDALE, CA. 91706

# ATTACHMENT "E"

# MAIN AGGREGATE PLANT
# (D08813)

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No. D08813
A/N 185077
Page 1

**This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.**

**Legal Owner**
**Or Operator:** UNITED ROCK PRODUCTS CORPORATION

ID 65341

**Equipment**
**located at:** 1245 EAST ARROW HIGHWAY, IRWINDALE, CALIFORNIA

**Equipment Description:**

A. AGGREGATE PROCESSING SYSTEM CONSISTING OF:

1. BELT CONVEYOR, C-1A, ~~200~~ 300 H.P.
2. BELT CONVEYOR, C-1, 250 H.P.
3. TWO CLASSIFYING SCREENS, NOS. VS-1 AND VS-2, HEWITT-ROBINS, DOUBLE DECK, 8' X 20', EACH 30 H.P.
4. BELT CONVEYOR, C-5, 100 H.P.
5. BELT CONVEYOR, C-6, 75 H.P.
6. TWO CLASSIFYING SCREENS, NOS. VS-4 AND VS-5, WET SCREENINGS, HEWITT-ROBINS, DOUBLE DECK, 8' X 20', EACH 30 H.P.
7. CLASSIFYING TANK, ~~WEMCO, MODEL "D"~~ Eagle, 10' X ~~35'~~ 40', ~~1-1/2~~ 10 H.P.
8. ~~THREE~~ One WASHERS, WEMCO, MODEL "B", EACH ~~10~~ 15 H.P.
9. METERING BIN, ~~9~~ 20 TONS CAPACITY. — three Washers, Kolberg, each 40 HP
10. BELT CONVEYOR C-21, 5 H.P.
11. SURGE BIN, 75 TONS CAPACITY.
12. BELT CONVEYOR, C-13, 30 H.P.
13. BELT CONVEYOR, C-7, 7-1/2 H.P.
14. SURGE BIN, ~~55~~ 100 TON CAPACITY.
15. BELT CONVEYOR, ~~GR-5~~ C13-B CRUSHER FEED, X 15 H.P.
16. ~~CONE CRUSHER, NO. GR-5, ED JAY, MODEL NO. 49, 125 H.P.~~
17. BELT CONVEYOR, NO. C-12, X 10 H.P.

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No. D08813
A/N 185077
Page 2

**CONTINUATION OF PERMIT TO OPERATE**

18. BELT CONVEYOR, NO. C-11, ~~5~~ 7.5 H.P.

19. TWO CONE CRUSHER, NOS. CR-3 AND CR-4, ~~SYMONS, EACH WITH A 300 H.P.~~ Nordberg, 200 and 300 HP MAIN DRIVE, ~~A 3 H.P. ROTARY FEEDER, A 5 H.P. LUBE PUMP AND A 7-1/2 H.P. ADJUSTER~~.

20. TWO SURGE BINS, 36 TONS CAPACITY EACH.

21. BELT CONVEYOR, NO. C-9, ~~7 1/2~~ 15 H.P.

22. CONE CRUSHER, NO. CR-1, ~~SYMONS~~, SIZE ~~4'~~ Nordberg 5' WITH A ~~300~~ 500 H.P. MAIN DRIVE, ~~A 5 H.P. LUBE PUMP A A 5 H.P. ADJUSTER~~.

23. BELT CONVEYOR, NO. C-10, 5 H.P.

24. CONE CRUSHER, NO. CR-2, ~~TELSMITH~~, MODEL ~~TC 66~~ Nordberg HP300, WITH A 300 H.P. MAIN DRIVE, ~~A 5 H.P. LUBE PUMP~~.

25. BELT CONVEYOR, NO. C-8, 5 H.P.

26. BELT CONVEYOR, NO. C-2, 50 H.P.

27. BELT CONVEYOR, NO. C-3, 100 H.P.

28. BELT CONVEYOR, NO. C-4, 150 H.P.

29. FOUR CLASSIFYING SCREENS, NOS. VS-6A, VS-6B, VS-7A, VS-7B, HEWITT-ROBINS, DOUBLE DECK, 6 X 20', EACH 30 H.P.

30. CLASSIFYING SCREEN NO. VS-6C, ~~EL-JAY, MODEL FS-6163~~ Simplicity, 6'x20', TRIPLE DECK, 30 H.P.

31. BELT CONVEYOR, NO. C-14, 15 H.P.

32. BELT CONVEYOR, NO. C-15, 15 H.P.

33. BELT CONVEYOR, NO. C-16, 15 H.P.

34. BELT CONVEYOR, NO. C-17, 20 H.P.

35. BELT CONVEYOR, NO. C-18, ~~7-1/2~~ 10 H.P.

36. BELT CONVEYOR, NO. C-19, 20 H.P.

37. BELT CONVEYOR, NO. C-20, 7-1/2 H.P.

38. BELT CONVEYOR, NO. C-22, 15 H.P.

39. BELT CONVEYOR, NO. C-23, 30 H.P.

40. BELT CONVEYOR, NO. C-24, 20 H.P.

41. BELT CONVEYOR, NO. C-25, ~~27-1/2~~ 40 H.P.

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D08813
A/N 185077
Page 3

## CONTINUATION OF PERMIT TO OPERATE

42. BELT CONVEYOR, C13C 24" W. X 30' L., ~~5~~ 10 H.P.

43. SURGE HOPPER, 75 TONS.

44. BELT CONVEYOR, NO. CS-1, 5 H.P.

45. BELT CONVEYOR, NO. CS-2, ~~15~~ 10 H.P.

~~46. WATER SPRAY SYSTEM WITH 68 SPRAY NOZZLES, JOHNSON-MARCH, 10 H.P.~~

~~47. CONE CRUSHER, SYMONS, MODEL 66", WITH A 250 H.P. MAIN DRIVE, A 5 H.P. LUBE PUMP AND A 7-1.2 H.P. ADJUSTER.~~

48. BELT CONVEYOR, NO. CS-3, ~~15~~ 5 H.P.

~~49. CLASSIFYING SCREEN, NO. VS-8, HEWITT-ROBINS, 8' X 20', 50 H.P.~~

50. BELT CONVEYOR, NO. CS-4, ~~5~~ 10 H.P.

51. BELT CONVEYOR, NO. ~~CS-5, 5~~ A-1 30 H.P.

52. BELT CONVEYOR, NO. ~~CS-6, 15~~ A-2 7.5 H.P.

53. BELT CONVEYOR, NO. ~~CS-7, 15~~ B 5 H.P.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

1. AGGREGATE CHARGED AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

. THIS SYSTEM SHALL NOT PROCESS MORE THAN 24,000 TONS PER DAY OF AGGREGATE.

. A DAILY OPERATING LOG SHOWING TONS OF AGGREGATE PROCESSED SHALL BE MAINTAINED BY THE OPERATOR. THIS OPERATING LOG SHALL BE KEPT ON FILE FOR TWO YEARS AND MADE AVAILABLE, UPO REQUEST, TO THE EXECUTIVE OFFICER OR HIS REPRESENTATIVE.

**THIS PERMIT CONCLUDES ON THE NEXT PAGE.**

# ATTACHMENT "F"

# BASE PLANT
# (D08811)

**Justice** & *Associates*

## United Rock - Base Plant - Emissions Before Increase

### Emission Evaluation

| | Description | Thruput (ton/day) | x | $PM_{10}$ AP-42 Emission Factors (lb/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 1 | Conveyors C28 and C29 to Surge Bins | 3,200 | | 0.000048 | | 0.1536 |
| 2 | Surge Bins to Conveyors C30 and C31 | 3,200 | | 0.000048 | | 0.1536 |
| 3 | Conveyors C30 and C31 to Pug Mills | 3,200 | | 0.000048 | | 0.1536 |
| 4 | Pugmills to Conveyors C32 and C33 | 3,200 | | 0.000048 | | 0.1536 |
| 5 | Conveyors C32 and C33 to Loadout Hoppers | 3,200 | | 0.000048 | | 0.1536 |
| | | | | Total $PM_{10}$ (lb/day) | | 0.7680 |
| | | | | Aggregate Thruput (ton/day) | ÷ | 3200 |
| | | | | Process Emissions Factor (lb/ton) | | 0.00024 |

### Total Facility Emissions

| Aggregate Thruput | | $PM_{10}$ Emissions Factor (lb/ton) | = | $PM_{10}$ Emission | |
|---|---|---|---|---|---|
| 96,000 | ton/month x | 0.00024 | | 23.04 | lb/month |
| 1,152,000 | ton/year x | 0.00024 | | 276.48 | lb/year |
| | | | | 0.14 | tons/yr |

**Justice** & *Associates*

## United Rock - Base Plant - Emissions After Increase

### *Emissions Evaluation*

| | Description | Thruput (ton/day) | x | $PM_{10}$ AP-42 Emission Factors (lb/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 1 | Conveyors C28 and C29 to Surge Bins | 5,000 | | 0.000048 | | 0.2400 |
| 2 | *Surge Bins to Conveyors C30 and C31* | *5,000* | | *0.000048* | | *0.2400* |
| 3 | Conveyors C30 and C31 to Pug Mills | 5,000 | | 0.000048 | | 0.2400 |
| 4 | Pugmills to Conveyors C32 and C33 | 5,000 | | 0.000048 | | 0.2400 |
| 5 | Conveyors C32 and C33 to Loadout Hoppers | 5,000 | | 0.000048 | | 0.2400 |
| | | | | Total $PM_{10}$ (lb/day) | | 1.2000 |
| | | | | Aggregate Thruput (ton/day) | ÷ | 5000 |
| | | | | Process Emissions Factor (lb/ton) | | 0.00024 |

### Total Facility Emissions

| Aggregate Thruput | | $PM_{10}$ Emissions Factor (lb/ton) | = | $PM_{10}$ Emission | |
|---|---|---|---|---|---|
| 150,000 | ton/month x | 0.00024 | | 36.00 | lb/month |
| 1,800,000 | ton/year x | 0.00024 | | 432.00 | lb/year |
| | | | | 0.22 | tons/yr |

### Summary of Emission Increase

| | $PM_{10}$ (lbs/year) | |
|---|---|---|
| Before | 276.48 | |
| After | 432.00 | |
| Increase | 155.52 | Total |

# ATTACHMENT "G"

# DRUM PLANT
# (D08812)

**Justice** & *Associates*

# United Rock - Drum Plant - Emissions Before Increase

## Emissions Evaluation

| | Description | Thruput (ton/day) | x | $PM_{10}$ AP-42 Emission Factors (lb/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 1 | Receiving Hoppers 1 and 2 to Incline Conveyor 3 | 4,000 | | -- | | -- |
| 2 | Incline Conveyor 3 to Shuttle Conveyor 4 | 4,000 | | 0.000048 | | 0.1920 |
| 3 | Shuttle Conveyor 4 to Asphalt Plant | 4,000 | | 0.000048 | | 0.1920 |
| | | | | Total $PM_{10}$ (lb/day) | | 0.3840 |
| | | | | Aggregate Thruput (ton/day) | ÷ | 4000 |
| | | | | Process Emissions Factor (lb/ton) | | 0.000096 |

## Total Facility Emissions

| Aggregate Thruput | | | $PM_{10}$ Emissions Factor (lb/ton) | = | $PM_{10}$ Emission | |
|---|---|---|---|---|---|---|
| 120,000 | ton/month | x | 0.000096 | | 11.52 | lb/month |
| 1,440,000 | ton/year | x | 0.000096 | | 138.24 | lbs/yr |
| | | | | | 0.069 | tons/yr |

**Justice** & Associates

# United Rock - Drum Plant - Emissions After Increase

## Emissions Evaluation

| | Description | Thruput (ton/day) | x | $PM_{10}$ AP-42 Emission Factors (lb/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 1 | Receiving Hoppers 1 and 2 to Feeder Conveyor 3 | 6,000 | | -- | | -- |
| 2 | Feeder Conveyor 3 to Incline Conveyor 4 | 6,000 | | 0.000048 | | 0.2880 |
| 3 | Incline Conveyor 4 to Shuttle Conveyor 5 | 6,000 | | 0.000048 | | 0.2880 |
| 4 | Shuttle Conveyor 5 to Asphalt Plant | 6,000 | | 0.000048 | | 0.2880 |
| | | | | Total $PM_{10}$ (lb/day) | | 0.8640 |
| | | | | Aggregate Thruput (ton/day) | ÷ | 6000 |
| | | | | Process Emissions Factor (lb/ton) | | 0.000144 |

## Total Facility Emissions

| Aggregate Thruput | | $PM_{10}$ Emissions Factor (lb/ton) | = | $PM_{10}$ Emission | |
|---|---|---|---|---|---|
| 180,000 | ton/month x | 0.000144 | | 25.92 | lb/month |
| 2,160,000 | ton/year x | 0.000144 | | 311.04 | lbs/yr |
| | | | | 0.16 | tons/yr |

## Summary of Emission Increase

| | $PM_{10}$ (lbs/year) | |
|---|---|---|
| Before | 138.24 | |
| After | 311.04 | |
| Increase | 172.8 | Total |

# ATTACHMENT "H"

# DRY LOADOUT SYSTEM
# (D08808)

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D08808
A/N 185072
Page 1

**This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.**

**Legal Owner**
**Or Operator:** UNITED ROCK PRODUCTS CORPORATION

ID 65341

**Equipment**
**located at:** 1245 EAST ARROW HIGHWAY, IRWINDALE, CALIFORNIA

**Equipment Description:**

CRUSHED AGGREGATE RECLAIMING, STORAGE AND LOADOUT SYSTEM CONSISTING OF:

1. BELT CONVEYOR NO. 27, RECLAIMING, 300 H.P. WITH A 1.5 H.P. DISCHARGE TURNHEAD.

2. SIX STORAGE BINS, NOS. 7 THROUGH 12; 200 TONS CAPACITY EACH, WITH PNEUMATICALLY OPERATED GATES.

3. FOUR AIR COMPRESSORS, TWO 20 H.P. AND TWO 15 H.P.

**Conditions:** 30Ton feedhopper

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. NOT MORE THAN 8000 TONS OF AGGREGATE SHALL BE PROCESSED IN ANY ONE DAY.

4. AGGREGATE CHARGED AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METER OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTIN LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Raquel Puerta/jas
July 6, 1989

UNITED ROCK PRODUCTS CORP.
ATTN: THOMAS S. TEDESCO
13131 LOS ANGELES ST.
IRWINDALE, CA. 91706

**Justice** & *Associates*

## United Rock - Dry Loadout - Emissions Before Increase

### Emission Evaluation

| | Description | Thruput (ton/day) | x | $PM_{10}$ AP-42 Emission Factors (lb/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 2 | Belt Conveyor to Receiving Hoppers | 8,000 | | 0.000048 | | 0.3840 |
| | | | | Total $PM_{10}$ (lb/day) | | 0.3840 |
| | | | | Aggregate Thruput (ton/day) | ÷ | 8000 |
| | | | | Process Emissions Factor (lb/ton) | | 0.000048 |

### Total Facility Emissions

| Aggregate Thruput | | $PM_{10}$ Emissions Factor (lb/ton) | = | $PM_{10}$ Emission | |
|---|---|---|---|---|---|
| 240,000 | ton/month | x 0.000048 | | 11.52 | lb/month |
| 2,880,000 | ton/year | x 0.000048 | | 138.24 | lbs/yr |
| | | | | 0.07 | tons/yr |

**Justice** & *Associates*

## United Rock - Dry Loadout - Emissions After Increase

### Emission Evaluation

| | Description | Thruput (ton/day) | x | $PM_{10}$ AP-42 Emission Factors (lb/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 1 | Belt Conveyor to Receiving Hoppers | 16,000 | | 0.000048 | | 0.7680 |
| | | | | Total $PM_{10}$ (lb/day) | | 0.7680 |
| | | | | Aggregate Thruput (ton/day) | ÷ | 16000 |
| | | | | Process Emissions Factor (lb/ton) | | 0.000048 |

### Total Facility Emissions

| Aggregate Thruput | | $PM_{10}$ Emissions Factor (lb/ton) | = | $PM_{10}$ Emission | |
|---|---|---|---|---|---|
| 480,000 | ton/month | x 0.000048 | | 23.04 | lb/month |
| 5,760,000 | ton/year | x 0.000048 | | 276.48 | lbs/yr |
| | | | | 0.14 | tons/yr |

### Summary of Emission Increase

| | $PM_{10}$ (lbs/year) | |
|---|---|---|
| Before | 138.24 | |
| After | 276.48 | |
| Increase | 138.24 | Total |

# ATTACHMENT "I"

# WET LOADOUT SYSTEM
# (D08809)

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D08809
A/N 185073
Page 1

**This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.E) is not received by the expiration date, contact the District.**

**Legal Owner**
**Or Operator:** UNITED ROCK PRODUCTS CORPORATION

ID 65341

**Equipment**
**located at:** 1245 EAST ARROW HIGHWAY, IRWINDALE, CALIFORNIA

**Equipment Description:**

WASHED SAND AND AGGREGATE RECLAIMING, STORAGE, AND LOADOUT SYSTEM CONSISTING OF:

1. BELT CONVEYOR NO. C-26, WASHED MATERIALS RECLAIMING, 250 H.P. WITH A 1.5 H.P. DISCHARGE TURNHEAD.

2. SIX STORAGE BINS, NOS. 1 THROUGH 6: 200 TON CAPACITY EACH, WITH PNEUMATICALLY OPERATED GATES.

3. FOUR AIR COMPRESSORS, TWO 20 H.P. AND TWO 15 H.P.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. NOT MORE THAN 8000 TONS OF SAND AND AGGREGATE SHALL BE PROCESSED IN ANY ONE DAY.

4. AGGREGATE CHARGED AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METE OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTI LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Raquel Puerta/jas
July 6, 1989

UNITED ROCK PRODUCTS CORP.
ATTN: THOMAS S. TEDESCO
13131 LOS ANGELES ST.
IRWINDALE, CA. 91706

# ATTACHMENT "J"

# NSR BALANCE




# AQMD C.P.P. Facility Information

Company ID: **65341**

Name : **UNITED ROCK PRODUCTS CORPORATION**
1245 ARROW HWY E
IRWINDALE CA 91706-1302

Telephone : (626) 3584558

Mail Address (optional)
1245 ARROW HWY E
IRWINDALE CA 91706-1302

| Chart of Accounts | Emission ID | Balance (lbs/day) |
|---|---|---|
| Emissions from new unit | PM10 | -2.000 |

| Appl # | Device ID | Permit # | Application Type | Application Status |
|---|---|---|---|---|
| 185071 | 0 | D08807 | Change of Ownership | PERMIT TO OPERATE GRANTED |
| 185072 | 0 | D08808 | Change of Ownership | PERMIT TO OPERATE GRANTED |
| 185073 | 0 | D08809 | Change of Ownership | PERMIT TO OPERATE GRANTED |
| 185074 | 0 | D08810 | Change of Ownership | PERMIT TO OPERATE GRANTED |
| 185075 | 0 | D08811 | Change of Ownership | PERMIT TO OPERATE GRANTED |
| 185076 | 0 | D08812 | Change of Ownership | PERMIT TO OPERATE GRANTED |
| 185077 | 0 | D08813 | Change of Ownership | PERMIT TO OPERATE GRANTED |
| 185084 | 0 | D16721 | Change of Ownership | PERMIT TO OPERATE GRANTED |
| 185085 | 0 | D17134 | Permit to Operate | PERMIT TO OPERATE GRANTED |
| 185086 | 0 | | Permit to Operate | APPLICATION CANCELLED, KEEP FILING FEES |
| 185087 | 0 | D16722 | Change of Ownership | PERMIT TO OPERATE GRANTED |
| 185088 | 0 | D16723 | Change of Ownership | PERMIT TO OPERATE GRANTED |
| 185089 | 0 | D16724 | Change of Ownership | PERMIT TO OPERATE GRANTED |
| 186857 | 0 | | Permit to Operate | APPLICATION CANCELLED, REFUND ALL FEES |

| | | | | |
|---|---|---|---|---|
| 186858 | 0 | D14490 | Rule 219 Application | PERMIT TO OPERATE GRANTED |
| 186859 | 0 | D14492 | Rule 219 Application | PERMIT TO OPERATE GRANTED |
| 186860 | 0 | D14493 | Rule 219 Application | PERMIT TO OPERATE GRANTED |
| 231453 | 0 | M96595 | Alteration | PERMIT TO OPERATE GRANTED |
| 279903 | 0 | | Plans & Excavation | BANKING/ PLAN GRANTED |

19 row(s)

Previous Page

*Last Update: 3/10/04*

*URL: http://ozone/cgi-bin/cpp/cpp?objtype=cppid&objopr=query*

**Need information or have a question? - webinquiry@aqmd.gov**
**To report a problem with the website - webeditor@aqmd.gov**
**21865 Copley Drive - Diamond Bar, California 91765**
**(800) CUT-SMOG (288-7664) - (909) 396-2000**

South Coast
Air Quality Management District
21865 E. Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000

**Date:** 04/14/04 12:58 PM **Receipt Nbr:** C34748

**Facility:** 65341 UNITED ROCKE PRODUCTS CORP

**Location Address:** 1245 E. ARROW HWY

**City:** RIWINDALE **State:** CA **Zip:** 91706 —

| Check nbr. | Amount | Check Nbr. | Amount |
|---|---|---|---|
| 13117 | $17,091.64 | | $.00 |
| | $.00 | | $.00 |
| | $.00 | | $.00 |
| | $.00 | | $.00 |
| | $.00 | | $.00 |

**Cash:** $.00

**Total:** $17,091.64

**Comments:** (2) APPLICATIONS
NEW CONSTRUCTION

**Received By:** AQMD Cashier

**Cashier Signature:** D. Van Den Heede

Duplicate Copy

SOUTH COAST AQMD

| JOB/SUB JOB NO | CO | DIV | VENDOR | REFERENCE | CHECK NO |
|---|---|---|---|---|---|
| | 30 | 200 | 70216 | | 013117 |

| INVOICE NUMBER | INVOICE DATE | DESCRIPTION | GROSS AMOUNT | DISCOUNT | NET AMOUNT |
|---|---|---|---|---|---|
| 04132004 | 04/13/04 | PERMIT FEES | 17,091.64 | | 17,091.64 |
| | | TOTALS | 17,091.64 | | 17,091.64 |

DETACH AND RETAIN THIS STATEMENT
THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED ABOVE
IF NOT CORRECT PLEASE NOTIFY US PROMPTLY. NO RECEIPT DESIRED.

To Reorder call Formation rng at (800) 693-3933

P/O Approved.
F73757
2.15.05 Miller

ROUTING RECORD

| DATE | FROM | TO | ACTION |
|---|---|---|---|
| 5-28-04 | RKM | RJS | ~~CLASS~~ I |
| 02-02-05 | RJS | RWM | ISSUE PO |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

REFERENCE TO OTHER APCD RECORDS INCLUDING VARIANCES




APPL # 430418
I. D. # 65341

ITED ROCK PRODUCTS CORPORATION
15 E ARROW HWY
VINDALE
GREGATE CONVEYING

Date: 05/25/04

UNITED ROCK PRODUCTS CORPORATION AP430418

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

# PERMIT TO OPERATE


Permit No.
F73757
A/N 430418

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership.
If the billing for the annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

ID 65341

Legal Owner
or Operator:

UNITED ROCK PRODUCTS CORPORATION
1245 E ARROW HWY
IRWINDALE, CA 91706-1302

**Equipment Location:** 1245 E ARROW HWY, IRWINDALE, CA 91706-1302

**Equipment Description :**

AGGREGATE PRE-CRUSHING, CONVEYING, AND STACKING SYSTEM NO.1 CONSISTING OF:

1. TWO RECEIVING HOPPERS, EACH WITH A VIBRATING GRIZZLY.
2. JAW CRUSHER, TELESMITH, 2'-6" W. X 4'-7" L., 150 H.P., WITH A PLATE FEEDER.
3. FOUR SCREENS NOS. 17, 18, 19, & 20, SVEDALA, 6'-0" W. X 20'-0" L., 40 H.P. EACH.
4. TWO UNDER SCREEN CONVEYORS NOS. 15, 16, 3'-6" W. X 40'-0" L., 20 H.P. EACH.
5. TWO SCREENS NOS. 21, & 22, SVEDALA, 5'-6" W. X 15'-0" L., 30 H.P. EACH.
6. SHUTTLE CONVEYOR NO. 14, 3'-6" W. X 60'-0" L., 30 H.P.
7. BELT CONVEYOR NO. 1, 3'-6" W. X 600'-0" L., 75 H.P.
8. BELT CONVEYOR NO. 2, 3'-6" W. X 350'-0" L., 125 H.P.
9. BELT CONVEYOR NO. 3, 3'-6" W. X 50'-0" L., 40 H.P.
10. BELT CONVEYOR NO. 4, 3'-6" W. X 650'-0" L., 275 H.P.
11. BELT CONVEYOR NO. 5, 3'-6" W. X 490'-0" L., 150 H.P.
12. BELT CONVEYOR NO. 6, 3'-6" W. X 130'-0" L., 75 H.P.
13. SEVEN BELT CONVEYORS NOS. 7 THRU 13, 3'-6" W. X 150'-0" L., 40 H.P. EACH.
14. BELT CONVEYOR NO. 11A, 3'-6" W. X 275'-0" L., 125 H.P. (COMMON TO A/N 438791)
15. STACKING CONVEYOR NO. 12A, 3'-6" W. X 200'-0" L., 150 H.P. (COMMON TO A/N 438791)

**FILE COPY**

# PERMIT TO OPERATE

CONTINUATION OF PERMIT TO OPERATE

**Conditions :**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THIS EQUIPMENT SHALL NOT PROCESS MORE THAN 336,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

5. THIS EQUIPMENT SHALL PROCESS WET MATERIAL FROM CLAMSHELL DREDGE ONLY.

6. THIS EQUIPMENT IS SUBJECT TO PART 60, CHAPTER 1, TITLE 40, CODE OF FEDERAL REGULATIONS, SUBPART OOO, STANDARD OF PERFORMANCE FOR NON-METALLIC MINERAL PROCESSING PLANTS.

7. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

**NOTICE**

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Dorris M Bailey

By Dorris M.Bailey/RS06
2/15/2005

**FILE COPY**

South Coast Air Quality Management District
P.O. Box 4944
Diamond Bar CA 91765
(909) 396-2000

# APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE FORM 400 - A

**Non-Title V Facilities:** This form must be accompanied by one or more 400-E-xx series forms(s). Complete this side of form only.
**Title V Facilities:** Complete both sides of this form. Include additional forms as necessary.

**NC/NOV NUMBER:**
**INSPECTOR** **SECTOR**
**ISSUE DATE**

## Section I - Company Information

LEGAL NAME OF OPERATOR: United Rock Products Corporation — ☐ IRS OR ☐ S.S. Number

PERMIT TO BE ISSUED TO (SEE INSTRUCTIONS): United Rock Products Corporation

BUSINESS MAILING ADDRESS: 1245 East Arrow Highway, Irwindale, CA 91706

PERMIT MAILING ADDRESS, IF DIFFERENT FROM BUSINESS MAILING ADDRESS:

TYPE OF ORGANIZATION
☒ Corporation ☐ Limited Partnership ☐ Government Entity
☐ Individual ☐ General Partnership ☐ Other (Fill In):

ARE YOU A SMALL BUSINESS? (SEE INSTRUCTIONS) ☐ Yes ☒ No
AVERAGE ANNUAL GROSS RECEIPT $
NUMBER OF EMPLOYEES
IS YOUR BUSINESS 51 % OR MORE WOMAN/MINORITY OWNED? ☐ Yes ☐ No

**THIS SECTION IS REQUIRED FOR ALL APPLICATIONS FOR NEW CONSTRUCTION OR MAJOR MODIFICATIONS.**
ARE ALL MAJOR SOURCES UNDER SAME OWNERSHIP IN CALIFORNIA IN COMPLIANCE WITH FEDERAL, STATE, AND LOCAL AIR POLLUTION CONTROL RULES? ☒ Yes ☐ No

ARE YOU THE OWNER OF THE EQUIPMENT UNDER THIS APPLICATION? ☒ Yes ☐ No ☐ IRS OR ☐ S.S.NUMBER
IF NO, ENTER THE LEGAL NAME OF OWNER

## Section II - Facility Information

EQUIPMENT ADDRESS/LOCATION: 1245 East Arrow Highway (NUMBER/STREET)
Irwindale (CITY OR COMMUNITY) CA 91706 (ZIP CODE)
FACILITY NAME: Irwindale
FACILITY ID NUMBER: 0 6 5 3 4 1

PRINT NAME OF CONTACT PERSON: Frank Keohane
TITLE OF CONTACT PERSON:
TYPE OF BUSINESS AT THIS FACILITY: Aggregate Production
PRIMARY SIC CODE FOR THIS FACILITY: 1442
NUMBER OF EMPLOYEES AT THIS FACILITY:
CONTACT PERSON'S TELEPHONE NUMBER: (626) 358-4558
CONTACT PERSON'S FAX NUMBER: (626) 357-9508
CONTACT PERSON'S E-MAIL ADDRESS:

## Section III - Application Type

DESCRIPTION OF EQUIPMENT: Aggregate Conveying
PREVIOUS PERMIT #S: D08810

APPLICATION FOR (SEE INSTRUCTIONS):
☐ NEW CONSTRUCTION
☐ EXISTING EQUIPMENT WITHOUT PERMIT
☐ EXISTING EQUIPMENT WITH EXPIRED PERMIT
☐ CHANGE OF LOCATION ☐ RECLAIM Processing Fee
☒ MODIFICATION
☐ CHANGE OF PERMITTEE
☐ CHANGE OF PERMIT CONDITION

ARE YOU SUBMITTING MULTIPLE APPLICATIONS FOR EQUIPMENT IDENTICAL TO THAT DESCRIBED ABOVE? ☐ Yes ☒ No

☐ **APPLICATION FOR NON-TITLE V EQUIPMENT PERMIT. CHECK THE SUPPLEMENTAL SERIES 400-E-xx FORM(S) SUBMITTED WITH THIS 400-A FORM:**

| | | | |
|---|---|---|---|
| ____ | 400-E-1 • PARTICULATE MATTER (PM-10) CONTROL EQUIPMENT | ____ | 400-E-13 • INTERNAL COMBUSTION EQUIPMENT |
| ____ | 400-E-2 • VOLATILE ORGANIC COMPOUND (VOC) CONTROL EQUIPMENT | ____ | 400-E-14 • OPEN PROCESS TANK |
| ____ | 400-E-3 • SCRUBBER | ____ | 400-E-14a • OPEN PROCESS TANK; PROCESS LINE |
| ____ | 400-E-4 • ABRASIVE BLASTING EQUIPMENT | ____ | 400-E-15 • PRINTING EQUIPMENT |
| ____ | 400-E-5 • DEGREASER | ____ | 400-E-16 • SOLID MATERIALS STORAGE EQUIPMENT |
| ____ | 400-E-7 • DRY CLEANING EQUIPMENT | ____ | 400-E-17 • SPRAY BOOTH/OPEN SPRAY |
| ____ | 400-E-8 • ETHYLENE OXIDE STERILIZER | ____ | 400-E-17a • POWDER SPRAY BOOTH |
| ____ | 400-E-9 • EXTERNAL COMBUSTION EQUIPMENT | ____ | 400-E-18 • STORAGE TANK (LIQUID & GASEOUS MATERIAL) |
| ____ | 400-E-10 • FOOD BROILER/FRYER | ____ | 400-E-19 • WAVE SOLDER MACHINE |
| ____ | 400-E-11 • FUEL DISPENSING AND STORAGE EQUIPMENT | ____ | 400-E-20 • ASBESTOS REMOVAL EQUIPMENT |
| ____ | 400-E-12 • GAS TURBINE | ____ | NONE • ADDITIONAL INFORMATION SUBMITTED AS REQUESTED ON FORM 400-E-GI |

☐ **APPLICATION FOR TITLE V FACILITY PERMIT. PROVIDE INFORMATION REQUESTED ON REVERSE SIDE OF THIS FORM.**

**I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT.**
SIGNATURE OF RESPONSIBLE OFFICIAL OF FIRM: Frank Keohane
TITLE OF RESPONSIBLE OFFICIAL OF FIRM: General Manager
TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL OF FIRM: Frank Keohane
RESPONSIBLE OFFICIALS TELEPHONE NUMBER: (626) 358-4558
DATE SIGNED: 5-18-04

**I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT.**
SIGNATURE OF PREPARER, IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM:
TITLE OF RESPONSIBLE OFFICIAL OF FIRM: Consultant
TYPE OR PRINT NAME OF PREPARER, IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM: Kimba Spencer
PREPARER'S TELEPHONE NUMBER: (562) 961-3494
DATE SIGNED: 5/18/04

**TITLE V FACILITIES ONLY: COMPLETE OTHER SIDE**

| AQMD USE ONLY | APPLICATION/TRACKING # | TYPE B C D | EQUIPMENT CATEGORY CODE: | FEE SCHEDULE: $ | VALIDATION |
|---|---|---|---|---|---|
| | 430478 | | | | 05/25/04 |
| ENG. A R DATE | ENG. A R DATE | CLASS I III IV | ASSIGNMENT UNIT / ENGINEER | ENF SECT. | CHECK/MONEY ORDER # / AMOUNT $ |

FORM 400-A, Rev. 3/98

(35803) 616 W CHECK

Job No. & Form 8536-6

# TITLE V APPLICATION CERTIFICATION

**- TO BE COMPLETED BY TITLE V FACILITIES ONLY -**

## Section IV Title V Application

1. This is an application for a(n) (Check all applicable boxes and provide the requested information as appropriate):
   a. ☐ Initial Title V Permit
   b. ☐ Permit Renewal: Provide current permit expiration date: _____
   c. ☐ Administrative Permit Revision (Check all that apply)
      ☐ Change of Ownership. (Complete and attach equipment-specific Form 400-E-xx series forms)
      ☐ Change of Facility Information
      ☐ Other, Please specify: _____
   d. ☐ Other (Complete and attach equipment specific form 400-E-XX series form(s) to this form if your application involves permit action for new construction, change of location, non-administrative permit revision, alternative operating scenario (AOS), permit shield, streamlined permit conditions, or temporary source permit.)
2. Is this facility required to prepare a Risk Management Plan (RMP) for another agency? ☐ Yes ☐ No

## Section V Title V Submittal Checklist

1. Enter the quantity of each type form submitted in the space provided:

| | | | |
|---|---|---|---|
| _____ | 500-A2 | _____ | 500-F1 |
| _____ | 500-B | _____ | 500-F2 |
| _____ | 500-C1 | _____ | 500-F3 |
| _____ | 500-C2 | _____ | 500-F4 |
| _____ | 500-D | _____ | Other (specify): _____ |

2. Additional information referenced in this application submitted (Check **ALL** that apply):
   a. ☐ Existing Facility Permit
   b. ☐ Preliminary Facility Permit
   c. ☐ EFB Report for Year(s) _____
   d. ☐ None
   e. ☐ Other (Specify): _____
3. Supplemental information included with this application submittal (Check **ALL** that Apply):
   a. ☐ Facility Plot Plan
   b. ☐ MSDS Sheet(s)
   c. ☐ None
   d. ☐ Other (Specify): _____

**AQMD USE ONLY**

| APPLICATION TYPE | 30 DAY PUBLIC NOTICE START DATE | 30 DAY PUBLIC NOTICE END DATE | PUBLIC HEARING DATE | 45-DAY EPA REVIEW START DATE | 45-DAY EPA REVIEW END DATE |
|---|---|---|---|---|---|
| INITIAL, RENEWAL & SIGNIFICANT | | | | | |
| MINOR & DE MINIMIS | | | | | |
| ESTABLISH GENERAL PERMIT | | | | | |

**USE THE SECTIONS BELOW FOR TITLE V INITIAL AND RENEWAL APPLICATIONS ONLY:**

| APPLICATION/TRACKING # | TYPE B C D | EQUIPMENT CATEGORY CODE: ___ ___ ___ ___ ___ / ___ ___ | FEE SCHEDULE: $ | VALIDATION |
|---|---|---|---|---|
| | | | | |

| ENG. A R DATE | ENG. A R DATE | CLASS I III IV | ASSIGNMENT UNIT ENGINEER | ENF. SECT. | CHECK/MONEY ORDER AMOUNT # $ |
|---|---|---|---|---|---|
| | | | | | |

FORM 400-A, Rev. 3/98

4 MAY 21 P3:24

S.C.A.Q.M.D. ENGINEERING

South Coast Air Quality Management District
21865 East Copley Drive
Diamond Bar, CA 91765
(909) 396- 2000

# CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) APPLICABILITY FORM 400 - CEQA

The SCAQMD is required by state law, the California Environmental Quality Act (CEQA), to review discretionary permit project applications for potential air quality and other environmental impacts. This form is a screening tool to assist the SCAQMD in clarifying whether or not the project[1] has the potential to generate significant adverse environmental impacts that might require preparation of a CEQA document [CEQA Guidelines §15060(a)].[2] Refer to the attached instructions for guidance in completing this form.[3] For each Form 400-A application, also complete and submit one Form 400-CEQA. If submitting multiple Form 400-A applications for the same project, only one 400-CEQA form is necessary for the entire project. If you need assistance completing this form, contact Lori Inga at (909) 396-3109.

## FACILITY INFORMATION

**Facility Name:** United Rock Products **Facility ID** (6-Digit): 065341

**Project Description:** Aggregate production facility.

## REVIEW FOR EXEMPTION FROM FURTHER CEQA ACTION

Check "Yes" or "No" as applicable

| | Yes | No | Is this application for... |
|---|---|---|---|
| A. | ☐ | ☒ | **A request for a change of permittee only (without equipment modifications)?** |
| B. | ☐ | ☒ | **Equipment certification or equipment registration?** |
| C. | ☐ | ☒ | **A CEQA and/or NEPA document previously or currently prepared that specifically evaluates this project?** If yes, a permit cannot be issued until a Final CEQA document and Notice of Determination is submitted. |
| D. | ☐ | ☒ | **Equipment damaged as a result of a disaster during state of emergency?** |
| E. | ☐ | ☒ | **A Title V permit renewal (without equipment modifications)?** |
| F. | ☐ | ☒ | **A Title V administrative permit revision?** |
| G. | ☐ | ☒ | **The conversion of an existing permit into an initial Title V permit?** |
| H. | ☐ | ☒ | **A functionally identical permit unit replacement with no increase in rating or emissions?** |
| I. | ☐ | ☒ | **A change of daily VOC permit limit to a monthly VOC permit limit?** |

If "Yes" is checked for any question above, your application does not require additional evaluation for CEQA applicability. Skip to page 2, "SIGNATURES" and sign and date this form.

## REVIEW OF IMPACTS WHICH MAY TRIGGER CEQA

Complete Sections I-V by checking "Yes" or "No" as applicable. To avoid delays in processing your application(s), explain all "Yes" responses on a separate sheet and attach it to this form.

| | Yes | No | Section I - General |
|---|---|---|---|
| 1. | ☐ | ☒ | **Has this project generated any known public controversy regarding potential adverse impacts that may be generated by the project?** Controversy may be construed as concerns raised by local groups at public meetings; adverse media attention such as negative articles in newspapers or other periodical publications, local news programs, environmental justice issues, etc. |
| 2. | ☐ | ☒ | **Is this project part of a larger project?** |
| | | | **Section II - Air Quality** |
| 3. | ☐ | ☒ | **Will there be any demolition, excavating, and/or grading construction activities that encompass an area exceeding 20,000 square feet?** |
| 4. | ☒ | ☐ | **Does this project include the open outdoor storage of dry bulk solid materials that could generate dust?** If Yes, include a plot plan with the application package. |

1. A "project" means the whole of an action which has a potential for resulting in physical change to the environment, including construction activities, clearing or grading of land, improvements to existing structures, and activities or equipment involving the issuance of a permit. For example, a project might include installation of a new, or modification of an existing internal combustion engine, dry-cleaning facility, boiler, gas turbine, spray coating booth, solvent cleaning tank, etc.
2. To download the CEQA guidelines, visit http://ceres.ca.gov/env_law/state.html.
3. To download this form and the instructions, visit http://www.aqmd.gov/ceqa.

| | Yes | No | |
|---|---|---|---|
| 5. | ☐ | ☒ | **Would this project result in noticeable off-site odors from activities that may not be subject to SCAQMD permit requirements?** For example, compost materials or other types of greenwaste (i.e., lawn clippings, tree trimmings, etc.) have the potential to generate odor complaints subject to Rule 402 - Nuisance. |
| 6. | ☐ | ☒ | **Does this project cause an increase of emissions from marine vessels, trains and/or airplanes?** |
| 7. | ☐ | ☒ | **Will the proposed project increase the QUANTITY of hazardous materials stored aboveground onsite or transported by mobile vehicle to or from the site by greater than or equal to the amounts associated with each compound on the attached Table 1?[4]** |
| | | | **Section III - Water Resources** |
| 8. | ☐ | ☒ | **Will the project increase demand for water at the facility by more than 5,000,000 gallons per day?** The following examples identify some, but not all, types of projects that may result in a "yes" answer to this question: 1) projects that generate steam; 2) projects that use water as part of the air pollution control equipment; 3) projects that require water as part of the production process; 4) projects that require new or expansion of existing sewage treatment facilities; 5) projects where water demand exceeds the capacity of the local water purveyor to supply sufficient water for the project; and 6) projects that require new or expansion of existing water supply facilities. |
| 9. | ☐ | ☒ | **Will the project require construction of new water conveyance infrastructure?** Examples of such projects are when water demands exceed the capacity of the local water purveyor to supply sufficient water for the project, or require new or modified sewage treatment facilities such that the project requires new water lines, sewage lines sewage hook ups etc |
| | | | **Section IV - Transportation / Circulation** |
| 10. | | | **Will the project result in** (Check all that apply): |
| | ☐ | ☒ | **a. the need for more than 350 new employees?** |
| | ☐ | ☒ | **b. an increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round-trips per day?** |
| | ☐ | ☒ | **c. increase customer traffic by more than 700 visits per day?** |
| | | | **Section V - Noise** |
| 11. | ☐ | ☒ | **Will the project include equipment with a noise specification GREATER THAN 90 decibels (dB)?** |
| | | | **Section VI - Public Services** |
| 12. | | | **Will the project create a permanent need for new or additional public services in any of the following areas** (Check all that apply): |
| | ☐ | ☒ | **a. Solid waste disposal?** Check "No" if the projected potential amount of wastes generated by the project is less than five tons per day. |
| | ☐ | ☒ | **b. Hazardous waste disposal?** Check "No" if the projected potential amount of hazardous wastes generated by the project is less than 42 cubic yards per day (or equivalent in pounds) |

**REMINDER For each 'Yes' checked in the sections above, attach all pertinent information including but not limited to estimated quantities - volumes, weights, etc -**

## SIGNATURES

I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. I UNDERSTAND THAT THIS FORM IS A SCREENING TOOL AND THAT THE SCAQMD RESERVES THE RIGHT TO CONSIDER OTHER PERTINENT INFORMATION IN DETERMINING CEQA APPLICABILITY.

| SIGNATURE OF RESPONSIBLE OFFICIAL OF FIRM: | TITLE OF RESPONSIBLE OFFICIAL OF FIRM: | |
|---|---|---|
| Frank Keohane | General Manager | |
| TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL OF FIRM: | RESPONSIBLE OFFICIAL'S TELEPHONE NUMBER: | DATE Signed: |
| Frank Keohane | (626) 358-4558 | |
| SIGNATURE OF PREPARER, IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM: | TITLE OF PREPARER: | |
| | Consultant | |
| TYPE OR PRINT NAME OF PREPARER: | PREPARER'S TELEPHONE NUMBER: | DATE Signed: |
| Kimba Spencer | (562) 961-3494 | 8/27/04 |

*THIS CONCLUDES FORM 400-CEQA. INCLUDE THIS FORM AND THE ATTACHMENTS WITH FORM 400-A.*

4. Table I - Regulated Substances List and Threshold Quantities for Accidental Release Prevention can be found in the Instructions for Form 400-CEQA.

SCAQMD PERMIT PROCESSING SYSTEM (PPS)

# FEE DATA - SUMMARY SHEET

| | | | |
|---|---|---|---|
| Application No : | 430418 | IRS/SS No: | |
| Previous Application No: | 185074 | Previous Permit No: | D08810 |

| | |
|---|---|
| Company Name : | UNITED ROCK PRODUCTS CORPORATION |
| Equipment Street: | 1245 E ARROWHWY , IRWINDALE CA 91706 |
| Equipment Desc : | AGGREGATE PRODN/CRUSH >= 5000 TPD |

Facility ID: 65341

| | | | | | |
|---|---|---|---|---|---|
| Equipment Type : | BASIC | | | Fee Charged by: | B-CAT |
| B-CAT NO. : | 107752 | C-CAT NO: | 00 | Fee Schedule: | D |
| Facility Zone : | 09 | Deemed Compl. Date: | 6/10/2004 | Public Notice: | NO |

| | |
|---|---|
| Evaluation Type : | ALTERATION/MODIFICATION (PO NO PC) |
| Disposition : | Approve PO, Recommended by Engineer |
| Lead Appl. No : | |

Small Business: ☐
Penalty: ☑
Identical Permit Unit: ☐

| | | | | | |
|---|---|---|---|---|---|
| Air quality Analysis | | | $0.00 | Filing Fee Paid: | $0.00 |
| E.I.R | | | $0.00 | Permit Processing Fee Paid: | $4,622.78 |
| Health Risk Assessment | | | $0.00 | Permit Processing Fee Calculated*: | $4,622.78 |
| Significant Project | | | $0.00 | Permit Processing Fee Adjustment: | $0.00 |
| Express Processing | Hours: | 0.00 | $0.00 | | |
| Source Test Review | Hours: | 0.00 | $0.00 | | |
| Time & Material | Hours: | 0.00 | $0.00 | | |
| | | | | Total Additional Fee: | $0.00 |
| | | | | Additional Charge: | $0.00 |

COMMENTS:

RECOMMENDED BY: RAJENDRA SINGH DATE: 02/01/2005

REVIEWED BY: _____ DATE: 2-15-05

* ADJUSTED FOR SMALL BUSINESS, IDENTICAL EQUIPMENT AND P/O NO P/C PENALTY

SCAQMD PERMIT PROCESSING SYSTEM (PPS)

# AEIS DATA SHEET

Company Name : UNITED ROCK PRODUCTS CORPORATION
Facility ID : 65341
Equipment Address : 1245 E ARROW HWY
IRWINDALE CA 91706

Application Number : 430418
Equipment B-Cat : 107752
Estimated Completion Date : 02/01/05
Equipment C-Cat :
Equipment Type : Basic
Equipment Description : AGGREGATE PRODN/CRUSH >= 5000 TPD

| | Emissions | |
|---|---|---|
| Emittants | R1 LB/HR | R2 LB/HR |
| PM10 | 0.01 | 0.01 |

**Applicable Rules**

| | | |
|---|---|---|
| 1401 | 05/02/2003 | New Source Review of Toxic Air Contaminants |
| 401 | 11/09/2001 | Visible Emissions |
| 402 | 05/07/1976 | Nuisance |
| 403 | 04/02/2004 | Fugitive Dust |
| 405 | 02/07/1986 | Solid Particulate Matter - Weight |

| | Mon | Tue | Wed | Thu | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|
| Daily Start Times : | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 |
| Daily Stop Times : | 24:00 | 24:00 | 24:00 | 24:00 | 24:00 | 24:00 | 24:00 |

User's Initials : RS06 Date: 02/01/05 Supervisor's Name : _____ Review Date : 2/15/05

# NSR DATA SUMMARY SHEET

Application No: 430418
Application Type: Alteration
Application Status: PENDAPPRV
Previous Apps,Dev,Permit #: 185074, 0 - x, NONE

---

Company Name: UNITED ROCK PRODUCTS CORPORATION
Company ID: 65341
Address: 1245 E ARROW HWY,IRWINDALE, CA 91706-1302
RECLAIM: NO
RECLAIM Zone: 02A
Air Basin: SC
Zone: 09
Title V: NO

---

Device ID: 0 - AGGREGATE-PROD
Estimated Completion Date:
Heat Input Capacity: 0 Million BTU/hr
Priority Reserve: NONE - No Priority Access Requested
Recommended Disposition: 31 - PERMIT TO OPERATE GRANTED
PR Expiration:
School Within 1000 Feet: NO
Operating Weeks Per Year: 52
Operating Days Per Week: 7
Monday Operating Hours: 00:00 to 24:00
Tuesday Operating Hours: 00:00 to 24:00
Wednesday Operating Hours: 00:00 to 24:00
Thursday Operating Hours: 00:00 to 24:00
Friday Operating Hours: 00:00 to 24:00
Saturday Operating Hours: 00:00 to 24:00
Sunday Operating Hours: 00:00 to 24:00

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Emittant: PM10
BACT:
Cost Effectiveness: NO
Source Type: MINOR
Emis Increase: 0
Modeling: N/A
Public Notice: N/A
CONTROLLED EMISSION
Max Hourly: 0 lbs/hr
Max Daily: 0 lbs/day
UNCONTROLLED EMISSION
Max Hourly: 0 lbs/hr
Max Daily: 0 lbs/day
CURRENT EMISSION
BACT 30 days Avg: 0 lbs/day
Annual Emission: 0 lbs/yr
District Exemption: None

SUPERVISOR'S APPROVAL: _____ SUPERVISOR'S REVIEW DATE: 2-15-05

Processed By: rsingh 2/1/2005 2:43:22 PM

| SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT | PAGE | 1 of 9 |
|---|---|---|
| | APPL.NO. | 430403, 430418, and 438791 |
| ENGINEERING AND COMPLIANCE DIVISION | PROCESSED BY: | R. Singh |
| | CHECKED BY | |
| APPLICATION PROCESSING AND CALCULATION | DATE | 02/02/05 |

# PERMIT TO CONSTRUCT/OPERATE EVALUATION,

| | |
|---|---|
| **Applicant's Name** | **UNITED ROCK PRODUCTS CORPORATION** |
| **Company I.D.** | **65341** |
| **Mailing Address** | **1245 E. ARROW HIGHWAY, IRWINDALE, CA 91706** |
| **Equipment Address** | **1245 E. ARROW HIGHWAY, IRWINDALE, CA 91706** |
| **APPLICATION NUMBER** | **430403, 430418, 438791** |

## BACKGROUND:

These applications were submitted for modifications to three aggregate crushing / screening and conveying plants operating under valid permits. A/N 430403 for the main aggregate plant (currently operating under PO # D08813) was submitted on 5/25/04 to change the daily production limit to a monthly limit without changing the throughput and to install spray nozzles at crushers to control PM emissions. Originally, the application was submitted as an administrative change. However, it is being processed as a modification due to equipment changes and addition of spray nozzles..The applicant has been informed of the additional fee that will be charged.

A/N 430418 was initially submitted to consolidate equipment in two rock pre- crushing plants into one permit unit. The two systems are currently operating under PO #s D08810 and D08807. A review of the two permits indicated that combining the two systems will increase the emissions and will require offsets for PM10. After speaking to the applicant's consultant, it was decided to keep the two systems separated. Consequently, a new application (A/N 438791) was received on 1/13/05 to modify the second plant. A/N 430418 will modify PO # D08810 and the new A/N 438791 will modify PO # D08807. The applicant has also requested to change the daily production limits in these permits to monthly limits.

A check on the compliance data indicates one open violation and an open notice of compliance. These will not affect the applications being processed here. The facility is in an industrial area and there are no schools within 1000 feet of this facility.

**EQUIPMENT DESCRIPTION:**

Application No. 430403

AGGREGATE CRUSHING, SCREENING, AND STACKING SYSTEM CONSISTING OF:

1. VIBRATING FEEDER FROM STORAGE
2. BELT CONVEYOR NO. C-1 A, 300 HP.
3. BELT CONVEYOR NO. C-1, 250 HP.
4. TWO CLASSIFYING SCREWS VS-I AND VS-2, HEWITT-ROBINS, DOUBLE DECK, 8'-0" W. X 20'-0" L, 30 HP EACH.
5. BELT CONVEYOR NO. C-5, 100 HP.
6. BELT CONVEYOR NO. C-6, 75 HP.
7. TWO CLASSIFYING SCREENS, VS-4 AND VS-5, WET SCREENING, HEWITT-ROBINS, DOUBLE DECK, 8'-0" W X 20'-0"L, 30 HP EACH
8. CLASSIFYING TANK, EAGLE, 10'-0" W. X 40'-0" L., 10 HP.
9. WASHER NO. 1, WEMCO, MODEL B, 15 HP.
10. THREE WASHERS NOS. 2, 3, & 4, KOLBERG, 40 HP EACH.
11. METERING BIN, 20 TON CAPACITY.
12. BELT CONVEYOR NO. C-21, 5 HP.
13. SURGE BIN, 75 TONS CAPACITY.
14. BELT CONVEYOR NO. C-13, 30 HP.
15. BELT CONVEYOR NO. C-13B, CRUSHER FEED, 15 HP.
16. BELT CONVEYOR NO. C-13C, 2'-0" W. X 30'-0" L., 10 HP.
17. BELT CONVEYOR NO. C-7, 7-/2 HP.
18. SURGE BIN, 100 TON CAPACITY.
19. BELT CONVEYOR NO. C-11, 7-1/2 HP.
20. BELT CONVEYOR NO. C-12, 10 HP.
21. CONE CRUSHER NO. CR-3, NORDBERG, 200 HP.
22. CONE CRUSHER NO. CR-4, NORDBERG, 300 HP.
23. BELT CONVEYOR NO. C-8, 5 HP.
24. TWO SURGE BINS, 36 TONS CAPACITY EACH,
25. BELT CONVEYOR NO. C-9, 15 HP.
26. BELT CONVEYOR, NO. C-10, 5 HP.
27. CONE CRUSHER NO. CR-1, NORDBERG, size 5', WITH A 500 HP MAIN DRIVE.
28. CONE CRUSHER NO. CR-2, NORDBERG, MODEL HP-300, WITH A 300 HP MAIN DRIVE.
29. BELT CONVEYOR NO. C-2, 50 HP.
30. BELT CONVEYOR NO. C-3, 100 HP.
31. BELT CONVEYOR NO. C-4, 150 HP.
32. FOUR CLASSIFYING SCREENS NOS. VS-6A, VS-6B, VS-7A, VS-7B, HEWTT-ROBINS, DOUBLE DECK, 8'-0" W. X 20'-0" L., EACH 30 H.P.
33. CLASSIFYING SCREEN NO. VS-6C, SIMPLICITY, 6'-0" W. X 20'-0" L., TRIPLE DECK, 30 HP.
34. BELT CONVEYOR NO. C-14, 15 HP.
35. BELT CONVEYOR NO. C-15, 15 HP.
36. BELT CONVEYOR NO. C-16, 15 HP.
37. BELT CONVEYOR NO. C-17, 20 HP.
38. BELT CONVEYOR NO. C-18, 10 HP.
39. BELT CONVEYOR NO. C-19, 20 HP.
40. BELT CONVEYOR NO. C-20, 7-1/2 HP.

41. BELT CONVEYOR NO. C-22, 15 HP.
42. BELT CONVEYOR NO. C-23, 30 HP.
43. BELT CONVEYOR NO. C-24, 20 HP.
44. BELT CONVEYOR NO. C-25, 40 HP.
45. BELT CONVEYOR NO. CS-1, 5 HP.
46. BELT CONVEYOR NO. CS-2, 10 HP.
47. BELT CONVEYOR NO. CS-3, 5 HP.
48. BELT CONVEYOR NO. CS-4, 10 HP.
49. SURGE HOPPER, 75 TON CAPACITY.
50. BELT CONVEYOR NO. A-1, 30 HP.
51. BELT CONVEYOR NO. A-2, 7-1/2 HP.
52. BELT CONVEYOR. NO. B, 5 HP.
53. HIGH PRESSURE WATER SPRAY SYSTEM, NESCO, MODEL DUST PRO, 200 PSI, 20 GPM, WITH EIGHT SPRAY LINES.

Application No. 430418

AGGREGATE PRE-CRUSHING, CONVEYING, AND STACKING SYSTEM NO.1 CONSISTING OF:

1. TWO RECEIVING HOPPERS, EACH WITH A VIBRATING GRIZZLY.
2. JAW CRUSHER, TELESMITH, 2'-6" W. X 4'-7" L., 150 H.P., WITH A PLATE FEEDER.
3. FOUR SCREENS NOS. 17, 18, 19, & 20, SVEDALA, 6'-0" W. X 20'-0" L., 40 H.P. EACH.
4. TWO UNDER SCREEN CONVEYORS NOS. 15, 16, 3'-6" W. X 40'-0" L., 20 H.P. EACH.
5. TWO SCREENS NOS. 21, & 22, SVEDALA, 5'-6" W. X 15'-0" L., 30 H.P. EACH.
6. SHUTTLE CONVEYOR NO. 14, 3'-6" W. X 60'-0" L., 30 H.P.
7. BELT CONVEYOR NO. 1, 3'-6" W. X 600'-0" L., 75 H.P.
8. BELT CONVEYOR NO. 2, 3'-6" W. X 350'-0" L., 125 H.P.
9. BELT CONVEYOR NO. 3, 3'-6" W. X 50'-0" L., 40 H.P.
10. BELT CONVEYOR NO. 4, 3'-6" W. X 650'-0" L., 275 H.P.
11. BELT CONVEYOR NO. 5, 3'-6" W. X 490'-0" L., 150 H.P.
12. BELT CONVEYOR NO. 6, 3'-6" W. X 130'-0" L., 75 H.P.
13. SEVEN BELT CONVEYORS NOS. 7 THRU 13, 3'-6" W. X 150'-0" L., 40 H.P. EACH.
14. BELT CONVEYOR NO. 11A, 3'-6" W. X 275'-0" L., 125 H.P. (COMMON TO A/N 438791)
15. STACKING CONVEYOR NO. 12A, 3'-6" W. X 200'-0" L., 150 H.P. (COMMON TO A/N 438791)

Application No. 438791

AGGREGATE PRE-CRUSHING, CONVEYING, AND STACKING SYSTEM NO. 2 CONSISTING OF:

1. RECEIVING HOPPER, WITH A VIBRATING GRIZZLY FEEDER.
2. JAW CRUSHER, MINYU, 3'-4" W. X 3'-6" L., 150 H.P.
3. UNDER JAW BELT CONVEYOR NO. 3A, 3'-6" W. X 30'-0" L., 30 H.P.
4. BELT CONVEYOR NO. 3, 3'-6" W. X 1000'-0" L., 150 H.P.
5. BELT CONVEYOR NO. 4, 3'-6" W. X 675'-0" L., 400 H.P.
6. BELT CONVEYOR NO. 5, 3'-6" W. X 890'-0" L., 75 H.P.
7. BELT CONVEYOR NO. 6, 3'-6" W. X 125'-0" L., 50 H.P.
8. BELT CONVEYOR NO. 7, 3'-6" W. X 540'-0" L., 150 H.P.
9. BELT CONVEYOR NO. 8, 3'-6" W. X 1150'-0" L., 150 H.P.
10. BELT CONVEYOR NO. 9, 3'-6" W. X 850'-0" L., 150 H.P.

11. BELT CONVEYOR NO. 10, 3'-6" W. X 150'-0" L., 150 H.P.
12. BELT CONVEYOR NO. 11A, 3'-6" W. X 275'-0" L., 125 H.P. (COMMON TO A/N 430418)
13. STACKING CONVEYOR NO. 12A, 3'-6" W. X 200'-0" L., 150 H.P. (COMMON TO A/N 430418)

## PROCESS DESCRIPTION:

A/N 430403 – This is the main aggregate plant. The attached flow diagram shows the operation of the system and material flow. During this modification a high pressure water spray system will be installed to control PM emissions. The spray system consists of a 20 gpm, 200 psi pump, and a spray nozzles as shown on the attached flow diagram. The equipment changes are shown on the attached marked up copy of the existing permit. There is no change in throughput; therefore, no increase in emissions is expected as a result of this modification.

A/N 430418 – This rock pre-crushing and conveying system processes wet material from a clamshell dredge. The attached flow diagram shows the operation of the system and material flow. During this modification, some equipment changes are being made as shown on the attached marked up copy of the existing permit. There is no change in throughput; therefore, no increase in emissions is expected as a result of this modification.

A/N 438791 – This rock pre-crushing and conveying system is being modified to replace a crusher and install spray nozzles to control PM emissions from the crushing operation. The attached flow diagram shows the operation of the system and material flow. The equipment changes are shown on the attached marked up copy of the existing permit. This and the other pre-crushing system (A/N 430418), both feed the primary surge pile using two common conveyors. Currently, these two conveyors are not covered by any of the two existing permits for these two systems (PO # D08807 and PO # D08810). Therefore, these two conveyors are being included in this application. There is no change in throughput. The only increase in PM emissions will be due to the inclusion of these two conveyors.

## OPERATING SCHEDULE:

Maximum: 24 hrs per day, 7 days per week, 52 weeks per year
Average: same

## EMISSION CALCULATIONS:

Application No. 430403

Throughput = 24,000 tons per day
= 720,000 tons / month (permit condition)

There is no change in throughput. The PM emissions are expected to be reduced due to addition of spray nozzles. The emission calculations are presented in the attached sheets. These calculations were performed by the applicant's consultant and are being used after checking the accuracy of the calculations. Emission factors used in these calculations are taken from AP-42, Table 11.19.2-2 for crushed stone processing (attached). The controlled PM10 emission factors are based on use of water spray to control particulate emissions.

From the attached calculations:

R2 (PM10) = 80.15 lbs / day
= 3.34 lbs./ hr @ 24 hrs / day

The uncontrolled emissions are calculated assuming 90 % reduction in emissions due to water spray,

R1 (PM10) = (3.34 lbs / hr) / (1-0.9)
= 33.4 lbs / hr

Assuming PM10 = 50 % of PM

R1 (PM) = 2 x 33.4 lbs / hr
= 66.8 lbs./ hr.
R2 (PM) = 2 x 3.34 lbs./ hr
= 6.68 lbs./ hr.

This is less than the 30 lb / hr allowable limit in Table 405 (a) for process weight of 1,000 tons per hr..

AEIS and NSR Emission Data

R1 (PM10) =33.4 lb / hr
R2 (PM10) = 3.34 lb / hr.

30-Day average (PM10) = (3.34 lbs / hr. x 24 hrs / day x 30 days / month) / 30
= 80.16 lb / day

Annual average (PM10) = (3.34 lbs./ hr. x 24 hrs./ day x 7 days / wk. x 52 wks./ yr.)/2000
= 14.6 tons / yr.

From the NSR data base, the PM10 emissions prior to this modification are 26 lbs / hr. Thus, there is a decrease in emissions due to this modification.

Application No. 430418

Throughput = 11,200 tons per day
= 336,000 tons / month (permit condition)

This site operates a clamshell dredge. The material is completely wet and therefore, PM10 emissions from this process are expected to insignificant.

AEIS and NSR Emission Data

R1 (PM10) = 0 lb / hr
R2 (PM10) = 0 lb / hr.

Application No. 438791

Throughput = 9,600 tons per day
= 288,000 tons / month (permit condition)

There is no change in throughput. The PM emissions are expected to be reduced to due to addition of a spray nozzle at the jaw crusher. The emission calculations are presented in the attached sheet. Emission factors used in these calculations are taken from AP-42, Table 11.19.2-2 for crushed stone processing (attached).

From the attached calculations:

R2 (PM10) = 10.5 lbs / day
= 0.44 lbs./ hr @ 24 hrs / day

The uncontrolled emissions are calculated assuming 90 % reduction in emissions due to water spray,

R1 (PM10) = (0.44 lbs / hr) / (1-0.9)
= 4.4 lbs / hr

Assuming PM10 = 50 % of PM

R1 (PM) = 2 x 4.4 lbs / hr
= 8.8 lbs./ hr.

R2 (PM) = 2 x 0.44 lbs / hr
= 0.88 lbs / hr.

This is much less than the 28 lb / hr allowable limit in Table 405 (a) for process weight of 400 tons per hr..

AEIS and NSR Emission Data

R1 (PM10) = 4.4 lb / hr
R2 (PM10) = 0.44 lb / hr.

30-Day average (R2-PM10) = (0.44 lbs / hr. x 24 hrs / day x 30 days / month) / 30
= 10.992 lb / day

Annual average (R2-PM10) = (0.458 lbs / hr. x 24 hrs / day x 7 days / wk. x 52 wks / yr)/2000
= 1.92 tons / yr.

From the NSR data base, the PM10 emissions prior to this modification are 2.6 lbs / hr. Thus, there is a decrease in emissions after the modification..

**RULES:**

RULE 212 — There are no schools within 1000 feet of the facility. Public notice is not required.

RULE 401 — Visible emissions are not expected with proper maintenance and operation of this equipment. Compliance is expected.

RULE 402 — Operation of this equipment is not expected to create a nuisance. Compliance is expected.

RULE 403 — Fugitive dust is not expected with proper use of water spray as specified in permit conditions. Compliance is expected.

RULE 405 — As shown in the above calculations, the PM emissions are much smaller than the rate allowed in Table 405 (a) of this rule. Compliance is expected.

REG. XIII — New Source Review:

A/N 430403: From the NSR data base, the PM10 emissions prior to this modification are 26 lbs / hr. The calculated PM10 emissions after modification are 3.34 lbs / hr. Thus, there is a decrease in emissions due to this modification. Therefore, Regulation XIII evaluation is not required.

A/N 430418: This system processes wet material from a clamshell dredge. No significant emissions are expected from this process.

A/N 438791: From the NSR data base, the PM10 emissions prior to this modification are 2.6 lbs / hr. The calculated PM10 emissions after modification are 0.44 lbs / hr. Thus, there is a decrease in emissions due to this modification. Therefore, Regulation XIII evaluation is not required.

RULE 1401 — Review of Toxic Air Contaminants
No toxic emissions are expected from these operation. Compliance is expected.

**CONCLUSIONS/RECOMMENDATIONS:**

The equipment is expected to comply with all applicable AQMD rules and regulations. Issue POs subject to permit conditions listed below:

**Conditions:**

Application No. 430403

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THIS EQUIPMENT SHALL NOT PROCESS MORE THAN 720,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

5. THE HIGH PRESSURE WATER SPRAY SYSTEM SHALL BE INSTALLED AND MAINTAINED AT THE FEED INLET AND OUTLET OF EACH CRUSHER AND AT EACH STOCK PILE. THE DISTRICT MECHANICAL TEAM SHALL BE INFORMED WHEN THIS SYSTEM IS INSTALLED AND OPERATIONAL.

6. THIS EQUIPMENT IS SUBJECT TO PART 60, CHAPTER 1, TITLE 40, CODE OF FEDERAL REGULATIONS, SUBPART OOO, STANDARD OF PERFORMANCE FOR NON-METALLIC MINERAL PROCESSING PLANTS.

7. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

Application No. 430418

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THIS EQUIPMENT SHALL NOT PROCESS MORE THAN 336,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

5. THIS EQUIPMENT SHALL PROCESS WET MATERIAL FROM CLAMSHELL DREDGE ONLY.

6. THIS EQUIPMENT IS SUBJECT TO PART 60, CHAPTER 1, TITLE 40, CODE OF FEDERAL REGULATIONS, SUBPART OOO, STANDARD OF PERFORMANCE FOR NON-METALLIC MINERAL PROCESSING PLANTS.

7. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

Application No. 438791

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS ERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THIS EQUIPMENT SHALL NOT PROCESS MORE THAN 288,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

5. A HIGH PRESSURE WATER SPRAY SYSTEM SHALL BE INSTALLED AND MAINTAINED AT FEED HOPPER, FEED INLET TO JAW CRUSHER, DISCHARGE BELT 3A, AND AT BELT TRANSFER POINTS APPROXIMATELY 1000 FEET APART. THE DISTRICT MECHANICAL TEAM SHALL BE INFORMED WHEN THIS SYSTEM IS INSTALLED AND OPERATIONAL.

6. THIS EQUIPMENT IS SUBJECT TO PART 60, CHAPTER 1, TITLE 40, CODE OF FEDERAL REGULATIONS, SUBPART OOO, STANDARD OF PERFORMANCE FOR NON-METALLIC MINERAL PROCESSING PLANTS.

7. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

02/02/2005 08:51 SCAQMD → 915629613493

South Coast Air Quality Management District
21865 E. Copley Drive
Diamond Bar, CA 91765
(909) 396-2000

To: RAJ SINGH.
Air Quality Engineer
Phone: 909-396-3099
Fax: 909-396-3341
e-mail: rsingh@aqmd.gov

From: SCOTT TAYLOR
JUSTICE & ASSOCIATES

**Fax:** 562-961-3493 **Pages:** 3 (including cover sheet)

**Phone** 562-961-3494 **Date:** 2/2/2005

**Re:** Your application nos. 430403, 430418, and 438791 for United Rock Products **CC:**

x **Please Comment** x **Please Reply** ☐ **Please Recycle**

Dear Mr. Taylor

The draft equipment descriptions and permit conditions for the three applications mentioned above are enclosed for your review. Please let me know if you have any comments. If you have no comments, please write "no comments" on this fax cover sheet, sign and and fax it back to me. If you have any questions, please call me.

Thank You,

Raj Singh

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Raj 2/2/05

There are no commcats on A/N 430903 and A/N 438791. The belts labeled 11, 12 on A/N 438791 are in common with A/N 430418. We would request belts 11, 12 be added to A/N 430418 and indicate that they are in common with the other application. Please see the following permit with the changes

Scott Taylor

# PERMIT TO OPERATE

DRAFT

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership.
If the billing for the annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

ID 65341

Legal Owner or Operator: UNITED ROCK PRODUCTS CORPORATION
1245 E ARROW HWY
IRWINDALE, CA 91706-1302

**Equipment Location:** 1245 E ARROW HWY, IRWINDALE, CA 91706-1302

**Equipment Description :**

ROCK PRE-CRUSHING, CONVEYING, AND STACKING SYSTEM NO.1 CONSISTING OF:

1. TWO RECEIVING HOPPERS, EACH WITH A VIBRATING GRIZZLY.
2. JAW CRUSHER, TELESMITH, 2'-6" W. X 4'-7" L., 150 H.P., WITH A PLATE FEEDER.
3. FOUR SCREENS, SVEDALA, 6'-0" W. X 20'-0" L., 40 H.P. EACH.
4. TWO UNDER SCREEN CONVEYORS, 3'-6" W. X 40'-0" L., 20 H.P. EACH.
5. TWO SCREENS, SVEDALA, 5'-6" W. X 15'-0" L., 30 H.P. EACH.
6. UNDER JAW BELT CONVEYOR, 3'-6" W. X 60'-0" L., 30 H.P.
7. BELT CONVEYOR, 3'-6" W. X 600'-0" L., 75 H.P.
8. BELT CONVEYOR, 3'-6" W. X 350'-0" L., 125 H.P.
9. BELT CONVEYOR, 3'-6" W. X 50'-0" L., 40 H.P.
10. BELT CONVEYOR, 3'-6" W. X 650'-0" L., 275 H.P.
11. BELT CONVEYOR, 3'-6" W. X 490'-0" L., 150 H.P.
12. BELT CONVEYOR, 3'-6" W. X 130'-0" L., 75 H.P.
13. SEVEN BELT CONVEYORS, 3'-6" W. X 150'-0" L., 40 H.P. EACH.

A/N 439879

14. Belt Conveyor, 3'-6" W X 275'-0" L., 125 H.P. Each (in common with
15. Stacking Conveyor, 3'-6" W X 200'-0" L., 150 H.P. Each

**Conditions :**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

(in common wi A/N 43879)

SAMPLE

# PERMIT TO OPERATE

CONTINUATION OF PERMIT TO OPERATE

DRAFT

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

5. THIS EQUIPMENT SHALL NOT PROCESS MORE THAN 336,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

6. THIS EQUIPMENT SHALL PROCESS WET MATERIAL FROM CLAMSHELL DREDGE ONLY.

7. THIS EQUIPMENT SHALL BE OPERATED IN FULL COMPLIANCE WITH AQMD RULES 401 (VISIBLE EMISSIONS), 402 (NUISANCE), AND 403 (FUGITIVE DUST).

8. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

## NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Dorris M.Bailey/R506
1/1/1900

SAMPLE

**Justice & Associates**

4155 Outer Traffic Circle
Long Beach, CA 90804-2111
562.961.3494 Fax 562.961.3493

www.justiceassociates.com

1401 S. Arville St., Suite J
Las Vegas, NV 89102-0537
702.822.2111 Fax 702.822.2113

January 13, 2005

South Coast AQMD
21865 E. Copley Drive
Diamond Bar, CA 91765

Attention: Rajendra Singh

Dear Ragendra:

In response to your e-mail dated January 5, 2005, we are requesting that PO# D08810 and PO# D08807 not be combined. This decision will change the corrections detailed in the application dated April 7. For clarity, I have detailed the new corrections for each permit below. Under Attachment "A" is a flow diagram showing both permit units.

Perimit # D08810 (A/N 430418)

The permit currently limits production to 11,200 tons per day (Condition #3). We request that the production limit be changed to a monthly limit of 336,000 tons per month (11,200 TPD * 30 days/monthly = 336,000 TPM).

This site operates a clamshell dredge. While this equipment does not generate particulate emissions, several of the other permits for this facility included wet process equipment. In order to be consistent with the other permits, we have included a list of equipment for the dredge to be added to Permit D08810. A marked-up copy of the permit and equipment list has been included in Attachment "B".

The permit also requires a technical correction. The jaw crusher specified on the permit as a 50 HP KUE-KAN size 24"× 36" needs to be changed to a 150 HP Telesmith jaw crusher size 30' × 55".

**Justice** & *Associates*

Permit # D08807

Under Attachment "B" you will find a 400A form and a check in the amount of ~~$3,174.31~~ to cover the filing fees.
7,662.78 1213

The permit currently limits the production to 9,600 tons per day (Condition 3). We request that the production limit be changed to a monthly limit of 288,000 tons per month (9,600 TPD * 30 days/month = 288,000 TPM).

Both pre-crushing plants feed the primary surge pile using common conveyors. Currently these conveyors do not appear to be covered on either Permit # D08807 or D08810. As a result we request that two conveyors be added to Permit D08807. Attachment "C" has the emission calculations for the additional conveyors and a marked up copy of the permit.

I trust this letter and application allow the processing of permits for the equipment to move forward. If you have any questions, please call me at (652) 961-3494.

Best regards,

Scott Taylor

Scott Taylor,
Justice & Associates

cc. Ken Barker, United Rock Products

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D08810
A/N 185074
Page 1

**This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.**

**Legal Owner**
**Or Operator:** UNITED ROCK PRODUCTS CORPORATION

ID 65341

**Equipment**
**located at:** 1245 EAST ARROW HIGHWAY, IRWINDALE, CALIFORNIA

**Equipment Description:** with a vibrating grizzly

ROCK PRE-CRUSHING, CONVEYING, AND STACKING SYSTEM NO. 1, CONSISTING OF:

1. Two RECEIVING HOPPERS, ~~WITH A PNEUMATICALLY OPERATED RECIPROCATING PLATE FEEDER~~.
2. ~~JAW CRUSHER, KUE-KAN, OAKLAND, SIZE 24 X 96, 50 H.P.~~ Jow Crusher, Telesmith, Size 30K 55, 150HP
3. THREE BELT CONVEYORS, 175 H.P. TOTAL. (these conveyors are included in the detailed equipment list)

**Conditions:** Please see the following page for additional equipment.

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. NOT MORE THAN ~~11,200~~ 336,000 TONS OF AGGREGATE SHALL BE PROCESSED IN ANY ONE ~~DAY~~ month.
4. AGGREGATE CHARGED AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METEI OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTI LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

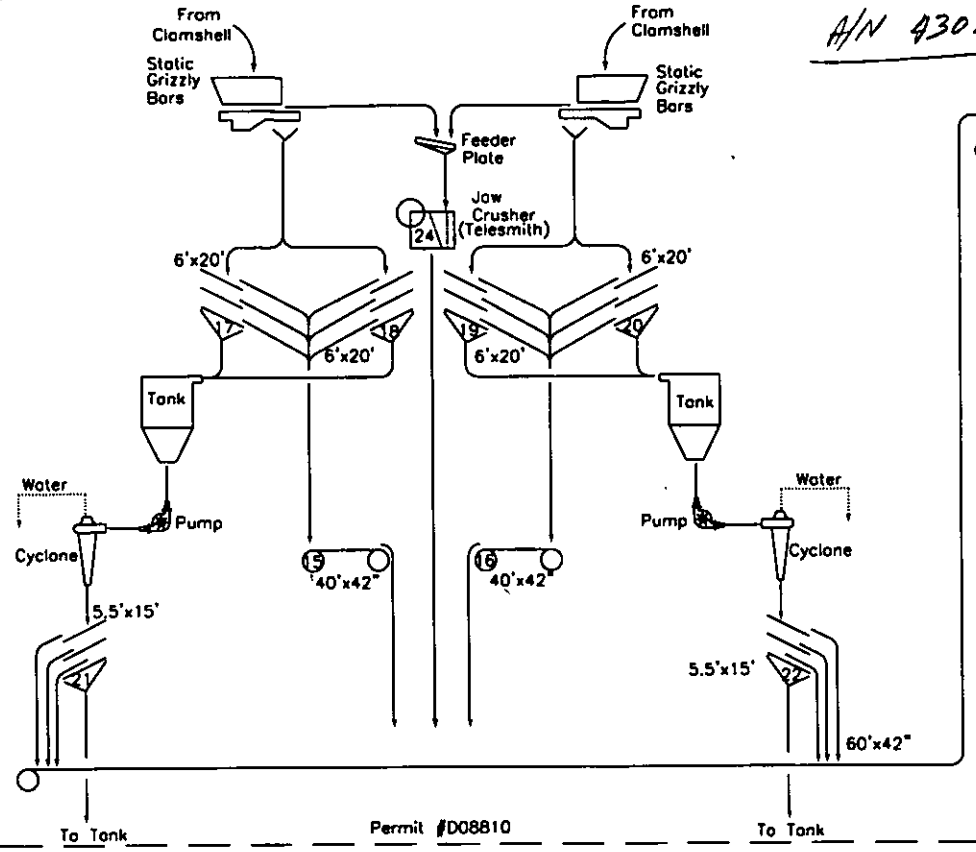
By Raquel Fuerte/jas
July 6, 1989

UNITED ROCK PRODUCTS CORP.
ATTN: THOMAS S. TEDESCO
13131 LOS ANGELES ST.
IRWINDALE, CA. 91706

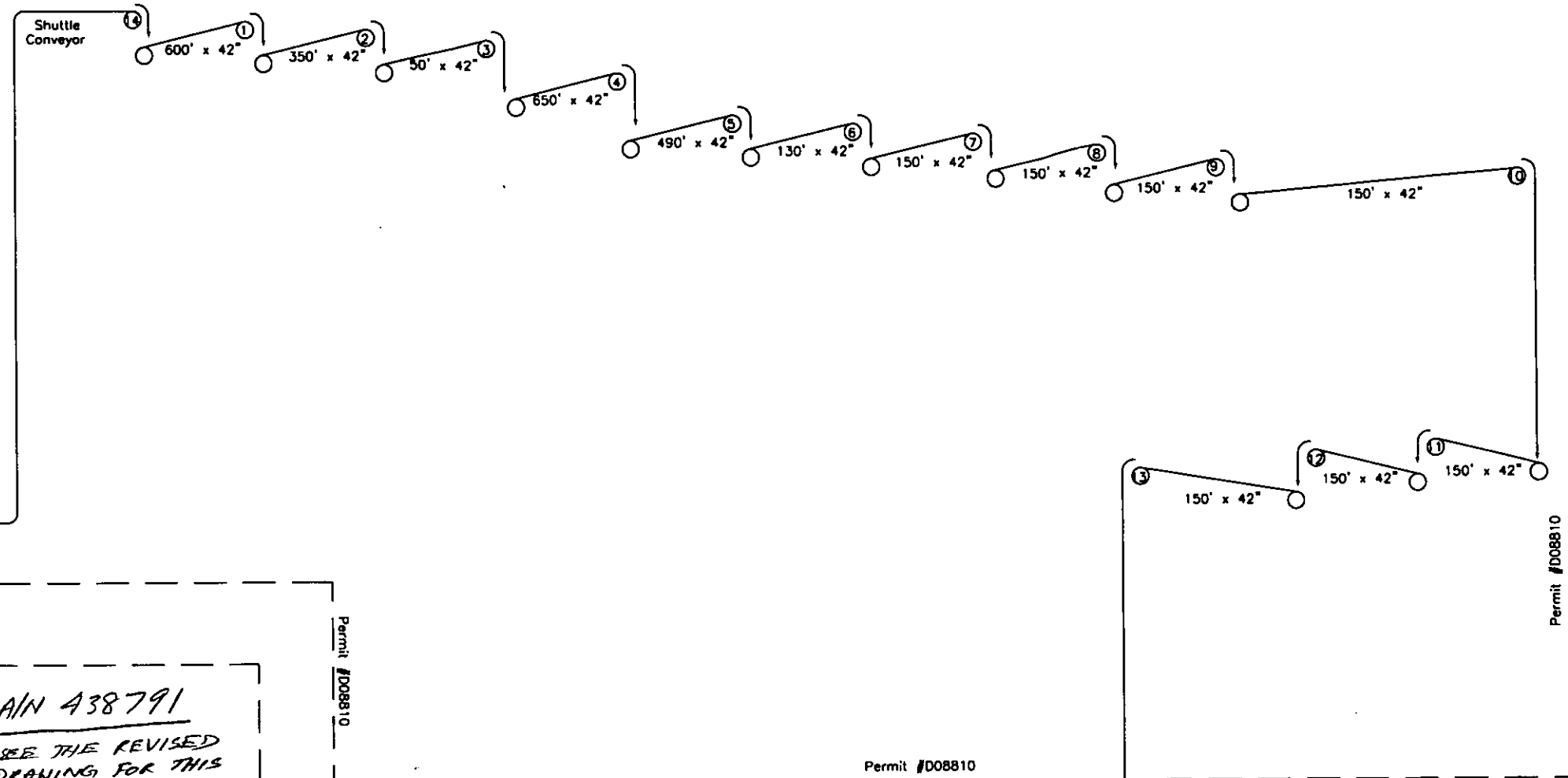
**Dredge Equipment:** (new wet equipment)

| | | | |
|---|---|---|---|
| 1 | Belt Conveyor | 600' × 42" | 75 HP |
| 2 | Belt Conveyor | 350' × 42" | 125 HP |
| 3 | Belt Conveyor | 50' × 42" | 40 HP |
| 4 | Belt Conveyor | 650' × 42" | 275 HP |
| 5 | Belt Conveyor | 490' × 42" | 150 HP |
| 6 | Belt Conveyor | 130' × 42" | 75 HP |
| 7 | Belt Conveyor | 150' × 42" | 40 HP |
| 8 | Belt Conveyor | 150' × 42" | 40 HP |
| 9 | Belt Conveyor | 150' × 42" | 40 HP |
| 10 | Belt Conveyor | 150' × 42" | 40 HP |
| 11 | Belt Conveyor | 150' × 42" | 40 HP |
| 12 | Belt Conveyor | 150' × 42" | 40 HP |
| 13 | Belt Conveyor | 150' × 42" | 40 HP |
| 14 | Under Jaw Belt Conveyor | 60' × 42" | 30 HP |
| 15 | Conveyor A | 40' × 42" | 20 HP |
| 16 | Conveyor B | 40' × 42" | 20 HP |
| 17 | Svedala Screen | 6' × 20' | 40 HP |
| 18 | Svedala Screen | 6' × 20' | 40 HP |
| 19 | Svedala Screen | 6' × 20' | 40 HP |
| 20 | Svedala Screen | 6' × 20' | 40 HP |
| 21 | Svedala Screen | 5.5 × 15' | 30 HP |
| 22 | Svedala Screen | 5.5' × 15' | 30 HP |
| 23 | Plate Feeder | -- | -- |
| 24 | Jaw Crusher, Telesmith | 30' × 55" | 150 HP |

A/N 430418




Permit #D08810



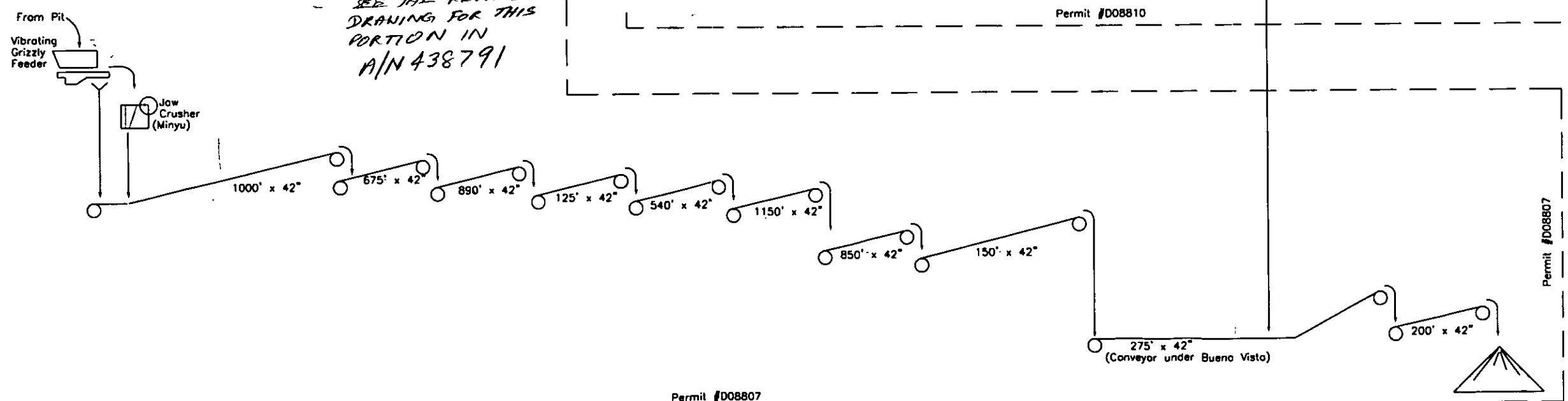

Permit #D08810

Permit #D08810

Permit #D08807

A/N 438791

SEE THE REVISED DRAWING FOR THIS PORTION IN A/N 438791




Permit #D08807

Permit #D08807

Permit #D08807

Justice & Associates
4155 Outer Traffic Circle, Long Beach, CA. 90804
Phone 562 961-3494 Fax 562 961-3493

| DESCRIPTION | | | | |
|---|---|---|---|---|
| United Rock Products<br>Rock Pre-Crushing Systems (D08810 & D08807) | | | | |
| JOB NO. | CADCODE | DRAWN BY: | DATE | DWG. NO. |
| 8536 | 8536-6 | KS | 8/24/2004 | 8536-6 |

(909) 396-3099
(909) 396-3341- Fax

-----Original Message-----
**From:** Rajendra Singh
**Sent:** Tuesday, July 13, 2004 2:19 PM
**To:** 'Spencer, Kimba'
**Subject:** United Rock Products, ID # 65341

Hi Kimba

I need the following additional information to process the eight applications you submitted for United Rock Products, ID # 65341.

- CEQA form for each application
- A/N 430418 (item 3 in your letter) - two Rock Pre-Crushing Systems (PO #s D08810 and D08807) are being consolidated into one permit unit. Please provide a flow diagram for the combined system.
- A/N 430413 (item 6 in your letter) - Drum Plant - a marked copy of permit # D08812 with corrections is missing in attachment G. Please provide.

Thank you,

Raj Singh
Air Quality Engineer
South Coast Air Quality Management District
(909) 396-3099
(909) 396-3341- Fax

**Justice** & *Associates*

4155 Outer Traffic Circle
Long Beach, CA 90804-2111
562.961.3494 Fax 562.961.3493

www.justiceassociates.com

1401 S. Arville St., Suite J
Las Vegas, NV 89102-0537
702.822.2111 Fax 702.822.2113

May 18, 2004

South Coast AQMD
21865 E. Copley Drive
Diamond Bar, CA 91765

Attention: Raj Singh

Subject: United Rock Products (Facility ID# 65341)
Permit Issues

Dear Raj:

In response to our telephone conversation on May 13, 2004, here are six (6) 400A Forms to accompany the package you are reviewing for United Rock Products.

Please call if you have any questions at (562) 961-3494.

Best regards,

Kimba Spencer
Justice & Associates

J:\UnitedRock\letters\8536 letter.doc

**Justice** & *Associates*

4155 Outer Traffic Circle
Long Beach, CA 90804-2111
562.961.3494 Fax 562.961.3493

www.justiceassociates.com

1401 S. Arville St., Suite J
Las Vegas, NV 89102-0537
702.822.2111 Fax 702.822.2113

April 7, 2004

South Coast AQMD
21865 East Copley Drive
Diamond Bar, CA 91765

Attention: Permit Services

Subject: United Rock Products
(Facility ID #65341) Permit Issues

Enclosed are several applications and technical corrections for the United Rock Products, Irwindale facility. Enclosed is a check in the amount of $17,091.64 to cover the application fees. Under Attachment "A" is a fee schedule worksheet which describes the break down of the fees. The following is a description of each application and/or correction and the supporting information.

1. A new application for a stationary screening plant with a 56 TPH throughput. This application is being submitted as a Class III application. Attachment "B" following this letter includes the 400A form as well as emission calculations, an equipment list and a flow diagram. This plant operates on grid power. United Rock is requesting a production limit of 9,856 Tons Per Month (TPM). A/N 428833

2. A new application for a second stationary screening plant with an 84 TPH throughput. This application is being submitted as a Class III application. Attachment "C" following this letter includes the 400A form and supporting material for this application. This plant operates on grid power. United Rock is requesting a production limit of 20,160 TPM. A/N 428834

3. Currently United Rock holds two permits for two separate Rock Pre-Crushing systems (D08810 and D08807). Although these two systems operate independently, both feed the same stock pile using two conveyors that are common to both systems. Since this equipment uses common equipment, we are requesting the equipment and permit conditions on Permit D08807 be added to Permit D08810. Note that the Pioneer jaw crusher listed on permit D08807 is no longer in service and should not be included in the combined permit. At the same time we are requesting that the daily limits be combined into one monthly limit of 624,000 tons/month ([11,200 TPD + 9,600 TPD] × 30 days/month = 624,000 TPM)

AN 430 418

This site operates a clamshell dredge. While this equipment does not generate particulate emissions, several of the other permits for this facility included wet process equipment. In order to be consistent with the other permits we have included a list of equipment for the dredge to be added to Permit D08810. The dredge includes the following equipment:

| | | | |
|---|---|---|---|
| 1. | Belt Conveyor | 600' × 42" | 75 HP |
| 2. | Belt Conveyor | 350' × 42" | 125 HP |
| 3. | Belt Conveyor | 50' × 42" | 40 HP |
| 4. | Belt Conveyor | 650' × 42" | 275 HP |
| 5. | Belt Conveyor | 490' × 42" | 150 HP |
| 6. | Belt Conveyor | 130' × 42" | 75 HP |
| 7. | Belt Conveyor | 150' × 42" | 40 HP |
| 8. | Belt Conveyor | 150' × 42" | 40 HP |
| 9. | Belt Conveyor | 150' × 42" | 40 HP |
| 10. | Belt Conveyor | 150' × 42" | 40 HP |
| 11. | Belt Conveyor | 150' × 42" | 40 HP |
| 12. | Belt Conveyor | 150' × 42" | 40 HP |
| 13. | Belt Conveyor | 150' × 42" | 40 HP |
| 14. | Under Jaw Belt Conveyor | 60' × 42" | 30 HP |
| 15. | Conveyor A | 40' × 42" | 20 HP |
| 16. | Conveyor B | 40' × 42" | 20 HP |
| 17. | Svedala Screen | 6' × 20' | 40 HP |
| 18. | Svedala Screen | 6' × 20' | 40 HP |
| 19. | Svedala Screen | 6' × 20' | 40 HP |
| 20. | Svedala Screen | 6' × 20' | 40 HP |
| 21. | Svedala Screen | 5.5' × 15' | 30 HP |
| 22. | Svedala Screen | 5.5' × 15' | 30 HP |
| 23. | Plate Feeder | -- | -- |
| 24. | Jaw Crusher, Telesmith | 30' × 55" | 150 HP |

Both pre-crushing plants feed the primary surge pile using common conveyors. Currently these conveyors do not appear to be covered on either permit. As a result we request that two conveyors be added to Permit D08810 for the primary surge pile loading. The following is the equipment description:

| | | |
|---|---|---|
| Stacking Conveyor | 200' × 42" | 150 HP |
| Belt Conveyor | 275' × 42" | 125 HP |

Attachment "D" has the emission calculations for the additional conveyors.

Rock Pre-crushing (Permit #D08810) requires a technical correction. The jaw crushers specified on the permit as a 50 HP, KUE-KAN size 24" × 36" needs to be changed to a 150 HP, Minyu, size 40" × 42".

Attachment "D" includes marked-up copies of the facility permits showing the additional equipment and the corrections to the equipment descriptions and conditions.

4. We are requesting a change to the Main Aggregate Plant's (Permit #D08813) existing production permit condition from a daily limit to a monthly limit. A/N 430403

The existing permit conditions allow daily production of 24,000 TPD. We are requesting a change to a monthly limit of 720,000 TPM (24,000 TPD × 30 days/month = 720,000 TPM).

The modification in production limit does not result in a change of emissions. Attachment "E" includes a marked-up copy of the facility permit showing the additional equipment and the corrections to the equipment descriptions and conditions.

5. The Base Plant (Permit # D08811) is outgrowing its production limits and United Rock is requesting to increase and change their daily limit to a monthly limit. The permit currently has a daily processing limit of 3,200 tons. We are requesting this be changed 150,000 tons per month. Attachment "F" includes emission evaluation for both before and after the change in production. A/N 430411

6. The Drum Plant permit (Permit # D08812) requires several technical corrections. A feeder belt needs to be added to the equipment list. The belt specifications are 45' L × 36" W and is 15 HP. Additionally, the incline conveyor shows a horsepower of 40 and it should be changed to 50 HP. The shuttle conveyor shows a horsepower of 5 and it should be 10 HP. A/N 430413

The existing permit conditions allow a daily production of 4,000 tons. We are requesting an increase and a change to a monthly limit of 180,000 tons per month. With the addition of the conveyer and the increase in production, the emissions from this equipment will be increased by 172.80 lbs per year.

Attachment "G" has a marked up copy of the permit with the corrections as well as emission calculations for both before and after the production increase.

7. The Dry Loadout System (Permit # D08808) requires two technical corrections. A/N 430416 The horsepower on the discharge turnhead needs to be changed from 1 HP to 1.5 HP. The permit is also missing a 30 Ton feed hopper which sits on top of belt conveyer C27. Material fed into the hopper will result in a like amount to be reduced from the gates that feed material to the conveyor. As a result there are no additional emissions generated with the addition of the hopper.

This facility is also outgrowing its production and United Rock would like to request an increase in production and a change from a daily limit to a monthly limit. The current permit has a daily limit of 8,000 tons. We are requesting this be changed to a monthly limit of 480,600 tons. This increase in production will result in an annual emissions increase of 138.24 lbs per year.

Attachment "H" has a marked up copy of the permit showing the correction as well as emission calculations for both before and after the production increase.

8. The Wet Loadout System (Permit # D08809) requires a technical correction. The A/N 430417 horsepower on the discharge turnhead needs to be changed from 1 HP to 1.5 HP.

This permit unit also has out grown its production. United Rock would like to request an increase in production and a change from a daily limit to a monthly limit. The current permit has a daily limit of 8,000 tons. We are requesting this be changed to a monthly limit of 480,600 tons. Since this facility processes only wet material the increase in production will not result in an increase in emissions.

Attachment "I" has a marked up copy of the permit showing the correction.

Below is a summary of the total emission increase that are a result of the changes in equipment or production.

Emission Increase Summary

| | | |
|---|---|---|
| 1. | Screening Plant I | 83.97 lbs/year |
| 2. | Screening Plant II | 171.76 lbs/year |

| | | |
|---|---|---|
| 3. | Base Plant (D08811) | 155.52 lbs/year |
| 4. | Drum Plant (D08812) | 172.8 lbs/year |
| 5. | Dry Loadout (D08808) | 138.24 lbs/year |
| | Total | 722.29 lbs/year |
| | | 0.36 tons/year |

Currently, the facility's NSR balance shows that it is well below the offset threshold of 4 ton/year of PM (Please refer to Attachment "J"). Based on the Emission Increase Summary the annual increase in emissions are 0.36 tons/year. As a result, we do not anticipate these modifications requiring offsets.

We trust this information will be sufficient to process these applications and requests. If you have any questions, please call me at (562) 961-3494.

Best regards,

Kimba Spencer
Justice & Associates

cc: Ken Barker, United Rock Products

| **Attachments** | - | **Description** |
|---|---|---|
| "A" | - | Fee Schedule |
| "B" | - | Screening Plant I |
| "C" | - | Screening Plant II |
| "D" | - | Rock Pre-Crushing Systems (D08810) |
| "E" | - | Main Aggregate Plant (D08813) |
| "F" | - | Base Plant (D08811) |
| "G" | - | Drum Plant (D08812) |
| "H" | - | Dry Loadout System (D08808) |
| "I" | - | Wet Loadout System (D08809) |
| "J" | - | NSR Balance |

# ATTACHMENT "D"

# ROCK PRE-CRUSHING SYSTEMS

**Justice** & *Associates*

## United Rock - Pre-Crushing Plant Emissions

Emissions from Added Conveyors

| | Description | Thruput (ton/day) | | $PM_{10}$ AP-42 Emission Factors (lb/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 1 | Stacking Conveyor to Belt Conveyor | 20,800 | x | 0.000048 | | 0.9984 |
| 2 | Belt Conveyor to Pile | 20,800 | | -- | | -- |
| | | | | Total PM10 (lb/day) | | 0.9984 |
| | | | | Aggregate Thruput (ton/day) | ÷ | 20800 |
| | | | | Process Emissions Factor (lb/ton) | | 0.000048 |

| Aggregate Thruput | | $PM_{10}$ Emissions Factor (lb/ton) = | $PM_{10}$ Emission | |
|---|---|---|---|---|
| 624,000 | ton/month x | 0.000048 | 29.95 | lb/month |
| 7,488,000 | ton/year x | 0.000048 | 359.42 | lbs/yr |
| | | | 0.18 | tons/yr |

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D08810
A/N 185074
Page 1

This in:  al permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes  nership. If the billing for annual renewal fee (Rule 301.f) is not received by the exp:  tion date, contact the District.

Legal C  r
Or Ope:  r: UNITED ROCK PRODUCTS CORPORATION ID 65341

Equipm  :
located  t: 1245 EAST ARROW HIGHWAY, IRWINDALE, CALIFORNIA

Equip  t Description: With vibrating grizzler

ROCK  -CRUSHING, CONVEYING, AND STACKING SYSTEM NO. 1, CONSISTING OF:

1.  CEIVING HOPPER, ~~WITH A PNEUMATICALLY OPERATED RECIPROCATING PLATE FEEDER.~~

2.  W CRUSHER, ~~KUE-KAN, OAKLAND~~, SIZE ~~24~~ 40 X ~~36~~ 42, ~~50~~ 150 H.P. MinYU

3. THREE BELT CONVEYORS, 175 H.P. TOTAL.

Conditions: Please See following page for additional equipment

1.  RATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND  CIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS  ERWISE NOTED BELOW.

2.  S EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL  ES.

3.  MORE THAN 11,200 TONS OF AGGREGATE SHALL BE PROCESSED IN ANY ONE DAY.

4.  REGATE CHARGED AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT  ESSIVE DUST EMISSIONS.

NOTICE

IN ACC  ANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METE OF THE  UIPMENT.

THIS P  IT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISI  26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALIT  ANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTI LAWS,  INANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Raquel Puerta/jas
July 6, 1989

UNITED ROCK PRODUCTS CORP.
ATTN: THOMAS S. TEDESCO
13131 LOS ANGELES ST.
IRWINDALE, CA. 91706

Additional equipment to be added to Permit #D08810

**Rock Pre-crushing Equipment:** (from permit D08807)

1. Receiving Hopper with vibrating grizzly
2. Eight Belt Conveyors, 800 HP total
3. Stacking Conveyor 200' × 42", 150 HP
4. Belt Conveyor 275' × 42", 125 HP

**Dredge Equipment:** (new wet equipment)

| | | | |
|---|---|---|---|
| 1 | Belt Conveyor | 600' × 42" | 75 HP |
| 2 | Belt Conveyor | 350' × 42" | 125 HP |
| 3 | Belt Conveyor | 50' × 42" | 40 HP |
| 4 | Belt Conveyor | 650' × 42" | 275 HP |
| 5 | Belt Conveyor | 490' × 42" | 150 HP |
| 6 | Belt Conveyor | 130' × 42" | 75 HP |
| 7 | Belt Conveyor | 150' × 42" | 40 HP |
| 8 | Belt Conveyor | 150' × 42" | 40 HP |
| 9 | Belt Conveyor | 150' × 42" | 40 HP |
| 10 | Belt Conveyor | 150' × 42" | 40 HP |
| 11 | Belt Conveyor | 150' × 42" | 40 HP |
| 12 | Belt Conveyor | 150' × 42" | 40 HP |
| 13 | Belt Conveyor | 150' × 42" | 40 HP |
| 14 | Under Jaw Belt Conveyor | 60' × 42" | 30 HP |
| 15 | Conveyor A | 40' × 42" | 20 HP |
| 16 | Conveyor B | 40' × 42" | 20 HP |
| 17 | Svedala Screen | 6' × 20' | 40 HP |
| 18 | Svedala Screen | 6' × 20' | 40 HP |
| 19 | Svedala Screen | 6' × 20' | 40 HP |
| 20 | Svedala Screen | 6' × 20' | 40 HP |
| 21 | Svedala Screen | 5.5 × 15' | 30 HP |
| 22 | Svedala Screen | 5.5' × 15' | 30 HP |
| 23 | Plate Feeder | -- | -- |
| 24 | Jaw Crusher, Telesmith | 30' × 55" | 150 HP |

**Justice & Associates**
4155 Outer Traffic Circle
Long Beach, CA 90804-2111
(562) 961-3494 Fax (562) 961-3493

# FEE SCHEDULE WORK SHEET

(For permit processing in accordance with Rule 301)

Permits to be issued to: United Rock Products

Address: 1245 East Arrow Highway

City, State, Zip: Irwindale, CA 91706

| Quantity of Identical Units | Equipment/Process | Fee Schedule | Full Fee for First Permit Unit | + | 50% of Processing Fee for failure to obtain Permit to Construct | = | Total |
|---|---|---|---|---|---|---|---|
| 1 | Screening Plant | C | $2,232.96 | + | $1,116.48 | = | $3,349.44 |
| 1 | Screening Plant | C | $2,232.96 | + | $1,116.48 | = | $3,349.44 |
| 1 | Permit reissue (D08813) | N/A | $123.02 | + | -- | = | $123.02 |
| 1 | Aggregate Conveying (D08811) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Conveying (D08812) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Loading (D08808) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Loading (D08809) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Conveying (D08810) | D | $3,081.85 | + | $1,540.93 | = | $4,622.78 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Total Permit Processing Fee Due: $17,091.64

Comments:

P/O Approved.
F73758
2-15-05

ROUTING RECORD

| DATE | FROM | TO | ACTION |
|---|---|---|---|
| 1-19-05 | RWM | RJS | CLASS III |
| 2-2-05 | RJS | RWM | ISSUE PO |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

REFERENCE TO OTHER APCD RECORDS INCLUDING VARIANCES



APPL # 436791
I.D. # 65341

ITED ROCK PRODUCTS CORPORATION
45 E ARROW HWY
VINDALE
GREGATE PRODUCTION

Date 01/14/05

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

# PERMIT TO OPERATE



This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership.
If the billing for the annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

ID 65341

Legal Owner
or Operator: UNITED ROCK PRODUCTS CORPORATION
1245 E ARROW HWY
IRWINDALE, CA 91706-1302

**Equipment Location:** 1245 E ARROW HWY, IRWINDALE, CA 91706-1302

**Equipment Description :**

AGGREGATE PRE-CRUSHING, CONVEYING, AND STACKING SYSTEM NO. 2 CONSISTING OF:

1. RECEIVING HOPPER, WITH A VIBRATING GRIZZLY FEEDER.
2. JAW CRUSHER, MINYU, 3'-4" W. X 3'-6" L., 150 H.P.
3. UNDER JAW BELT CONVEYOR NO. 3A, 3'-6" W. X 30'-0" L., 30 H.P.
4. BELT CONVEYOR NO. 3, 3'-6" W. X 1000'-0" L., 150 H.P.
5. BELT CONVEYOR NO. 4, 3'-6" W. X 675'-0" L., 400 H.P.
6. BELT CONVEYOR NO. 5, 3'-6" W. X 890'-0" L., 75 H.P.
7. BELT CONVEYOR NO. 6, 3'-6" W. X 125'-0" L., 50 H.P.
8. BELT CONVEYOR NO. 7, 3'-6" W. X 540'-0" L., 150 H.P.
9. BELT CONVEYOR NO. 8, 3'-6" W. X 1150'-0" L., 150 H.P.
10. BELT CONVEYOR NO. 9, 3'-6" W. X 850'-0" L., 150 H.P.
11. BELT CONVEYOR NO. 10, 3'-6" W. X 150'-0" L., 150 H.P.
12. BELT CONVEYOR NO. 11A, 3'-6" W. X 275'-0" L., 125 H.P. (COMMON TO A/N 430418)
13. STACKING CONVEYOR NO. 12A, 3'-6" W. X 200'-0" L., 150 H.P. (COMMON TO A/N 430418)

**Conditions :**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

**FILE COPY**

CONTINUATION OF PERMIT TO OPERATE

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THIS EQUIPMENT SHALL NOT PROCESS MORE THAN 288,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

5. A HIGH PRESSURE WATER SPRAY SYSTEM SHALL BE INSTALLED AND MAINTAINED AT FEED HOPPER, FEED INLET TO JAW CRUSHER, UNDER JAW DISCHARGE BELT, AND AT BELT TRANSFER POINTS APPROXIMATELY 1000 FEET APART. THE DISTRICT MECHANICAL TEAM SHALL BE INFORMED WHEN THIS SYSTEM IS INSTALLED AND OPERATIONAL.

6. THIS EQUIPMENT IS SUBJECT TO PART 60, CHAPTER 1, TITLE 40, CODE OF FEDERAL REGULATIONS, SUBPART OOO, STANDARD OF PERFORMANCE FOR NON-METALLIC MINERAL PROCESSING PLANTS.

7. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

**NOTICE**

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Dorris M Bailey

By Dorris M.Bailey/RS06
2/15/2005

**FILE COPY**

South Coast Air Quality Management District
P.O. Box 4944
Diamond Bar CA 91765
(909) 396-2000

# APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE FORM 400 - A

**Non-Title V Facilities:** This form must be accompanied by one or more 400-E-xx series forms(s). Complete this side of form only.
**Title V Facilities:** Complete both sides of this form. Include additional forms as necessary.

NC/NOV NUMBER:
INSPECTOR SECTOR
ISSUE DATE

## Section I - Company Information

LEGAL NAME OF OPERATOR: United Rock Products Corporation — ☐ IRS OR ☐ S.S. Number

PERMIT TO BE ISSUED TO (SEE INSTRUCTIONS): United Rock Products Corporation

BUSINESS MAILING ADDRESS: 1245 East Arrow Highway Irwindale, CA 91706

PERMIT MAILING ADDRESS, IF DIFFERENT FROM BUSINESS MAILING ADDRESS:

TYPE OF ORGANIZATION
☒ Corporation ☐ Limited Partnership ☐ Government Entity
☐ Individual ☐ General Partnership ☐ Other (Fill In):

ARE YOU A SMALL BUSINESS? (SEE INSTRUCTIONS) ☐ Yes ☒ No
AVERAGE ANNUAL GROSS RECEIPT $
NUMBER OF EMPLOYEES
IS YOUR BUSINESS 51 % OR MORE WOMAN/MINORITY OWNED? ☐ Yes ☒ No

**THIS SECTION IS REQUIRED FOR ALL APPLICATIONS FOR NEW CONSTRUCTION OR MAJOR MODIFICATIONS.**
ARE ALL MAJOR SOURCES UNDER SAME OWNERSHIP IN CALIFORNIA IN COMPLIANCE WITH FEDERAL, STATE, AND LOCAL AIR POLLUTION CONTROL RULES? ☒ Yes ☐ No

ARE YOU THE OWNER OF THE EQUIPMENT UNDER THIS APPLICATION? ☒ Yes ☐ No ☐ IRS OR ☐ S.S.NUMBER
IF NO, ENTER THE LEGAL NAME OF OWNER

## Section II - Facility Information

EQUIPMENT ADDRESS/LOCATION: 1245 East Arrow Highway (NUMBER/STREET)
Irwindale (CITY OR COMMUNITY) CA 91706 (ZIP CODE)
FACILITY NAME: Irwindale
FACILITY ID NUMBER: 0 6 5 3 4 1

PRINT NAME OF CONTACT PERSON: Frank Keohane
TITLE OF CONTACT PERSON:
TYPE OF BUSINESS AT THIS FACILITY: Aggregate Production
PRIMARY SIC CODE FOR THIS FACILITY: 1442
NUMBER OF EMPLOYEES AT THIS FACILITY:
CONTACT PERSON'S TELEPHONE NUMBER: (626) 358-4558
CONTACT PERSON'S FAX NUMBER: (626) 357-9508
CONTACT PERSON'S E-MAIL ADDRESS:

## Section III - Application Type

DESCRIPTION OF EQUIPMENT: Aggregate Production/Crushing (>5000)
PREVIOUS PERMIT #S: D08807

APPLICATION FOR (SEE INSTRUCTIONS):
☐ NEW CONSTRUCTION
☒ EXISTING EQUIPMENT WITHOUT PERMIT
☐ EXISTING EQUIPMENT WITH EXPIRED PERMIT
☐ CHANGE OF LOCATION ☐ RECLAIM Processing Fee
☒ MODIFICATION
☐ CHANGE OF PERMITTEE
☐ CHANGE OF PERMIT CONDITION

ARE YOU SUBMITTING MULTIPLE APPLICATIONS FOR EQUIPMENT IDENTICAL TO THAT DESCRIBED ABOVE? ☐ Yes ☒ No

☐ **APPLICATION FOR NON-TITLE V EQUIPMENT PERMIT. CHECK THE SUPPLEMENTAL SERIES 400-E-xx FORM(S) SUBMITTED WITH THIS 400-A FORM:**

| | | | |
|---|---|---|---|
| ____ 400-E-1 | • PARTICULATE MATTER (PM-10) CONTROL EQUIPMENT | ____ 400-E-13 | • INTERNAL COMBUSTION EQUIPMENT |
| ____ 400-E-2 | • VOLATILE ORGANIC COMPOUND (VOC) CONTROL EQUIPMENT | ____ 400-E-14 | • OPEN PROCESS TANK |
| ____ 400-E-3 | • SCRUBBER | ____ 400-E-14a | • OPEN PROCESS TANK; PROCESS LINE |
| ____ 400-E-4 | • ABRASIVE BLASTING EQUIPMENT | ____ 400-E-15 | • PRINTING EQUIPMENT |
| ____ 400-E-5 | • DEGREASER | ____ 400-E-16 | • SOLID MATERIALS STORAGE EQUIPMENT |
| ____ 400-E-7 | • DRY CLEANING EQUIPMENT | ____ 400-E-17 | • SPRAY BOOTH/OPEN SPRAY |
| ____ 400-E-8 | • ETHYLENE OXIDE STERILIZER | ____ 400-E-17a | • POWDER SPRAY BOOTH |
| ____ 400-E-9 | • EXTERNAL COMBUSTION EQUIPMENT | ____ 400-E-18 | • STORAGE TANK (LIQUID & GASEOUS MATERIAL) |
| ____ 400-E-10 | • FOOD BROILER/FRYER | ____ 400-E-19 | • WAVE SOLDER MACHINE |
| ____ 400-E-11 | • FUEL DISPENSING AND STORAGE EQUIPMENT | ____ 400-E-20 | • ASBESTOS REMOVAL EQUIPMENT |
| ____ 400-E-12 | • GAS TURBINE | ____ NONE | • ADDITIONAL INFORMATION SUBMITTED AS REQUESTED ON FORM 400-E-GI |

☐ **APPLICATION FOR TITLE V FACILITY PERMIT. PROVIDE INFORMATION REQUESTED ON REVERSE SIDE OF THIS FORM.**

**I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT.**
SIGNATURE OF RESPONSIBLE OFFICIAL OF FIRM: Frank Keohane
TITLE OF RESPONSIBLE OFFICIAL OF FIRM: General Manager
TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL OF FIRM: Frank Keohane
RESPONSIBLE OFFICIALS TELEPHONE NUMBER: (626) 358-4558
DATE SIGNED:

**I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT.**
SIGNATURE OF PREPARER, IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM: Scott Taylor
TITLE OF RESPONSIBLE OFFICIAL OF FIRM: Consultant
TYPE OR PRINT NAME OF PREPARER, IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM: Scott Taylor
PREPARER'S TELEPHONE NUMBER: (562) 961-3494
DATE SIGNED: 1/13/05

**TITLE V FACILITIES ONLY: COMPLETE OTHER SIDE**

| AQMD USE ONLY | APPLICATION/TRACKING # | TYPE B C D | EQUIPMENT CATEGORY CODE: | FEE SCHEDULE: $ | VALIDATION |
|---|---|---|---|---|---|
| | 438791 | | L07752 D | | 1-14-05 |

| ENG. A R DATE | ENG. A R DATE | CLASS I III IV | ASSIGNMENT UNIT 5 ENGINEER | ENF SECT. | CHECK/MONEY ORDER # 014413 | AMOUNT $ 4622.78 |
|---|---|---|---|---|---|---|

FORM 400-A, Rev. 3/98 RECEIVED CHECK FOR 4622.78 BY RAJ SINGH ON 1/14/05 Job No. & Form 8536-2
(42230) LC + 014413

# TITLE V APPLICATION CERTIFICATION

**- TO BE COMPLETED BY TITLE V FACILITIES ONLY -**

## Section IV Title V Application

1. This is an application for a(n) (Check all applicable boxes and provide the requested information as appropriate):
   a. ☐ Initial Title V Permit
   b. ☐ Permit Renewal: Provide current permit expiration date: _____
   c. ☐ Administrative Permit Revision (Check all that apply)
      ☐ Change of Ownership. (Complete and attach equipment-specific Form 400-E-xx series forms)
      ☐ Change of Facility Information
      ☐ Other, Please specify: _____
   d. ☐ Other (Complete and attach equipment specific form 400-E-XX series form(s) to this form if your application involves permit action for new construction, change of location, non-administrative permit revision, alternative operating scenario (AOS), permit shield, streamlined permit conditions, or temporary source permit.)
2. Is this facility required to prepare a Risk Management Plan (RMP) for another agency? ☐ Yes ☐ No

## Section V Title V Submittal Checklist

1. Enter the quantity of each type form submitted in the space provided:

| | | | |
|---|---|---|---|
| _____ | 500-A2 | _____ | 500-F1 |
| _____ | 500-B | _____ | 500-F2 |
| _____ | 500-C1 | _____ | 500-F3 |
| _____ | 500-C2 | _____ | 500-F4 |
| _____ | 500-D | _____ | Other (specify): _____ |

2. Additional information referenced in this application submitted (Check **ALL** that apply):
   a. ☐ Existing Facility Permit
   b. ☐ Preliminary Facility Permit
   c. ☐ EFB Report for Year(s) _____
   d. ☐ None
   e. ☐ Other (Specify): _____
3. Supplemental information included with this application submittal (Check **ALL** that Apply):
   a. ☐ Facility Plot Plan
   b. ☐ MSDS Sheet(s)
   c. ☐ None
   d. ☐ Other (Specify): _____

5 JAN 14 P4:3
S.C.A.Q.M.D.
PERMIT PROCESSING

| AQMD USE ONLY | APPLICATION TYPE | 30 DAY PUBLIC NOTICE START DATE | 30 DAY PUBLIC NOTICE END DATE | PUBLIC HEARING DATE | 45-DAY EPA REVIEW START DATE | 45-DAY EPA REVIEW END DATE |
|---|---|---|---|---|---|---|
| | INITIAL, RENEWAL & SIGNIFICANT | | | | | |
| | MINOR & DE MINIMIS | | | | | |
| | ESTABLISH GENERAL PERMIT | | | | | |

**USE THE SECTIONS BELOW FOR TITLE V INITIAL AND RENEWAL APPLICATIONS ONLY:**

| APPLICATION/TRACKING # | TYPE | EQUIPMENT CATEGORY CODE: | FEE SCHEDULE: | VALIDATION |
|---|---|---|---|---|
| _____ | B C D | ___ ___ ___ ___ / ___ ___ | $ | |

| ENG. A DATE | R | ENG. A DATE | R | CLASS | ASSIGNMENT UNIT ENGINEER | ENF. SECT. | CHECK/MONEY ORDER AMOUNT # $ |
|---|---|---|---|---|---|---|---|
| | | | | I III IV | | | |

FORM 400-A, Rev. 3/98

SCAQMD PERMIT PROCESSING SYSTEM (PPS)

# FEE DATA - SUMMARY SHEET

| | | | |
|---|---|---|---|
| Application No : | 438791 | IRS/SS No: | |
| Previous Application No: | | Previous Permit No: | |

| | | | |
|---|---|---|---|
| Company Name : | UNITED ROCK PRODUCTS CORPORATION | Facility ID: | 65341 |
| Equipment Street: | 1245 E ARROWHWY , IRWINDALE CA 91706 | | |
| Equipment Desc : | AGGREGATE PRODN/CRUSH >= 5000 TPD | | |

| | | | | | |
|---|---|---|---|---|---|
| Equipment Type : | BASIC | | | Fee Charged by: | B-CAT |
| B-CAT NO. : | 107752 | C-CAT NO: | 00 | Fee Schedule: | D |
| Facility Zone : | 09 | Deemed Compl. Date: | 1/27/2005 | Public Notice: | NO |

| | | | |
|---|---|---|---|
| Evaluation Type : | PO NO PC (PENALTY WILL BE ASSESSED) | Small Business: | ☐ |
| Disposition : | Approve PO, Recommended by Engineer | Penalty: | ☑ |
| Lead Appl. No : | | Identical Permit Unit: | ☐ |

| | | | | | |
|---|---|---|---|---|---|
| Air quality Analysis | | | $0.00 | Filing Fee Paid: | $0.00 |
| E.I.R | | | $0.00 | Permit Processing Fee Paid: | $4,761.47 |
| Health Risk Assessment | | | $0.00 | Permit Processing Fee Calculated*: | $4,761.47 |
| Significant Project | | | $0.00 | Permit Processing Fee Adjustment: | $0.00 |
| Express Processing | Hours: | 0.00 | $0.00 | | |
| Source Test Review | Hours: | 0.00 | $0.00 | | |
| Time & Material | Hours: | 0.00 | $0.00 | | |
| | | | | Total Additional Fee: | $0.00 |
| | | | | Additional Charge: | $0.00 |

COMMENTS:

RECOMMENDED BY: RAJENDRA SINGH DATE: 02/01/2005

REVIEWED BY: _____ DATE: 2.15.05

* ADJUSTED FOR SMALL BUSINESS, IDENTICAL EQUIPMENT AND P/O NO P/C PENALTY

SCAQMD PERMIT PROCESSING SYSTEM (PPS)

# AEIS DATA SHEET

Company Name : UNITED ROCK PRODUCTS CORPORATION
Facility ID : 65341
Equipment Address : 1245 E ARROW HWY
IRWINDALE CA 91706

Application Number : 438791
Estimated Completion Date : 02/01/05
Equipment Type : Basic
Equipment Description : AGGREGATE PRODN/CRUSH >= 5000 TPD
Equipment B-Cat : 107752
Equipment C-Cat :

| Emittants | Emissions R1 LB/HR | Emissions R2 LB/HR |
|---|---|---|
| PM10 | 4.40 | 0.44 |

**Applicable Rules**

| | | |
|---|---|---|
| 1401 | 05/02/2003 | New Source Review of Toxic Air Contaminants |
| 401 | 11/09/2001 | Visible Emissions |
| 402 | 05/07/1976 | Nuisance |
| 403 | 04/02/2004 | Fugitive Dust |
| 405 | 02/07/1986 | Solid Particulate Matter - Weight |

| | Mon | Tue | Wed | Thu | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|
| Daily Start Times : | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 |
| Daily Stop Times : | 24:00 | 24:00 | 24:00 | 24:00 | 24:00 | 24:00 | 24:00 |

User's Initials : RS06 Date: 02/01/05 Supervisor's Name : _____ Review Date : 2/15/05

# NSR DATA SUMMARY SHEET

Application No: 438791
Application Type: Alteration
Application Status: PENDAPPRV
Previous Apps,Dev,Permit #: 185071, 0 - x, NONE

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Company Name: UNITED ROCK PRODUCTS CORPORATION
Company ID: 65341
Address: 1245 E ARROW HWY,IRWINDALE, CA 91706-1302
RECLAIM: NO
RECLAIM Zone: 02A
Air Basin: SC
[redacted]one: 09
Title V: NO

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Device ID: 0 - AGGREGATE-PROD
Estimated Completion Date: 01-20-2005
Heat Input Capacity: 0 Million BTU/hr
Priority Reserve: NONE - No Priority Access Requested
Recommended Disposition: 31 - PERMIT TO OPERATE GRANTED
PR Expiration:
School Within 1000 Feet: NO
Operating Weeks Per Year: 52
Operating Days Per Week: 7
Monday Operating Hours: 00:00 to 24:00
Tuesday Operating Hours: 00:00 to 24:00
Wednesday Operating Hours: 00:00 to 24:00
Thursday Operating Hours: 00:00 to 24:00
Friday Operating Hours: 00:00 to 24:00
[redacted]aturday Operating Hours: 00:00 to 24:00
Sunday Operating Hours: 00:00 to 24:00

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Emittant: PM10
BACT:
Cost Effectiveness: NO
Source Type: MINOR
Emis Increase: -5
Modeling: N/A
Public Notice: N/A
CONTROLLED EMISSION
Max Hourly: 0.44 lbs/hr
Max Daily: 10.56 lbs/day
UNCONTROLLED EMISSION
Max Hourly: 4.4 lbs/hr
Max Daily: 105.6 lbs/day
CURRENT EMISSION
BACT 30 days Avg: 11 lbs/day
Annual Emission: 3843.84 lbs/yr
District Exemption: None

SUPERVISOR'S APPROVAL: _____ SUPERVISOR'S REVIEW DATE: 2-15-05

Processed By: rsingh 2/3/2005 7:54:46 AM

| SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT | PAGE | 1 of 9 |
|---|---|---|
| | APPL.NO. | 430403, 430418, and 438791 |
| ENGINEERING AND COMPLIANCE DIVISION | PROCESSED BY: | R. Singh |
| | CHECKED BY | |
| APPLICATION PROCESSING AND CALCULATION | DATE | 02/02/05 |

# PERMIT TO CONSTRUCT/OPERATE EVALUATION,

| | |
|---|---|
| **Applicant's Name** | **UNITED ROCK PRODUCTS CORPORATION** |
| **Company I.D.** | **65341** |
| **Mailing Address** | **1245 E. ARROW HIGHWAY, IRWINDALE, CA 91706** |
| **Equipment Address** | **1245 E. ARROW HIGHWAY, IRWINDALE, CA 91706** |

**APPLICATION NUMBER** **430403, 430418, 438791**

## BACKGROUND:

These applications were submitted for modifications to three aggregate crushing / screening and conveying plants operating under valid permits. A/N 430403 for the main aggregate plant (currently operating under PO # D08813) was submitted on 5/25/04 to change the daily production limit to a monthly limit without changing the throughput and to install spray nozzles at crushers to control PM emissions. Originally, the application was submitted as an administrative change. However, it is being processed as a modification due to equipment changes and addition of spray nozzles..The applicant has been informed of the additional fee that will be charged.

A/N 430418 was initially submitted to consolidate equipment in two rock pre- crushing plants into one permit unit. The two systems are currently operating under PO #s D08810 and D08807. A review of the two permits indicated that combining the two systems will increase the emissions and will require offsets for PM10. After speaking to the applicant's consultant, it was decided to keep the two systems separated. Consequently, a new application (A/N 438791) was received on 1/13/05 to modify the second plant. A/N 430418 will modify PO # D08810 and the new A/N 438791 will modify PO # D08807. The applicant has also requested to change the daily production limits in these permits to monthly limits.

A check on the compliance data indicates one open violation and an open notice of compliance. These will not affect the applications being processed here. The facility is in an industrial area and there are no schools within 1000 feet of this facility.

**EQUIPMENT DESCRIPTION:**

Application No. 430403

AGGREGATE CRUSHING, SCREENING, AND STACKING SYSTEM CONSISTING OF:

1. VIBRATING FEEDER FROM STORAGE
2. BELT CONVEYOR NO. C-1 A, 300 HP.
3. BELT CONVEYOR NO. C-1, 250 HP.
4. TWO CLASSIFYING SCREWS VS-I AND VS-2, HEWITT-ROBINS, DOUBLE DECK, 8'-0" W. X 20'-0" L, 30 HP EACH.
5. BELT CONVEYOR NO. C-5, 100 HP.
6. BELT CONVEYOR NO. C-6, 75 HP.
7. TWO CLASSIFYING SCREENS, VS-4 AND VS-5, WET SCREENING, HEWITT-ROBINS, DOUBLE DECK, 8'-0" W X 20'-0"L, 30 HP EACH
8. CLASSIFYING TANK, EAGLE, 10'-0" W. X 40'-0" L., 10 HP.
9. WASHER NO. 1, WEMCO, MODEL B, 15 HP.
10. THREE WASHERS NOS. 2, 3, & 4, KOLBERG, 40 HP EACH.
11. METERING BIN, 20 TON CAPACITY.
12. BELT CONVEYOR NO. C-21, 5 HP.
13. SURGE BIN, 75 TONS CAPACITY.
14. BELT CONVEYOR NO. C-13, 30 HP.
15. BELT CONVEYOR NO. C-13B, CRUSHER FEED, 15 HP.
16. BELT CONVEYOR NO. C-13C, 2'-0" W. X 30'-0" L., 10 HP.
17. BELT CONVEYOR NO. C-7, 7-/2 HP.
18. SURGE BIN, 100 TON CAPACITY.
19. BELT CONVEYOR NO. C-11, 7-1/2 HP.
20. BELT CONVEYOR NO. C-12, 10 HP.
21. CONE CRUSHER NO. CR-3, NORDBERG, 200 HP.
22. CONE CRUSHER NO. CR-4, NORDBERG, 300 HP.
23. BELT CONVEYOR NO. C-8, 5 HP.
24. TWO SURGE BINS, 36 TONS CAPACITY EACH,
25. BELT CONVEYOR NO. C-9, 15 HP.
26. BELT CONVEYOR, NO. C-10, 5 HP.
27. CONE CRUSHER NO. CR-1, NORDBERG, size 5', WITH A 500 HP MAIN DRIVE.
28. CONE CRUSHER NO. CR-2, NORDBERG, MODEL HP-300, WITH A 300 HP MAIN DRIVE.
29. BELT CONVEYOR NO. C-2, 50 HP.
30. BELT CONVEYOR NO. C-3, 100 HP.
31. BELT CONVEYOR NO. C-4, 150 HP.
32. FOUR CLASSIFYING SCREENS NOS. VS-6A, VS-6B, VS-7A, VS-7B, HEWTT-ROBINS, DOUBLE DECK, 8'-0" W. X 20'-0" L., EACH 30 H.P.
33. CLASSIFYING SCREEN NO. VS-6C, SIMPLICITY, 6'-0" W. X 20'-0" L., TRIPLE DECK, 30 HP.
34. BELT CONVEYOR NO. C-14, 15 HP.
35. BELT CONVEYOR NO. C-15, 15 HP.
36. BELT CONVEYOR NO. C-16, 15 HP.
37. BELT CONVEYOR NO. C-17, 20 HP.
38. BELT CONVEYOR NO. C-18, 10 HP.
39. BELT CONVEYOR NO. C-19, 20 HP.
40. BELT CONVEYOR NO. C-20, 7-1/2 HP.

41. BELT CONVEYOR NO. C-22, 15 HP.
42. BELT CONVEYOR NO. C-23, 30 HP.
43. BELT CONVEYOR NO. C-24, 20 HP.
44. BELT CONVEYOR NO. C-25, 40 HP.
45. BELT CONVEYOR NO. CS-1, 5 HP.
46. BELT CONVEYOR NO. CS-2, 10 HP.
47. BELT CONVEYOR NO. CS-3, 5 HP.
48. BELT CONVEYOR NO. CS-4, 10 HP.
49. SURGE HOPPER, 75 TON CAPACITY.
50. BELT CONVEYOR NO. A-1, 30 HP.
51. BELT CONVEYOR NO. A-2, 7-1/2 HP.
52. BELT CONVEYOR. NO. B, 5 HP.
53. HIGH PRESSURE WATER SPRAY SYSTEM, NESCO, MODEL DUST PRO, 200 PSI, 20 GPM, WITH EIGHT SPRAY LINES.

Application No. 430418

AGGREGATE PRE-CRUSHING, CONVEYING, AND STACKING SYSTEM NO.1 CONSISTING OF:

1. TWO RECEIVING HOPPERS, EACH WITH A VIBRATING GRIZZLY.
2. JAW CRUSHER, TELESMITH, 2'-6" W. X 4'-7" L., 150 H.P., WITH A PLATE FEEDER.
3. FOUR SCREENS NOS. 17, 18, 19, & 20, SVEDALA, 6'-0" W. X 20'-0" L., 40 H.P. EACH.
4. TWO UNDER SCREEN CONVEYORS NOS. 15, 16, 3'-6" W. X 40'-0" L., 20 H.P. EACH.
5. TWO SCREENS NOS. 21, & 22, SVEDALA, 5'-6" W. X 15'-0" L., 30 H.P. EACH.
6. SHUTTLE CONVEYOR NO. 14, 3'-6" W. X 60'-0" L., 30 H.P.
7. BELT CONVEYOR NO. 1, 3'-6" W. X 600'-0" L., 75 H.P.
8. BELT CONVEYOR NO. 2, 3'-6" W. X 350'-0" L., 125 H.P.
9. BELT CONVEYOR NO. 3, 3'-6" W. X 50'-0" L., 40 H.P.
10. BELT CONVEYOR NO. 4, 3'-6" W. X 650'-0" L., 275 H.P.
11. BELT CONVEYOR NO. 5, 3'-6" W. X 490'-0" L., 150 H.P.
12. BELT CONVEYOR NO. 6, 3'-6" W. X 130'-0" L., 75 H.P.
13. SEVEN BELT CONVEYORS NOS. 7 THRU 13, 3'-6" W. X 150'-0" L., 40 H.P. EACH.
14. BELT CONVEYOR NO. 11A, 3'-6" W. X 275'-0" L., 125 H.P. (COMMON TO A/N 438791)
15. STACKING CONVEYOR NO. 12A, 3'-6" W. X 200'-0" L., 150 H.P. (COMMON TO A/N 438791)

Application No. 438791 ✓

AGGREGATE PRE-CRUSHING, CONVEYING, AND STACKING SYSTEM NO. 2 CONSISTING OF:

1. RECEIVING HOPPER, WITH A VIBRATING GRIZZLY FEEDER.
2. JAW CRUSHER, MINYU, 3'-4" W. X 3'-6" L., 150 H.P.
3. UNDER JAW BELT CONVEYOR NO. 3A, 3'-6" W. X 30'-0" L., 30 H.P.
4. BELT CONVEYOR NO. 3, 3'-6" W. X 1000'-0" L., 150 H.P.
5. BELT CONVEYOR NO. 4, 3'-6" W. X 675'-0" L., 400 H.P.
6. BELT CONVEYOR NO. 5, 3'-6" W. X 890'-0" L., 75 H.P.
7. BELT CONVEYOR NO. 6, 3'-6" W. X 125'-0" L., 50 H.P.
8. BELT CONVEYOR NO. 7, 3'-6" W. X 540'-0" L., 150 H.P.
9. BELT CONVEYOR NO. 8, 3'-6" W. X 1150'-0" L., 150 H.P.
10. BELT CONVEYOR NO. 9, 3'-6" W. X 850'-0" L., 150 H.P.

11. BELT CONVEYOR NO. 10, 3'-6" W. X 150'-0" L., 150 H.P.
12. BELT CONVEYOR NO. 11A, 3'-6" W. X 275'-0" L., 125 H.P. (COMMON TO A/N 430418)
13. STACKING CONVEYOR NO. 12A, 3'-6" W. X 200'-0" L., 150 H.P. (COMMON TO A/N 430418)

**PROCESS DESCRIPTION:**

A/N 430403 – This is the main aggregate plant. The attached flow diagram shows the operation of the system and material flow. During this modification a high pressure water spray system will be installed to control PM emissions. The spray system consists of a 20 gpm, 200 psi pump, and a spray nozzles as shown on the attached flow diagram. The equipment changes are shown on the attached marked up copy of the existing permit. There is no change in throughput; therefore, no increase in emissions is expected as a result of this modification.

A/N 430418 – This rock pre-crushing and conveying system processes wet material from a clamshell dredge. The attached flow diagram shows the operation of the system and material flow. During this modification, some equipment changes are being made as shown on the attached marked up copy of the existing permit. There is no change in throughput; therefore, no increase in emissions is expected as a result of this modification.

A/N 438791 – This rock pre-crushing and conveying system is being modified to replace a crusher and install spray nozzles to control PM emissions from the crushing operation. The attached flow diagram shows the operation of the system and material flow. The equipment changes are shown on the attached marked up copy of the existing permit. This and the other pre-crushing system (A/N 430418), both feed the primary surge pile using two common conveyors. Currently, these two conveyors are not covered by any of the two existing permits for these two systems (PO # D08807 and PO # D08810). Therefore, these two conveyors are being included in this application. There is no change in throughput. The only increase in PM emissions will be due to the inclusion of these two conveyors.

**OPERATING SCHEDULE:**

Maximum: 24 hrs per day, 7 days per week, 52 weeks per year
Average: same

**EMISSION CALCULATIONS:**

Application No. 430403

Throughput = 24,000 tons per day
= 720,000 tons / month (permit condition)

There is no change in throughput. The PM emissions are expected to be reduced due to addition of spray nozzles. The emission calculations are presented in the attached sheets. These calculations were performed by the applicant's consultant and are being used after checking the accuracy of the calculations. Emission factors used in these calculations are taken from AP-42, Table 11.19.2-2 for crushed stone processing (attached). The controlled PM10 emission factors are based on use of water spray to control particulate emissions.

From the attached calculations:

R2 (PM10) = 80.15 lbs / day
= 3.34 lbs./ hr @ 24 hrs / day

The uncontrolled emissions are calculated assuming 90 % reduction in emissions due to water spray,

R1 (PM10) = (3.34 lbs / hr) / (1-0.9)
= 33.4 lbs / hr

Assuming PM10 = 50 % of PM

R1 (PM) = 2 x 33.4 lbs / hr
= 66.8 lbs./ hr.
R2 (PM) = 2 x 3.34 lbs./ hr
= 6.68 lbs./ hr.

This is less than the 30 lb / hr allowable limit in Table 405 (a) for process weight of 1,000 tons per hr..

AEIS and NSR Emission Data

R1 (PM10) =33.4 lb / hr
R2 (PM10) = 3.34 lb / hr.

30-Day average (PM10) = (3.34 lbs / hr. x 24 hrs / day x 30 days / month) / 30
= 80.16 lb / day

Annual average (PM10) = (3.34 lbs./ hr. x 24 hrs./ day x 7 days / wk. x 52 wks./ yr.)/2000
= 14.6 tons / yr.

From the NSR data base, the PM10 emissions prior to this modification are 26 lbs / hr. Thus, there is a decrease in emissions due to this modification.

Application No. 430418

Throughput = 11,200 tons per day
= 336,000 tons / month (permit condition)

This site operates a clamshell dredge. The material is completely wet and therefore, PM10 emissions from this process are expected to insignificant.

AEIS and NSR Emission Data

R1 (PM10) = 0 lb / hr
R2 (PM10) = 0 lb / hr.

Application No. 438791

Throughput = 9,600 tons per day
= 288,000 tons / month (permit condition)

There is no change in throughput. The PM emissions are expected to be reduced due to addition of a spray nozzle at the jaw crusher. The emission calculations are presented in the attached sheet. Emission factors used in these calculations are taken from AP-42, Table 11.19.2-2 for crushed stone processing (attached).

From the attached calculations:

R2 (PM10) = 10.5 lbs / day
= 0.44 lbs./ hr @ 24 hrs / day

The uncontrolled emissions are calculated assuming 90 % reduction in emissions due to water spray,

R1 (PM10) = (0.44 lbs / hr) / (1-0.9)
= 4.4 lbs / hr

Assuming PM10 = 50 % of PM

R1 (PM) = 2 x 4.4 lbs / hr
= 8.8 lbs./ hr.

R2 (PM) = 2 x 0.44 lbs / hr
= 0.88 lbs / hr.

This is much less than the 28 lb / hr allowable limit in Table 405 (a) for process weight of 400 tons per hr..

AEIS and NSR Emission Data

R1 (PM10) = 4.4 lb / hr
R2 (PM10) = 0.44 lb / hr.

30-Day average (R2-PM10) = (0.44 lbs / hr. x 24 hrs / day x 30 days / month) / 30
= 10.992 lb / day

Annual average (R2-PM10) = (0.458 lbs / hr. x 24 hrs / day x 7 days / wk. x 52 wks / yr)/2000
= 1.92 tons / yr.

From the NSR data base, the PM10 emissions prior to this modification are 2.6 lbs / hr. Thus, there is a decrease in emissions after the modification..

**RULES:**

RULE 212 There are no schools within 1000 feet of the facility. Public notice is not required.

RULE 401 Visible emissions are not expected with proper maintenance and operation of this equipment. Compliance is expected.

RULE 402 Operation of this equipment is not expected to create a nuisance. Compliance is expected.

RULE 403 Fugitive dust is not expected with proper use of water spray as specified in permit conditions. Compliance is expected.

RULE 405 As shown in the above calculations, the PM emissions are much smaller than the rate allowed in Table 405 (a) of this rule. Compliance is expected.

REG. XIII New Source Review:

A/N 430403: From the NSR data base, the PM10 emissions prior to this modification are 26 lbs / hr. The calculated PM10 emissions after modification are 3.34 lbs / hr. Thus, there is a decrease in emissions due to this modification. Therefore, Regulation XIII evaluation is not required.

A/N 430418: This system processes wet material from a clamshell dredge. No significant emissions are expected from this process.

A/N 438791: From the NSR data base, the PM10 emissions prior to this modification are 2.6 lbs / hr. The calculated PM10 emissions after modification are 0.44 lbs / hr. Thus, there is a decrease in emissions due to this modification. Therefore, Regulation XIII evaluation is not required.

RULE 1401 Review of Toxic Air Contaminants
No toxic emissions are expected from these operation. Compliance is expected.

**CONCLUSIONS/RECOMMENDATIONS:**

The equipment is expected to comply with all applicable AQMD rules and regulations. Issue POs subject to permit conditions listed below:

**Conditions:**

Application No. 430403

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THIS EQUIPMENT SHALL NOT PROCESS MORE THAN 720,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

5. THE HIGH PRESSURE WATER SPRAY SYSTEM SHALL BE INSTALLED AND MAINTAINED AT THE FEED INLET AND OUTLET OF EACH CRUSHER AND AT EACH STOCK PILE. THE DISTRICT MECHANICAL TEAM SHALL BE INFORMED WHEN THIS SYSTEM IS INSTALLED AND OPERATIONAL.

6. THIS EQUIPMENT IS SUBJECT TO PART 60, CHAPTER 1, TITLE 40, CODE OF FEDERAL REGULATIONS, SUBPART OOO, STANDARD OF PERFORMANCE FOR NON-METALLIC MINERAL PROCESSING PLANTS.

7. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

Application No. 430418

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THIS EQUIPMENT SHALL NOT PROCESS MORE THAN 336,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

5. THIS EQUIPMENT SHALL PROCESS WET MATERIAL FROM CLAMSHELL DREDGE ONLY.

6. THIS EQUIPMENT IS SUBJECT TO PART 60, CHAPTER 1, TITLE 40, CODE OF FEDERAL REGULATIONS, SUBPART OOO, STANDARD OF PERFORMANCE FOR NON-METALLIC MINERAL PROCESSING PLANTS.

7. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

Application No. 438791

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS ERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THIS EQUIPMENT SHALL NOT PROCESS MORE THAN 288,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

5. A HIGH PRESSURE WATER SPRAY SYSTEM SHALL BE INSTALLED AND MAINTAINED AT FEED HOPPER, FEED INLET TO JAW CRUSHER, DISCHARGE BELT 3A, AND AT BELT TRANSFER POINTS APPROXIMATELY 1000 FEET APART. THE DISTRICT MECHANICAL TEAM SHALL BE INFORMED WHEN THIS SYSTEM IS INSTALLED AND OPERATIONAL.

6. THIS EQUIPMENT IS SUBJECT TO PART 60, CHAPTER 1, TITLE 40, CODE OF FEDERAL REGULATIONS, SUBPART OOO, STANDARD OF PERFORMANCE FOR NON-METALLIC MINERAL PROCESSING PLANTS.

7. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

Emission Calculations
A/N 438791, United Rock Products
Rock Pre-Crushing and Conveying

| Emission Factors-PM10, lbs./ ton | R1 | R2 | |
|---|---|---|---|
| Transfer Points. | 0.0011 | 0.000046 | |
| Crushing | 0.0024 | 0.00054 | |
| | | | |
| Emission factors are taken from AP-42, Table 11.19.2-2 for crushed stone processing (attached). | | | |
| | | | |
| | **Throughput** | **R1(PM10)** | **R2 (PM10)** |
| | **(tons / day)** | **lbs. / day** | **lbs./ day** |
| | | | |
| Vibrating grizzly to jaw crusher | 9,600 | 10.56 | 0.4416 |
| Jaw Crusher | 9,600 | 23.04 | 5.184 |
| Belt 3A to 3 | 9,600 | 10.56 | 0.4416 |
| Belt 3 to belt 4 | 9,600 | 10.56 | 0.4416 |
| Belt 4 to belt 5 | 9,600 | 10.56 | 0.4416 |
| Belt 5 to belt 6 | 9,600 | 10.56 | 0.4416 |
| Belt 5 to belt 6 | 9,600 | 10.56 | 0.4416 |
| Belt 6 to belt 7 | 9,600 | 10.56 | 0.4416 |
| Belt 7 to belt 8 | 9,600 | 10.56 | 0.4416 |
| Belt 8 to belt 9 | 9,600 | 10.56 | 0.4416 |
| Belt 9 to belt 10 | 9,600 | 10.56 | 0.4416 |
| Belt 10 to belt 11 | 9,600 | 10.56 | 0.4416 |
| Belt 11 to belt 12 | 9,600 | 10.56 | 0.4416 |
| Belt 12 to stockpile | 9,600 | - | - |
| | | | |
| Total Emissions | | 149.76 | 10.4832 |
| | | | |
| Note: The loading of the first conveyor belt and discharge from the last conveyor belt are not | | | |
| considered material transfer points. | | | |
| | | | |
| | | | |
| | | | |
| | | | |
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| | | | |
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Table 11.19.2-2 (English Units). EMISSION FACTORS FOR CRUSHED STONE PROCESSING OPERATIONS (lb/Ton)[a]

| Source [b] | Total Particulate Matter [r,s] | EMISSION FACTOR RATING | Total PM-10 | EMISSION FACTOR RATING | Total PM-2.5 | EMISSION FACTOR RATING |
|---|---|---|---|---|---|---|
| Primary Crushing (SCC 3-05-020-01) | ND | | ND[n] | | ND[n] | |
| Primary Crushing (controlled) (SCC 3-05-020-01) | ND | | ND[n] | | ND[n] | |
| Secondary Crushing (SCC 3-05-020-02) | ND | | ND[n] | | ND[n] | |
| Secondary Crushing (controlled) (SCC 3-05-020-02) | ND | | ND[n] | | ND[n] | |
| Tertiary Crushing (SCC 3-050030-03) | 0.0054[d] | E | 0.0024[o] | C | ND[n] | |
| Tertiary Crushing (controlled) (SCC 3-05-020-03) | 0.0012[d] | E | 0.00054[p] | C | 0.00010[q] | E |
| Fines Crushing (SCC 3-05-020-05) | 0.0390[e] | E | 0.0150[e] | E | ND | |
| Fines Crushing (controlled) (SCC 3-05-020-05) | 0.0030[f] | E | 0.0012[f] | E | 0.000070[q] | E |
| Screening (SCC 3-05-020-02, 03) | 0.025[e] | E | 0.0087[l] | C | ND | |
| Screening (controlled) (SCC 3-05-020-02, 03) | 0.0022[d] | E | 0.00074[m] | C | 0.000050[q] | E |
| Fines Screening (SCC 3-05-020-21) | 0.30[g] | E | 0.072[g] | E | ND | |
| Fines Screening (controlled) (SCC 3-05-020-21) | 0.0036[g] | E | 0.0022[g] | E | ND | |
| Conveyor Transfer Point (SCC 3-05-020-06) | 0.0030[n] | E | 0.00110[h] | D | ND | |
| Conveyor Transfer Point (controlled) (SCC 3-05-020-06) | 0.00014[t] | E | $4.6 \times 10^{-5}$[j] | D | $1.3 \times 10^{-5}$[q] | E |
| Wet Drilling - Unfragmented Stone (SCC 3-05-020-10) | ND | | $8.0 \times 10^{-5}$[j] | E | ND | |
| Truck Unloading -Fragmented Stone (SCC 3-05-020-31) | ND | | $1.6 \times 10^{-5}$[j] | E | ND | |
| Truck Unloading - Conveyor, crushed stone (SCC 3-05-020-32) | ND | | 0.00010[k] | E | ND | |

a. Emission factors represent uncontrolled emissions unless noted. Emission factors in lb/Ton of material of throughput. SCC = Source Classification Code. ND = No data.

b. Controlled sources (with wet suppression) are those that are part of the processing plant that employs current wet suppression technology similar to the study group. The moisture content of the study group without wet suppression systems operating (uncontrolled) ranged from 0.21 to 1.3 percent, and the same facilities operating wet suppression systems (controlled) ranged from 0.55 to 2.88 percent. Due to carry over of the small amount of moisture required, it has been shown that each source, with the exception of crushers, does not need to employ direct water sprays. Although the moisture content was the only variable measured, other process features may have as much influence on emissions from a given source. Visual observations from each source under normal operating conditions are probably the best indicator of which emission factor is most appropriate. Plants that employ substandard control measures as indicated by visual observations should use the uncontrolled factor with an appropriate control efficiency that best reflects the effectiveness of the controls employed.

c. References 1, 3, 7, and 8

d. References 3, 7, and 8

## Rajendra Singh

**From:** Taylor, Scott
**Sent:** Wednesday, February 09, 2005 10:04 AM
**To:** Rajendra Singh
**Subject:** United Rock Flow Diagram

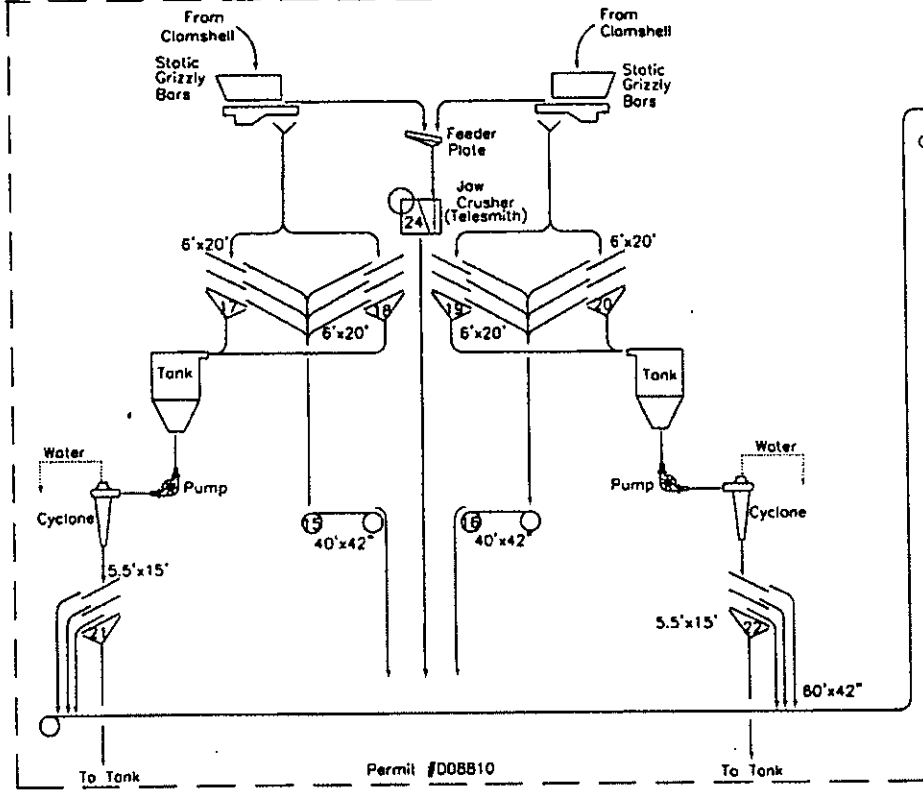


001.PDF (67 KB)

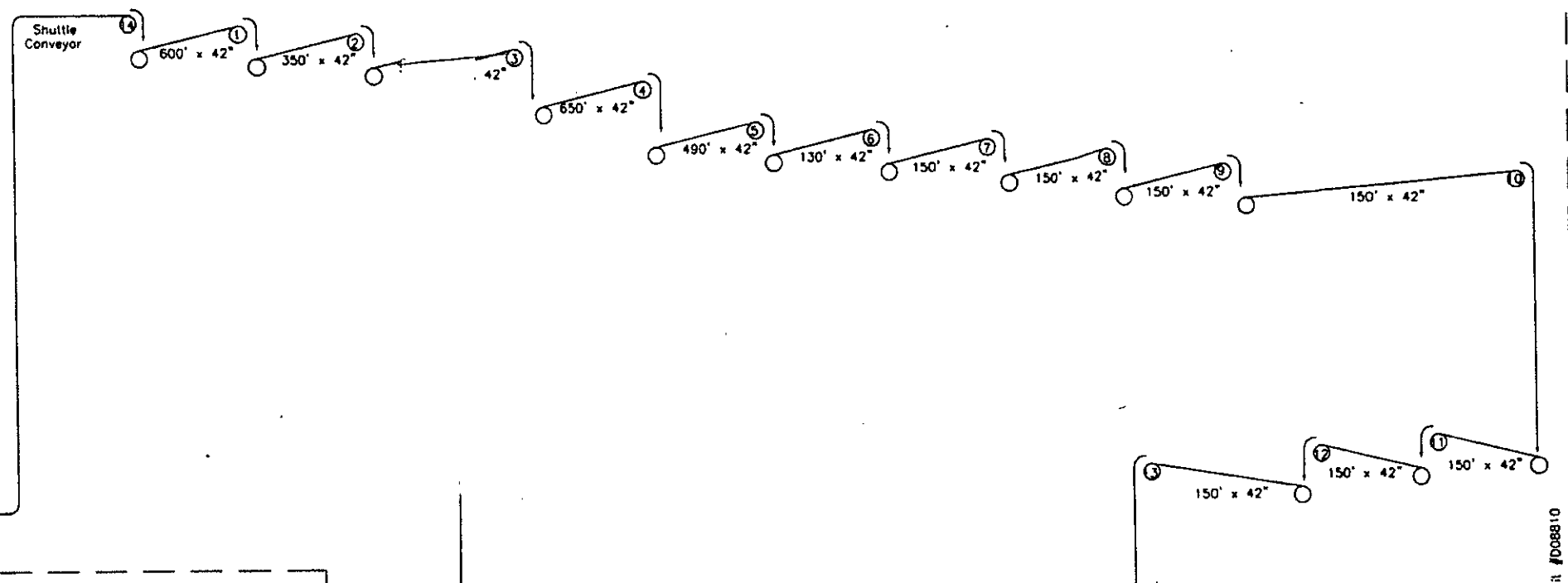
Raj,
Attached is the latest flow diagram which includes the addition of the water sprays at the conveyor transfers for permit D08807. The water spray system that will be included with the pre-crushing system will be a custom system that is still being designed. If we can keep the description on the permit of the water spray system generic, it should cover the system installed.

If you have any questions please give me a call.

Scott Taylor
Justice & Associates
(562) 961-3494
Fax (562) 961-3493



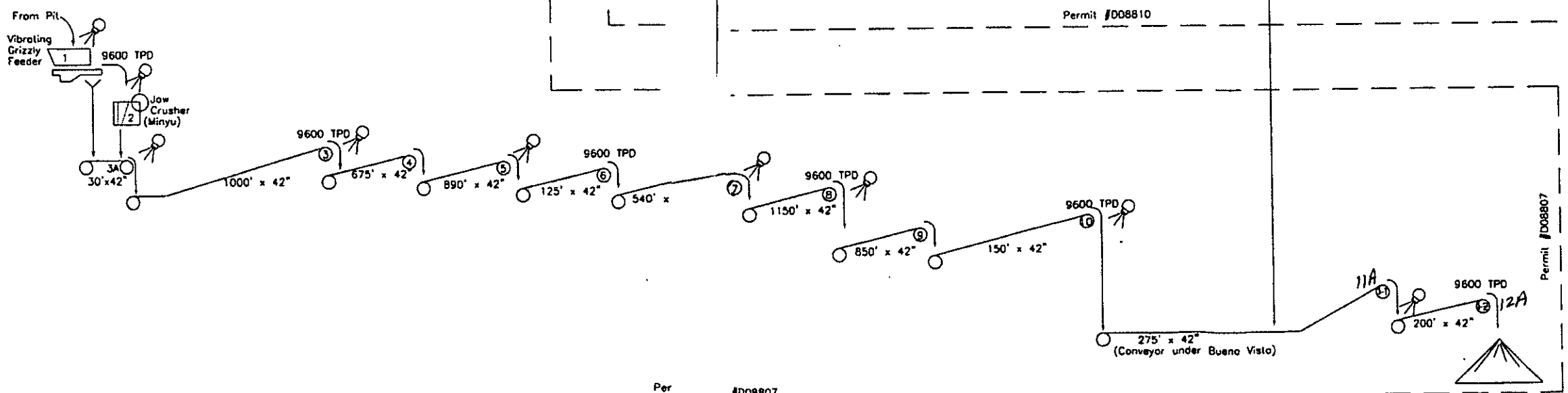

Permit #D08810




Permit #D08810

Permit #D08807

A/N 438791




Permit #D08807

Per #D08807

Material Flow

Water Spray

Justice & Associates
4155 Outer Traffic Circle, Long Beach, CA. 90804
Phone 562 961-3494 Fax 562 961-3493

DESCRIPTION: United Rock Products
Rock Pre-Crushing Systems (D08810 & D08807)

| JOB NO. | CADCODE | DRAWN BY: | DATE | DWG. NO. |
|---|---|---|---|---|
| 8536 | 8536-6 | KS | 02/09/05 | 8536-6 |

02/02/2005 08:51 SCAQMD → 915629613493

South Coast Air Quality Management District
21865 E. Copley Drive
Diamond Bar, CA 91765
(909) 396-2000

To: RAJ SINGH.
Air Quality Engineer
Phone: 909-396-3099
Fax: 909-396-3341
e-mail: rsingh@aqmd.gov

From: SCOTT TAYLOR
JUSTICE & ASSOCIATES

Fax: 562-961-3493

Pages: 3 (including cover sheet)

Phone: 562-961-3494

Date: 2/2/2005

Re: Your application nos. 430403, 430418, and 438791 for United Rock Products

CC:

x Please Comment x Please Reply ☐ Please Recycle

Dear Mr. Taylor

The draft equipment descriptions and permit conditions for the three applications mentioned above are enclosed for your review. Please let me know if you have any comments. If you have no comments, please write "no comments" on this fax cover sheet, sign and and fax it back to me. If you have any questions, please call me.

Thank You,

Raj Singh

---

Raj 2/2/05

There are no comments on A/N 430903 and A/N 438791. The belts labeled 11, 12 on A/N 438791 are in common with A/N 430418. We would request belts 11, 12 be added to A/N 430418 and indicate that they are in common with the other application. Please see the following Permit with the changes

Scott Taylor

Page 1
Permit No.
A/N 438418

# PERMIT TO OPERATE

DRAFT

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership.
If the billing for the annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

ID 65341

Legal Owner or Operator:
UNITED ROCK PRODUCTS CORPORATION
1245 E ARROW HWY
IRWINDALE, CA 91706-1302

**Equipment Location:** 1245 E ARROW HWY, IRWINDALE, CA 91706-1302

**Equipment Description :**

ROCK PRE-CRUSHING, CONVEYING, AND STACKING SYSTEM NO.1 CONSISTING OF:

1. TWO RECEIVING HOPPERS, EACH WITH A VIBRATING GRIZZLY.
2. JAW CRUSHER, TELESMITH, 2'-6" W. X 4'-7" L., 150 H.P., WITH A PLATE FEEDER.
3. FOUR SCREENS, SVEDALA, 6'-0" W. X 20'-0" L., 40 H.P. EACH.
4. TWO UNDER SCREEN CONVEYORS, 3'-6" W. X 40'-0" L., 20 H.P. EACH.
5. TWO SCREENS, SVEDALA, 5'-6" W. X 15'-0" L., 30 H.P. EACH.
6. UNDER JAW BELT CONVEYOR, 3'-6" W. X 60'-0" L., 30 H.P.
7. BELT CONVEYOR, 3'-6" W. X 600'-0" L., 75 H.P.
8. BELT CONVEYOR, 3'-6" W. X 350'-0" L., 125 H.P.
9. BELT CONVEYOR, 3'-6" W. X 50'-0" L., 40 H.P.
10. BELT CONVEYOR, 3'-6" W. X 650'-0" L., 275 H.P.
11. BELT CONVEYOR, 3'-6" W. X 490'-0" L., 150 H.P.
12. BELT CONVEYOR, 3'-6" W. X 130'-0" L., 75 H.P.
13. SEVEN BELT CONVEYORS, 3'-6" W. X 150'-0" L., 40 H.P. EACH.

A/N 43879

14. Belt Conveyor, 3'-6" W X 275'-0" L., 125 H.P. Each (in common with
15. Stacking conveyor, 3'-6" W X 200'-0" L., 150 H.P. Each

**Conditions :**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

(in common w
A/N 43879

SAMPLE

# PERMIT TO OPERATE

## CONTINUATION OF PERMIT TO OPERATE

DRAFT

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

5. THIS EQUIPMENT SHALL NOT PROCESS MORE THAN 336,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

6. THIS EQUIPMENT SHALL PROCESS WET MATERIAL FROM CLAMSHELL DREDGE ONLY.

7. THIS EQUIPMENT SHALL BE OPERATED IN FULL COMPLIANCE WITH AQMD RULES 401 (VISIBLE EMISSIONS), 402 (NUISANCE), AND 403 (FUGITIVE DUST).

8. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

## NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Dorris M.Bailey/RS06
1/1/1900

SAMPLE

## Rajendra Singh

**From:** Taylor, Scott
**Sent:** Wednesday, February 02, 2005 5:08 PM
**To:** Rajendra Singh
**Subject:** United Rock A/N 438791

Raj,

We have discovered that the permit for the application listed above needs to have a small change. The PTO needs a belt added and the horsepower's need to be changed on a couple of conveyors. Attached is a marked up copy of the PTO and a copy of the revised flow diagram.

If you have any questions please call.

Thanks again,

*Scott Taylor*

*Justice & Associates*

*(562) 961-3494*

*Fax (562) 961-3493*

<<URflow.pdf>> <<URPermit.pdf>>

# PERMIT TO OPERATE

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership.
If the billing for the annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

DRAFT

ID 65341

**Legal Owner or Operator:** UNITED ROCK PRODUCTS CORPORATION
1245 E ARROW HWY
IRWINDALE, CA 91706-1302

**Equipment Location:** 1245 E ARROW HWY, IRWINDALE, CA 91706-1302

**Equipment Description :**

ROCK PRE-CRUSHING, CONVEYING, AND STACKING SYSTEM NO. 2 CONSISTING OF:

1. RECEIVING HOPPER, WITH A VIBRATING GRIZZLY.
2. JAW CRUSHER, MINYU, 3'-4" W. X 3'-6" L., ~~[illegible]~~ 150 H.P., WITH HIGH PRESSURE WATER SPARAY NOZZLE.
3. Belt Conveyor, 3'-6" W X 30' L, 30 HP ~~[illegible]~~ BELT CONVEYOR, 3'-6" W. X 1000'-0" L., ~~[illegible]~~ 150 H.P.
4. BELT CONVEYOR, 3'-6" W. X 675'-0" L., 400 H.P.
5. BELT CONVEYOR, 3'-6" W. X 890'-0" L., 75 H.P.
6. BELT CONVEYOR, 3'-6" W. X 125'-0" L., 50 H.P.
7. BELT CONVEYOR, 3'-6" W. X 540'-0" L., 150 H.P.
8. BELT CONVEYOR, 3'-6" W. X 1150'-0" L., 150 H.P.
9. BELT CONVEYOR, 3'-6" W. X 850'-0" L., 150 H.P.
10. BELT CONVEYOR, 3'-6" W. X 150'-0" L., 150 H.P. EACH.
11. BELT CONVEYOR, 3'-6" W. X 275'-0" L., 125 H.P. EACH.
12. STACKING CONVEYOR, 3'-6" W. X 200'-0" L., 150 H.P. EACH.

**Conditions :**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

SAMPLE

# PERMIT TO OPERATE

CONTINUATION OF PERMIT TO OPERATE

DRAFT

3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

5. THIS EQUIPMENT SHALL NOT PROCESS MORE THAN 288,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

6. A HIGH PRESSURE WATER SPRAY NOZZLE SHALL BE INSTALLED AND MAINTAINED AT THE JAW CRUSHER.

7. THIS EQUIPMENT SHALL BE OPERATED IN FULL COMPLIANCE WITH AQMD RULES 401 (VISIBLE EMISSIONS), 402 (NUISANCE), AND 403 (FUGITIVE DUST).

8. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

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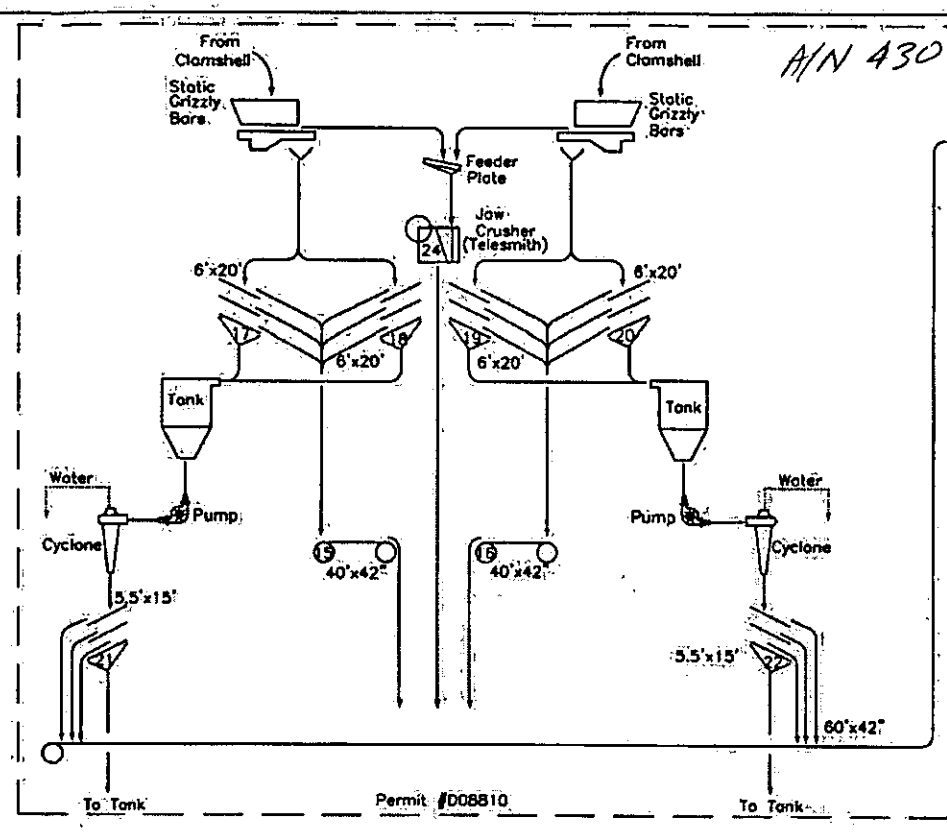
EXECUTIVE OFFICER

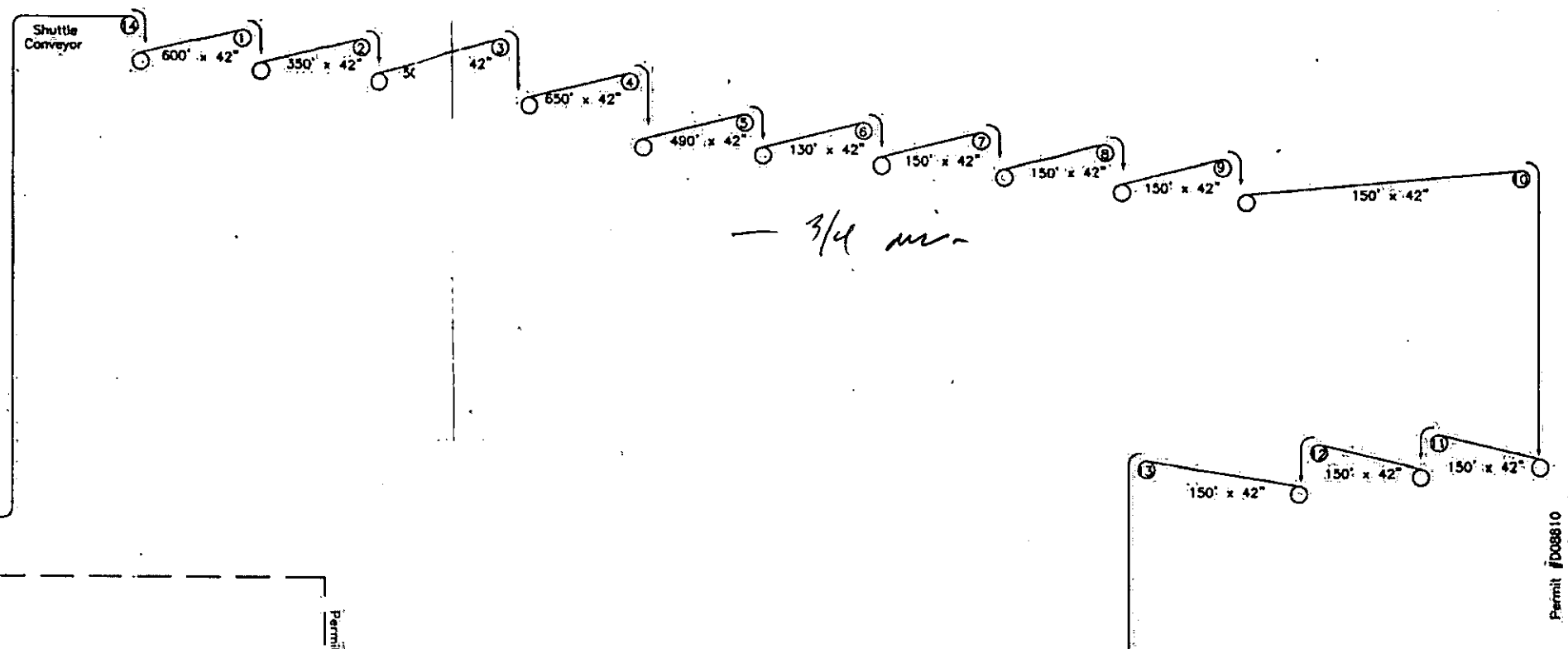
By Dorris M.Bailey/RS06
1/1/1900

SAMPLE

A/N 430418




Permit #D08810




— 3/4 mi —

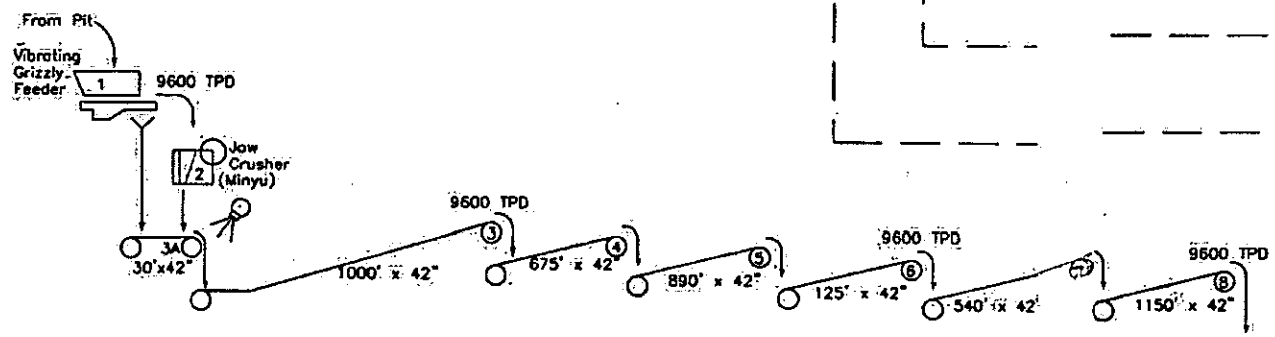



Permit #D08810

Permit #D08810

Permit #D08807

A/N 438791




Permit #D08807

SEE REVISED FLOW DIAGRAM

— 1,11 mi —

Permit #D08807

Material Flow

Water Spray

**Justice & Associates**
4155 Outer Traffic Circle, Long Beach, CA. 90804
Phone 562 961-3494 Fax 562 961-3493

| DESCRIPTION | | | | |
|---|---|---|---|---|
| United Rock Products<br>Rock Pre-Crushing Systems (D08810 & D08807) | | | | |
| JOB NO. | CADCODE | DRAWN BY: | DATE | DWG. NO. |
| 8536 | 8536-6 | KS | 02/02/05 | 8536-6 |

## Rajendra Singh

**From:** Taylor, Scott
**Sent:** Thursday, January 27, 2005 1:19 PM
**To:** Rajendra Singh
**Subject:** RE: United Rock, PO # D08807

The belt is 30 hp. Thanks.

*Scott Taylor*
*Justice & Associates*
*(562) 961-3494*
*Fax (562) 961-3493*

-----Original Message-----
**From:** Rajendra Singh [mailto:RSingh@aqmd.gov]
**Sent:** Thursday, January 27, 2005 11:47 AM
**To:** Scott Taylor
**Subject:** RE: United Rock, PO # D08807

Scott,
Please provide the H.P. info for item 3 also. It is missing in your email below
Thanks,
Raj Singh

-----Original Message-----
**From:** Taylor, Scott
**Sent:** Wednesday, January 26, 2005 4:39 PM
**To:** Rajendra Singh
**Subject:** RE: United Rock, PO # D08807

Raj,
Below is the list of equipment you sent me with the horsepower filled in for each belt. If you have any questions please let me know.

*Scott Taylor*
*Justice & Associates*
*(562) 961-3494*
*Fax (562) 961-3493*

-----Original Message-----
**From:** Rajendra Singh [mailto:RSingh@aqmd.gov]
**Sent:** Tuesday, January 25, 2005 4:19 PM
**To:** Scott Taylor
**Subject:** United Rock, PO # D08807

Hi Scott

I am trying to finish up the three remaining applications for United Rock. The revised equipment description for permit no. D08807 is shown below. Please provide horse power for the eight belt

conveyors, items 3 thru 10 below. In the existing permit, these are described as "eight belt conveyors, 800 H.P. total". Since each conveyor is of different length, we need to describe them separately, and therefore, we need the H.P. for each. Thanks for all the help.

Regards,

Raj Singh

SCAQMD

X3099

Application No. 438791

ROCK PRE-CRUSHING, CONVEYING, AND STACKING SYSTEM NO. 2 CONSISTING OF:

1. RECEIVING HOPPER, WITH A VIBRATING GRIZZLY.

2. JAW CRUSHER, MINYU, 3'-4" W. X 3'-6" L., 50 H.P.

3. UNDER JAW BELT CONVEYOR, 3'-6" W. X 1000'-0" L., xx H.P.

4. BELT CONVEYOR, 3'-6" W. X 675'-0" L., 400 H.P.

5. BELT CONVEYOR, 3'-6" W. X 890'-0" L., 75 H.P.

6. BELT CONVEYOR, 3'-6" W. X 125'-0" L., 50 H.P.

7. BELT CONVEYOR, 3'-6" W. X 540'-0" L., 150H.P.

8. BELT CONVEYOR, 3'-6" W. X 1150'-0" L., 150 H.P.

9. BELT CONVEYOR, 3'-6" W. X 850'-0" L., 150 H.P.

10. BELT CONVEYOR, 3'-6" W. X 150'-0" L., 150 H.P. EACH.

11. BELT CONVEYOR, 3'-6" W. X 275'-0" L., 125 H.P. EACH.

12. STACKING CONVEYOR, 3'-6" W. X 200'-0" L., 150 H.P. EACH.

## Rajendra Singh

**From:** Rajendra Singh
**Sent:** Wednesday, January 05, 2005 12:55 PM
**To:** Taylor, Scott
**Subject:** RE: Revised Rock Pre-Crushing Systems

Hi Scott
Thanks for sending the URL for AP42 emission factors.

Regarding combining the equipment in PO#s D08807 and D08810 into one permit unit, it may not be a good idea because the emissions from the combined permit unit will have to be evaluated for NSR. Since the PM10 emissions for the facility are much more than 4 ton / year limit, offsets will be required. Keeping them separated and not increasing the throughput is the best way to go in my opinion. I checked with Rod Millican also and he agrees that we should not combine the two permits.

If you agree with the above, then A/N 430418 and the fee submitted will be applied to revise PO # D08810. A new application with appropriate fee will be necessary to revise PO D08807.

Please let me know how you want to proceed.

Thanks,
Raj Singh
SCAQMD

-----Original Message-----
From: Taylor, Scott
Sent: Wednesday, January 05, 2005 8:43 AM
To: Rajendra Singh
Subject: Revised Rock Pre-Crushing Systems

Rajendra,

United Rock has agreed to install a water spray on the Minyu Jaw to satisfy the back requirements. Attached is a revised flow diagram detailing the change.

Please let me know if you need any further information.

Scott Taylor
Justice & Associates

**Justice** & *Associates*

4155 Outer Traffic Circle
Long Beach, CA 90804-2111
562.961.3494 Fax 562.961.3493

www.justiceassociates.com

1401 S. Arville St., Suite J
Las Vegas, NV 89102-0537
702.822.2111 Fax 702.822.2113

January 18, 2005

South Coast AQMD
21865 E. Copley Drive
Diamond Bar, CA 91765-4178

Attention: Rajandra Singh

Subject: United Rock Products

Dear Rajandra:

Per our phone conversation on January 14, 2005, enclosed is a check in the amount of $138.69 to cover the missing application fees for the modification of United Rock's permit D08807.

I trust this check allows resolves this issue.

If you have any questions, pleas give me a call at (562) 961-3494.

Sincerely,

Scott Taylor

Scott Taylor
Justice & Associates

J:\UnitedRock\letters\8536-3.doc

**Justice & Associates**

4155 Outer Traffic Circle
Long Beach, CA 90804-2111
562.961.3494 Fax 562.961.3493

www.justiceassociates.com

1401 S. Arville St., Suite J
Las Vegas, NV 89102-0537
702.822.2111 Fax 702.822.2113

January 13, 2005

South Coast AQMD
21865 E. Copley Drive
Diamond Bar, CA 91765

Attention: Rajendra Singh

Dear Ragendra:

In response to your e-mail dated January 5, 2005, we are requesting that PO# D08810 and PO# D08807 not be combined. This decision will change the corrections detailed in the application dated April 7. For clarity, I have detailed the new corrections for each permit below. Under Attachment "A" is a flow diagram showing both permit units.

Perimit # D08810 (A/N 430418)

The permit currently limits production to 11,200 tons per day (Condition #3). We request that the production limit be changed to a monthly limit of 336,000 tons per month (11,200 TPD * 30 days/monthly = 336,000 TPM).

This site operates a clamshell dredge. While this equipment does not generate particulate emissions, several of the other permits for this facility included wet process equipment. In order to be consistent with the other permits, we have included a list of equipment for the dredge to be added to Permit D08810. A marked-up copy of the permit and equipment list has been included in Attachment "B".

The permit also requires a technical correction. The jaw crusher specified on the permit as a 50 HP KUE-KAN size 24"× 36" needs to be changed to a 150 HP Telesmith jaw crusher size 30' × 55".

**Justice** & *Associates*

Permit # D08807

Under Attachment "B" you will find a 400A form and a check in the amount of ~~$3,174.31~~ to cover the filing fees.
4,662.78 LCB

The permit currently limits the production to 9,600 tons per day (Condition 3). We request that the production limit be changed to a monthly limit of 288,000 tons per month (9,600 TPD * 30 days/month = 288,000 TPM).

Both pre-crushing plants feed the primary surge pile using common conveyors. Currently these conveyors do not appear to be covered on either Permit # D08807 or D08810. As a result we request that two conveyors be added to Permit D08807. Attachment "C" has the emission calculations for the additional conveyors and a marked up copy of the permit.

I trust this letter and application allow the processing of permits for the equipment to move forward. If you have any questions, please call me at (652) 961-3494.

Best regards,

Scott Taylor

Scott Taylor,
Justice & Associates

cc. Ken Barker, United Rock Products

## Existing Facility Emissions
## Rock Pre-Crushing

The emission estimates for the aggregate plant are calculated below. The emissions sectors were taken from EPA AP-42 Table 11.19.2-2

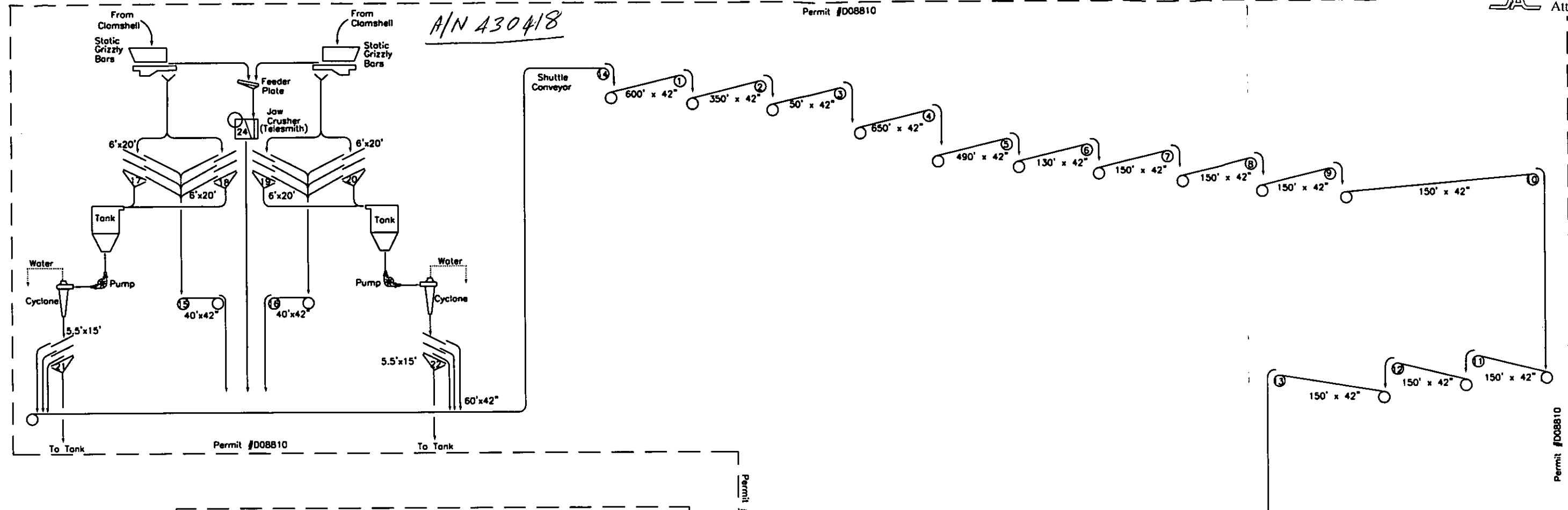
| | Description | Thruput (ton/day) | × | $PM_{10}$ AP-42 Emission Factors (lb/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 1 | Vibrating Grizzly Feeder 1 to Jaw Crusher 2 | 9,600 | | 0.000046 | | 0.4416 |
| 2 | Jaw Crusher 2 | 9,600 | | 0.00054 | | 5.1840 |
| 3 | Jaw Crusher 2 to Belt Conveyor 3 | 9,600 | | 0.000046 | | 0.4416 |
| 4 | Belt Conveyor 3 to Belt Conveyor 4 | 9,600 | | 0.000046 | | 0.4416 |
| 5 | Belt Conveyor 4 to Belt Conveyor 5 | 9,600 | | 0.000046 | | 0.4416 |
| 6 | Belt Conveyor 5 to Belt Conveyor 6 | 9,600 | | 0.000046 | | 0.4416 |
| 7 | Belt Conveyor 6 to Belt Conveyor 7 | 9,600 | | 0.000046 | | 0.4416 |
| 8 | Belt Conveyor 7 to Belt Conveyor 8 | 9,600 | | 0.000046 | | 0.4416 |
| 9 | Belt Conveyor 8 to Belt Conveyor 9 | 9,600 | | 0.000046 | | 0.4416 |
| 10 | Belt Conveyor 9 to Belt Conveyor 10 | 9,600 | | 0.000046 | | 0.4416 |
| 11 | Belt Conveyor 10 to Belt Conveyor 11 | 9,600 | | 0.000046 | | 0.4416 |
| 12 | Belt Conveyor 11 to Belt Conveyor 12 | 9,600 | | 0.000046 | | 0.4416 |
| 13 | Belt Conveyor 12 to Stockpile | 9,600 | | 0.000046 | | 0.4416 |
| | | | | Total $PM_{10}$ (lb/day) | | 10.4832 |
| | | | | Aggregate Thruput (ton/day) | ÷ | 9600 |
| | | | | Process Emissions Factor (lb/ton) | | 0.001092 |

| Aggregate Thruput | × | $PM_{10}$ Emissions Factor (lb/ton) | = | $PM_{10}$ Emission |
|---|---|---|---|---|
| 9,600 (ton/day) | | 0.001092 | | 10.48 (lb/day) |
| 288,000 (ton/month) | | 0.001092 | | 314.50 (lb/month) |
| 3,504,000 (ton/yr) | | 0.001092 | | 3826.37 (lb/yr) |
| | | | | 1.91 (tons/yr) |

Attachment "A"

A/N 430418

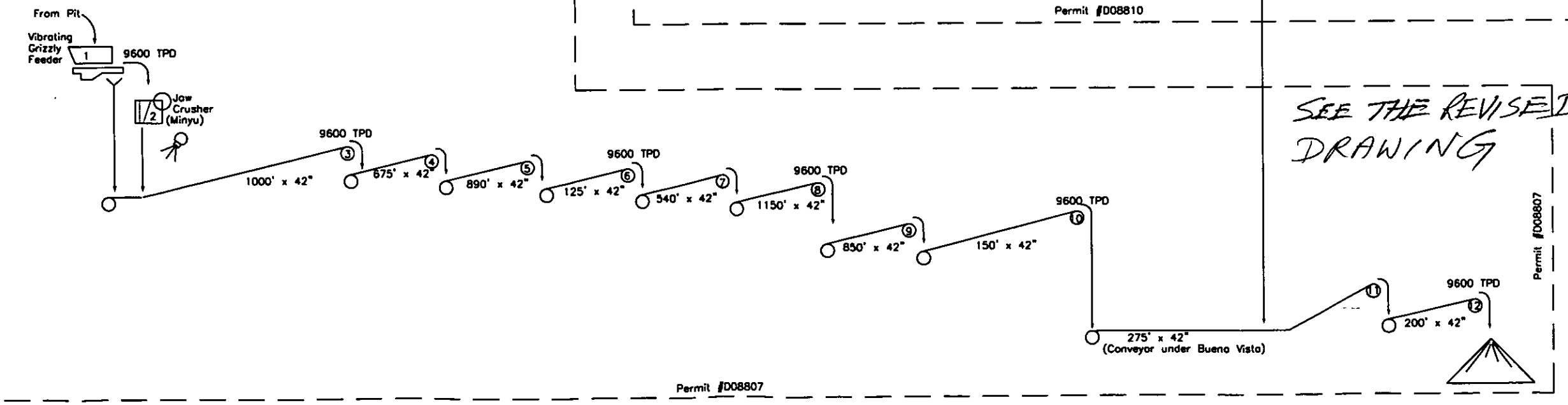
Permit #D08810




Permit #D08810

Permit #D08807

A/N 438791




SEE THE REVISED DRAWING

Permit #D08807

Material Flow

Water Spray


Justice & Associates
4155 Outer Traffic Circle, Long Beach, CA. 90804
Phone 562 961-3494 Fax 562 961-3493


| DESCRIPTION | | | | |
|---|---|---|---|---|
| United Rock Products<br>Rock Pre-Crushing Systems (D08810 & D08807) | | | | |
| JOB NO. | CADCODE | DRAWN BY: | DATE | DWG. NO. |
| 8536 | 8536-6 | KS | 1/05/2005 | 8536-6 |

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D08807
A/N 185071
Page 1

**This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.**

**Legal Owner**
**Or Operator:** UNITED ROCK PRODUCTS CORPORATION

ID 65341

**Equipment**
**located at:** 1245 EAST ARROW HIGHWAY, IRWINDALE, CALIFORNIA

**Equipment Description:**

ROCK PRE-CRUSHING, CONVEYING, AND STACKING SYSTEM NO. 2 CONSISTING OF:

1. RECEIVING HOPPER WITH ~~RECIPROCATING PLATE FEEDER, PNEUMATICALLY OPERATED~~ Vibrating Grizzly.
2. JAW CRUSHER, ~~PIONEER, SIZE 35 X 46, 200 H.P.~~ Minyu, Size 40 x 42, 50HP
3. EIGHT BELT CONVEYORS, 800 H.P. TOTAL,
   4. Stacking Conveyor 200' x 42", 150HP
   5. Belt Conveyor 275' x 42", 125HP

**Conditions:**

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. NOT MORE THAN ~~2600~~ 280,000 TONS OF AGGREGATE SHALL BE PROCESSED IN ANY ~~DAY~~ month.
4. AGGREGATE CHARGED AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Raquel Puerta/jas
July 6, 1989

UNITED ROCK PRODUCTS CORP.
ATTN: THOMAS S. TEDESCO
13131 LOS ANGELES ST.
IRWINDALE, CA. 91706

**Justice** & *Associates*

## United Rock - Pre-Crushing Plant Emissions

Emissions from Added Conveyors

| | Description | Thruput (ton/day) | x | $PM_{10}$ AP-42 Emission Factors (lb/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 1 | Stacking Conveyor to Belt Conveyor | 20,800 | | 0.000048 | | 0.9984 |
| 2 | Belt Conveyor to Pile | 20,800 | | -- | | -- |
| | | | | Total PM10 (lb/day) | | 0.9984 |
| | | | | Aggregate Thruput (ton/day) | ÷ | 20800 |
| | | | | Process Emissions Factor (lb/ton) | | 0.000048 |

| Aggregate Thruput | | $PM_{10}$ Emissions Factor (lb/ton) | = | $PM_{10}$ Emission | |
|---|---|---|---|---|---|
| 624,000 | ton/month | x 0.000048 | | 29.95 | lb/month |
| 7,488,000 | ton/year | x 0.000048 | | 359.42 | lbs/yr |
| | | | | 0.18 | tons/yr |

South Coast Air Quality Management District
21865 East Copley Drive
Diamond Bar, CA 91765
(909) 396- 2000

# CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) APPLICABILITY FORM 400 - CEQA

The SCAQMD is required by state law, the California Environmental Quality Act (CEQA), to review discretionary permit project applications for potential air quality and other environmental impacts. This form is a screening tool to assist the SCAQMD in clarifying whether or not the project[1] has the potential to generate significant adverse environmental impacts that might require preparation of a CEQA document [CEQA Guidelines §15060(a)].[2] Refer to the attached instructions for guidance in completing this form.[3] For each Form 400-A application, also complete and submit one Form 400-CEQA. If submitting multiple Form 400-A applications for the same project, only one 400-CEQA form is necessary for the entire project. If you need assistance completing this form, contact Lori Inga at (909) 396-3109.

## FACILITY INFORMATION

**Facility Name:** United Rock Products **Facility ID** (6-Digit): 065341

**Project Description:** Aggregate production facility.

## REVIEW FOR EXEMPTION FROM FURTHER CEQA ACTION

Check "Yes" or "No" as applicable

| | Yes | No | Is this application for: |
|---|---|---|---|
| A. | ☐ | ☒ | **A request for a change of permittee only (without equipment modifications)?** |
| B. | ☐ | ☒ | **Equipment certification or equipment registration?** |
| C. | ☐ | ☒ | **A CEQA and/or NEPA document previously or currently prepared that specifically evaluates this project?** If yes, a permit cannot be issued until a Final CEQA document and Notice of Determination is submitted. |
| D. | ☐ | ☒ | **Equipment damaged as a result of a disaster during state of emergency?** |
| E. | ☐ | ☒ | **A Title V permit renewal (without equipment modifications)?** |
| F. | ☐ | ☒ | **A Title V administrative permit revision?** |
| G. | ☐ | ☒ | **The conversion of an existing permit into an initial Title V permit?** |
| H. | ☐ | ☒ | **A functionally identical permit unit replacement with no increase in rating or emissions?** |
| I. | ☐ | ☒ | **A change of daily VOC permit limit to a monthly VOC permit limit?** |

If "Yes" is checked for any question above, your application does not require additional evaluation for CEQA applicability. Skip to page 2, "SIGNATURES" and sign and date this form.

## REVIEW OF IMPACTS WHICH MAY TRIGGER CEQA

Complete Sections I-V by checking "Yes" or "No" as applicable. To avoid delays in processing your application(s), explain all "Yes" responses on a separate sheet and attach it to this form.

| | Yes | No | Section I - General |
|---|---|---|---|
| 1. | ☐ | ☒ | **Has this project generated any known public controversy regarding potential adverse impacts that may be generated by the project?** Controversy may be construed as concerns raised by local groups at public meetings; adverse media attention such as negative articles in newspapers or other periodical publications, local news programs, environmental justice issues, etc. |
| 2. | ☐ | ☒ | **Is this project part of a larger project?** |
| | | | **Section II - Air Quality** |
| 3. | ☐ | ☒ | **Will there be any demolition, excavating, and/or grading construction activities that encompass an area exceeding** 20,000 **square feet?** |
| 4. | ☒ | ☐ | **Does this project include the open outdoor storage of dry bulk solid materials that could generate dust?** If Yes, include a plot plan with the application package. |

1. A "project" means the whole of an action which has a potential for resulting in physical change to the environment, including construction activities, clearing or grading of land, improvements to existing structures, and activities or equipment involving the issuance of a permit. For example, a project might include installation of a new, or modification of an existing internal combustion engine, dry-cleaning facility, boiler, gas turbine, spray coating booth, solvent cleaning tank, etc.
2. To download the CEQA guidelines, visit http://ceres.ca.gov/env_law/state.html.
3. To download this form and the instructions, visit http://www.aqmd.gov/ceqa.

| | Yes | No | |
|---|---|---|---|
| 5. | ☐ | ☒ | **Would this project result in noticeable off-site odors from activities that may not be subject to SCAQMD permit requirements?** For example, compost materials or other types of greenwaste (i.e., lawn clippings, tree trimmings, etc.) have the potential to generate odor complaints subject to Rule 402 - Nuisance. |
| 6. | ☐ | ☒ | **Does this project cause an increase of emissions from marine vessels, trains and/or airplanes?** |
| 7. | ☐ | ☒ | **Will the proposed project increase the QUANTITY of hazardous materials stored aboveground onsite or transported by mobile vehicle to or from the site by greater than or equal to the amounts associated with each compound on the attached Table 1?[4]** |
| | | | **Section III - Water Resources** |
| 8. | ☐ | ☒ | **Will the project increase demand for water at the facility by more than 5,000,000 gallons per day?** The following examples identify some, but not all, types of projects that may result in a "yes" answer to this question: 1) projects that generate steam; 2) projects that use water as part of the air pollution control equipment; 3) projects that require water as part of the production process; 4) projects that require new or expansion of existing sewage treatment facilities; 5) projects where water demand exceeds the capacity of the local water purveyor to supply sufficient water for the project; and 6) projects that require new or expansion of existing water supply facilities. |
| 9. | ☐ | ☒ | **Will the project require construction of new water conveyance infrastructure?** Examples of such projects are when water demands exceed the capacity of the local water purveyor to supply sufficient water for the project, or require new or modified sewage treatment facilities such that the project requires new water lines, sewage lines sewage hook ups etc |
| | | | **Section IV - Transportation / Circulation** |
| 10. | | | **Will the project result in** (Check all that apply): |
| | ☐ | ☒ | **a. the need for more than 350 new employees?** |
| | ☐ | ☒ | **b. an increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round-trips per day?** |
| | ☐ | ☒ | **c. increase customer traffic by more than 700 visits per day?** |
| | | | **Section V - Noise** |
| 11. | ☐ | ☒ | **Will the project include equipment with a noise specification GREATER THAN 90 decibels (dB)?** |
| | | | **Section VI - Public Services** |
| 12. | | | **Will the project create a permanent need for new or additional public services in any of the following areas** (Check all that apply): |
| | ☐ | ☒ | **a. Solid waste disposal?** Check "No" if the projected potential amount of wastes generated by the project is less than five tons per day. |
| | ☐ | ☒ | **b. Hazardous waste disposal?** Check "No" if the projected potential amount of hazardous wastes generated by the project is less than 42 cubic yards per day (or equivalent in pounds) |

**REMINDER For each 'Yes' checked in the sections above, attach all pertinent information including but not limited to estimated quantities - volumes, weights, etc -**

## SIGNATURES

I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. I UNDERSTAND THAT THIS FORM IS A SCREENING TOOL AND THAT THE SCAQMD RESERVES THE RIGHT TO CONSIDER OTHER PERTINENT INFORMATION IN DETERMINING CEQA APPLICABILITY.

| SIGNATURE OF RESPONSIBLE OFFICIAL OF FIRM: | TITLE OF RESPONSIBLE OFFICIAL OF FIRM: | |
|---|---|---|
| Frank Keohane | General Manager | |
| TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL OF FIRM: | RESPONSIBLE OFFICIAL'S TELEPHONE NUMBER: | DATE Signed: |
| Frank Keohane | (626) 358-4558 | |
| SIGNATURE OF PREPARER, IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM: | TITLE OF PREPARER: | |
| | Consultant | |
| TYPE OR PRINT NAME OF PREPARER: | PREPARER'S TELEPHONE NUMBER: | DATE Signed: |
| Kimba Spencer | (562) 961-3494 | 8/27/04 |

*THIS CONCLUDES FORM 400-CEQA. INCLUDE THIS FORM AND THE ATTACHMENTS WITH FORM 400-A.*

4. Table I - Regulated Substances List and Threshold Quantities for Accidental Release Prevention can be found in the Instructions for Form 400-CEQA.

**Justice & Associates**

4155 Outer Traffic Circle
Long Beach, CA 90804-2111
(562) 961-3494 Fax (562) 961-3493

# FEE SCHEDULE WORK SHEET

(For permit processing in accordance with Rule 301)

Permits to be issued to: United Rock Products

Address: 1245 East Arrow Highway

City, State, Zip: Irwindale, CA 91706

| Quantity of Identical Units | Equipment/Process | Fee Schedule | Full Fee for First Permit Unit | + | 50% of Processing Fee for failure to obtain Permit to Construct | = | Total |
|---|---|---|---|---|---|---|---|
| 1 | Aggregate Production/Crushing | D | $3,081.85 | + | $1,540.93 | | $4662.78 |
| | (>5000) (D08807) | | | | | | |
| | | | | | | | |
| | | | | | | | |
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| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Total Permit Processing Fee Due: $4,622.78

Comments:

J:\UnitedRock\misc\8536-fee.doc

SOUTH COAST AIR QUALITY

| JOB/SUB JOB NO. | CO | DIV | VENDOR | REFERENCE | CHECK NO |
|---|---|---|---|---|---|
| | 30 | 200 | 70659 | | 014413 |

| INVOICE NUMBER | INVOICE DATE | DESCRIPTION | GROSS AMOUNT | DISCOUNT | NET AMOUNT |
|---|---|---|---|---|---|
| 011305 | 01/13/05 | PERMIT APP FOR OP PT | 4,622.78 | | 4,622.78 |
| | | TOTALS | 4,622.78 | | 4,622.78 |

DETACH AND RETAIN THIS STATEMENT
THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED ABOVE
IF NOT CORRECT PLEASE NOTIFY US PROMPTLY. NO RECEIPT DESIRED.

JUSTICE & ASSOCIATES

| | | | |
|---|---|---|---|
| SCAQMD | [redacted] | [redacted]17/2005 | 039055 |
| 5050 · Filing Fees | UNITED ROCK #8536 | | 138.69 |

| | | |
|---|---|---|
| Checking - Bank of Ameri | UNITED ROCK | 138.69 |

P/O Approved.
F 73756
2-15-05 Mellen

ROUTING RECORD

| DATE | FROM | TO | ACTION |
|---|---|---|---|
| 5-28-04 | RWM | RJS | CLASS I |
| 02-02-05 | RJS | RWM | ISSUE PO |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

REFERENCE TO OTHER APCD RECORDS INCLUDING VARIANCES

2005
SCANNED
567891011



APPL # 430403
I. D. # 65341

ROCK PRODUCTS CORPORATION
ARROW HWY
ALE
GATE LOADING

Date: 05/25/04

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

# PERMIT TO OPERATE


Permit No.
F73756
A/N 430403

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership.
If the billing for the annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

ID 65341

Legal Owner
or Operator: UNITED ROCK PRODUCTS CORPORATION
1245 E ARROW HWY
IRWINDALE, CA 91706-1302

**Equipment Location:** 1245 E ARROW HWY, IRWINDALE, CA 91706-1302

**Equipment Description :**

AGGREGATE CRUSHING, SCREENING, AND STACKING SYSTEM CONSISTING OF:

1. VIBRATING FEEDER FROM STORAGE
2. BELT CONVEYOR NO. C-L A, 300 HP.
3. BELT CONVEYOR NO. C-1, 250 HP.
4. TWO CLASSIFYING SCREWS VS-I AND VS-2, HEWITT-ROBINS, DOUBLE DECK, 8'-0" W. X 20'-0" L, □30 HP EACH.
5. BELT CONVEYOR NO. C-5, 100 HP.
6. BELT CONVEYOR NO. C-6, 75 HP.
7. TWO CLASSIFYING SCREENS, VS-4 AND VS-5, WET SCREENING, HEWITT-ROBINS, DOUBLE □DECK, 8'-0" W X 20'-0"L, 30 HP EACH
8. CLASSIFYING TANK, EAGLE, 10'-0" W. X 40'-0" L., 10 HP.
9. WASHER NO. 1, WEMCO, MODEL B, 15 HP.
10. THREE WASHERS NOS. 2, 3, & 4, KOLBERG, 40 HP EACH.
11. METERING BIN, 20 TON CAPACITY.
12. BELT CONVEYOR NO. C-21, 5 HP.
13. SURGE BIN, 75 TONS CAPACITY.
14. BELT CONVEYOR NO. C-13, 30 HP.
15. BELT CONVEYOR NO. C-13B, CRUSHER FEED, 15 HP.
16. BELT CONVEYOR NO. C-13C, 2'-0" W. X 30'-0" L., 10 HP.

**FILE COPY**

CONTINUATION OF PERMIT TO OPERATE

17. BELT CONVEYOR NO. C-7, 7-/2 HP.
18. SURGE BIN, 100 TON CAPACITY.
19. BELT CONVEYOR NO. C-11, 7-1/2 HP.
20. BELT CONVEYOR NO. C-12, 10 HP.
21. CONE CRUSHER NO. CR-3, NORDBERG, 200 HP.
22. CONE CRUSHER NO. CR-4, NORDBERG, 300 HP.
23. BELT CONVEYOR NO. C-8, 5 HP.
24. TWO SURGE BINS, 36 TONS CAPACITY EACH,
25. BELT CONVEYOR NO. C-9, 15 HP.
26. BELT CONVEYOR, NO. C-10, 5 HP.
27. CONE CRUSHER NO. CR-1, NORDBERG, SIZE 5', WITH A 500 HP MAIN DRIVE.
28. CONE CRUSHER NO. CR-2, NORDBERG, MODEL HP-300, WITH A 300 HP MAIN DRIVE.
29. BELT CONVEYOR NO. C-2, 50 HP.
30. BELT CONVEYOR NO. C-3, 100 HP.
31. BELT CONVEYOR NO. C-4, 150 HP.
32. FOUR CLASSIFYING SCREENS NOS. VS-6A, VS-6B, VS-7A, VS-7B, HEWTT-ROBINS, DOUBLE DECK, □8'-0" W. X 20'-0" L., EACH 30 H.P.
33. CLASSIFYING SCREEN NO. VS-6C, SIMPLICITY, 6'-0" W. X 20'-0" L., TRIPLE DECK, 30 HP.
34. BELT CONVEYOR NO. C-14, 15 HP.
35. BELT CONVEYOR NO. C-15, 15 HP.
36. BELT CONVEYOR NO. C-16, 15 HP.
37. BELT CONVEYOR NO. C-17, 20 HP.
38. BELT CONVEYOR NO. C-18, 10 HP.
39. BELT CONVEYOR NO. C-19, 20 HP.
40. BELT CONVEYOR NO. C-20, 7-1/2 HP.
41. BELT CONVEYOR NO. C-22, 15 HP.

**FILE COPY**

CONTINUATION OF PERMIT TO OPERATE

42. BELT CONVEYOR NO. C-23, 30 HP.

43. BELT CONVEYOR NO. C-24, 20 HP.

44. BELT CONVEYOR NO. C-25, 40 HP.

45. BELT CONVEYOR NO. CS-1, 5 HP.

46. BELT CONVEYOR NO. CS-2, 10 HP.

47. BELT CONVEYOR NO. CS-3, 5 HP.

48. BELT CONVEYOR NO. CS-4, 10 HP.

49. SURGE HOPPER, 75 TON CAPACITY.

50. BELT CONVEYOR NO. A-1, 30 HP.

51. BELT CONVEYOR NO. A-2, 7-1/2 HP.

52. BELT CONVEYOR. NO. B, 5 HP.

53. HIGH PRESSURE WATER SPRAY SYSTEM, NESCO, MODEL DUST PRO, 200 PSI, 20 GPM, WITH EIGHT SPRAY LINES.

**Conditions :**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THIS EQUIPMENT SHALL NOT PROCESS MORE THAN 720,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

5. THE HIGH PRESSURE WATER SPRAY SYSTEM SHALL BE INSTALLED AND MAINTAINED AT THE FEED INLET AND OUTLET OF EACH CRUSHER AND AT EACH STOCK PILE. THE DISTRICT MECHANICAL TEAM SHALL BE INFORMED WHEN THIS SYSTEM IS INSTALLED AND OPERATIONAL.

6. THIS EQUIPMENT IS SUBJECT TO PART 60, CHAPTER 1, TITLE 40, CODE OF FEDERAL REGULATIONS, SUBPART OOO, STANDARD OF PERFORMANCE FOR NON-METALLIC MINERAL PROCESSING PLANTS.

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CONTINUATION OF PERMIT TO OPERATE

7. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

**NOTICE**

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Dorris M Bailey

By Dorris M.Bailey/RS06
2/15/2005

**FILE COPY**

South Coast Air Quality Management District
P.O. Box 4944
Diamond Bar CA 91765
(909) 396-2000

# APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE FORM 400 - A

**Non-Title V Facilities:** This form must be accompanied by one or more 400-E-xx series forms(s). Complete this side of form only.
**Title V Facilities:** Complete both sides of this form. Include additional forms as necessary.

NC/NOV NUMBER:
INSPECTOR SECTOR
ISSUE DATE

## Section I - Company Information

LEGAL NAME OF OPERATOR: United Rock Products Corporation — ☐ IRS OR ☐ S.S. Number

PERMIT TO BE ISSUED TO (SEE INSTRUCTIONS): United Rock Products Corporation

BUSINESS MAILING ADDRESS: 1245 East Arrow Highway, Irwindale, CA 91706

PERMIT MAILING ADDRESS, IF DIFFERENT FROM BUSINESS MAILING ADDRESS:

TYPE OF ORGANIZATION
☒ Corporation ☐ Limited Partnership ☐ Government Entity
☐ Individual ☐ General Partnership ☐ Other (Fill In):

ARE YOU A SMALL BUSINESS? (SEE INSTRUCTIONS) ☐ Yes ☒ No
AVERAGE ANNUAL GROSS RECEIPT $
NUMBER OF EMPLOYEES
IS YOUR BUSINESS 51 % OR MORE WOMAN/MINORITY OWNED? ☐ Yes ☐ No

**THIS SECTION IS REQUIRED FOR ALL APPLICATIONS FOR NEW CONSTRUCTION OR MAJOR MODIFICATIONS.**
ARE ALL MAJOR SOURCES UNDER SAME OWNERSHIP IN CALIFORNIA IN COMPLIANCE WITH FEDERAL, STATE, AND LOCAL AIR POLLUTION CONTROL RULES? ☒ Yes ☐ No

ARE YOU THE OWNER OF THE EQUIPMENT UNDER THIS APPLICATION? ☒ Yes ☐ No ☐ IRS OR ☐ S.S.NUMBER
IF NO, ENTER THE LEGAL NAME OF OWNER

## Section II - Facility Information

EQUIPMENT ADDRESS/LOCATION: 1245 East Arrow Highway (NUMBER/STREET)
Irwindale (CITY OR COMMUNITY) CA 91706 (ZIP CODE)
FACILITY NAME: Irwindale
FACILITY ID NUMBER: 0 6 5 3 4 1

PRINT NAME OF CONTACT PERSON: Frank Keohane
TITLE OF CONTACT PERSON:
TYPE OF BUSINESS AT THIS FACILITY: Aggregate Production
PRIMARY SIC CODE FOR THIS FACILITY: 1442
NUMBER OF EMPLOYEES AT THIS FACILITY:
CONTACT PERSON'S TELEPHONE NUMBER: (626) 358-4558
CONTACT PERSON'S FAX NUMBER: (626) 357-9508
CONTACT PERSON'S E-MAIL ADDRESS:

## Section III - Application Type

DESCRIPTION OF EQUIPMENT: Aggregate Loading
PREVIOUS PERMIT #S: D08813

APPLICATION FOR (SEE INSTRUCTIONS):
☐ NEW CONSTRUCTION
☐ EXISTING EQUIPMENT WITHOUT PERMIT
☐ EXISTING EQUIPMENT WITH EXPIRED PERMIT
☐ CHANGE OF LOCATION ☐ RECLAIM Processing Fee
☐ MODIFICATION
☐ CHANGE OF PERMITTEE
☐ CHANGE OF PERMIT CONDITION

ARE YOU SUBMITTING MULTIPLE APPLICATIONS FOR EQUIPMENT IDENTICAL TO THAT DESCRIBED ABOVE? ☐ Yes ☒ No

☐ **APPLICATION FOR NON-TITLE V EQUIPMENT PERMIT. CHECK THE SUPPLEMENTAL SERIES 400-E-xx FORM(S) SUBMITTED WITH THIS 400-A FORM:**

| | | | |
|---|---|---|---|
| ____ | 400-E-1 • PARTICULATE MATTER (PM-10) CONTROL EQUIPMENT | ____ | 400-E-13 • INTERNAL COMBUSTION EQUIPMENT |
| ____ | 400-E-2 • VOLATILE ORGANIC COMPOUND (VOC) CONTROL EQUIPMENT | ____ | 400-E-14 • OPEN PROCESS TANK |
| ____ | 400-E-3 • SCRUBBER | ____ | 400-E-14a • OPEN PROCESS TANK; PROCESS LINE |
| ____ | 400-E-4 • ABRASIVE BLASTING EQUIPMENT | ____ | 400-E-15 • PRINTING EQUIPMENT |
| ____ | 400-E-5 • DEGREASER | ____ | 400-E-16 • SOLID MATERIALS STORAGE EQUIPMENT |
| ____ | 400-E-7 • DRY CLEANING EQUIPMENT | ____ | 400-E-17 • SPRAY BOOTH/OPEN SPRAY |
| ____ | 400-E-8 • ETHYLENE OXIDE STERILIZER | ____ | 400-E-17a • POWDER SPRAY BOOTH |
| ____ | 400-E-9 • EXTERNAL COMBUSTION EQUIPMENT | ____ | 400-E-18 • STORAGE TANK (LIQUID & GASEOUS MATERIAL) |
| ____ | 400-E-10 • FOOD BROILER/FRYER | ____ | 400-E-19 • WAVE SOLDER MACHINE |
| ____ | 400-E-11 • FUEL DISPENSING AND STORAGE EQUIPMENT | ____ | 400-E-20 • ASBESTOS REMOVAL EQUIPMENT |
| ____ | 400-E-12 • GAS TURBINE | ____ | NONE • ADDITIONAL INFORMATION SUBMITTED AS REQUESTED ON FORM 400-E-GI |

☐ **APPLICATION FOR TITLE V FACILITY PERMIT. PROVIDE INFORMATION REQUESTED ON REVERSE SIDE OF THIS FORM.**

**I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT.**
SIGNATURE OF RESPONSIBLE OFFICIAL OF FIRM: Frank Keohane
TITLE OF RESPONSIBLE OFFICIAL OF FIRM: General Manager
TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL OF FIRM: Frank Keohane
RESPONSIBLE OFFICIALS TELEPHONE NUMBER: (626) 358-4558
DATE SIGNED: 5-18-04

**I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT.**
SIGNATURE OF PREPARER, IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM:
TITLE OF RESPONSIBLE OFFICIAL OF FIRM: Consultant
TYPE OR PRINT NAME OF PREPARER, IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM: Kimba Spence
PREPARER'S TELEPHONE NUMBER: (562) 961-3494
DATE SIGNED: 5/18/04

**TITLE V FACILITIES ONLY: COMPLETE OTHER SIDE**

| AQMD USE ONLY | APPLICATION/TRACKING # | TYPE B C D | EQUIPMENT CATEGORY CODE: | FEE SCHEDULE: $ | VALIDATION |
|---|---|---|---|---|---|
| | 430403 | | | | 05/07/04 |
| ENG. A R DATE | ENG. A R DATE | CLASS I III IV | ASSIGNMENT UNIT D ENGINEER | ENF SECT. | CHECK/MONEY ORDER # / AMOUNT $ |

FORM 400-A, Rev. 3/98

(35803)

Job No. & Form 8536-1

# TITLE V APPLICATION CERTIFICATION

**- TO BE COMPLETED BY TITLE V FACILITIES ONLY -**

## Section IV Title V Application

1. This is an application for a(n) (Check all applicable boxes and provide the requested information as appropriate):
   a. ☐ Initial Title V Permit
   b. ☐ Permit Renewal: Provide current permit expiration date: _____
   c. ☐ Administrative Permit Revision (Check all that apply)
      ☐ Change of Ownership. (Complete and attach equipment-specific Form 400-E-xx series forms)
      ☐ Change of Facility Information
      ☐ Other, Please specify: _____
   d. ☐ Other (Complete and attach equipment specific form 400-E-XX series form(s) to this form if your application involves permit action for new construction, change of location, non-administrative permit revision, alternative operating scenario (AOS), permit shield, streamlined permit conditions, or temporary source permit.)
2. Is this facility required to prepare a Risk Management Plan (RMP) for another agency? ☐ Yes ☐ No

## Section V Title V Submittal Checklist

1. Enter the quantity of each type form submitted in the space provided:

| | | | |
|---|---|---|---|
| _____ | 500-A2 | _____ | 500-F1 |
| _____ | 500-B | _____ | 500-F2 |
| _____ | 500-C1 | _____ | 500-F3 |
| _____ | 500-C2 | _____ | 500-F4 |
| _____ | 500-D | _____ | Other (specify): _____ |

2. Additional information referenced in this application submitted (Check **ALL** that apply):
   a. ☐ Existing Facility Permit
   b. ☐ Preliminary Facility Permit
   c. ☐ EFB Report for Year(s) _____
   d. ☐ None
   e. ☐ Other (Specify): _____
3. Supplemental information included with this application submittal (Check **ALL** that Apply):
   a. ☐ Facility Plot Plan
   b. ☐ MSDS Sheet(s)
   c. ☐ None
   d. ☐ Other (Specify): _____

**AQMD USE ONLY**

| APPLICATION TYPE | 30 DAY PUBLIC NOTICE START DATE | 30 DAY PUBLIC NOTICE END DATE | PUBLIC HEARING DATE | 45-DAY EPA REVIEW START DATE | 45-DAY EPA REVIEW END DATE |
|---|---|---|---|---|---|
| INITIAL, RENEWAL & SIGNIFICANT | | | | | |
| MINOR & DE MINIMIS | | | | | |
| ESTABLISH GENERAL PERMIT | | | | | |

**USE THE SECTIONS BELOW FOR TITLE V INITIAL AND RENEWAL APPLICATIONS ONLY:**

| APPLICATION/TRACKING # | TYPE B C D | EQUIPMENT CATEGORY CODE: ___ ___ ___ ___ ___ / ___ ___ | FEE SCHEDULE: $ | VALIDATION |
|---|---|---|---|---|
| | | | | |

| ENG. A DATE R | ENG. A DATE R | CLASS I III IV | ASSIGNMENT UNIT ENGINEER | ENF. SECT. | CHECK/MONEY ORDER AMOUNT # $ |
|---|---|---|---|---|---|
| | | | | | |

FORM 400-A, Rev. 3/98

4 MAY 21 P3:24

S.C.A.Q.M.D. ENGINEERING

South Coast Air Quality Management District
21865 East Copley Drive
Diamond Bar, CA 91765
(909) 396- 2000

# CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) APPLICABILITY FORM 400 - CEQA

The SCAQMD is required by state law, the California Environmental Quality Act (CEQA), to review discretionary permit project applications for potential air quality and other environmental impacts. This form is a screening tool to assist the SCAQMD in clarifying whether or not the project[1] has the potential to generate significant adverse environmental impacts that might require preparation of a CEQA document [CEQA Guidelines §15060(a)].[2] Refer to the attached instructions for guidance in completing this form.[3] For each Form 400-A application, also complete and submit one Form 400-CEQA. If submitting multiple Form 400-A applications for the same project, only one 400-CEQA form is necessary for the entire project. If you need assistance completing this form, contact Lori Inga at (909) 396-3109.

## FACILITY INFORMATION

**Facility Name:** United Rock Products **Facility ID** (6-Digit): 065341

**Project Description:** Aggregate production facility.

## REVIEW FOR EXEMPTION FROM FURTHER CEQA ACTION

Check "Yes" or "No" as applicable

| | Yes | No | Is this application for: |
|---|---|---|---|
| A. | ☐ | ☒ | **A request for a change of permittee only (without equipment modifications)?** |
| B. | ☐ | ☒ | **Equipment certification or equipment registration?** |
| C. | ☐ | ☒ | **A CEQA and/or NEPA document previously or currently prepared that specifically evaluates this project?** If yes, a permit cannot be issued until a Final CEQA document and Notice of Determination is submitted. |
| D. | ☐ | ☒ | **Equipment damaged as a result of a disaster during state of emergency?** |
| E. | ☐ | ☒ | **A Title V permit renewal (without equipment modifications)?** |
| F. | ☐ | ☒ | **A Title V administrative permit revision?** |
| G. | ☐ | ☒ | **The conversion of an existing permit into an initial Title V permit?** |
| H. | ☐ | ☒ | **A functionally identical permit unit replacement with no increase in rating or emissions?** |
| I. | ☐ | ☒ | **A change of daily VOC permit limit to a monthly VOC permit limit?** |

If "**Yes**" is checked for any question above, your application does not require additional evaluation for CEQA applicability. Skip to page 2, "SIGNATURES" and sign and date this form.

## REVIEW OF IMPACTS WHICH MAY TRIGGER CEQA

Complete Sections I-V by checking "Yes" or "No" as applicable. To avoid delays in processing your application(s), explain all "Yes" responses on a separate sheet and attach it to this form.

| | Yes | No | Section I - General |
|---|---|---|---|
| 1. | ☐ | ☒ | **Has this project generated any known public controversy regarding potential adverse impacts that may be generated by the project?** Controversy may be construed as concerns raised by local groups at public meetings; adverse media attention such as negative articles in newspapers or other periodical publications, local news programs, environmental justice issues, etc. |
| 2. | ☐ | ☒ | **Is this project part of a larger project?** |
| | | | **Section II - Air Quality** |
| 3. | ☐ | ☒ | **Will there be any demolition, excavating, and/or grading construction activities that encompass an area exceeding 20,000 square feet?** |
| 4. | ☒ | ☐ | **Does this project include the open outdoor storage of dry bulk solid materials that could generate dust?** If Yes, include a plot plan with the application package. |

1. A "project" means the whole of an action which has a potential for resulting in physical change to the environment, including construction activities, clearing or grading of land, improvements to existing structures, and activities or equipment involving the issuance of a permit. For example, a project might include installation of a new, or modification of an existing internal combustion engine, dry-cleaning facility, boiler, gas turbine, spray coating booth, solvent cleaning tank, etc.
2. To download the CEQA guidelines, visit http://ceres.ca.gov/env_law/state.html.
3. To download this form and the instructions, visit http://www.aqmd.gov/ceqa.

| | Yes | No | |
|---|---|---|---|
| 5. | ☐ | ☒ | **Would this project result in noticeable off-site odors from activities that may not be subject to SCAQMD permit requirements?** For example, compost materials or other types of greenwaste (i.e., lawn clippings, tree trimmings, etc.) have the potential to generate odor complaints subject to Rule 402 - Nuisance. |
| 6. | ☐ | ☒ | **Does this project cause an increase of emissions from marine vessels, trains and/or airplanes?** |
| 7. | ☐ | ☒ | **Will the proposed project increase the QUANTITY of hazardous materials stored aboveground onsite or transported by mobile vehicle to or from the site by greater than or equal to the amounts associated with each compound on the attached Table 1?[4]** |
| | | | **Section III - Water Resources** |
| 8. | ☐ | ☒ | **Will the project increase demand for water at the facility by more than 5,000,000 gallons per day?** The following examples identify some, but not all, types of projects that may result in a "yes" answer to this question: 1) projects that generate steam; 2) projects that use water as part of the air pollution control equipment; 3) projects that require water as part of the production process; 4) projects that require new or expansion of existing sewage treatment facilities; 5) projects where water demand exceeds the capacity of the local water purveyor to supply sufficient water for the project; and 6) projects that require new or expansion of existing water supply facilities. |
| 9. | ☐ | ☒ | **Will the project require construction of new water conveyance infrastructure?** Examples of such projects are when water demands exceed the capacity of the local water purveyor to supply sufficient water for the project, or require new or modified sewage treatment facilities such that the project requires new water lines, sewage lines sewage hook ups etc |
| | | | **Section IV - Transportation / Circulation** |
| 10. | | | **Will the project result in** (Check all that apply): |
| | ☐ | ☒ | **a. the need for more than 350 new employees?** |
| | ☐ | ☒ | **b. an increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round-trips per day?** |
| | ☐ | ☒ | **c. increase customer traffic by more than 700 visits per day?** |
| | | | **Section V - Noise** |
| 11. | ☐ | ☒ | **Will the project include equipment with a noise specification GREATER THAN 90 decibels (dB)?** |
| | | | **Section VI - Public Services** |
| 12. | | | **Will the project create a permanent need for new or additional public services in any of the following areas** (Check all that apply): |
| | ☐ | ☒ | **a. Solid waste disposal?** Check "No" if the projected potential amount of wastes generated by the project is less than five tons per day. |
| | ☐ | ☒ | **b. Hazardous waste disposal?** Check "No" if the projected potential amount of hazardous wastes generated by the project is less than 42 cubic yards per day (or equivalent in pounds) |

**REMINDER For each 'Yes' checked in the sections above, attach all pertinent information including but not limited to estimated quantities - volumes, weights, etc -**

## SIGNATURES

I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. I UNDERSTAND THAT THIS FORM IS A SCREENING TOOL AND THAT THE SCAQMD RESERVES THE RIGHT TO CONSIDER OTHER PERTINENT INFORMATION IN DETERMINING CEQA APPLICABILITY.

| SIGNATURE OF RESPONSIBLE OFFICIAL OF FIRM: | TITLE OF RESPONSIBLE OFFICIAL OF FIRM: | |
|---|---|---|
| Frank Keohane | General Manager | |
| TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL OF FIRM: | RESPONSIBLE OFFICIAL'S TELEPHONE NUMBER: | DATE Signed: |
| Frank Keohane | (626) 358-4558 | |
| SIGNATURE OF PREPARER, IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM: | TITLE OF PREPARER: | |
| | Consultant | |
| TYPE OR PRINT NAME OF PREPARER: | PREPARER'S TELEPHONE NUMBER: | DATE Signed: |
| Kimba Spencer | (562) 961-3494 | 8/27/04 |

*THIS CONCLUDES FORM 400-CEQA. INCLUDE THIS FORM AND THE ATTACHMENTS WITH FORM 400-A.*

4. Table I - Regulated Substances List and Threshold Quantities for Accidental Release Prevention can be found in the Instructions for Form 400-CEQA.

SCAQMD PERMIT PROCESSING SYSTEM (PPS)

# FEE DATA - SUMMARY SHEET

| | | | |
|---|---|---|---|
| Application No : | 430403 | IRS/SS No: | |
| Previous Application No: | 185077 | Previous Permit No: | D08813 |

| | |
|---|---|
| Company Name : | UNITED ROCK PRODUCTS CORPORATION |
| Equipment Street: | 1245 E ARROWHWY , IRWINDALE CA 91706 |
| Equipment Desc : | AGGREGATE PRODN/CRUSH >= 5000 TPD |

Facility ID: 65341

| | | | | | |
|---|---|---|---|---|---|
| Equipment Type : | BASIC | | | Fee Charged by: | B-CAT |
| B-CAT NO. : | 107752 | C-CAT NO: | 00 | Fee Schedule: | D |
| Facility Zone : | 09 | Deemed Compl. Date: | 6/10/2004 | Public Notice: | NO |

| | |
|---|---|
| Evaluation Type : | CHANGE OF CONDITIONS, ACTUAL OPER. COND. (PO) |
| Disposition : | Approve PO, Recommended by Engineer |
| Lead Appl. No : | |

Small Business: ☐
Penalty: ☐
Identical Permit Unit: ☐

| | | | | | |
|---|---|---|---|---|---|
| Air quality Analysis | | | $0.00 | Filing Fee Paid: | $0.00 |
| E.I.R | | | $0.00 | Permit Processing Fee Paid: | $123.02 |
| Health Risk Assessment | | | $0.00 | Permit Processing Fee Calculated*: | $123.02 |
| Significant Project | | | $0.00 | Permit Processing Fee Adjustment: | $0.00 |
| Express Processing | Hours: | 0.00 | $0.00 | | |
| Source Test Review | Hours: | 0.00 | $0.00 | | |
| Time & Material | Hours: | 0.00 | $0.00 | | |
| OTHER FEES (FOR BALANCING ONLY) | | | $2,958.83 | | |
| | | | | Total Additional Fee: | $2,958.83 |
| | | | | Additional Charge: | $2,958.83 |

COMMENTS: THE FEE PAID WAS FOR ADMINISTRATIVE CHANGE ONLY. LATER, THE APPLICANT DECIDED TO MAKE MODIFICATIONS. CHARGE ADDITIONAL FEE FOR PROCESSING AS MODIFICATION.

FEES DUE! 2/11/05

RECOMMENDED BY: RAJENDRA SINGH DATE: 02/02/2005

REVIEWED BY: _____ DATE: 2-15-05

* ADJUSTED FOR SMALL BUSINESS, IDENTICAL EQUIPMENT AND P/O NO P/C PENALTY

SCAQMD PERMIT PROCESSING SYSTEM (PPS)

# AEIS DATA SHEET

Company Name : UNITED ROCK PRODUCTS CORPORATION

Facility ID : 65341

Equipment Address : 1245 E ARROW HWY

IRWINDALE CA 91706

Application Number : 430403

Estimated Completion Date : 02/01/05

Equipment Type : Basic

Equipment Description : AGGREGATE PRODN/CRUSH >= 5000 TPD

Equipment B-Cat : 107752

Equipment C-Cat :

| | Emissions | |
|---|---|---|
| Emittants | R1 LB/HR | R2 LB/HR |
| PM10 | 33.40 | 3.34 |

**Applicable Rules**

| | | |
|---|---|---|
| 1401 | 05/02/2003 | New Source Review of Toxic Air Contaminants |
| 401 | 11/09/2001 | Visible Emissions |
| 402 | 05/07/1976 | Nuisance |
| 403 | 04/02/2004 | Fugitive Dust |
| 405 | 02/07/1986 | Solid Particulate Matter - Weight |

| | Mon | Tue | Wed | Thu | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|
| Daily Start Times : | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 | 00:00 |
| Daily Stop Times : | 24:00 | 24:00 | 24:00 | 24:00 | 24:00 | 24:00 | 24:00 |

User's Initials : RS06 Date: 02/01/05 Supervisor's Name : _____ Review Date : 2/15/05

# NSR DATA SUMMARY SHEET

Application No: 430403
Application Type: Change of Conditions: No Engineering Evaluation/Ad
Application Status: PENDAPPRV
Previous Apps,Dev,Permit #: 185077, 0 - x, NONE

Company Name: UNITED ROCK PRODUCTS CORPORATION
Company ID: 65341
Address: 1245 E ARROW HWY,IRWINDALE, CA 91706-1302
RECLAIM: NO
RECLAIM Zone: 02A
Air Basin: SC
[redacted]ne: 09
Title V: NO

Device ID: 0 - AGGREGATE-PROD
Estimated Completion Date:
Heat Input Capacity: 0 Million BTU/hr
Priority Reserve: NONE - No Priority Access Requested
Recommended Disposition: 31 - PERMIT TO OPERATE GRANTED
PR Expiration:
School Within 1000 Feet: NO
Operating Weeks Per Year: 52
Operating Days Per Week: 7
Monday Operating Hours: 00:00 to 24:00
Tuesday Operating Hours: 00:00 to 24:00
Wednesday Operating Hours: 00:00 to 24:00
Thursday Operating Hours: 00:00 to 24:00
Friday Operating Hours: 00:00 to 24:00
[redacted]aturday Operating Hours: 00:00 to 24:00
Sunday Operating Hours: 00:00 to 24:00

Emittant: PM10
BACT:
Cost Effectiveness: NO
Source Type: MINOR
Emis Increase: -79
Modeling: N/A
Public Notice: N/A
CONTROLLED EMISSION
Max Hourly: 3.34 lbs/hr
Max Daily: 80.16 lbs/day
UNCONTROLLED EMISSION
Max Hourly: 33.4 lbs/hr
Max Daily: 801.6 lbs/day
CURRENT EMISSION
BACT 30 days Avg: 80 lbs/day
Annual Emission: 29200 lbs/yr
District Exemption: None

SUPERVISOR'S APPROVAL: _____ SUPERVISOR'S REVIEW DATE: 2-15-05

Processed By: rsingh 2/2/2005 1:15:11 PM

# PERMIT TO CONSTRUCT/OPERATE EVALUATION,

| | |
|---|---|
| **Applicant's Name** | **UNITED ROCK PRODUCTS CORPORATION** |
| **Company I.D.** | **65341** |
| **Mailing Address** | **1245 E. ARROW HIGHWAY, IRWINDALE, CA 91706** |
| **Equipment Address** | **1245 E. ARROW HIGHWAY, IRWINDALE, CA 91706** |
| **APPLICATION NUMBER** | **430403, 430418, 438791** |

## BACKGROUND:

These applications were submitted for modifications to three aggregate crushing / screening and conveying plants operating under valid permits. A/N 430403 for the main aggregate plant (currently operating under PO # D08813) was submitted on 5/25/04 to change the daily production limit to a monthly limit without changing the throughput and to install spray nozzles at crushers to control PM emissions. Originally, the application was submitted as an administrative change. However, it is being processed as a modification due to equipment changes and addition of spray nozzles. The applicant has been informed of the additional fee that will be charged.

A/N 430418 was initially submitted to consolidate equipment in two rock pre- crushing plants into one permit unit. The two systems are currently operating under PO #s D08810 and D08807. A review of the two permits indicated that combining the two systems will increase the emissions and will require offsets for PM10. After speaking to the applicant's consultant, it was decided to keep the two systems separated. Consequently, a new application (A/N 438791) was received on 1/13/05 to modify the second plant. A/N 430418 will modify PO # D08810 and the new A/N 438791 will modify PO # D08807. The applicant has also requested to change the daily production limits in these permits to monthly limits.

A check on the compliance data indicates one open violation and an open notice of compliance. These will not affect the applications being processed here. The facility is in an industrial area and there are no schools within 1000 feet of this facility.

**EQUIPMENT DESCRIPTION:**

Application No. 430403

AGGREGATE CRUSHING, SCREENING, AND STACKING SYSTEM CONSISTING OF:

1. VIBRATING FEEDER FROM STORAGE
2. BELT CONVEYOR NO. C-1 A, 300 HP.
3. BELT CONVEYOR NO. C-1, 250 HP.
4. TWO CLASSIFYING SCREWS VS-I AND VS-2, HEWITT-ROBINS, DOUBLE DECK, 8'-0" W. X 20'-0" L, 30 HP EACH.
5. BELT CONVEYOR NO. C-5, 100 HP.
6. BELT CONVEYOR NO. C-6, 75 HP.
7. TWO CLASSIFYING SCREENS, VS-4 AND VS-5, WET SCREENING, HEWITT-ROBINS, DOUBLE DECK, 8'-0" W X 20'-0"L, 30 HP EACH
8. CLASSIFYING TANK, EAGLE, 10'-0" W. X 40'-0" L., 10 HP.
9. WASHER NO. 1, WEMCO, MODEL B, 15 HP.
10. THREE WASHERS NOS. 2, 3, & 4, KOLBERG, 40 HP EACH.
11. METERING BIN, 20 TON CAPACITY.
12. BELT CONVEYOR NO. C-21, 5 HP.
13. SURGE BIN, 75 TONS CAPACITY.
14. BELT CONVEYOR NO. C-13, 30 HP.
15. BELT CONVEYOR NO. C-13B, CRUSHER FEED, 15 HP.
16. BELT CONVEYOR NO. C-13C, 2'-0" W. X 30'-0" L., 10 HP.
17. BELT CONVEYOR NO. C-7, 7-/2 HP.
18. SURGE BIN, 100 TON CAPACITY.
19. BELT CONVEYOR NO. C-11, 7-1/2 HP.
20. BELT CONVEYOR NO. C-12, 10 HP.
21. CONE CRUSHER NO. CR-3, NORDBERG, 200 HP.
22. CONE CRUSHER NO. CR-4, NORDBERG, 300 HP.
23. BELT CONVEYOR NO. C-8, 5 HP.
24. TWO SURGE BINS, 36 TONS CAPACITY EACH,
25. BELT CONVEYOR NO. C-9, 15 HP.
26. BELT CONVEYOR, NO. C-10, 5 HP.
27. CONE CRUSHER NO. CR-1, NORDBERG, size 5', WITH A 500 HP MAIN DRIVE.
28. CONE CRUSHER NO. CR-2, NORDBERG, MODEL HP-300, WITH A 300 HP MAIN DRIVE.
29. BELT CONVEYOR NO. C-2, 50 HP.
30. BELT CONVEYOR NO. C-3, 100 HP.
31. BELT CONVEYOR NO. C-4, 150 HP.
32. FOUR CLASSIFYING SCREENS NOS. VS-6A, VS-6B, VS-7A, VS-7B, HEWTT-ROBINS, DOUBLE DECK, 8'-0" W. X 20'-0" L., EACH 30 H.P.
33. CLASSIFYING SCREEN NO. VS-6C, SIMPLICITY, 6'-0" W. X 20'-0" L., TRIPLE DECK, 30 HP.
34. BELT CONVEYOR NO. C-14, 15 HP.
35. BELT CONVEYOR NO. C-15, 15 HP.
36. BELT CONVEYOR NO. C-16, 15 HP.
37. BELT CONVEYOR NO. C-17, 20 HP.
38. BELT CONVEYOR NO. C-18, 10 HP.
39. BELT CONVEYOR NO. C-19, 20 HP.
40. BELT CONVEYOR NO. C-20, 7-1/2 HP.

41. BELT CONVEYOR NO. C-22, 15 HP.
42. BELT CONVEYOR NO. C-23, 30 HP.
43. BELT CONVEYOR NO. C-24, 20 HP.
44. BELT CONVEYOR NO. C-25, 40 HP.
45. BELT CONVEYOR NO. CS-1, 5 HP.
46. BELT CONVEYOR NO. CS-2, 10 HP.
47. BELT CONVEYOR NO. CS-3, 5 HP.
48. BELT CONVEYOR NO. CS-4, 10 HP.
49. SURGE HOPPER, 75 TON CAPACITY.
50. BELT CONVEYOR NO. A-1, 30 HP.
51. BELT CONVEYOR NO. A-2, 7-1/2 HP.
52. BELT CONVEYOR. NO. B, 5 HP.
53. HIGH PRESSURE WATER SPRAY SYSTEM, NESCO, MODEL DUST PRO, 200 PSI, 20 GPM, WITH EIGHT SPRAY LINES.

Application No. 430418

AGGREGATE PRE-CRUSHING, CONVEYING, AND STACKING SYSTEM NO.1 CONSISTING OF:

1. TWO RECEIVING HOPPERS, EACH WITH A VIBRATING GRIZZLY.
2. JAW CRUSHER, TELESMITH, 2'-6" W. X 4'-7" L., 150 H.P., WITH A PLATE FEEDER.
3. FOUR SCREENS NOS. 17, 18, 19, & 20, SVEDALA, 6'-0" W. X 20'-0" L., 40 H.P. EACH.
4. TWO UNDER SCREEN CONVEYORS NOS. 15, 16, 3'-6" W. X 40'-0" L., 20 H.P. EACH.
5. TWO SCREENS NOS. 21, & 22, SVEDALA, 5'-6" W. X 15'-0" L., 30 H.P. EACH.
6. SHUTTLE CONVEYOR NO. 14, 3'-6" W. X 60'-0" L., 30 H.P.
7. BELT CONVEYOR NO. 1, 3'-6" W. X 600'-0" L., 75 H.P.
8. BELT CONVEYOR NO. 2, 3'-6" W. X 350'-0" L., 125 H.P.
9. BELT CONVEYOR NO. 3, 3'-6" W. X 50'-0" L., 40 H.P.
10. BELT CONVEYOR NO. 4, 3'-6" W. X 650'-0" L., 275 H.P.
11. BELT CONVEYOR NO. 5, 3'-6" W. X 490'-0" L., 150 H.P.
12. BELT CONVEYOR NO. 6, 3'-6" W. X 130'-0" L., 75 H.P.
13. SEVEN BELT CONVEYORS NOS. 7 THRU 13, 3'-6" W. X 150'-0" L., 40 H.P. EACH.
14. BELT CONVEYOR NO. 11A, 3'-6" W. X 275'-0" L., 125 H.P. (COMMON TO A/N 438791)
15. STACKING CONVEYOR NO. 12A, 3'-6" W. X 200'-0" L., 150 H.P. (COMMON TO A/N 438791)

Application No. 438791

AGGREGATE PRE-CRUSHING, CONVEYING, AND STACKING SYSTEM NO. 2 CONSISTING OF:

1. RECEIVING HOPPER, WITH A VIBRATING GRIZZLY FEEDER.
2. JAW CRUSHER, MINYU, 3'-4" W. X 3'-6" L., 150 H.P.
3. UNDER JAW BELT CONVEYOR NO. 3A, 3'-6" W. X 30'-0" L., 30 H.P.
4. BELT CONVEYOR NO. 3, 3'-6" W. X 1000'-0" L., 150 H.P.
5. BELT CONVEYOR NO. 4, 3'-6" W. X 675'-0" L., 400 H.P.
6. BELT CONVEYOR NO. 5, 3'-6" W. X 890'-0" L., 75 H.P.
7. BELT CONVEYOR NO. 6, 3'-6" W. X 125'-0" L., 50 H.P.
8. BELT CONVEYOR NO. 7, 3'-6" W. X 540'-0" L., 150 H.P.
9. BELT CONVEYOR NO. 8, 3'-6" W. X 1150'-0" L., 150 H.P.
10. BELT CONVEYOR NO. 9, 3'-6" W. X 850'-0" L., 150 H.P.

11. BELT CONVEYOR NO. 10, 3'-6" W. X 150'-0" L., 150 H.P.
12. BELT CONVEYOR NO. 11A, 3'-6" W. X 275'-0" L., 125 H.P. (COMMON TO A/N 430418)
13. STACKING CONVEYOR NO. 12A, 3'-6" W. X 200'-0" L., 150 H.P. (COMMON TO A/N 430418)

## PROCESS DESCRIPTION:

A/N 430403 – This is the main aggregate plant. The attached flow diagram shows the operation of the system and material flow. During this modification a high pressure water spray system will be installed to control PM emissions. The spray system consists of a 20 gpm, 200 psi pump, and a spray nozzles as shown on the attached flow diagram. The equipment changes are shown on the attached marked up copy of the existing permit. There is no change in throughput; therefore, no increase in emissions is expected as a result of this modification.

A/N 430418 – This rock pre-crushing and conveying system processes wet material from a clamshell dredge. The attached flow diagram shows the operation of the system and material flow. During this modification, some equipment changes are being made as shown on the attached marked up copy of the existing permit. There is no change in throughput; therefore, no increase in emissions is expected as a result of this modification.

A/N 438791 – This rock pre-crushing and conveying system is being modified to replace a crusher and install spray nozzles to control PM emissions from the crushing operation. The attached flow diagram shows the operation of the system and material flow. The equipment changes are shown on the attached marked up copy of the existing permit. This and the other pre-crushing system (A/N 430418), both feed the primary surge pile using two common conveyors. Currently, these two conveyors are not covered by any of the two existing permits for these two systems (PO # D08807 and PO # D08810). Therefore, these two conveyors are being included in this application. There is no change in throughput. The only increase in PM emissions will be due to the inclusion of these two conveyors.

## OPERATING SCHEDULE:

Maximum: 24 hrs per day, 7 days per week, 52 weeks per year
Average: same

## EMISSION CALCULATIONS:

Application No. 430403

Throughput = 24,000 tons per day
= 720,000 tons / month (permit condition)

There is no change in throughput. The PM emissions are expected to be reduced due to addition of spray nozzles. The emission calculations are presented in the attached sheets. These calculations were performed by the applicant's consultant and are being used after checking the accuracy of the calculations. Emission factors used in these calculations are taken from AP-42, Table 11.19.2-2 for crushed stone processing (attached). The controlled PM10 emission factors are based on use of water spray to control particulate emissions.

From the attached calculations:

R2 (PM10) = 80.15 lbs / day
= 3.34 lbs./ hr @ 24 hrs / day

The uncontrolled emissions are calculated assuming 90 % reduction in emissions due to water spray,

R1 (PM10) = (3.34 lbs / hr) / (1-0.9)
= 33.4 lbs / hr

Assuming PM10 = 50 % of PM

R1 (PM) = 2 x 33.4 lbs / hr
= 66.8 lbs./ hr.
R2 (PM) = 2 x 3.34 lbs./ hr
= 6.68 lbs./ hr.

This is less than the 30 lb / hr allowable limit in Table 405 (a) for process weight of 1,000 tons per hr..

AEIS and NSR Emission Data

R1 (PM10) =33.4 lb / hr
R2 (PM10) = 3.34 lb / hr.

30-Day average (PM10) = (3.34 lbs / hr. x 24 hrs / day x 30 days / month) / 30
= 80.16 lb / day

Annual average (PM10) = (3.34 lbs./ hr. x 24 hrs./ day x 7 days / wk. x 52 wks./ yr.)/2000
= 14.6 tons / yr.

From the NSR data base, the PM10 emissions prior to this modification are 26 lbs / hr. Thus, there is a decrease in emissions due to this modification.

Application No. 430418

Throughput = 11,200 tons per day
= 336,000 tons / month (permit condition)

This site operates a clamshell dredge. The material is completely wet and therefore, PM10 emissions from this process are expected to insignificant.

AEIS and NSR Emission Data

R1 (PM10) = 0 lb / hr
R2 (PM10) = 0 lb / hr.

Application No. 438791

Throughput = 9,600 tons per day
= 288,000 tons / month (permit condition)

There is no change in throughput. The PM emissions are expected to be reduced to due to addition of a spray nozzle at the jaw crusher. The emission calculations are presented in the attached sheet. Emission factors used in these calculations are taken from AP-42, Table 11.19.2-2 for crushed stone processing (attached).

From the attached calculations:

R2 (PM10) = 10.5 lbs / day
= 0.44 lbs./ hr @ 24 hrs / day

The uncontrolled emissions are calculated assuming 90 % reduction in emissions due to water spray,

R1 (PM10) = (0.44 lbs / hr) / (1-0.9)
= 4.4 lbs / hr

Assuming PM10 = 50 % of PM

R1 (PM) = 2 x 4.4 lbs / hr
= 8.8 lbs./ hr.

R2 (PM) = 2 x 0.44 lbs / hr
= 0.88 lbs / hr.

This is much less than the 28 lb / hr allowable limit in Table 405 (a) for process weight of 400 tons per hr..

AEIS and NSR Emission Data

R1 (PM10) = 4.4 lb / hr
R2 (PM10) = 0.44 lb / hr.

30-Day average (R2-PM10) = (0.44 lbs / hr. x 24 hrs / day x 30 days / month) / 30
= 10.992 lb / day

Annual average (R2-PM10) = (0.458 lbs / hr. x 24 hrs / day x 7 days / wk. x 52 wks / yr)/2000
= 1.92 tons / yr.

From the NSR data base, the PM10 emissions prior to this modification are 2.6 lbs / hr. Thus, there is a decrease in emissions after the modification..

**RULES:**

RULE 212 There are no schools within 1000 feet of the facility. Public notice is not required.

RULE 401 Visible emissions are not expected with proper maintenance and operation of this equipment. Compliance is expected.

RULE 402 Operation of this equipment is not expected to create a nuisance. Compliance is expected.

RULE 403 Fugitive dust is not expected with proper use of water spray as specified in permit conditions. Compliance is expected.

RULE 405 As shown in the above calculations, the PM emissions are much smaller than the rate allowed in Table 405 (a) of this rule. Compliance is expected.

REG. XIII New Source Review:

A/N 430403: From the NSR data base, the PM10 emissions prior to this modification are 26 lbs / hr. The calculated PM10 emissions after modification are 3.34 lbs / hr. Thus, there is a decrease in emissions due to this modification. Therefore, Regulation XIII evaluation is not required.

A/N 430418: This system processes wet material from a clamshell dredge. No significant emissions are expected from this process.

A/N 438791: From the NSR data base, the PM10 emissions prior to this modification are 2.6 lbs / hr. The calculated PM10 emissions after modification are 0.44 lbs / hr. Thus, there is a decrease in emissions due to this modification. Therefore, Regulation XIII evaluation is not required.

RULE 1401 Review of Toxic Air Contaminants
No toxic emissions are expected from these operation. Compliance is expected.

**CONCLUSIONS/RECOMMENDATIONS:**

The equipment is expected to comply with all applicable AQMD rules and regulations. Issue POs subject to permit conditions listed below:

**Conditions:**

Application No. 430403

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THIS EQUIPMENT SHALL NOT PROCESS MORE THAN 720,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

5. THE HIGH PRESSURE WATER SPRAY SYSTEM SHALL BE INSTALLED AND MAINTAINED AT THE FEED INLET AND OUTLET OF EACH CRUSHER AND AT EACH STOCK PILE. THE DISTRICT MECHANICAL TEAM SHALL BE INFORMED WHEN THIS SYSTEM IS INSTALLED AND OPERATIONAL.

6. THIS EQUIPMENT IS SUBJECT TO PART 60, CHAPTER 1, TITLE 40, CODE OF FEDERAL REGULATIONS, SUBPART OOO, STANDARD OF PERFORMANCE FOR NON-METALLIC MINERAL PROCESSING PLANTS.

7. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

Application No. 430418

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THIS EQUIPMENT SHALL NOT PROCESS MORE THAN 336,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

5. THIS EQUIPMENT SHALL PROCESS WET MATERIAL FROM CLAMSHELL DREDGE ONLY.

6. THIS EQUIPMENT IS SUBJECT TO PART 60, CHAPTER 1, TITLE 40, CODE OF FEDERAL REGULATIONS, SUBPART OOO, STANDARD OF PERFORMANCE FOR NON-METALLIC MINERAL PROCESSING PLANTS.

7. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

Application No. 438791

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS ERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.
4. THIS EQUIPMENT SHALL NOT PROCESS MORE THAN 288,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.
5. A HIGH PRESSURE WATER SPRAY SYSTEM SHALL BE INSTALLED AND MAINTAINED AT FEED HOPPER, FEED INLET TO JAW CRUSHER, DISCHARGE BELT 3A, AND AT BELT TRANSFER POINTS APPROXIMATELY 1000 FEET APART. THE DISTRICT MECHANICAL TEAM SHALL BE INFORMED WHEN THIS SYSTEM IS INSTALLED AND OPERATIONAL.
6. THIS EQUIPMENT IS SUBJECT TO PART 60, CHAPTER 1, TITLE 40, CODE OF FEDERAL REGULATIONS, SUBPART OOO, STANDARD OF PERFORMANCE FOR NON-METALLIC MINERAL PROCESSING PLANTS.
7. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

## Existing Facility Emissions
## Main Aggregate Plant

The emissions estimates for the aggregate plant are calculated below. The emissions factors were taken from EPA AP-42 Table 11.19.2-2

| | Description | Thruput (tons/day) | × | $PM_{10}$ AP-42 Emission Factors (lbs/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 1 | Belt Conveyor C1A to Belt Conveyor C1 | 24,000 | | 0.000046 | | 1.1040 |
| 2 | Belt Conveyor C1 to Screen VS1 | 24,000 | | 0.000046 | | 1.1040 |
| 3 | Screen VS1 | 24,000 | | 0.00074 | | 17.7600 |
| 4 | Screen VS1 to Screen VS2 | 6,000 | | 0.000046 | | 0.2760 |
| 5 | Screen VS2 | 6,000 | | 0.00074 | | 4.4400 |
| 6 | Screen VS1 to Belt Conveyor C5 | 0 | | 0.000046 | | 0.0000 |
| 7 | Belt Conveyor C5 to Belt Conveyor C6 | 0 | | 0.000046 | | 0.0000 |
| 8 | Belt Conveyor C6 to Screen VS4 | 0 | | Wet | | -- |
| 9 | Screen VS4 | 0 | | Wet | | -- |
| 10 | Screen VS1 to Surge Bin 1 (6" × 1 1/2") w/Belt Conveyor C9 | 1,000 | | 0.000046 | | 0.0460 |
| 11 | Belt Conveyor C9 to Cone Crusher CR1 | 1,000 | | 0.000046 | | 0.0460 |
| 12 | Cone Crusher CR1 | 1,000 | | 0.00054 | | 0.5400 |
| 13 | Cone Crusher CR1 to Belt Conveyor C2 | 1,000 | | 0.000046 | | 0.0460 |
| 14 | Belt Conveyor C2 to Belt Conveyor C3 | 24,000 | | 0.000046 | | 1.1040 |
| 15 | Belt Conveyor C3 to Belt Conveyor C4 | 24,000 | | 0.000046 | | 1.1040 |
| 16 | Belt Conveyor C4 to Screens VS6A,B, & C | 24,000 | | 0.000046 | | 1.1040 |
| 17 | Screen VS6A | 12,000 | | 0.00074 | | 8.8800 |
| 18 | Screen VS6B | 12,000 | | 0.00074 | | 8.8800 |
| 19 | Screen VS1 to Surge Bin 2 (1 1/2" × 1 7/8") | 8,500 | | 0.000046 | | 0.3910 |
| 20 | Belt Conveyor C10 to Cone Crusher CR2 | 8,500 | | 0.000046 | | 0.3910 |
| 21 | Cone Crusher CR2 | 8,500 | | 0.00059 | | 5.0150 |
| 22 | Cone Crusher CR2 to Belt Conveyor C2 | 8,500 | | 0.000046 | | 0.3910 |
| 23 | Screen VS1 to 100 Ton Surge Bin 3 w/Belt Conveyors C11 & C12 | 8,500 | | 0.000046 | | 0.3910 |
| 24 | Belt Conveyors C11 and C12 to Cone Crushers CR3 and CR4 | 8,500 | | 0.000046 | | 0.3910 |
| 25 | Cone Crushers CR3 and CR4 | 8,500 | | 0.00054 | | 4.5900 |
| 26 | Cone Crushers CR3 and CR4 to Belt Conveyor C2 | 8,500 | | 0.000046 | | 0.3910 |
| 27 | Screen VS2 to Belt Conveyor C7 | 6,000 | | 0.000046 | | 0.2760 |
| 28 | Screen VS2 to Belt Conveyor C5 | 0 | | 0.000046 | | 0.0000 |
| 29 | Belt Conveyor C7 to Surge Bin 3 | 6,000 | | 0.000046 | | 0.2760 |
| 30 | Screen VS2 to Belt Conveyor C13 | 0 | | 0.000046 | | 0.0000 |
| 31 | Belt Conveyor C13 to Belt Conveyor C13B | 0 | | 0.000046 | | 0.0000 |
| 32 | Belt Conveyor C13B to Belt Conveyor C13C | 0 | | 0.000046 | | 0.0000 |

## Existing Facility Emissions
## Main Aggregate Plant (continued)

| | Description | Thruput (tons/day) | × | $PM_{10}$ AP-42 Emission Factors (lbs/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 33 | Belt Conveyor C13C to Stockpile | 0 | | -- | | 0.0000 |
| 34 | Screen VS4 to Belt Conveyors C18 and C19 | 0 | | Wet | | -- |
| 35 | Belt Conveyors C18 and C19 to Stockpiles | 0 | | -- | | -- |
| 36 | Screen VS4 to Screen VS5 | 0 | | Wet | | -- |
| 37 | Screen VS5 | 0 | | Wet | | -- |
| 38 | Screen VS5 to Belt Conveyor C20 | 0 | | Wet | | -- |
| 39 | Belt Conveyor 20 to Stockpile | 0 | | -- | | -- |
| 40 | Screen VS5 to Metering Bin 5 | 0 | | Wet | | -- |
| 41 | Metering Bin 5 to Belt Conveyor C21 | 0 | | Wet | | -- |
| 42 | Belt Conveyor C21 to Birds Eye Hopper | 0 | | Wet | | -- |
| 43 | Screen VS5 to Classifying Tank | 0 | | Wet | | -- |
| 44 | Classifying Tank to Washers 1,2,3, and 4 | 0 | | Wet | | -- |
| 45 | Washers 1,2,3, and 4 to Belt Conveyor C24 | 0 | | Wet | | -- |
| 46 | Belt Conveyor C24 to Belt Conveyor C25 | 0 | | Wet | | -- |
| 47 | Belt Conveyor C25 to Stockpile | 0 | | -- | | -- |
| 48 | Washers 1,2,3, and 4 to Belt Conveyor C22 | 0 | | Wet | | -- |
| 49 | Belt Conveyor C22 to Belt Conveyor C23 | 0 | | Wet | | -- |
| 50 | Belt Conveyor C23 to Stockpile | 0 | | -- | | -- |
| 51 | Screens VS6A and VS6B to Belt Conveyor C8 | 0 | | 0.000046 | | -- |
| 52 | Belt Conveyor C8 to Surge Bins 2 and 3 | 0 | | 0.000046 | | -- |
| 53 | Screens VS6A, VS6B, & VS6C to Belt Conveyor C7 | 0 | | 0.000046 | | -- |
| 54 | Screen VS6A to Screen VS7A | 12,000 | | 0.000046 | | 0.5520 |
| 55 | Screen VS6B to Screen VS7B | 12,000 | | 0.000046 | | 0.5520 |
| 56 | Screens VS7A | 12,000 | | 0.00074 | | 8.8800 |
| 57 | Screens VS7B | 12,000 | | 0.00074 | | 8.8800 |
| 58 | Screens VS7A and VS7B to Belt Conveyor C14 | 6,000 | | 0.000046 | | 0.2760 |
| 59 | Screens VS7A and VS7B to Belt Conveyor C15 | 3,000 | | 0.000046 | | 0.1380 |
| 60 | Screens VS7A and VS7B to Belt Conveyor C16 | 6,000 | | 0.000046 | | 0.2760 |
| 61 | Screens VS6A and VS6B to Belt Conveyor C17 | 6,000 | | 0.000046 | | 0.2760 |
| 62 | Screen VS6B to Loadout | 0 | | 0.000046 | | 0.0000 |
| 63 | Belt Conveyor C14 to Stockpile | 6,000 | | -- | | 0.0000 |
| 64 | Belt Conveyor C15 to Stockpile | 3,000 | | -- | | 0.0000 |
| 65 | Belt Conveyor C16 to Stockpile | 6,000 | | -- | | 0.0000 |
| 66 | Belt Conveyor C17 to Stockpile | 6,000 | | -- | | 0.0000 |
| 67 | Screens VS6A, VS6B, & VS6C to Belt Conveyor C7A | 3,000 | | 0.000046 | | 0.1380 |

## Existing Facility Emissions
## Main Aggregate Plant (continued)

| | Description | Thruput (tons/day) | × | $PM_{10}$ AP-42 Emission Factors (lbs/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 68 | Folley Bin w/Belt Conveyor A1 to Belt Conveyor A2 | 3,000 | | 0.000046 | | 0.1380 |
| 69 | Belt Conveyor A2 | 3,000 | | 0.000046 | | 0.1380 |
| 70 | Belt Conveyor A2 to Belt Conveyor B | 3,000 | | 0.000046 | | 0.1380 |
| 71 | Belt Conveyor B to Hopper | 3,000 | | 0.000046 | | 0.1380 |
| 72 | Screens VS7A, VS7B, and VS6C to Belt Conveyor CS1 | 3,000 | | 0.000046 | | 0.1380 |
| 73 | Belt Conveyor CS1 to Belt Conveyor CS2 | 3,000 | | 0.000046 | | 0.1380 |
| 74 | Belt Conveyor CS2 to Belt Conveyor CS3 | 3,000 | | 0.000046 | | 0.1380 |
| 75 | Belt Conveyor CS3 to Belt Conveyor CS4 | 3,000 | | 0.000046 | | 0.1380 |
| 76 | Belt Conveyor CS4 to Belt Conveyor C25 | 3,000 | | 0.000046 | | 0.1380 |
| | | | | Total $PM_{10}$ (lb/day) | | 80.1470 |
| | | | | Aggregate Thruput (ton/day) | + | 24000 |
| | | | | Process Emissions Factor (lb/ton) | | 0.003339458 |

| Aggregate Thruput | × | $PM_{10}$ Emissions Factor (lb/ton) | = | $PM_{10}$ Emissions |
|---|---|---|---|---|
| 24,000 ( tons/day) | | 0.003339458 | | 80.15 (lbs/day) |
| 720,000(tons/month) | | 0.003339458 | | 2,404.41 (lbs/month) |
| 8,760,000(tons/yr) | | 0.003339458 | | 29,253.66 (lbs/yr) |
| | | | | 14.63 (tons/yr) |

Table 11.19.2-2 (English Units). EMISSION FACTORS FOR CRUSHED STONE PROCESSING OPERATIONS (lb/Ton)[a]

| Source [b] | Total Particulate Matter [r,s] | EMISSION FACTOR RATING | Total PM-10 | EMISSION FACTOR RATING | Total PM-2.5 | EMISSION FACTOR RATING |
|---|---|---|---|---|---|---|
| Primary Crushing (SCC 3-05-020-01) | ND | | ND[n] | | ND[n] | |
| Primary Crushing (controlled) (SCC 3-05-020-01) | ND | | ND[n] | | ND[n] | |
| Secondary Crushing (SCC 3-05-020-02) | ND | | ND[n] | | ND[n] | |
| Secondary Crushing (controlled) (SCC 3-05-020-02) | ND | | ND[n] | | ND[n] | |
| Tertiary Crushing (SCC 3-050030-03) | 0.0054[d] | E | 0.0024[o] | C | ND[n] | |
| Tertiary Crushing (controlled) (SCC 3-05-020-03) | 0.0012[d] | E | 0.00054[p] | C | 0.00010[q] | E |
| Fines Crushing (SCC 3-05-020-05) | 0.0390[e] | E | 0.0150[e] | E | ND | |
| Fines Crushing (controlled) (SCC 3-05-020-05) | 0.0030[l] | E | 0.0012[l] | E | 0.000070[q] | E |
| Screening (SCC 3-05-020-02, 03) | 0.025[c] | E | 0.0087[l] | C | ND | |
| Screening (controlled) (SCC 3-05-020-02, 03) | 0.0022[d] | E | 0.00074[m] | C | 0.000050[q] | E |
| Fines Screening (SCC 3-05-020-21) | 0.30[g] | E | 0.072[g] | E | ND | |
| Fines Screening (controlled) (SCC 3-05-020-21) | 0.0036[g] | E | 0.0022[g] | E | ND | |
| Conveyor Transfer Point (SCC 3-05-020-06) | 0.0030[h] | E | 0.00110[h] | D | ND | |
| Conveyor Transfer Point (controlled) (SCC 3-05-020-06) | 0.00014[t] | E | $4.6 \times 10^{-5}$[t] | D | $1.3 \times 10^{-5}$[q] | E |
| Wet Drilling - Unfragmented Stone (SCC 3-05-020-10) | ND | | $8.0 \times 10^{-5}$[j] | E | ND | |
| Truck Unloading -Fragmented Stone (SCC 3-05-020-31) | ND | | $1.6 \times 10^{-5}$[j] | E | ND | |
| Truck Unloading - Conveyor, crushed stone (SCC 3-05-020-32) | ND | | 0.00010[k] | E | ND | |

a. Emission factors represent uncontrolled emissions unless noted. Emission factors in lb/Ton of material of throughput. SCC = Source Classification Code. ND = No data.

b. Controlled sources (with wet suppression) are those that are part of the processing plant that employs current wet suppression technology similar to the study group. The moisture content of the study group without wet suppression systems operating (uncontrolled) ranged from 0.21 to 1.3 percent, and the same facilities operating wet suppression systems (controlled) ranged from 0.55 to 2.88 percent. Due to carry over of the small amount of moisture required, it has been shown that each source, with the exception of crushers, does not need to employ direct water sprays. Although the moisture content was the only variable measured, other process features may have as much influence on emissions from a given source. Visual observations from each source under normal operating conditions are probably the best indicator of which emission factor is most appropriate. Plants that employ substandard control measures as indicated by visual observations should use the uncontrolled factor with an appropriate control efficiency that best reflects the effectiveness of the controls employed.

c. References 1, 3, 7, and 8

d. References 3, 7, and 8

South Coast Air Quality Management District
21865 E. Copley Drive
Diamond Bar, CA 91765
(909) 396-2000

To:

From: SCOTT TAYLOR
JUSTICE & ASSOCIATES

To: RAJ SINGH.
Air Quality Engineer
Phone: 909-396-3099
Fax: 909-396-3341
e-mail: rsingh@aqmd.gov

**Fax:** 562-961-3493 **Pages:** 3 (including cover sheet)

**Phone** 562-961-3494 **Date:** 2/2/2005

**Re:** Your application nos. 430403, 430418, and 438791 for United Rock Products **CC:**

x **Please Comment** x **Please Reply** ☐ **Please Recycle**

Dear Mr. Taylor

The draft equipment descriptions and permit conditions for the three applications mentioned above are enclosed for your review. Please let me know if you have any comments. If you have no comments, please write "no comments" on this fax cover sheet, sign and and fax it back to me. If you have any questions, please call me.

Thank You,

Raj Singh

---

Raj

2/2/05

There are no commcats on A/N 430903 and A/N 438791. The belts labeled 11, 12 on A/N 438791 are in common with A/N 430918. We would request belts 11, 12 be added to A/N 430918 and indicate that they are in common with the other application. Please see the following Permit with the changes

Scott Taylor

Page 1
Permit No.
A/N 439418

# PERMIT TO OPERATE

DRAFT

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership.
If the billing for the annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

ID 65341

Legal Owner or Operator: UNITED ROCK PRODUCTS CORPORATION
1245 E ARROW HWY
IRWINDALE, CA 91706-1302

Equipment Location: 1245 E ARROW HWY, IRWINDALE, CA 91706-1302

Equipment Description :

ROCK PRE-CRUSHING, CONVEYING, AND STACKING SYSTEM NO.1 CONSISTING OF:

1. TWO RECEIVING HOPPERS, EACH WITH A VIBRATING GRIZZLY.
2. JAW CRUSHER, TELESMITH, 2'-6" W. X 4'-7" L., 150 H.P., WITH A PLATE FEEDER.
3. FOUR SCREENS, SVEDALA, 6'-0" W. X 20'-0" L., 40 H.P. EACH.
4. TWO UNDER SCREEN CONVEYORS, 3'-6" W. X 40'-0" L., 20 H.P. EACH.
5. TWO SCREENS, SVEDALA, 5'-6" W. X 15'-0" L., 30 H.P. EACH.
6. UNDER JAW BELT CONVEYOR, 3'-6" W. X 60'-0" L., 30 H.P.
7. BELT CONVEYOR, 3'-6" W. X 600'-0" L., 75 H.P.
8. BELT CONVEYOR, 3'-6" W. X 350'-0" L., 125 H.P.
9. BELT CONVEYOR, 3'-6" W. X 50'-0" L., 40 H.P.
10. BELT CONVEYOR, 3'-6" W. X 650'-0" L., 275 H.P.
11. BELT CONVEYOR, 3'-6" W. X 490'-0" L., 150 H.P.
12. BELT CONVEYOR, 3'-6" W. X 130'-0" L., 75 H.P.
13. SEVEN BELT CONVEYORS, 3'-6" W. X 150'-0" L., 40 H.P. EACH.

A/N 43879

14. Belt Conveyor, 3'-6" W X 275'-0" L., 125 H.P. Each (in common with
15. Stacking conveyor, 3'-6" W X 200'-0" L., 150 H.P. Each

Conditions :

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

(in common wi A/N 43879

SAMPLE

# PERMIT TO OPERATE

## CONTINUATION OF PERMIT TO OPERATE

DRAFT

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

4. THE ROADWAYS, AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

5. THIS EQUIPMENT SHALL NOT PROCESS MORE THAN 336,000 TONS OF AGGREGATE IN ANY ONE CALENDAR MONTH.

6. THIS EQUIPMENT SHALL PROCESS WET MATERIAL FROM CLAMSHELL DREDGE ONLY.

7. THIS EQUIPMENT SHALL BE OPERATED IN FULL COMPLIANCE WITH AQMD RULES 401 (VISIBLE EMISSIONS), 402 (NUISANCE), AND 403 (FUGITIVE DUST).

8. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH THE ABOVE PERMIT CONDITIONS. THE RECORDS SHALL BE KEPT FOR A MINIMUM OF THE LAST TWO YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

## NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Dorris M.Bailey/RS06
1/1/1900

SAMPLE

## Rajendra Singh

**From:** Taylor, Scott
**Sent:** Wednesday, December 22, 2004 7:54 AM
**To:** Rajendra Singh
**Cc:** fkeohane@sully-miller.com; KBarker@sully-miller.com
**Subject:** United Rock Emission Calculations.

Rajendra,

Attached are the base line emission calculations you requested for United Rock. Included are new flow diagrams with production rates added. The emission calculations are based on a worst case potential to emit scenario.

Actual throughput rates within the plant will vary based on changes of material characteristics and desired products to be made.

However, it is likely that a similar evaluation was done when the plant was originally permitted. Please keep in mind that the basic equipment at the facility has remained essentially unchanged since its original construction.

I trust this information satisfies your request. If you have any questions, please let me know.

*Scott Taylor*

*Justice & Associates*

*(562) 961-3494*

*Fax (562) 961-3493*

<<Prerockcrushing.pdf>> <<Aggplant.pdf>> <<8636.doc>>

## Existing Facility Emissions
## Main Aggregate Plant

The emissions estimates for the aggregate plant are calculated below. The emissions factors were taken from EPA AP-42 Table 11.19.2-2

| | Description | Thruput (tons/day) | × | $PM_{10}$ AP-42 Emission Factors (lbs/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 1 | Belt Conveyor C1A to Belt Conveyor C1 | 24,000 | | 0.000046 | | 1.1040 |
| 2 | Belt Conveyor C1 to Screen VS1 | 24,000 | | 0.000046 | | 1.1040 |
| 3 | Screen VS1 | 24,000 | | 0.00074 | | 17.7600 |
| 4 | Screen VS1 to Screen VS2 | 6,000 | | 0.000046 | | 0.2760 |
| 5 | Screen VS2 | 6,000 | | 0.00074 | | 4.4400 |
| 6 | Screen VS1 to Belt Conveyor C5 | 0 | | 0.000046 | | 0.0000 |
| 7 | Belt Conveyor C5 to Belt Conveyor C6 | 0 | | 0.000046 | | 0.0000 |
| 8 | Belt Conveyor C6 to Screen VS4 | 0 | | Wet | | -- |
| 9 | Screen VS4 | 0 | | Wet | | -- |
| 10 | Screen VS1 to Surge Bin 1 (6" × 1 1/2") w/Belt Conveyor C9 | 1,000 | | 0.000046 | | 0.0460 |
| 11 | Belt Conveyor C9 to Cone Crusher CR1 | 1,000 | | 0.000046 | | 0.0460 |
| 12 | Cone Crusher CR1 | 1,000 | | 0.00054 | | 0.5400 |
| 13 | Cone Crusher CR1 to Belt Conveyor C2 | 1,000 | | 0.000046 | | 0.0460 |
| 14 | Belt Conveyor C2 to Belt Conveyor C3 | 24,000 | | 0.000046 | | 1.1040 |
| 15 | Belt Conveyor C3 to Belt Conveyor C4 | 24,000 | | 0.000046 | | 1.1040 |
| 16 | Belt Conveyor C4 to Screens VS6A,B, & C | 24,000 | | 0.000046 | | 1.1040 |
| 17 | Screen VS6A | 12,000 | | 0.00074 | | 8.8800 |
| 18 | Screen VS6B | 12,000 | | 0.00074 | | 8.8800 |
| 19 | Screen VS1 to Surge Bin 2 (1 1/2" × 1 7/8") | 8,500 | | 0.000046 | | 0.3910 |
| 20 | Belt Conveyor C10 to Cone Crusher CR2 | 8,500 | | 0.000046 | | 0.3910 |
| 21 | Cone Crusher CR2 | 8,500 | | 0.00059 | | 5.0150 |
| 22 | Cone Crusher CR2 to Belt Conveyor C2 | 8,500 | | 0.000046 | | 0.3910 |
| 23 | Screen VS1 to 100 Ton Surge Bin 3 w/Belt Conveyors C11 & C12 | 8,500 | | 0.000046 | | 0.3910 |
| 24 | Belt Conveyors C11 and C12 to Cone Crushers CR3 and CR4 | 8,500 | | 0.000046 | | 0.3910 |
| 25 | Cone Crushers CR3 and CR4 | 8,500 | | 0.00054 | | 4.5900 |
| 26 | Cone Crushers CR3 and CR4 to Belt Conveyor C2 | 8,500 | | 0.000046 | | 0.3910 |
| 27 | Screen VS2 to Belt Conveyor C7 | 6,000 | | 0.000046 | | 0.2760 |
| 28 | Screen VS2 to Belt Conveyor C5 | 0 | | 0.000046 | | 0.0000 |
| 29 | Belt Conveyor C7 to Surge Bin 3 | 6,000 | | 0.000046 | | 0.2760 |
| 30 | Screen VS2 to Belt Conveyor C13 | 0 | | 0.000046 | | 0.0000 |
| 31 | Belt Conveyor C13 to Belt Conveyor C13B | 0 | | 0.000046 | | 0.0000 |
| 32 | Belt Conveyor C13B to Belt Conveyor C13C | 0 | | 0.000046 | | 0.0000 |

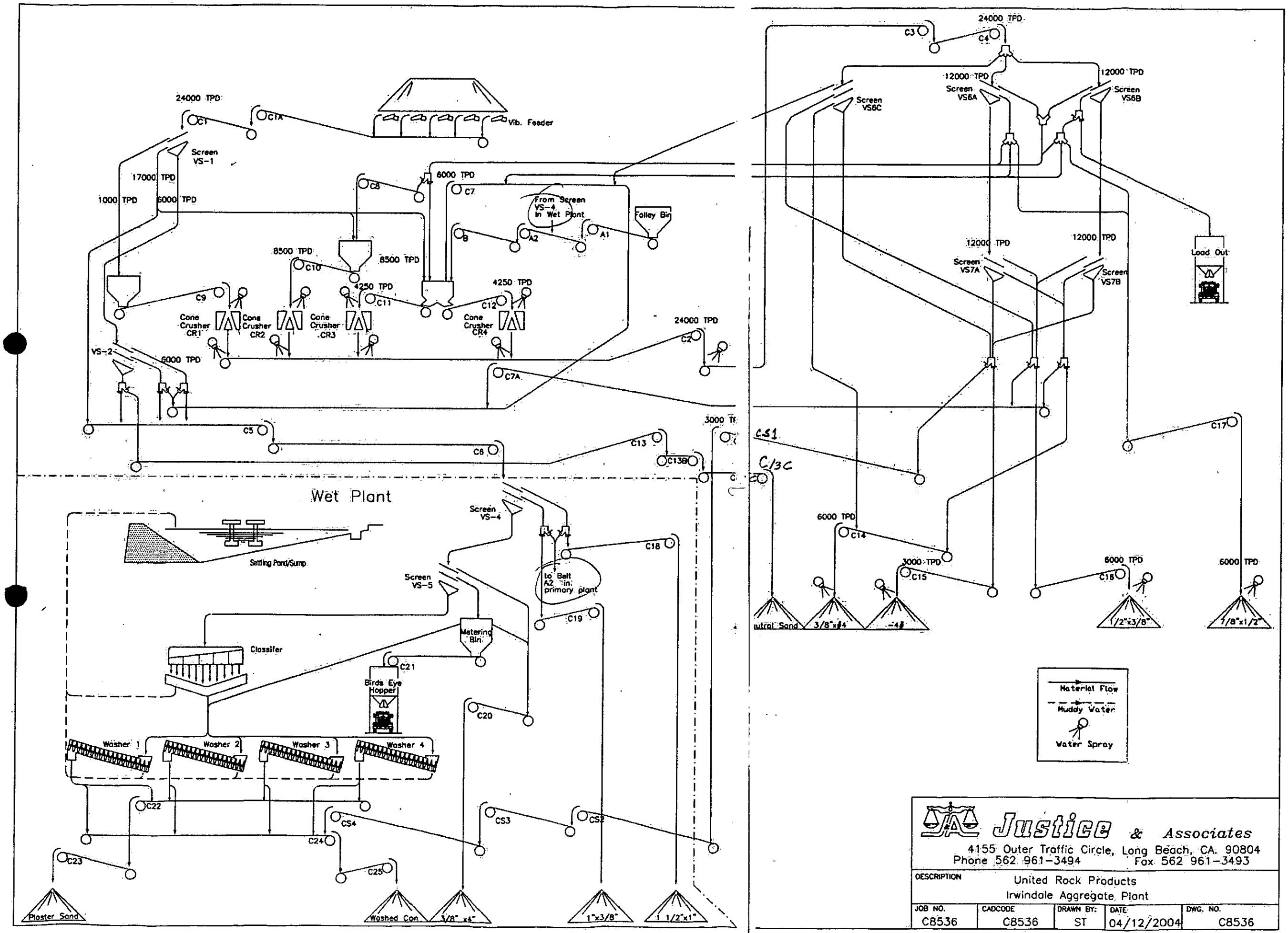
## Existing Facility Emissions
## Main Aggregate Plant (continued)

| | Description | Thruput (tons/day) | × | $PM_{10}$ AP-42 Emission Factors (lbs/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 33 | Belt Conveyor C13C to Stockpile | 0 | | -- | | 0.0000 |
| 34 | Screen VS4 to Belt Conveyors C18 and C19 | 0 | | Wet | | -- |
| 35 | Belt Conveyors C18 and C19 to Stockpiles | 0 | | -- | | -- |
| 36 | Screen VS4 to Screen VS5 | 0 | | Wet | | -- |
| 37 | Screen VS5 | 0 | | Wet | | -- |
| 38 | Screen VS5 to Belt Conveyor C20 | 0 | | Wet | | -- |
| 39 | Belt Conveyor 20 to Stockpile | 0 | | -- | | -- |
| 40 | Screen VS5 to Metering Bin 5 | 0 | | Wet | | -- |
| 41 | Metering Bin 5 to Belt Conveyor C21 | 0 | | Wet | | -- |
| 42 | Belt Conveyor C21 to Birds Eye Hopper | 0 | | Wet | | -- |
| 43 | Screen VS5 to Classifying Tank | 0 | | Wet | | -- |
| 44 | Classifying Tank to Washers 1,2,3, and 4 | 0 | | Wet | | -- |
| 45 | Washers 1,2,3, and 4 to Belt Conveyor C24 | 0 | | Wet | | -- |
| 46 | Belt Conveyor C24 to Belt Conveyor C25 | 0 | | Wet | | -- |
| 47 | Belt Conveyor C25 to Stockpile | 0 | | -- | | -- |
| 48 | Washers 1,2,3, and 4 to Belt Conveyor C22 | 0 | | Wet | | -- |
| 49 | Belt Conveyor C22 to Belt Conveyor C23 | 0 | | Wet | | -- |
| 50 | Belt Conveyor C23 to Stockpile | 0 | | -- | | -- |
| 51 | Screens VS6A and VS6B to Belt Conveyor C8 | 0 | | 0.000046 | | -- |
| 52 | Belt Conveyor C8 to Surge Bins 2 and 3 | 0 | | 0.000046 | | -- |
| 53 | Screens VS6A, VS6B, & VS6C to Belt Conveyor C7 | 0 | | 0.000046 | | -- |
| 54 | Screen VS6A to Screen VS7A | 12,000 | | 0.000046 | | 0.5520 |
| 55 | Screen VS6B to Screen VS7B | 12,000 | | 0.000046 | | 0.5520 |
| 56 | Screens VS7A | 12,000 | | 0.00074 | | 8.8800 |
| 57 | Screens VS7B | 12,000 | | 0.00074 | | 8.8800 |
| 58 | Screens VS7A and VS7B to Belt Conveyor C14 | 6,000 | | 0.000046 | | 0.2760 |
| 59 | Screens VS7A and VS7B to Belt Conveyor C15 | 3,000 | | 0.000046 | | 0.1380 |
| 60 | Screens VS7A and VS7B to Belt Conveyor C16 | 6,000 | | 0.000046 | | 0.2760 |
| 61 | Screens VS6A and VS6B to Belt Conveyor C17 | 6,000 | | 0.000046 | | 0.2760 |
| 62 | Screen VS6B to Loadout | 0 | | 0.000046 | | 0.0000 |
| 63 | Belt Conveyor C14 to Stockpile | 6,000 | | -- | | 0.0000 |
| 64 | Belt Conveyor C15 to Stockpile | 3,000 | | -- | | 0.0000 |
| 65 | Belt Conveyor C16 to Stockpile | 6,000 | | -- | | 0.0000 |
| 66 | Belt Conveyor C17 to Stockpile | 6,000 | | -- | | 0.0000 |
| 67 | Screens VS6A, VS6B, & VS6C to Belt Conveyor C7A | 3,000 | | 0.000046 | | 0.1380 |

## Existing Facility Emissions
## Main Aggregate Plant (continued)

| | Description | Thruput (tons/day) | × | $PM_{10}$ AP-42 Emission Factors (lbs/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 68 | Folley Bin w/Belt Conveyor A1 to Belt Conveyor A2 | 3,000 | | 0.000046 | | 0.1380 |
| 69 | Belt Conveyor A2 | 3,000 | | 0.000046 | | 0.1380 |
| 70 | Belt Conveyor A2 to Belt Conveyor B | 3,000 | | 0.000046 | | 0.1380 |
| 71 | Belt Conveyor B to Hopper | 3,000 | | 0.000046 | | 0.1380 |
| 72 | Screens VS7A, VS7B, and VS6C to Belt Conveyor CS1 | 3,000 | | 0.000046 | | 0.1380 |
| 73 | Belt Conveyor CS1 to Belt Conveyor CS2 | 3,000 | | 0.000046 | | 0.1380 |
| 74 | Belt Conveyor CS2 to Belt Conveyor CS3 | 3,000 | | 0.000046 | | 0.1380 |
| 75 | Belt Conveyor CS3 to Belt Conveyor CS4 | 3,000 | | 0.000046 | | 0.1380 |
| 76 | Belt Conveyor CS4 to Belt Conveyor C25 | 3,000 | | 0.000046 | | 0.1380 |
| | | | | Total $PM_{10}$ (lb/day) | | 80.1470 |
| | | | | Aggregate Thruput (ton/day) | ÷ | 24000 |
| | | | | Process Emissions Factor (lb/ton) | | 0.003339458 |

| Aggregate Thruput | × | $PM_{10}$ Emissions Factor (lb/ton) | = | $PM_{10}$ Emissions |
|---|---|---|---|---|
| 24,000 ( tons/day) | | 0.003339458 | | 80.15 (lbs/day) |
| 720,000(tons/month) | | 0.003339458 | | 2,404.41 (lbs/month) |
| 8,760,000(tons/yr) | | 0.003339458 | | 29,253.66 (lbs/yr) |
| | | | | 14.63 (tons/yr) |




Justice & Associates
4155 Outer Traffic Circle, Long Beach, CA. 90804
Phone 562 961-3494 Fax 562 961-3493

| DESCRIPTION | United Rock Products<br>Irwindale Aggregate Plant | | | |
|---|---|---|---|---|
| JOB NO. | CADCODE | DRAWN BY: | DATE: | DWG. NO. |
| C8536 | C8536 | ST | 04/12/2004 | C8536 |

## Rajendra Singh

**From:** Taylor, Scott
**Sent:** Wednesday, November 17, 2004 8:45 AM
**To:** Rajendra Singh
**Cc:** KBarker@sully-miller.com; Kimba Spencer
**Subject:** United Rock Products Permits D08813 and D08810

Rajendra,

Per your request United Rock is proposing the following for dust control for Permits D08810 and D08813

Permit D08810

This system includes a Telesmith Jaw crusher that processes dredged material only. Due to the high moisture content in dredged material, there is no control necessary on the crusher.

Permit D08813

United Rock evaluated their operations for dust control and has selected the NESCO "DustPro" spray system. Attached is the revised flow diagram showing the location of the spray nozzles. This system has been designed by the local NESCO representative and consists of a 20 gpm, 200 psi pump that is equipped with eight spray lines that will apply moisture to four crushers and four stock piles. According to the manufacturer, the added moisture to the stone at the crushers will stay in the material and help prevent emissions from downstream screening, conveying, and stacking operations. As a result, nozzles have not been proposed for the screens.

I trust this information satisfies your request. If you have any question please give me a call.

*Scott Taylor*

*Justice & Associates*

*(562) 961-3494*

*Fax (562) 961-3493*

<<001.pdf>>

## Rajendra Singh

**From:** Kimba Spencer [Kspencer@justiceassociates.com]
**Sent:** Wednesday, July 21, 2004 10:27 AM
**To:** Rajendra Singh
**Subject:** RE: United Rock Products, ID # 65341

Hi Raj,

Scott told me you called - sorry I hadn't responded yet. I've been waiting for URP to get back to me about doing that new flow diagram (and then I was on vacation for a few days). I will let you know when I have any information and get an update to you in the next two weeks.

Best regards,

Kimba Spencer
Justice & Associates

-----Original Message-----
**From:** Rajendra Singh [mailto:RSingh@aqmd.gov]
**Sent:** Friday, July 16, 2004 4:35 PM
**To:** Kimba Spencer
**Subject:** FW: United Rock Products, ID # 65341

Hi Kimba
Please provide the following information, in addition to the information requested in my email on 7/13/04:

- A/N 430403 (item 4 in your letter) - The marked-up copy of permit # D08813 submitted with your application shows extensive changes. It is recognized that these changes will result in lower overall emissions. However, it will be prudent to calculate the new emissions and enter in the NSR data base so that the facility PTE limit of 4 tons / year is not unnecessarily penalized. Therefore, this application should be considered a modification and not an administrative change and higher fee will apply. We can bill CALMAT for the remaining fee when the permit is issued. Please let me know if you have any problem with this assessment. Also, please provide a flow diagram of the modified system.

- A/N 430413 (item 6 in your letter) - A feeder belt is being added in the equipment list of permit # D08812. Please provide a flow diagram of the modified system.

- A/N 430416 (item 7 in your letter) - A 30 ton feed hopper is being added in the equipment list of permit # D08808. Please provide a flow diagram of the modified system and indicate how much material goes thru the hopper and how much thru the gates under the storage bins.

Please let me know by return email when the information requested in this and the previous email will be available.

Thank you,

Raj Singh
Air Quality Engineer
South Coast Air Quality Management District

**Justice & Associates**

4155 Outer Traffic Circle
Long Beach, CA 90804-2111
562.961.3494 Fax 562.961.3493

www.justiceassociates.com

1401 S. Arville St., Suite J
Las Vegas, NV 89102-0537
702.822.2111 Fax 702.822.2113

May 18, 2004

South Coast AQMD
21865 E. Copley Drive
Diamond Bar, CA 91765

Attention: Raj Singh

Subject: United Rock Products (Facility ID# 65341)
Permit Issues

Dear Raj:

In response to our telephone conversation on May 13, 2004, here are six (6) 400A Forms to accompany the package you are reviewing for United Rock Products.

Please call if you have any questions at (562) 961-3494.

Best regards,

Kimba Spencer
Justice & Associates

J:\UnitedRock\letters\8536 letter.doc

**Justice** & *Associates*

4155 Outer Traffic Circle
Long Beach, CA 90804-2111
562.961.3494 Fax 562.961.3493

www.justiceassociates.com

1401 S. Arville St., Suite J
Las Vegas, NV 89102-0537
702.822.2111 Fax 702.822.2113

April 7, 2004

South Coast AQMD
21865 East Copley Drive
Diamond Bar, CA 91765

Attention: Permit Services

Subject: United Rock Products
(Facility ID #65341) Permit Issues

Enclosed are several applications and technical corrections for the United Rock Products, Irwindale facility. Enclosed is a check in the amount of $17,091.64 to cover the application fees. Under Attachment "A" is a fee schedule worksheet which describes the break down of the fees. The following is a description of each application and/or correction and the supporting information.

1. A new application for a stationary screening plant with a 56 TPH throughput. A/N 428833
This application is being submitted as a Class III application. Attachment "B" following this letter includes the 400A form as well as emission calculations, an equipment list and a flow diagram. This plant operates on grid power. United Rock is requesting a production limit of 9,856 Tons Per Month (TPM).

2. A new application for a second stationary screening plant with an 84 TPH throughput. A/N 428834
This application is being submitted as a Class III application. Attachment "C" following this letter includes the 400A form and supporting material for this application. This plant operates on grid power. United Rock is requesting a production limit of 20,160 TPM.

3. Currently United Rock holds two permits for two separate Rock Pre-Crushing systems (D08810 and D08807). Although these two systems operate independently, both feed the same stock pile using two conveyors that are common to both systems. Since this equipment uses common equipment, we are requesting the equipment and permit conditions on Permit D08807 be added to Permit D08810. Note that the Pioneer jaw crusher listed on permit D08807 is no longer in service and should not be included in the combined permit. At the same time we are requesting that the daily limits be combined into one monthly limit of 624,000 tons/month ([11,200 TPD + 9,600 TPD] × 30 days/month = 624,000 TPM)

   This site operates a clamshell dredge. While this equipment does not generate particulate emissions, several of the other permits for this facility included wet process equipment. In order to be consistent with the other permits we have included a list of equipment for the dredge to be added to Permit D08810. The dredge includes the following equipment:

| | | | |
|---|---|---|---|
| 1. | Belt Conveyor | 600' × 42" | 75 HP |
| 2. | Belt Conveyor | 350' × 42" | 125 HP |
| 3. | Belt Conveyor | 50' × 42" | 40 HP |
| 4. | Belt Conveyor | 650' × 42" | 275 HP |
| 5. | Belt Conveyor | 490' × 42" | 150 HP |
| 6. | Belt Conveyor | 130' × 42" | 75 HP |
| 7. | Belt Conveyor | 150' × 42" | 40 HP |
| 8. | Belt Conveyor | 150' × 42" | 40 HP |
| 9. | Belt Conveyor | 150' × 42" | 40 HP |
| 10. | Belt Conveyor | 150' × 42" | 40 HP |
| 11. | Belt Conveyor | 150' × 42" | 40 HP |
| 12. | Belt Conveyor | 150' × 42" | 40 HP |
| 13. | Belt Conveyor | 150' × 42" | 40 HP |
| 14. | Under Jaw Belt Conveyor | 60' × 42" | 30 HP |
| 15. | Conveyor A | 40' × 42" | 20 HP |
| 16. | Conveyor B | 40' × 42" | 20 HP |
| 17. | Svedala Screen | 6' × 20' | 40 HP |
| 18. | Svedala Screen | 6' × 20' | 40 HP |
| 19. | Svedala Screen | 6' × 20' | 40 HP |
| 20. | Svedala Screen | 6' × 20' | 40 HP |
| 21. | Svedala Screen | 5.5' × 15' | 30 HP |
| 22. | Svedala Screen | 5.5' × 15' | 30 HP |
| 23. | Plate Feeder | -- | -- |
| 24. | Jaw Crusher, Telesmith | 30' × 55" | 150 HP |

Both pre-crushing plants feed the primary surge pile using common conveyors. Currently these conveyors do not appear to be covered on either permit. As a result we request that two conveyors be added to Permit D08810 for the primary surge pile loading. The following is the equipment description:

| | | |
|---|---|---|
| Stacking Conveyor | 200' × 42" | 150 HP |
| Belt Conveyor | 275' × 42" | 125 HP |

Attachment "D" has the emission calculations for the additional conveyors.

Rock Pre-crushing (Permit #D08810) requires a technical correction. The jaw crushers specified on the permit as a 50 HP, KUE-KAN size 24" × 36" needs to be changed to a 150 HP, Minyu, size 40" × 42".

Attachment "D" includes marked-up copies of the facility permits showing the additional equipment and the corrections to the equipment descriptions and conditions.

4. We are requesting a change to the Main Aggregate Plant's (Permit #D08813) existing production permit condition from a daily limit to a monthly limit. A/N 430403

The existing permit conditions allow daily production of 24,000 TPD. We are requesting a change to a monthly limit of 720,000 TPM (24,000 TPD × 30 days/month = 720,000 TPM).

The modification in production limit does not result in a change of emissions. Attachment "E" includes a marked-up copy of the facility permit showing the additional equipment and the corrections to the equipment descriptions and conditions.

5. The Base Plant (Permit # D08811) is outgrowing its production limits and United Rock is requesting to increase and change their daily limit to a monthly limit. The permit currently has a daily processing limit of 3,200 tons. We are requesting this be changed 150,000 tons per month. Attachment "F" includes emission evaluation for both before and after the change in production. A/N 430411

6. The Drum Plant permit (Permit # D08812) requires several technical corrections. A feeder belt needs to be added to the equipment list. The belt specifications are 45' L × 36" W and is 15 HP. Additionally, the incline conveyor shows a horsepower of 40 and it should be changed to 50 HP. The shuttle conveyor shows a horsepower of 5 and it should be 10 HP. A/N 430413

The existing permit conditions allow a daily production of 4,000 tons. We are requesting an increase and a change to a monthly limit of 180,000 tons per month. With the addition of the conveyer and the increase in production, the emissions from this equipment will be increased by 172.80 lbs per year.

Attachment "G" has a marked up copy of the permit with the corrections as well as emission calculations for both before and after the production increase.

7. The Dry Loadout System (Permit # D08808) requires two technical corrections. A/N 430416 The horsepower on the discharge turnhead needs to be changed from 1 HP to 1.5 HP. The permit is also missing a 30 Ton feed hopper which sits on top of belt conveyer C27. Material fed into the hopper will result in a like amount to be reduced from the gates that feed material to the conveyor. As a result there are no additional emissions generated with the addition of the hopper.

This facility is also outgrowing its production and United Rock would like to request an increase in production and a change from a daily limit to a monthly limit. The current permit has a daily limit of 8,000 tons. We are requesting this be changed to a monthly limit of 480,600 tons. This increase in production will result in an annual emissions increase of 138.24 lbs per year.

Attachment "H" has a marked up copy of the permit showing the correction as well as emission calculations for both before and after the production increase.

8. The Wet Loadout System (Permit # D08809) requires a technical correction. The A/N 430417 horsepower on the discharge turnhead needs to be changed from 1 HP to 1.5 HP.

This permit unit also has out grown its production. United Rock would like to request an increase in production and a change from a daily limit to a monthly limit. The current permit has a daily limit of 8,000 tons. We are requesting this be changed to a monthly limit of 480,600 tons. Since this facility processes only wet material the increase in production will not result in an increase in emissions.

Attachment "I" has a marked up copy of the permit showing the correction.

Below is a summary of the total emission increase that are a result of the changes in equipment or production.

Emission Increase Summary

| | | |
|---|---|---|
| 1. | Screening Plant I | 83.97 lbs/year |
| 2. | Screening Plant II | 171.76 lbs/year |

| | | |
|---|---|---|
| 3. | Base Plant (D08811) | 155.52 lbs/year |
| 4. | Drum Plant (D08812) | 172.8 lbs/year |
| 5. | Dry Loadout (D08808) | 138.24 lbs/year |
| | Total | 722.29 lbs/year |
| | | 0.36 tons/year |

Currently, the facility's NSR balance shows that it is well below the offset threshold of 4 ton/year of PM (Please refer to Attachment "J"). Based on the Emission Increase Summary the annual increase in emissions are 0.36 tons/year. As a result, we do not anticipate these modifications requiring offsets.

We trust this information will be sufficient to process these applications and requests. If you have any questions, please call me at (562) 961-3494.

Best regards,

Kimba Spencer
Justice & Associates

cc: Ken Barker, United Rock Products

| **Attachments** | - | **Description** |
|---|---|---|
| "A" | - | Fee Schedule |
| "B" | - | Screening Plant I |
| "C" | - | Screening Plant II |
| "D" | - | Rock Pre-Crushing Systems (D08810) |
| "E" | - | Main Aggregate Plant (D08813) |
| "F" | - | Base Plant (D08811) |
| "G" | - | Drum Plant (D08812) |
| "H" | - | Dry Loadout System (D08808) |
| "I" | - | Wet Loadout System (D08809) |
| "J" | - | NSR Balance |

# ATTACHMENT "E"

# MAIN AGGREGATE PLANT
# (D08813)

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No. D06813
A/N 185077
Page 1

**This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.**

**Legal Owner**
**Or Operator:** UNITED ROCK PRODUCTS CORPORATION

ID 65341

**Equipment**
**located at:** 1245 EAST ARROW HIGHWAY, IRWINDALE, CALIFORNIA

**Equipment Description:**

AGGREGATE PROCESSING SYSTEM CONSISTING OF:

1. BELT CONVEYOR, C-1A, ~~200~~ 300 H.P.
2. BELT CONVEYOR, C-1, 250 H.P.
3. TWO CLASSIFYING SCREENS, NOS. VS-1 AND VS-2, HEWITT-ROBINS, DOUBLE DECK, 8' X 20', EACH 30 H.P.
4. BELT CONVEYOR, C-5, 100 H.P.
5. BELT CONVEYOR, C-6, 75 H.P.
6. TWO CLASSIFYING SCREENS, NOS. VS-4 AND VS-5, WET SCREENINGS, HEWITT-ROBINS, DOUBLE DECK, 8' X 20', EACH 30 H.P.
7. CLASSIFYING TANK, Eagle ~~WEMCO, MODEL "D"~~, 10' X ~~32'~~ 40', ~~1-1/2~~ 10 H.P.
8. ~~THREE~~ One WASHER, WEMCO, MODEL "B", EACH ~~10~~ 15 H.P.
9. METERING BIN, ~~9~~ 20 TONS CAPACITY. three washers, Kolberg, each 40 HP
10. BELT CONVEYOR C-21, 5 H.P.
11. SURGE BIN, 75 TONS CAPACITY.
12. BELT CONVEYOR, C-13, 30 H.P.
13. BELT CONVEYOR, C-7, 7-1/2 H.P.
14. SURGE BIN, ~~55~~ 100 TON CAPACITY.
15. BELT CONVEYOR, ~~CR-5~~ C13-B CRUSHER FEED, X 15 H.P.
16. ~~CONE CRUSHER, NO. CR-5, EL JAY, MODEL NO. 45, 125 H.P.~~
17. BELT CONVEYOR, NO. C-12, X 10 H.P.

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731



**CONTINUATION OF PERMIT TO OPERATE**

18. BELT CONVEYOR, NO. C-11, ~~5~~ 7.5 H.P.

19. TWO CONE CRUSHER, NOS. CR-3 AND CR-4, ~~SYMONS, EACH WITH A 200 H.P.~~ Nordberg, 200 and 300 HP MAIN DRIVE, ~~A 3 H.P. ROTARY FEEDER, A 5 H.P. LUBE PUMP AND A 7-1/2 H.P. ADJUSTER~~.

20. TWO SURGE BINS, 36 TONS CAPACITY EACH.

21. BELT CONVEYOR, NO. C-9, ~~7 1/2~~ 15 H.P.

22. CONE CRUSHER, NO. CR-1, ~~SYMONS~~ Nordberg, SIZE ~~7'~~ 5' WITH A ~~300~~ 500 H.P. MAIN DRIVE, ~~A 5 H.P. LUBE PUMP & A 5 H.P. ADJSUTER~~.

23. BELT CONVEYOR, NO. C-10, 5 H.P.

24. CONE CRUSHER, NO. CR-2, ~~TELSMITH~~ Nordberg, MODEL ~~PC 66~~ HP300, WITH A 300 H.P. MAIN DRIVE, ~~A 5 H.P. LUBE PUMP~~.

25. BELT CONVEYOR, NO. C-8, 5 H.P.

26. BELT CONVEYOR, NO. C-2, 50 H.P.

27. BELT CONVEYOR, NO. C-3, 100 H.P.

28. BELT CONVEYOR, NO. C-4, 150 H.P.

29. FOUR CLASSIFYING SCREENS, NOS. VS-6A, VS-6B, VS-7A, VS-7B, HEWITT-ROBINS, DOUBLE DECK, 6 X 20', EACH 30 H.P.

30. CLASSIFYING SCREEN NO. VS-6C, ~~EL-JAY, MODEL FS-6163~~ Simplicity, 6'x20', TRIPLE DECK, 30 H.P.

31. BELT CONVEYOR, NO. C-14, 15 H.P.

32. BELT CONVEYOR, NO. C-15, 15 H.P.

33. BELT CONVEYOR, NO. C-16, 15 H.P.

34. BELT CONVEYOR, NO. C-17, 20 H.P.

35. BELT CONVEYOR, NO. C-18, ~~7-1/2~~ 10 H.P.

36. BELT CONVEYOR, NO. C-19, 20 H.P.

37. BELT CONVEYOR, NO. C-20, 7-1/2 H.P.

38. BELT CONVEYOR, NO. C-22, 15 H.P.

39. BELT CONVEYOR, NO. C-23, 30 H.P.

40. BELT CONVEYOR, NO. C-24, 20 H.P.

41. BELT CONVEYOR, NO. C-25, ~~37-1/2~~ 40 H.P.

# PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D08813
A/N 185077
Page 3

**CONTINUATION OF PERMIT TO OPERATE**

42. BELT CONVEYOR, C13C 24" W. X 30' L., ~~5~~ 10 H.P.
43. SURGE HOPPER, 75 TONS.
44. BELT CONVEYOR, NO. CS-1, 5 H.P.
45. BELT CONVEYOR, NO. CS-2, ~~15~~ 10 H.P.
46. ~~WATER SPRAY SYSTEM WITH 68 SPRAY NOZZLES, JOHNSON-MARCH, 10 H.P.~~
47. ~~CONE CRUSHER, SYMONS, MODEL 66", WITH A 250 H.P. MAIN DRIVE, A 5 H.P. LUBE PUMP AND A 7-1.2 H.P. ADJUSTER.~~
48. BELT CONVEYOR, NO. CS-3, ~~15~~ 5 H.P.
49. ~~CLASSIFYING SCREEN, NO. VS-8, HEWITT-ROBINS, 8' X 20', 50 H.P.~~
50. BELT CONVEYOR, NO. CS-4, ~~5~~ 10 H.P.
51. BELT CONVEYOR, NO. ~~CS-5~~ A-1, ~~5~~ 30 H.P.
52. BELT CONVEYOR, NO. ~~CS-6~~ A-2, ~~15~~ 7.5 H.P.
53. BELT CONVEYOR, NO. ~~CS-7~~ B, ~~15~~ 5 H.P.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. AGGREGATE CHARGED AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.
4. THIS SYSTEM SHALL NOT PROCESS MORE THAN 24,000 TONS PER DAY OF AGGREGATE.
5. A DAILY OPERATING LOG SHOWING TONS OF AGGREGATE PROCESSED SHALL BE MAINTAINED BY THE OPERATOR. THIS OPERATING LOG SHALL BE KEPT ON FILE FOR TWO YEARS AND MADE AVAILABLE, UPON REQUEST, TO THE EXECUTIVE OFFICER OR HIS REPRESENTATIVE.

**THIS PERMIT CONCLUDES ON THE NEXT PAGE.**

C3
C4
Screen VS6C
Screen VS6A
Screen VS6B
C1
C1A
Vib. Feeder
Screen VS-1
C8
C7
From Screen VS-4 In Wet Plant
Folley Bin
B
A2
A1
Load Out
C10
Screen VS7A
Screen VS7B
C9
C11
C12
Cone Crusher CR1
Cone Crusher CR2
Cone Crusher CR3
Cone Crusher CR4
C2
VS-2
C7A
C5
C6
C13
C13B
CS1
C13C
C17
Wet Plant
Screen VS-4
C18
Settling Pond/Sump
Screen VS-5
to Belt A2 in primary plant
C19
C14
C15
C16
Classifer
Metering Bin
C21
Birds Eye Hopper
C20
Nautral Sand
3/8"x#4
-4#
1/2"x3/8"
1/8"x1/2"
Washer 1
Washer 2
Washer 3
Washer 4
C22
CS4
CS3
CS2
C24
C23
C25
Plaster Sand
Washed Con
3/8" x4"
1"x3/8"
1 1/2"x1"

Material Flow
Muddy Water

SEE THE REVISED DRAWING


Justice & Associates
4155 Outer Traffic Circle, Long Beach, CA. 90804
Phone 562 961-3494 Fax 562 961-3493


| DESCRIPTION | | | | |
|---|---|---|---|---|
| United Rock Products<br>Irwindale Aggregate Plant | | | | |
| JOB NO. | CADCODE | DRAWN BY: | DATE | DWG. NO. |
| C8536 | C8536 | ST | 04/12/2004 | C8536 |

**Justice & Associates**
4155 Outer Traffic Circle
Long Beach, CA 90804-2111
(562) 961-3494 Fax (562) 961-3493

# FEE SCHEDULE WORK SHEET

(For permit processing in accordance with Rule 301)

Permits to be issued to: United Rock Products

Address: 1245 East Arrow Highway

City, State, Zip: Irwindale, CA 91706

| Quantity of Identical Units | Equipment/Process | Fee Schedule | Full Fee for First Permit Unit | + | 50% of Processing Fee for failure to obtain Permit to Construct | = | Total |
|---|---|---|---|---|---|---|---|
| 1 | Screening Plant | C | $2,232.96 | + | $1,116.48 | = | $3,349.44 |
| 1 | Screening Plant | C | $2,232.96 | + | $1,116.48 | = | $3,349.44 |
| 1 | Permit reissue (D08813) | N/A | $123.02 | + | -- | = | $123.02 |
| 1 | Aggregate Conveying (D08811) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Conveying (D08812) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Loading (D08808) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Loading (D08809) | B | $1,411.74 | + | -- | = | $1,411.74 |
| 1 | Aggregate Conveying (D08810) | D | $3,081.85 | + | $1,540.93 | = | $4,622.78 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Total Permit Processing Fee Due: $17,091.64

Comments:

# SCAQMD Notification Report

## Notification 136476

Run Date: 9/14/2016 12:28:36

| | | | |
|---|---|---|---|
| Receive By: | VSETIADI on 7/6/2006 12:53:13 | Assignment No: 944877 | Inspection Date: |
| Assign By: | | Inspector: | |
| Dispatch On: | | Disposition: | |
| Team: | X | AIRS ID: | |
| Activity: | R1166 SOIL EXCAVATION | Title V: | |
| Instruction: | | | |

Description: 2 tanks @ 12K-diesel; 1 tank @ 6K-unleaded; 1 @ 1K-waste oil;
ck 4422 7/7/06 $41.32;

Instance Start Date: 08/09/2006 00:00 Instance End Date: 08/14/2006 00:00

## Notifier

Facility: 129815 PACIFIC SYSTEMS ELECTRIC, EARL JONES,DBA

First Name: DENNIS Last Name: MINNOCK

Facility TS:

Address: VARIOUS LOCATIONS IN SCAQMD, Unit 450512, MURRIETA, CA 92563

Phone: (714)713-9529 (Work)

## Site Location

Facility: 65341 PD; UNITED ROCK PRODUCTS CORPORATION

Facility TS: TS-11 Industrial: Sector-based Inspections

Address: 1245 E ARROW HWY, IRWINDALE, CA 91706-1302 (Sector CK)

## Inspector Comment

INSPECTOR: _____ DATE: _____

signature

SUPERVISOR: _____ DATE: _____

signature

User ID: lramos

# SCAQMD Notification Report

## Notification 136530

Run Date: 9/14/2016 12:28:52

| | | | |
|---|---|---|---|
| Receive By: | VSETIADI on 7/7/2006 08:35:00 | Assignment No: 944978 | Inspection Date: |
| Assign By: | | Inspector: | |
| Dispatch On: | | Disposition: | |
| Team: | X | AIRS ID: | |
| Activity: | R1149 TANK DEGASSING | Title V: | |
| Instruction: | | | |
| Description: | 1@6K-gas;<br>ck 11706 7/11/06 $43.02; | | |
| Instance Start Date: | 08/15/2006 00:00 | Instance End Date: | 08/15/2006 00:00 |

## Notifier

| | |
|---|---|
| Facility: | 106375 ADAMS SERVICES, INC |
| First Name: | RYDER Last Name: ADAMS |
| Facility TS: | |
| Address: | VARIOUS LOCATIONS IN SCAQMD, Unit d93903, GARDENA, CA 90248 |
| Phone: | (310)678-2500 (Work) |

## Site Location

| | |
|---|---|
| Facility: | 65341 PD; UNITED ROCK PRODUCTS CORPORATION |
| Facility TS: | TS-11 Industrial: Sector-based Inspections |
| Address: | 1245 E ARROW HWY, IRWINDALE, CA 91706-1302 (Sector CK) |

## Inspector Comment

INSPECTOR: _____ DATE: _____

signature

SUPERVISOR: _____ DATE: _____

signature

User ID: lramos

# SCAQMD Notification Report

## Notification 150453

Run Date: 9/14/2016 12:29:05

| | | | |
|---|---|---|---|
| Receive By: | VSETIADI on 1/17/2007 14:26:30 | Assignment No: 973555 | Inspection Date: |
| Assign By: | | Inspector: | |
| Dispatch On: | | Disposition: | |
| Team: | X | AIRS ID: | |
| Activity: | R1166 SOIL EXCAVATION | Title V: N | |
| Instruction: | | | |

Description: Project#1070027; 3@30K-asphalt emulsion;ck 3516 $ 43.02 r3ceived on 1/17/07

Instance Start Date: 01/22/2007 00:00 Instance End Date: 02/09/2007 00:00

## Notifier

Facility: 93130 MJK CONSTRUCTION INC

First Name: MICHAEL Last Name: KISSICK

Facility TS: TS-60 Toxics: Rule 1166 Plans

Address: VARIOUS LOCATIONS IN SCAQMD, Unit 462018, POMONA, CA 91768

Phone: (562)843-5480 (Work)

## Site Location

Facility: 34055 SULLY MILLER CONTRACTING CO

Facility TS: TS-04 Cycle II RECLAIM/Non-Title V Facility

Address: 1245 E ARROW HWY, IRWINDALE, CA 91706-1302 (Sector CK)

## Inspector Comment

INSPECTOR: _____ DATE: _____

signature

SUPERVISOR: _____ DATE: _____

signature

User ID: lramos

# SCAQMD Notification Report

## Notification 157882

Run Date: 9/14/2016 12:29:19

| | | | |
|---|---|---|---|
| Receive By: | JPEREZ on 4/20/2007 11:53:05 | Assignment No: 987985 | Inspection Date: |
| Assign By: | | Inspector: | |
| Dispatch On: | | Disposition: | |
| Team: | X | AIRS ID: | |
| Activity: | R1166 SOIL EXCAVATION | Title V: | |
| Instruction: | | | |
| Description: | N/A; CHK# 5094 $43.02 04/20/07 | | |
| Instance Start Date: | 04/25/2007 00:00 | Instance End Date: | 04/26/2007 00:00 |

## Notifier

| | |
|---|---|
| Facility: | 129815 PACIFIC SYSTEMS ELECTRIC, EARL JONES,DBA |
| First Name: | DENNIS Last Name: M. |
| Facility TS: | |
| Address: | VARIOUS LOCATIONS IN SCAQMD, Unit 465901, MURRIETA, CA 92563 |
| Phone: | (714)713-9529 (Work) |

## Site Location

| | |
|---|---|
| Facility: | UNITERD ROCK PRODUCTS |
| Facility TS: | |
| Address: | 1245 E ARROW HWY, IRWINDALE, CA 91706 (Sector CK) |

## Inspector Comment

INSPECTOR: _____ DATE: _____

signature

SUPERVISOR: _____ DATE: _____

signature

User ID: lramos

# SCAQMD Complaint Report

## Complaint 190710

Run Date: 9/14/2016 10:36:58

| | | | |
|---|---|---|---|
| Receive By: | CMUNGUIA on 4/26/2007 17:26:09 | Assignment No: | 988918 |
| Assign By: | bhernan1 on 4/26/2007 18:12:41 | Inspector: | BERTHA A HERNANDEZ (BH02) |
| Dispatch On: | 4/26/2007 | Instruction: | |
| Team: | I | | |
| Type: | DUST | | |
| Inspection Date | 5/1/2007 00:00:00 | | |
| Description: | DUST COMING FROM POSSIBLY A ROCK QUARRY. PLEASE CONTACT COMPLAINANT. | | |

Instance Start Date:

Instance End Date:

## Complainant

First Name:

Address:

Phone:

## Alleged Source

Name: QUARRY

Address: GALEN/IVORY, DUARTE, CA 91010 (Sector CK)

## Actual Source

Name: UNITED ROCK PRODUCTS CORPORATION ID: 65341

Address: 1245 E ARROW HWY, IRWINDALE, CA 91706-1302 (Sector CK)

Facility TS: TS-11 Industrial: Sector-based Inspections

## Disposition

OC on 5/2/2007 14:41:13

## Inspector Comment

INSPECTOR: signature _____ DATE: _____

SUPERVISOR: signature _____ DATE: _____

User ID: lramos

ROUTING RECORD

| DATE | FROM | TO | ACTION |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

REFERENCE TO OTHER APCD RECORDS INCLUDING VARIANCES

Plan
Rule 403
30 Day

22 0

DATA ENTRY

RECEIVED
APR - 9 1993
SCAQMD
PRE-PROCESSING

APPL # 279903
I.D. # 065341
UNITED ROCK PRODUCTS CORPORATION
1245 E ARROW HWY
IRWINDALE
PLAN, RULE 403 COMPLIANCE
P/O
DATE: 03/29/93

279913

South Coast
AIR QUALITY MANAGEMENT DISTRICT
21865 E. Copley Drive, Diamond Bar, CA 91765-4182 (909) 396-2000

April 9, 1993

Arnold Brink
Operations Manager
United Rock Products
1245 East Arrow Highway
Irwindale, CA 91706

Dear Mr. Brink:

The South Coast Air Quality Management District (District) has received and reviewed the fugitive dust emissions control plan (plan) prepared for the United Rock products site in Irwindale and is pleased to inform you that the plan was **approved on April 9, 1993**. For our records, however, we would like to request a map which shows the general location of the site. Please send the map to:

South Coast Air Quality Management District
Attention: Mike Laybourn
21865 Coply Drive
Diamond Bar, CA 91765

Please remember that the approved plan will be valid for one year from this approval date. Please also remember that Rule 403 requires large operations which operate for more than one year to submit a revised plan to the District 60 days prior to the plan expiration date (January 21, 1994). If conditions at the site have not changed and the operator wants to be subject to the same fugitive dust control actions as identified in the originally adopted plan, the operator can simply submit a statement of no change (Form 403NC attached). There are no filing fees associated with submittal of a Form 403NC.

If you have any questions with the plan or if you would like to obtain a copy of the plan submittal, please call Mike Laybourn of my staff at (909) 396-3066.

Very truly yours,

Melvin D. Zeldin
Program Supervisor

MZ:ML

Attachment

AP # 279903/ID # 065341

APPLICATION FOR PLANS

FORM 400P

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

9150 Flair Drive, El Monte, CA 91731

## COMPANY INFORMATION

FOR INSTRUCTIONS SEE REVERSE SIDE

LEGAL NAME OF APPLICANT: United Rock Products Corporation

XX I.R.S. OR ___ S.S. NO.: 9 5 4 1 9 2 0 2 9

PLAN TO BE ISSUED TO: (SEE INSTRUCTIONS) United Rock Products Corporation

BUSINESS MAILING ADDRESS: 1245 East Arrow Highway, Irwindale, California 91706

## FACILITY INFORMATION

FACILITY NAME: United Rock Products

FACILITY I.D. NO.: 0 ~~6 6 2 4 1~~

EQUIPMENT/FACILITY LOCATION: (IF SAME AS MAILING ADDRESS, ENTER "SAME") Same

65341
86 3-29-93

TYPE OF BUSINESS: Sand and Gravel (Aggregate) Production

BUSINESS TYPE CODE: (SEE INSTRUCTIONS) 1 4 4 0

CONTACT PERSON AND TITLE Arnold Brink, Operations Manager

CONTACT TELEPHONE NO.: (818) 358-4558

## EQUIPMENT INFORMATION

APPLICATION HEREBY SUBMITTED FOR: Fugitive Dust Emissions Control Plan

RULE NUMBER WHICH THIS APPLICATION APPLIES TO: Rule No. 403

TYPE OF PLAN APPLICATION:
COMPLIANCE PLAN [ ]
EXCAVATION PLAN [ ]
OTHER [X] Fugitive Dust Emissions Control Plan
ALTERNATIVE EMISSION CONTROL PLAN (AECP) [ ]
EXTREME PERFORMANCE COATING CLASSIFICATION [ ]

IF THIS APPLICATION IS ASSOCIATED WITH CERTAIN DISTRICT APPLICATION(S)/PERMIT(S), ENTER APPLICATION/PERMIT NUMBER(S):

FOR THIS PROJECT, HAS A CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) DOCUMENT BEEN REQUIRED BY ANOTHER GOVERNMENTAL AGENCY? NO [X] YES [ ] IF YES, ENTER NAME OF AGENCY:

DO YOU CLAIM CONFIDENTIALITY OF DATA? (SEE INSTRUCTIONS) YES [ ] NO [X]

OPERATING SCHEDULE:

| | HOURS/DAY | DAYS/WEEK | WEEKS/YEAR |
|---|---|---|---|
| MAXIMUM | 12 | 6 | 52 |
| AVERAGE | 10 | 5 | 52 |

FOR AECP PLEASE FILL IN TABLE BELOW:

| | LBS/YEAR | DAYS/YEAR |
|---|---|---|
| ACTUAL USAGE TWO YEARS AGO | | |
| ACTUAL USAGE LAST YEAR | | |
| PROPOSED AVERAGE USE | | |

## SIGNATURE

I HEREBY CERTIFY, UNDER PENALTY OF PERJURY, THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION ARE TRUE AND CORRECT.

SIGNATURE OF RESPONSIBLE MEMBER OF ORGANIZATION [signature] DATE 3-4-93

TYPE OR PRINT NAME OF SIGNER: Arnold Brink

TITLE OF SIGNER: Operations Manager

TELEPHONE NO.: (818) 358-4558

## SCAQMD USE ONLY

| APPLICATION NUMBER | EQUIP. CAT. NO. | ENGR. A R DATE INITIAL | ENGR. A R DATE INITIAL |
|---|---|---|---|
| [illegible] | 666403 | 3/29/93 NTH | |

| ASSIGNMENT UNIT ENG. | FEE SCHEDULE $ | VALIDATION | CHECK NO. | AMOUNT | ENF. SEC. |
|---|---|---|---|---|---|
| | | [illegible] | 511287 511212 | 75400 8250 | |

1/91

SEE REVERSE SIDE FOR INSTRUCTIONS AND ADDITIONAL INFORMATION

S.C.A.Q.M.D.
ENGINEERING

'93 MAR -8 A9:54

# INSTRUCTIONS FOR PERMIT WORDING & FEE DATA

PUBLIC NOTICE REQUIRED ( ) YES ( ) NO

APPLICATION NO: 279903

DISPOSITION:
- [X] APPROVED
- [ ] DENIED
- [ ] CANCELLED - DON'T REFUND FEE
- [ ] CANCELLED - REFUND FEE (SEE COMMENTS)

PERMIT UNIT WORDING:
- [ ] BELOW
- [ ] ON FIELD REPORT DATED _____
- [ ] ON PAGE _____ OF PROCESS SHEETS
- [ ] ON _____

CONDITIONS:
- [X] NONE
- [ ] NUMBERS LISTED: _____
- [ ] SPECIAL (SEE PERMIT UNIT WORDING & CONDTIONS)
- [ ] AS ON _____

PREVIOUS PERMIT NO: PREVIOUS APPLICATION NO:

PERMIT UNIT WORDING & CONDITIONS Refund already processed through revenue receiving

FEE DETERMINATION:

TABLE I, SCHEDULE _____ ( ) P/C ( ) P/O ( ) P/C-P/O (X) PLAN

- [ ] REGULAR PERMIT PROCESSING FEE
- [ ] CHANGE OF PERMITTEE
- [ ] MODIFICATION
- [ ] CHANGE OF PERMIT CONDITION
- [ ] SMALL BUSINESS
- [ ] IDENTICAL PERMIT UNIT (REF. APPL. #_____)
- [ ] EXISTING EQUIPMENT OPERATING WITHOUT PERMIT (P/O NO P/C)
- [ ] TIME & MATERIALS

| | | |
|---|---|---|
| 1. | PERMIT PROCESSING FEE (APPLICATION FILED PRIOR TO 7/1/90) TABLE I FEE *, $ 75 LESS FILING FEE PAID, $ 325 = | 1. -250 |
| 2. | EMISSION REDUCTION CREDIT (OFFSET) | 2. |
| 3. | E.I.R. | 3. |
| 4. | AIR QUALITY ANALYSIS | 4. |
| 5. | HEALTH RISK ASSESSMENT | 5. |
| 6. | SIGNIFICANT PROJECT REVIEW | 6. |
| 7. | SOURCE TEST REVIEW | 7. |
| 8. | CEMS REVIEW | 8. |
| 9. | TIME AND MATERIALS (FOR PLAN APPLICATION ONLY) | 9. ½ hr (37.50) |
| 10. | PERMIT PROCESSING FEE ADJUSTMENT ** (EXPLAIN UNDER COMMENTS) (APPLICATION FILED BEGINNING 7/1/90) ADDITIONAL FEE | 10. |
| 11. | REFUND** (EXPLAIN UNDER COMMENTS)(INCLUDING CANCELLATION) | 11. -212.50 |

COMMENTS Staff spent ½ hour reviewing the plan

RECOMMENDED BY MPC DATE 4-9-93 REVIEWING ENGINEER MZ DATE 4/9/93

* ADJUSTED FOR SMALL BUSINESS, IDENTICAL EQUIPMENT AND P/O NO P/C PENALTY

** ADJUSTMENTS FOR INCORRECT FEE SUBMITTED, SMALL BUSINESS, IDENTICAL EQUIPMENT AND P/O NO P/C PENALTY

South Coast Air Quality Management District

Fugitive Dust Control Plan Review

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| | |
|---|---|
| **Name of Applicant:** | United Rock Products |
| **AP #:** | 279903 |
| **ID #:** | 065341 |

Plan is: (Approved) Conditionally Approved Disapproved

Approval date: April 9, 1993

A letter notifying the applicant of this designation was mailed: April 9, 1993

Staff spent ½ hours reviewing the plan (To nearest tenth)

Applicant is to be billed for an additional amount of: $ ✓

Applicant is entitled to a refund in the amount of: $ 212.50

The annual resubmittal is due: February 9, 1993

SCAQMD Reviewer: MPL

MP ✓

# UNITED ROCK PRODUCTS CORPORATION

April 1, 1993

South Coast Air Quality Management District
P.O. Box 4943
Diamond Bar, California 91765-0943

Re: Reference Facility 65341

Attn: Vicky Gonzales

Please be advised that the correct name for the above should be as follows:

United Rock Products Corporation
1245 E. Arrow Hwy.
Irwindale, Ca. 91706

Respectfully,

Arnold Brink
Operations Manager

AB/bw

# UNITED ROCK PRODUCTS CORPORATION

United Rock Products Corporation FAX (818) 357-9508

## FAX TRANSMISSION

DATE April 1, 1993

TIME FAX SENT 1

BUSINESS NAME SCAQMD

PERSON TO RECEIVE FAX Vicky Gonzalez

FAX NUMBER

PERSON SENDING FAX Arnold Brink

NUMBER OF PAGES INCLUDING COVER SHEET 2

ADDITIONAL COMMENTS

Hard copy to follow: yes no

If you experience any difficulty in receiving this transmission please call United Rock Products Corporation (818) 358-4558

1245 E. ARROW HWY., IRWINDALE, CA 91706 • 818-358-4558

ENG345F1 S.C.A.Q.M.D Pre-Screening Fee Assessment 03/08/93

Appl.Types: 10 - P/C (New Construction)
15 - Banking
20 - P/O (Equip Did Not Need P/C)
25 - Plans
30 - P/O no P/C
40 - Change of Ownership
50 - Alter/Mod Class I
Class II
60 - Change of Condition
Small Business?

Name of company: United Rock Products Corporation

| Appl Type | Equip Type | Equip BCAT | Equip CCAT | Iden. Appl. | Penalty | Amount |
|---|---|---|---|---|---|---|
| 25 | B | 666403 | 00 | | | 325.00 |

Total: 325.00

Eng Init.: NTM Unit#: N2 Ext.: 2481
Comments :

Change The Data or Press F7 to continue
Print 22 15 Continue Exit

30 day

Checklist for Rule 403 Compliance Plans

☐ Fee for $325

☑ Form 400P

☑ Supplemental Form ( Form 403 ,or Default Form or others)

(only facilities with scale of operation greater than 100 acres or more OR with a maximum throughput of 10,000 cubic yards or more a day need to submit the plan)

DATA ENTRY STAFF:
Please call Michael Laybourn, Air Quality Specialist, Planning and Rules, x 3066, to pick up the folders. He will process the application and return them to unit N4, for QC and filing.

South Coast
AIR QUALITY MANAGEMENT DISTRICT

# EMISSIONS CONTROL PLAN

## (Default Form)

UNDERSTANDING RULE 403

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
# 7/30/180-DAY APPLICATION PRE-SCREENING CHECKLIST

**FACILITY NAME** United Rock Products **FACILITY ID #** _____

**APPLICATION #** _____

| Further evaluation required by processing unit: | | Permit Category Determination: | |
|---|---|---|---|
| ☐ BACT Equivalency | ☐ Toxics | SMALL Source, 7-day | |
| ☐ CEQA | ☐ 1304 Exemption | MEDIUM Source, 30-day | ✓ |
| ☐ Rule 212, School location | | LARGE Source, 180-day | |

**Use the following questions to determine the permit category:**
**(Not all items need be addressed during pre-screening.**
**Address only as many as necessary to make a positive determination.)**

| | YES | NO |
|---|---|---|
| 1. Does the facility emit less than 10 tpy of any criteria air contaminant? | | 180 |
| 2. Is a CEQA required for this project? | 180 | |
| 3. Is the equipment listed on the Equipment with Minimal Toxics Emissions list? (see pg 7-2 of Pre-screening Guideline) | | 180 |
| 4. Does equipment meet BACT requirements? (see pg 9-2 of Pre-screening Guideline) | | 180 |
| 5. Is a school located within 1,000 feet of the facility? | 180 | |
| 6. Modeling Screening: | | |
| (a) Is source EXEMPT from modeling under Rule 1304? (*) If answer to question 6(a) is "yes," skip question 6(b). | * | |
| (b) Is emission rate less than allowed emissions under Rule 1303, Table A-1? (see pg 4-2 of Pre-screening Guideline; *Presently, modeling is not required for ROG or SOx emissions*) Contaminants: NOx | | 180 |
| CO | | 180 |
| PM10 | | 180 |
| 7. Public Notice Requirements: Are required offsets (and the ERCs provided) less than Community Bank (CB) threshold limits specified in Rule 1309.1? | | 180 |
| 8. Applicant qualifies for offsets from the Community Bank (CB), or applicant has provided adequate offsets with an ERC: | | 180 |
| 9. Accumulated Weighted Emissions Total (AWET): | | |
| (a) AWET = _____ | | |
| (b) AWET is less than 10 | 7 | |
| (c) AWET is greater than 10, but less than 30 | ~~30~~ | 180 |

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

## Form 403D - (Default) Fugitive Dust Emissions Control Plan

| | |
|---|---|
| Name of property owner: | United Rock Products Corporation |
| Name of operator or contractor: | Same as above |
| Name and phone number of key contact person:<br>Emergency phone number: | Arnold Brink<br>(818) 358-4558 |
| Complete address of site or assessor parcel number if no address is available: | 1245 E. Arrow Highway, Irwindale, California 91706 |
| Type of activity: | Sand and Gravel (Aggregate) Production |
| Scale of operation: 340 acres; | 4 Million cubic yards/year maximum throughput |

## Sources of Fugitive Dust

*Please provide the following information as completely as possible. Please also provide mapping with a north arrow which generally illustrates the characteristics of the site.*

No. Description of Source(s) [*Please provide best estimates*]

1 **Earth-moving** (If not applicable, check here ____)

Maximum cubic yards of earth-movement: _____/month or 4 MM /year

Anticipated start date: _____ End date _____; or Ongoing XX (Check)

Amount of export: 4 MM (Disposal site) _____

2 **Unpaved roads** (If not applicable, check here ____)

Mileage: 5 Estimate of average daily traffic levels: _____

Type of motor vehicles using roads: Transfer and Bottom Dump Trucks

3 **Storage piles** (If not applicable, check here ____)

Maximum number of piles: 15

Average height: 60 Feet, length/width: 100 Feet

4 **Vehicular track-out** (If not applicable, check here ____)

Number of access points which connect to public roads: 5

Estimate of the maximum number of vehicles which will exit the site: 400 / day

5 **Disturbed surface areas** (If not applicable, check here ____)

Maximum acreage: 265

Will any of these disturbed areas remain inactive for at least 10 days? Yes XX No ___

## Reasonably Available Control Measures

*Activities submitting this form will be required to implement the specific control measures listed in Tables 1 and 2 of Rule 403. Please CIRCLE all appropriate control measures. There must be at least one measure and one contingency measure circled for each applicable fugitive dust source category number. Those activities which elect to implement several of the control measures listed in Tables 1 and 2 can circle the word "combination".*

| No. | Control Measure | Control Action | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Earth-moving | | | | | | | | |
| | Table 2 | 1a | 1b | (1c) | combination | | | | |
| | Contingency Measure | | | | | | | | |
| | Table 1 | 1A | (2A) | combination | | | | | |
| 2 | Unpaved road travel | | | | | | | | |
| | Table 2 | (4a) | 4b | 4c | combination | | | | |
| | Contingency Measure | | | | | | | | |
| | Table 1 | 1C | (2C) | 3C | combination | | | | |
| 3 | Storage piles | | | | | | | | |
| | Table 2 | 5a | (5b) | combination | | | | | |
| | Contingency Measure | | | | | | | | |
| | Table 1 | (1D) | 2D | combination | | | | | |
| 4 | Vehicular track-out | | | | | | | | |
| | Contingency Measure | | | | | | | | |
| | Table 1 | 1E | (2E) | combination | | | | | |
| 5 | Disturbed surface areas | | | | | | | | |
| | Table 2 | 2a | (2b) | 2c | (2d) | (3a) | 3b | 3c | 3d |
| | | | combination | | | | | | |
| | Contingency Measure | | | | | | | | |
| | Table 1 | 1B | (2B) | 3B | 4B | combination | | | |

## Agreement

I certify that the information contained in this fugitive dust emission control plan is true and correct and that all control measures are being implemented at the site in the manner set forth herein.

Signature of Owner (Date)

I have read the conditions of this fugitive dust emission control plan and the owner has authorized the implementation of all of its provisions.

3-4-93

Signature of Operator (Date)
(If not the same as owner)

*Failure to disclose all sources of fugitive dust or failure to implement the fugitive dust control measures in the manner described in this fugitive dust emission control plan shall represent a violation of District Rule 403.*

## SCAQMD Review

Based on all of the information contained in this fugitive dust emission control plan it is:

_____ Approved

_____ Conditionally approved[1]

_____ Denied[2]

_____

Signature of SCAQMD Reviewer (Date)

1 The following are the conditions of approval of the Plan

_____

_____

_____

_____

_____

2 The following are the reasons for denial of the Plan

_____

_____

_____

_____

_____

# SCAQMD Rule 403 Recordkeeping

Month: _____

| Source Type/Control Action | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Earth-moving (mining)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▸ Water to prevent visible emissions from extending greater that 100 feet from active cut or mining area. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▸ High wind control measures. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Disturbed surface-areas** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▸ Apply dust suppressants to maintain a stabilized surface; and apply water twice a day to >70% of all unstabilized areas. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▸ High wind control measures. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Inactive disturbed surface-areas** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▸ Apply water to >70% of all inactive areas if there is evidence of wind driven dust; OR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▸ Apply dust suppressants to maintain a stabilized surface; OR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▸ Establish vegetative ground cover; OR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▸ Utilize any combination of the above listed control actions. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Unpaved roads** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▸ Water all roads used for any vehicular traffic at least three times per day; OR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▸ Water all roads used for any vehicular traffic once a day and restrict speed to 15 mph; OR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▸ Apply dust suppressants to maintain a stabilized surface. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▸ High wind control measures. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Open storage piles** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▸ Apply dust suppressants to maintain a stabilized surface; OR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▸ Apply water to >70% of the surface area of the pile if there is evidence of wind driven dust. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▸ High wind control measures. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Paved road track-out** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▸ High wind control measures. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Operator's Initials** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

UNITED ROCK PRODUCTS CORPORATION • 1245 E. ARROW HWY, IRWINDALE, CA 91706 • (818) 358-

| VENDOR NUMBER | VENDOR NAME | CHECK NO. | CHECK DATE | CONTROL NO. |
|---|---|---|---|---|
| 19025 | S.C.A.Q.M.D. | 511212 | 2/12/93 | |

| INVOICE NO. | INVOICE DATE | OUR P.O. NO. | DESCRIPTION | INVOICE AMOUNT | DISCOUNT | NET |
|---|---|---|---|---|---|---|
| | | | Fugitive Dust 403 Rule | $250.00 | | |

INITED ROCK PRODUCTS CORPORATION • 1245 E. ARROW HWY, IRWINDALE, CA 91706 • (818) 358-[redacted]

| VENDOR NUMBER | VENDOR NAME | CHECK NO. | CHECK DATE | CONTROL NO. |
|---|---|---|---|---|
| 19025 | S.C.A.Q.M.D. | 511287 | 03/09/93 | |

| INVOICE NO. | INVOICE DATE | OUR P.O. NO. | DESCRIPTION | INVOICE AMOUNT | DISCOUNT | NET |
|---|---|---|---|---|---|---|
| | | | Supplemental check for Fugitive 403 Rule | $ 75.00 | | |

UNITED ROCK PRODUCTS CORPORATION
1245 E. ARROW HWY., IRWINDALE, CA 91706

CERTIFIED
P 676 835 326
MAIL

U.S.POSTAGE
2.52

S. C. A. Q. M. D.
21865 E. Copley Drive
Diamond Bar, California 91765-4182

Cancel in Approval.
6-28-08

ROUTING RECORD

| DATE | FROM | TO | ACTION |
|---|---|---|---|
| 1-4-08 | RVM | HTP | CLASS III |
| 8-12-08 | HTF | PIS | Cancel |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

REFERENCE TO OTHER APCD RECORDS INCLUDING VARIANCES

57 6

DATA ENTRY

APPL # 476557
I. D. # 65341

UNITED ROCK PRODUCTS CORPORATION
1245 E ARROW HWY
IRWINDALE
AGGREGATE PRODUCTION/CRFUSHING

Date: 12/21/07

South Coast Air Quality Management District

# Form 400-A

## Application For Permit To Construct and Permit To Operate

**Mail Application To:**
P.O. Box 4944
Diamond Bar, CA 91765

Tel: (909) 396-3385
**www.aqmd.gov**

### Section A: Operator Information

1. **Business Name of Operator To Appear On The Permit:** United Rock Products Co.

2. **Valid AQMD Facility ID (Available on Permit or Invoice Issued by AQMD):** 65341

3. **Owner's Business Name (only if different from Business Name of Operator):**

### Section B: Equipment Location

4. **Equipment Location Address:**
For equipment operated at various locations in AQMD's jurisdiction, provide address of initial site

1245 East Arrow Highway
Street Address

Irwindale — CA, — 91706
City — State — Zip Code

County: (•) Los Angeles ( ) Orange ( ) San Bernardino ( ) Riverside

Contact Name: Ken Barker

Contact Title: Environmental Manager — Phone: (714) 578-9600

Fax: — E-Mail:

### Section C: Permit Mailing Address

5. **Permit and Correspondence Information:**
[X] Check here if same as equipment location address

Street Address

City — State — Zip Code

Contact Name:

Contact Title: — Phone:

Fax: — E-Mail:

### Section D: Application Type

**The facility is in** ( ) RECLAIM ( ) Title V ( ) RECLAIM & Title V Program (please check if applicable)

6. **Reason for Submitting Application (Select only ONE):**

- ( ) New Construction (Permit to Construct)
- (•) Equipment Operating Without a Permit or Expired Permit*
- ( ) Administrative Change
- ( ) Equipment On-Site But Not Constructed or Operational
- ( ) Title V Application (Initial, Revisions, Modifications, etc.)
- ( ) Compliance Plan
- ( ) Facility Permit Amendment
- ( ) Registration/Certification
- ( ) Streamlined Standard Permit
- ( ) Permitted Equipment Altered/ Modified Without Permit Approval*
- ( ) Proposed Alteration/Modification to Permitted Equipment
- ( ) Change of Condition For Permit To Operate
- ( ) Change of Condition For Permit To Construct
- ( ) Change of Location—Moving to New Site

**Existing Or Previous Permit/Application Number:**
*(If you checked any of the items in this column, you MUST provide a existing Permit/ Application Number)*

* A Higher Permit Processing Fee applies to those items with an asterisk (Rule 301 (c) (1) (D)

7. **Estimated Start Date of Operation/Construction (MM/DD/YYYY):** 01/01/2008

8. **Description of Equipment:** Aggregate Production/Crushing (< 5,000 TPD)

9. **Is this equipment portable AND will it be operated at different locations within AQMD's jurisdiction?** (•) No ( ) Yes

10. **For Identical equipment, how many additional applications are being submitted with this application?** (Form 400-A required for each)

11. **Are you a Small Business as per AQMD's Rule 102 definition?** (10 employees or less and total gross receipts are $500,000 or less, or a not-for-profit training center?) (•) No ( ) Yes

12. **Has a Notice of Violation (NOV) or a Notice To Comply (NC) been issued for this equipment?**
(•) No ( ) Yes If yes, provide NOV/NC #:

### Section E: Facility Business Information

13. **What type of business is being conducted at this equipment location?** Concrete Processing

14. **What is your businesses primary NAICS Code** (North American Industrial Classification System)? 327320

15. **Are there other facilities in the SCAQMD jurisdiction operated by the same operator?** ( ) No (•) Yes

16. **Are there any schools (K-12) within a 1000-ft. radius of the equipment physical location?** (•) No ( ) Yes

### Section F: Authorization/Signature

I hereby certify that all information contained herein and information submitted with this application is true and correct.

17. **Signature of Responsible Official:** Ken Barker

18. **Title:** Environmental Manager

19. **Print Name:** Ken Barker

20. **Date:** 12/17/07

**Check List**
- [ ] Form(s) signed and dated by authorized official
- [ ] Supplemental Equipment Form (400-E-XX or 400-E-GEN)
- [ ] CEQA Form (400-CEQA) attached
- [ ] Payment for permit processing fee attached

Your application will be rejected if any of the above items are missing.

| AQMD USE ONLY | APPLICATION/TRACKING # | TYPE | EQUIPMENT CATEGORY CODE: | FEE SCHEDULE: | VALIDATION |
|---|---|---|---|---|---|
| | 476557 | B C D | | $ | 12/21/07 cv |

| ENG. A R DATE | ENG. A R DATE | CLASS I II IV | ASSIGNMENT Unit D Engineer | CHECK/MONEY ORDER | AMOUNT | Tracking # |
|---|---|---|---|---|---|---|
| | | | | 519191 | $4,424.88 | |

© South Coast Air Quality Management District, Form 400-A (2006.02)

M:\Scanned\United Rock\10989\400-A.pdf

C17 66327

Rec'd 12-18-07

ENGINEERING
'07 DEC 21 AM0 :38

SCAQMD PERMIT PROCESSING SYSTEM (PPS)

# FEE DATA - SUMMARY SHEET

Application No : 476557 IRS/SS No:

Previous Application No: Previous Permit No:

Company Name : UNITED ROCK PRODUCTS CORPORATION Facility ID: 65341

Equipment Street: 1245 E ARROWHWY , IRWINDALE CA 91706

Equipment Desc : Aggregate Crushing (<5000 tpd)

Equipment Type : BASIC Fee Charged by: B-CAT

B-CAT NO. : 000380 C-CAT NO: 00 Fee Schedule: C

Facility Zone : 09 Deemed Compl. Date: 1/10/2008 Public Notice: NO

Evaluation Type : PO NO PC (PENALTY WILL BE ASSESSED) Small Business: ☐

Disposition : Cancel PO - Don't Refund Fee, Recommended by Engineer Penalty: ☑

Lead Appl. No : Identical Permit Unit: ☐

| | | | |
|---|---|---|---|
| Air quality Analysis | | Filing Fee Paid: | $0.00 |
| E.I.R | | Permit Processing Fee Paid: | $4,424.88 |
| Health Risk Assessment | | Permit Processing Fee Calculated*: | $4,424.88 |
| Significant Project | | Permit Processing Fee Adjustment: | $0.00 |
| Expedited Processing | Hours: | | |
| Source Test Review | Hours: | | |
| Time & Material | Hours: | | |
| | | Total Additional Fee: | $0.00 |
| | | Additional Charge: | $0.00 |

COMMENTS: THE APPLICANT DECIDED TO REMOVE THE EQUIPMENT. SINCE THE EVALUATION WAS INITIATED THERE WILL BE NO REFUND FOR THE CANCELLATION OF THE APPLICATION.

RECOMMENDED BY: HIRAM T FONG DATE: 08/12/2008

REVIEWED BY: _____ DATE: 8-28-08

* ADJUSTED FOR SMALL BUSINESS, IDENTICAL EQUIPMENT AND P/O NO P/C PENALTY

# NSR DATA SUMMARY SHEET

Application No: 476557
Application Type: Permit to Operate without prior Permit to Construc
Application Status: PENDAPPRV
Previous Apps,Dev,Permit #: NONE

---

Company Name: UNITED ROCK PRODUCTS CORPORATION
Company ID: 65341
Address: 1245 E ARROW HWY,IRWINDALE, CA 91706-1302
RECLAIM: NO
RECLAIM Zone: 02A
[redacted] Basin: SC
[redacted]ne: 09
Title V: NO

---

Device ID: 0 - AGGREGATE-PROD
Estimated Completion Date: 03-01-2008
Heat Input Capacity: 0 Million BTU/hr
Priority Reserve: NONE - No Priority Access Requested
Recommended Disposition: 52 - APPLICATION CANCELLED, KEEP ALL FEES
PR Expiration:
School Within 1000 Feet: NO
Operating Weeks Per Year: 52
Operating Days Per Week: 7
Monday Operating Hours: 00:00 to 24:00
Tuesday Operating Hours: 00:00 to 24:00
Wednesday Operating Hours: 00:00 to 24:00
Thursday Operating Hours: 00:00 to 24:00
[redacted]day Operating Hours: 00:00 to 24:00
Saturday Operating Hours: 00:00 to 24:00
Sunday Operating Hours: 00:00 to 24:00

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Emittant: PM10
BACT:
Cost Effectiveness: NO
Source Type: MINOR
Emis Increase: 0
Modeling: N/A
Public Notice: N/A
CONTROLLED EMISSION
Max Hourly: 0 lbs/hr
Max Daily: 0 lbs/day
UNCONTROLLED EMISSION
Max Hourly: 0 lbs/hr
Max Daily: 0 lbs/day
CURRENT EMISSION
BACT 30 days Avg: 0 lbs/day
Annual Emission: 0 lbs/yr
District Exemption: None

SUPERVISOR'S APPROVAL: _____ SUPERVISOR'S REVIEW DATE: 8-18-08

Processed By: hiramf 8/12/2008 10:44:18 AM

## Hiram Fong

**From:** Taylor, Scott
**Sent:** Friday, August 01, 2008 5:04 PM
**To:** Hiram Fong
**Subject:** RE: United Rock Products Corp. (A/N 476557)

Hiram,

After analysis by United Rock it was determined that it was better have the crushing done by an outside contractor. As a result they would like to cancel the application.

If you have any questions please let me know.

Regards,
Scott Taylor
Justice & Associates
(562) 961-3494
Fax(562) 961-3493

---

**From:** Hiram Fong [mailto:HFong@aqmd.gov]
**Sent:** Wednesday, July 16, 2008 9:57 AM
**To:** Scott Taylor
**Subject:** FW: United Rock Products Corp. (A/N 476557)

Hi Scott,

Any news for me regarding United Rock Products on what they want to do?

Hiram

-----Original Message-----
**From:** Hiram Fong
**Sent:** Wednesday, May 07, 2008 10:28 AM
**To:** Taylor, Scott
**Subject:** RE: United Rock Products Corp. (A/N 476557)

Scott,

With the baghouse at 99% eff. the emissions from the crusher will be 2.16 lbs/dy x 0.01 = 0.0216 lb/dy. Add the transfer pts emissions the total will be 0.0216 lb/dy + 4(0.184 lb/dy) = 0.76 lb/dy, seems like they still need 1 lb of offset unless they can limit the thruput.

-----Original Message-----
**From:** Taylor, Scott
**Sent:** Wednesday, May 07, 2008 10:23 AM
**To:** Hiram Fong

**Subject:** RE: United Rock Products Corp. (A/N 476557)

Hiram,

Would we need to provide offsets?

Regards,
Scott Taylor
Justice & Associates
(562) 961-3494
Fax(562) 961-3494

---

**From:** Hiram Fong [mailto:HFong@aqmd.gov]
**Sent:** Wednesday, May 07, 2008 10:21 AM
**To:** Scott Taylor
**Subject:** RE: United Rock Products Corp. (A/N 476557)

Scott,

With the addition of a baghouse we will give them additional decrease of emissions for PM10.

-----Original Message-----
**From:** Taylor, Scott
**Sent:** Monday, April 28, 2008 11:08 AM
**To:** Hiram Fong
**Subject:** RE: United Rock Products Corp. (A/N 476557)

Hiram,

What would happen to our analysis if we added a baghouse to the crusher as additional control. Would this get us below the deminimus emission level and allow there to be no net increase for the operation?

Regards,
Scott Taylor
Justice & Associates
(562) 961-3494
Fax(562) 961-3494

---

**From:** Hiram Fong [mailto:HFong@aqmd.gov]
**Sent:** Tuesday, April 22, 2008 5:55 PM
**To:** Scott Taylor
**Subject:** RE: United Rock Products Corp. (A/N 476557)

I think these equipment were permitted under the old Reg. XIII. I think the original permit

(F73756) has 159 lbs/dy of PTE. During the modification, it was reduced to 80 lbs/dy.

-----Original Message-----
**From:** Taylor, Scott
**Sent:** Tuesday, April 22, 2008 5:47 PM
**To:** Hiram Fong
**Subject:** RE: United Rock Products Corp. (A/N 476557)

United rock has 0 PM10 ERCs. How could an application have been processed in 2005 to show a daily balance of 80 lbs/day and no credits have been provided?

Scott.

---

**From:** Hiram Fong [mailto:HFong@aqmd.gov]
**Sent:** Tuesday, April 22, 2008 5:44 PM
**To:** Scott Taylor
**Subject:** RE: United Rock Products Corp. (A/N 476557)

Scott,

The problem seems to be on A/N 430403 (permit no. F73756) which is for the aggregate crushing plant. There was a modification done in 2005 and the PTE is 80 lbs/dy for PM10. The other equipment is under A/N 438791 (aggregate pre-crushing) which has PTE of 11 lbs/dy for PM10.

-----Original Message-----
**From:** Taylor, Scott
**Sent:** Tuesday, April 22, 2008 5:26 PM
**To:** Hiram Fong
**Subject:** RE: United Rock Products Corp. (A/N 476557)

Hiram,

Per our discussion today please check into the basis of the 94 lb/day.

Regards,
Scott Taylor
Justice & Associates
(562) 961-3494
Fax(562) 961-3494

---

**From:** Hiram Fong [mailto:HFong@aqmd.gov]
**Sent:** Tuesday, April 22, 2008 1:44 PM
**To:** Scott Taylor
**Subject:** RE: United Rock Products Corp. (A/N 476557)

Hi Scott,

The company PTE for PM10 is already at 94 lbs/dy. Based on your calculations the 30-day ave. for PM10 will be at 2 lbs/dy. 2 lbs of offset will be needed. Also,

a control unit will be required on the loader's exhaust in order to past toxic emissions.

-----Original Message-----
**From:** Taylor, Scott
**Sent:** Friday, April 04, 2008 9:17 AM
**To:** Hiram Fong
**Subject:** RE: United Rock Products Corp. (A/N 476557)

Hiram,

The loader being used for the plant is also used for the hot plant and other functions around the plant. The loader is a 966F with an approximately 250 HP engine. The estimated fuel consumption is 12.96 gals/hr. This equates to about an additional 13,608 gals/yr.

Please let me know how the impacts our analysis.

Regards,
Scott Taylor
Justice & Associates

---

**From:** Hiram Fong [mailto:HFong@aqmd.gov]
**Sent:** Tuesday, April 01, 2008 9:37 AM
**To:** Scott Taylor
**Subject:** FW: United Rock Products Corp. (A/N 476557)

Hi Scott,

We will need to account for the emissions from the loader. If there is increase in fuel usage then we will need to account for it either from the owner of the loader or we will need to account for it on this plant.

Hiram Fong
SCAQMD

-----Original Message-----
**From:** Hiram Fong
**Sent:** Friday, March 28, 2008 8:37 AM
**To:** 'staylor@justiceassociates.com'
**Subject:** FW: United Rock Products Corp. (A/N 476557)

Hi Scott,

Do you have any information for me regarding the endloader?

Hiram
SCAQMD

-----Original Message-----
**From:** Hiram Fong
**Sent:** Tuesday, March 04, 2008 9:52 AM
**To:** 'staylor@justiceassociates.com'

**Subject:** United Rock Products Corp. (A/N 476557)

Hi Scott,

I am working on the concrete crushing system for United Rock Prod. and have a few questions. Is the endloader used for this system an existing equipment in the facility? If it is an existing equipment are the emissions already calculated on an permitted equipment and did the diesel fuel use increased?

Hiram Fong
SCAQMD

| SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT | PAGES | PAGE |
|---|---|---|
| | 4 | 1 |
| STATIONARY SOURCE AND COMPLIANCE DIVISION | APPLICATION NO. | DATE |
| | 476557 | 8/12/2008 |
| APPLICATION PROCESSING AND CALCULATIONS | ENGINEER | CHECK BY |
| | HTF | |

## PERMIT TO OPERATE

APPLICANT'S NAME: UNITED ROCK PRODUCTS CORP.

MAILING ADDRESS: 1245 E. ARROW HIGHWAY
IRWINDALE, CA 91706

EQUIPMENT ADDRESS: SAME AS ABOVE

**EQUIPMENT DESCRIPTION:**

CONCRETE CRUSHING AND STACKING SYSTEM CONSISTING OF:

1. RECEIVING HOPPER WITH GRIZZLY FEEDER, 40 H.P.
2. JAW CRUSHER, 150 H.P.
3. BELT CONVEYOR, 3'-6" W. X 29'-6" L., 20 H.P.
4. STACKING BELT CONVEYOR, 3'-6" W. X 100'-0" L., 25 H.P.

**BACKGROUND:**

This application was received by the District on 12/21/07 as P/O no P/C and was validated on 12/21/07. The company is in the business of aggregate processing. A check in the compliance database shows no records of violation related to this equipment.

**PROCESS DESCRIPTION:**

The purpose of this equipment is to crush concrete into aggregates and convey them onto a stock pile. A 200 psi Nesco water spray system is used to control emissions. The maximum process rate for this system is 4,000 tons/hr. The maximum operating schedules are 10 hrs/day, 7 dys/wk, and 52 wks/yr.

| SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT | PAGES 4 | PAGE 2 |
|---|---|---|
| STATIONARY SOURCE AND COMPLIANCE DIVISION | APPLICATION NO. 476557 | DATE 8/12/2008 |
| APPLICATION PROCESSING AND CALCULATIONS | ENGINEER HTF | CHECK BY |

## EMISSION CALCULATIONS:

Aggregate transfer point emission factor (Source: AP-42 Table 11.19.2-2, Dated 8/04)
PM10 = 0.0011 lbs/ton uncontrolled
PM10 = 0.000046 lbs/ton controlled
PM = 0.003 lbs/ton uncontrolled
PM = 0.00014 lbs/ton controlled
Crushing emission factor (Source: AP-42 Table 11.19.2-2, Dated 8/04)
PM10 = 0.0024 lbs/ton uncontrolled
PM10 = 0.00054 lbs/ton controlled
PM = 0.0054 lbs/ton uncontrolled
PM = 0.0012 lbs/ton controlled

| Emission Source | Uncontrolled PM Emission factor lb./ton | Controlled PM Emission factor lb./ton | Uncontrolled PM10 Emission factor lb./ton | Controlled PM10 Emission factor lb./ton | Throughput ton/hr | R1 PM Lb./hr | R2 PM lb./hr | R1 PM10 lb./hr | R2 PM10 lb./hr | 30 day average lb./day |
|---|---|---|---|---|---|---|---|---|---|---|
| Loading to hopper | 0.003 | 0.00014 | 0.0011 | 0.000046 | 400 | 1.2 | 0.056 | 0.44 | 0.02 | 0.2 |
| Hopper to crusher | 0.003 | 0.00014 | 0.0011 | 0.000046 | 400 | 1.2 | 0.056 | 0.44 | 0.02 | 0.2 |
| Crusher | 0.0054 | 0.0012 | 0.0024 | 0.00054 | 400 | 2.16 | 0.48 | 0.96 | 0.22 | 2.2 |
| Crusher to belt #3 | 0.003 | 0.00014 | 0.0011 | 0.000046 | 400 | 1.2 | 0.056 | 0.44 | 0.02 | 0.2 |
| Belt #3 to belt #4 | 0.003 | 0.00014 | 0.0011 | 0.000046 | 400 | 1.2 | 0.056 | 0.44 | 0.02 | 0.2 |
| Belt #4 to stockpile | 0.003 | 0.00014 | 0.0011 | 0.000046 | 400 | 1.2 | 0.056 | 0.44 | 0.02 | 0.2 |
| Total | | | | | | 8.16 | 0.76 | 3.16 | 0.32 | 3.2 |

Maximum throughput = 4,000 tons/dy x 7 dys/wk x 4.33 wks/mo = 121,000 tons/mo

Endloader Emissions:
An endloader will be used in conjunction with the above equipment. The emissions will be calculated and will be included in the NSR database. Factors are for industrial, diesel power construction equipment (Source: AP-42, Table 3.3-1, Dated 10/96).

Endloader usage:
130 hp engine (given)
8 hrs/day (given)
6 dys/wk
52 wks/yr

| | | |
|---|---|---|
| HC: | 0.0025 | lb/hp-hr x 130 hp = 0.33 lb/hr |
| NOx: | 0.031 | lb/hp-hr x 130 hp = 4.03 lb/hr |
| SOx: | 0.002 | lb/hp-hr x 130 hp = 0.26 lb/hr |
| CO: | 0.0067 | lb/hp-hr x 130 hp = 0.87 lb/hr |
| PM = PM10: | 0.0022 | lb/hp-hr x 130 hp = 0.29 lb/hr |

| SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT | PAGES 4 | PAGE 3 |
|---|---|---|
| STATIONARY SOURCE AND COMPLIANCE DIVISION | APPLICATION NO. 476557 | DATE 8/12/2008 |
| APPLICATION PROCESSING AND CALCULATIONS | ENGINEER HTF | CHECK BY |

## RULE EVALUATION:

Rule 212: The equipment will not be operated within 1,000 feet of a school. Therefore, public notice is not required.

Rule 401: No visible emissions are expected with proper equipment operation.

Rule 402: Nuisance problems due to the operation of the system are unlikely.

Rule 403: No Fugitive Problems expected.

Rule 404: Compliance is expected.

Rule 405: Process Weight: 800,000 lbs/hr
Actual Emissions: 0.76 lb/hr
Allowed Emissions: 27.6 lbs/hr (approx)
Compliance

Rule 1303(a): BACT is high pressure water spray at transfer points and at the jaw crusher. Compliance.

Rule 1303(b) (1): The allowable PM10 emissions for a noncombustion source are specified in Table A-1 as 0.41 lbs/hr. The controlled PM10 emissions from the equipment is less than 0.41 lbs/hr. Therefore, no further screening analysis is required.

Rule 1303(b) (2): No external emissions offset are required to this equipment.

Rule 1303(b) (3): N/A

Rule 1303(b) (4): The subject facility complies with all applicable rules and regulations of the District.

Rule 1303(b) (5): The subject facility is not a "major polluting facility." Therefore, the requirements of this rule do not apply.

Rule 1401: No toxics will be released.

**CONCLUSIONS/RECOMMENDATIONS**:

FOR THIS APPLICATION THE FOLLOWING DISPOSITION IS RECOMMENDED:

Issue a P/O subject to the following conditions

## PERMIT CONDITIONS

1. STANDARD CONDITION.

2. STANDARD CONDITION.

3. THE MAXIMUM AMOUNT OF MATERIAL PROCESSED IN THIS EQUIPMENT SHALL NOT EXCEED 121,000 TONS PER MONTH.

4. RECORDS SHALL BE MAINTAINED IN ORDER TO COMPLY WITH CONDITION NO. 3. RECORDS SHALL BE MAINTAINED FOR AT LEAST THE LAST TWO YEARS AND MADE AVAILABLE TO THE DISTRICT PERSONNEL UPON REQUEST.

5. MATERIAL CHARGED, AND MATERIAL IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

6. HIGH PRESSURE WATER SPRAYS (200 PSIG) SHALL BE INSTALLED AND OPERATED AT ALL MATERIAL TRANSFER POINTS AS WELL AS THE CONE CRUSHER FEED INLET AND OUTLET DISCHARGE.

7. ALL FITTINGS AND HOSES OF THE HIGH PRESSURE WATER SPRAY SYSTEM SHALL BE KEPT TIGHT SUCH THAT THERE ARE NO LEAKS OR DRIPS. IF LEAKS OR DRIPS OCCUR, THEY MUST BE REPAIRED WITHIN 8 HOURS AFTER DETECTION OR SOONER.

8. THIS EQUIPMENT IS SUBJECT TO PART 60, CHAPTER 1, TITLE 40, CODE OF FEDERAL REGULATIONS, SUBPART 000, STANDARDS OF PERFORMANCE FOR NON-METALLIC MINERAL PROCESSING PLANTS.

South Coast Air Quality Management District

# Form 400-CEQA

## California Environmental Quality Act (CEQA) Applicability

**Mail Application To:**
P.O. Box 4944
Diamond Bar, CA 91765

Tel: (909) 396-3385

**www.aqmd.gov**

The SCAQMD is required by state law, the California Environmental Quality Act (CEQA), to review discretionary permit project applications for potential air quality and other environmental impacts. This form is a screening tool to assist the SCAQMD in clarifying whether or not the project[1] has the potential to generate significant adverse environmental impacts that might require preparation of a CEQA document [CEQA Guidelines §15060(a)].[2] Refer to the attached instructions for guidance in completing this form.[3] For each Form 400-A application, also complete and submit one Form 400-CEQA. If submitting multiple Form 400-A applications for the same project at the same time, only one 400-CEQA form is necessary for the entire project. If you need assistance completing this form, contact Lori Inga at (909) 396-3109.

### FACILITY INFORMATION

| Business Name of Operator to Appear on the Permit: | Facility ID (6-Digit): |
|---|---|
| United Rock Products Co. | 65341 |

**Project Description:**

Stationary Crushing Plant

### REVIEW FOR EXEMPTION FROM FURTHER CEQA ACTION

Check "Yes" or "No" as applicable

| | Yes | No | Is this application for: |
|---|---|---|---|
| A. | ○ | ⊙ | **A CEQA and/or NEPA document previously or currently prepared that specifically evaluates this project?** If yes, a permit cannot be issued until a Final CEQA document and Notice of Determination is submitted. |
| B. | ○ | ⊙ | **A request for a change of permittee only (without equipment modifications)?** |
| C. | ○ | ⊙ | **Equipment certification or equipment registration** (qualifies for Rule 222)**?** |
| D. | ○ | ⊙ | **A functionally identical permit unit replacement with no increase in rating or emissions?** |
| E. | ○ | ⊙ | **A change of daily VOC permit limit to a monthly VOC permit limit?** |
| F. | ○ | ⊙ | **Equipment damaged as a result of a disaster during state of emergency?** |
| G. | ○ | ⊙ | **A Title V** (i.e., Regulation XXX) **permit renewal (without equipment modifications)?** |
| H. | ○ | ⊙ | **A Title V administrative permit revision?** |
| I. | ○ | ⊙ | **The conversion of an existing permit into an initial Title V permit?** |

If **"Yes"** is checked for any question above, your application does not require additional evaluation for CEQA applicability. Skip to page 2, "SIGNATURES" and sign and date this form.

### REVIEW OF IMPACTS WHICH MAY TRIGGER CEQA

Complete Sections I-VI by checking "Yes" or "No" as applicable. To avoid delays in processing your application(s), explain all "Yes" responses on a separate sheet and attach it to this form.

| | Yes | No | Section I – General |
|---|---|---|---|
| 1. | ○ | ⊙ | **Has this project generated any known public controversy regarding potential adverse impacts that may be generated by the project?** Controversy may be construed as concerns raised by local groups at public meetings; adverse media attention such as negative articles in newspapers or other periodical publications, local news programs, environmental justice issues, etc. |
| 2. | ○ | ⊙ | **Is this project part of a larger project?** |
| | | | **Section II – Air Quality** |
| 3. | ○ | ⊙ | **Will there be any demolition, excavating, and/or grading construction activities that encompass an area exceeding 20,000 square feet?** |
| 4. | ⊙ | ○ | **Does this project include the open outdoor storage of dry bulk solid materials that could generate dust?** If Yes, include a plot plan with the application package. |

[1] A "project" means the whole of an action which has a potential for resulting in physical change to the environment, including construction activities, clearing or grading of land, improvements to existing structures, and activities or equipment involving the issuance of a permit. For example, a project might include installation of a new, or modification of an existing internal combustion engine, dry-cleaning facility, boiler, gas turbine, spray coating booth, solvent cleaning tank, etc.

[2] To download the CEQA guidelines, visit http://ceres.ca.gov/env_law/state.html.

[3] To download this form and the instructions, visit http://www.aqmd.gov/ceqa or http://www.aqmd.gov/permit

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| | Yes | No | |
|---|---|---|---|
| 5. | ○ | ⊙ | **Would this project result in noticeable off-site odors from activities that may not be subject to SCAQMD permit requirements?** For example, compost materials or other types of greenwaste (i.e., lawn clippings, tree trimmings, etc.) have the potential to generate odor complaints subject to Rule 402 – Nuisance. |
| 6. | ○ | ⊙ | **Does this project cause an increase of emissions from marine vessels, trains and/or airplanes?** |
| 7. | ○ | ⊙ | **Will the proposed project increase the QUANTITY of hazardous materials stored aboveground onsite or transported by mobile vehicle to or from the site by greater than or equal to the amounts associated with each compound on the attached Table 1?[4]** |
| | | | **Section III – Water Resources** |
| 8. | ○ | ⊙ | **Will the project increase demand for water at the facility by more than 5,000,000 gallons per day?** The following examples identify some, but not all, types of projects that may result in a "yes" answer to this question: 1) projects that generate steam; 2) projects that use water as part of the air pollution control equipment; 3) projects that require water as part of the production process; 4) projects that require new or expansion of existing sewage treatment facilities; 5) projects where water demand exceeds the capacity of the local water purveyor to supply sufficient water for the project; and 6) projects that require new or expansion of existing water supply facilities. |
| 9. | ○ | ⊙ | **Will the project require construction of new water conveyance infrastructure?** Examples of such projects are when water demands exceed the capacity of the local water purveyor to supply sufficient water for the project, or require new or modified sewage treatment facilities such that the project requires new water lines, sewage lines, sewage hook-ups, etc. |
| | | | **Section IV – Transportation/Circulation** |
| 10. | | | **Will the project result in** (Check all that apply): |
| | ○ | ⊙ | **a. the need for more than 350 new employees?** |
| | ○ | ⊙ | **b. an increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round-trips per day?** |
| | ○ | ⊙ | **c. increase customer traffic by more than 700 visits per day?** |
| | | | **Section V – Noise** |
| 11. | ○ | ⊙ | **Will the project include equipment that will generate noise GREATER THAN 90 decibels (dB) at the property line?** |
| | | | **Section VI – Public Services** |
| 12. | | | **Will the project create a permanent need for new or additional public services in any of the following areas** (Check all that apply): |
| | ○ | ⊙ | **a. Solid waste disposal?** Check "No" if the projected potential amount of wastes generated by the project is less than five tons per day. |
| | ○ | ⊙ | **b. Hazardous waste disposal?** Check "No" if the projected potential amount of hazardous wastes generated by the project is less than 42 cubic yards per day (or equivalent in pounds). |

***REMINDER: For each "Yes" checked in the sections above, attach all pertinent information including but not limited to estimated quantities, volumes, weights, etc.***

## SIGNATURES

**I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. I UNDERSTAND THAT THIS FORM IS A SCREENING TOOL AND THAT THE SCAQMD RESERVES THE RIGHT TO CONSIDER OTHER PERTINENT INFORMATION IN DETERMINING CEQA APPLICABILITY.**

| SIGNATURE OF RESPONSIBLE OFFICIAL OF FIRM: | TITLE OF RESPONSIBLE OFFICIAL OF FIRM: | |
|---|---|---|
| Ken Barker | Environmental Manager | |
| **TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL OF FIRM:** Ken Barker | **RESPONSIBLE OFFICIAL'S TELEPHONE NUMBER:** (714) 637-1550 | **DATE Signed:** 12/17/07 |
| **SIGNATURE OF PREPARER, IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM:** Scott Taylor | **TITLE OF PREPARER:** Consultant | |
| **TYPE OR PRINT NAME OF PREPARER:** Scott Taylor | **PREPARER'S TELEPHONE NUMBER:** (562) 961-3494 | **DATE Signed:** 12/19/07 |

***THIS CONCLUDES FORM 400-CEQA. INCLUDE THIS FORM AND THE ATTACHMENTS WITH FORM 400-A.***

[4] Table 1 – Regulated Substances List and Threshold Quantities for Accidental Release Prevention can be found in the Instructions for Form 400-CEQA.

**Justice** & *Associates*

4155 Outer Traffic Circle
Long Beach, CA 90804-2111
(562) 961-3494 Fax (562) 961-3493

# FEE SCHEDULE WORK SHEET

(For Permit Processing in Accordance With Rule 301)

Permits to be issued to: United Rock Products Co.

Address: 1245 East Arrow Highway

City, State, Zip: Irwindale, CA 91706

| Quantity of Identical Units | Equipment/Process | Fee Schedule | Full Fee for First Permit Unit | | 50% of Processing Fee for Failure to Obtain Permit to Construct | | Total |
|---|---|---|---|---|---|---|---|
| 1 | Aggregate Production/Crushing (<5,000 TPD) | C | $2,949.92 | + | $1,474.96 | = | $4,424.88 |
| | | | | | | | |
| | | | | | | | |
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| | | | | | | | |

Total Permit Processing Fee Due: $4,424.88

Comments:

**Justice** & *Associates*

4155 Outer Traffic Circle
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## SUMMARY

United Rock Products Co. is filing a Class III application for a Permit to Operate a concrete crushing facility located at 1245 East Arrow Highway, Irwindale California 91706 (Refer to Vicinity Map, Attachment "A"). The plant will be powered by electric grid power.

Emissions from the new equipment will be below the District's Rule 212 daily limit, therefore exempting it from Public Notice. Additionally, the plant will not exceed the Rule 1304 annual limits, therefore exempting it from modeling and offsets.

The equipment covered in this application is equipped with the Best Available Control Technology (BACT) in accordance with the District's New Source Review regulations. The facility will limit operations to processing concrete. As a result, the equipment will utilize a high pressure water spray system to control emissions.

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| **Attachments** | – | **Description** |
|---|---|---|
| 10989FLOW | – | Flow Diagram |
| "A" | – | Vicinity Map |
| "B" | – | AP-42 Emission Factors, Table 11.19.2-2 |

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## PART I – PROJECT DESCRIPTION

### A. Business Background

1. Name — United Rock Products Co.

2. Owner — United Rock Products Co.
1245 East Arrow Highway
Irwindale, CA 91706

3. Contact — Ken Barker
(714) 578-9600

4. Entitlement — Equipment to be owned and operated by United Rock Products Co.

5. Business Description — Crushing Concrete

6. Type of Application — New Construction

### B. Description of Facility

1. Location — 1245 East Arrow Highway
Irwindale, CA 91706

2. General Purpose of Facility

To crush concrete for use in base materials.

## C. Description of Process

1. General Description

Concrete is delivered to the vibrating grizzly feeder. Oversized materials are sent to a primary jaw crusher while smaller material passes to an underbelt. The material is then conveyed to a stock pile.

2. Flow Diagram

Refer to Justice & Associates Flow Diagram 10989FLOW which shows the interaction between equipment and process lines, transfer of materials and basic control equipment.

3. Production Schedule

Maximum Production Rates

| | Tons Per Day | Tons Per Month | Tons Per Year |
|---|---|---|---|
| Production | 4,000 | 120,000 | 700,000 |

4. Equipment List and Horsepower Schedule
(Refer to Flow Diagram 10989FLOW)

| Unit | Description | HP |
|---|---|---|
| 1 | Receiving Hopper with Vibrating Grizzly Feeder | 40 |
| 2 | Jaw Crusher | 150 |
| 3 | Belt Conveyor, 42" W × 29.5' L | 20 |
| 4 | Stocking Belt Conveyor, 42" W × 100' L | 25 |

## D. Control Equipment

The District's New Source Review regulation specifies that new equipment will be in compliance with the BACT guidelines. This facility exclusively processes concrete. The following describes the control system that will be utilized to control particulates during the operating of the plant.

1. Aggregate Processing – Baghouse Details

**Water Spray System:**

Manufactured By: National Environmental Services Co. (NESCO)
Model: Dustboy
Features: 200 psi using a 10 gpm/pump
(See flow diagram for location of spray heads.)

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## PART II – REGULATORY ANALYSIS

### A. Analysis of Emissions Restrictions

District prohibitory rules limit the emissions of various pollutants from all sources in the District. The specific rules that apply to this project are discussed below. The limitations in these rules are met through the application of BACT as required by Rule 1303. Rule 1303 limits the emissions from process equipment as a function on material processed on a daily basis.

1. Rule 212 – Public Notice

The provisions of Rule 212(g) require that a new or modified source subject to Regulation XIII which undergoes construction or modifications resulting in an emission increase exceeding any of the daily maximums specified as follows, shall require public notice.

| Air Contaminant | Daily Maximum (lbs/day) |
|---|---|
| $PM_{10}$ | 30 |

The $PM_{10}$ emissions increase from the proposed equipment is below this threshold; therefore, no public notification is required.

2. Rule 401 – Visible Emissions

Rule 401 limits the opacity of visible emissions from an exhaust stack to not be greater than No. 1 on the United States Bureau of Mines Ringelmann chart, or to the equivalent opacity. Ringelmann No. 1 corresponds to 20% opacity. Because water sprays will be utilized on the plant, compliance with this limitation is expected.

3. Rule 402 – Nuisance

A facility shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property. Since a control device will be utilized, compliance with this Rule is expected.

4. Rule 403 – Fugitive Dust

Rule 403 prohibits the emissions of fugitive dust from transport, handling or storage activity in quantities such that the dust remains visible in the air beyond the source's property line. The New Source Review Regulation requires control of potential sources of fugitive dust through the application of dust suppressants and other emission controls. Therefore, compliance with fugitive dust regulation is expected.

Rule 403 also requires that a site that moves 5,000 cubic yards of material in any three days within a rolling 12-month period, or has a total of 50 acres or more disturbed surface area shall complete a Fugitive Dust Control Plan or submit a large operation notification. Because the activities at this facility will not exceed these thresholds, a fugitive dust plan is not required at this time.

5. Particulate Emissions

Rules 404 and 405 limit the concentration and weight of particulate matter that can be emitted as a function of the quantity of material processed on an hourly basis. Because the New Source Review Regulation requires control of the various processes with a baghouse, the concentration and weight of particulate emitted to the atmosphere will be well below the rule limitations.

Rule 1303 limits the weight of particulate matter that can be emitted as a function of material processed on a daily basis. To be in compliance with the BACT requirements, dust collection and suppression systems will be employed to assure particulate emissions are below the rule limitations.

6. Rule 1157 – $PM_{10}$ Emission Reduction from Aggregate and Related Operations

Rule 1157 requires facilities to reduce $PM_{10}$ emissions from aggregate and related operations. The facility will utilize chemical suppressants and water to reduce emissions form roads, stock piles and process equipment. By utilizing these measures, compliance with this rule is expected.

7. Rule 1303 – Air Quality Concentration and Modeling

Rule 1303(b) requires a screening analysis in accordance with Appendix "A", Table A-1. Table A-1 Non-Combustion Source for $PM_{10}$ is 0.41 pounds per hour based on a 24-hour concentration.

The $PM_{10}$ emissions from the aggregate plant will not exceed this daily concentration limit. Therefore, modeling is not required (Refer to Part III (B)(1) for Emission Estimates).

8. Rule 1304 – Emission Offsets

Rule 1304 requires that emissions in excess of Table A be offset through the purchase of Emission Reduction Credits (ERCs). Since the total emissions from the facility are less than these thresholds, offsets are not required (Refer to Part III (B)(3) for Emission Estimates).

9. Rule 404 – Particulate Emissions – Concentration

Rule 404 limits the concentration of Particulate Matter (PM) that can be emitted as a function of the concentration at standard conditions. Since this facility will utilize a high pressure water spray system, compliance with this requirement is not expected to be a problem.

10. Rule 405 – Particulate Emissions – Weight of PM

Rule 405 limits the weight of PM that can be emitted as a function of the quantity of material processed on an hourly basis. Because the New Source Review Regulation requires control of the fugitive emissions, the weight of particulate emitted to the atmosphere will be well below the rule limitation.

Below is the maximum calculated PM discharge rate verses the allowed limit as specified in Table 405(a).

| Process Weight (lbs/hr) | Actual Discharge Rate (lbs/hr) | Maximum Discharge Rate Allowed for PM (lbs/hr) |
|---|---|---|
| 800,000 | 0.28 | 28.5 |

## B. Analysis of New Source Review Requirements/BACT

In accordance with the requirements of Rule 1303, the District staff has published a guideline of BACT for commonly processed permit units and industrial processes. The guideline is used by District's engineering staff in determining the acceptable degree of control for new or modified equipment. This facility will exclusively process concrete. Concrete does not contain the fine material that is typical of mined material. The BACT determinations, which will apply to the proposed facility, are discussed in detail in the following sections.

1. Crusher

   Due to the low fine content of cement, the applicant will utilize a high pressure water spray system.

2. Transfer Point

   Due to the low fine content of cement, high pressure water spray system will be used to minimize particulate emissions from transfer points.

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## PART III – ESTIMATED EMISSIONS

### A. Emissions Estimates for the Proposed Facility

1. Facility Emissions Factors

Based on the production of the plant, estimates of the emissions from the proposed facility have been developed. The estimates are discussed in detail in the following sections.

Emission estimates for the proposed facility are based on AP-42 Table 11 19.2-2 Emission Factors for Crushed Stone Processing Operations (Refer to Attachment "B"). The $PM_{10}$ factors are based on the aggregates surface being saturated with moisture in order to prevent excessive visible emissions.

| Source | Controlled $PM_{10}$ Emissions Factor (lbs/ton) |
|---|---|
| Crushing | 0.00054 |
| Material Transfer Point | 0.000046 |

No factors are used for loading into the first conveyor nor discharged from the last conveyor to storage.

Basis:

Maximum Daily Production Rate: 4,000 Tons Per Day

All transfer points and storage piles are controlled with water dust suppression spray as needed.

Refer to Justice & Associates Flow Diagram 10989FLOW for equipment identification and emission point reference.

2. Crushing and Screening Plant Emissions Estimates

The following calculations show the facilities $PM_{10}$ emissions (Refer to Justice & Associates flow diagram 10989FLOW):

| | Description | Thruput (tons/day) | × | Controlled $PM_{10}$ AP-42 Emission Factors (lbs/ton) | = | $PM_{10}$ (lbs/day) |
|---|---|---|---|---|---|---|
| 1 | End Loader to Hopper | 4,000 | | -- | | -- |
| 2 | Vibrating Grizzly 1 to Belt Conveyor 3 | 0 | | 0.000046 | | 0 |
| 3 | Vibrating Grizzly 1 to Jaw Crusher 2 | 4,000 | | 0.000046 | | 0.184 |
| 4 | Jaw Crusher 2 | 4,000 | | 0.00054 | | 2.16 |
| 5 | Jaw Crusher 2 to Belt Conveyor 3 | 4,000 | | 0.000046 | | 0.184 |
| 6 | Belt Conveyor 3 to Belt Conveyor 4 | 4,000 | | 0.000046 | | 0.184 |
| 7 | Belt Conveyor 4 Stockpile | 4,000 | | 0.000046 | | 0.184 |
| | | | | Total Plant Emissions (lbs/day) | | 2.896 |
| | | | | Plant Production (tons/day) | ÷ | 4,000 |
| | | | | Plant $PM_{10}$ Emission Factor (lbs/ton) | | 0.000724 |

| Aggregate Production | × | $PM_{10}$ Emissions Factor (lbs/ton) | = | $PM_{10}$ Emissions |
|---|---|---|---|---|
| 4,000 tons/day | | 0.000724 | | 2.896 lbs/day |
| 700,000 tons/yr | | 0.000724 | | 506.80 lbs/yr |
| | | | | 0.253 tons/yr |

## B. Emission Summary

1. Hourly Emissions (24-Hour Concentration)

| Daily $PM_{10}$ Emissions (lbs/day) | ÷ | 24-Hour Concentration | = | 24-Hour Emissions (lbs/hour) | < | Rule 1303(b) $PM_{10}$ Limit (lbs/hour) |
|---|---|---|---|---|---|---|
| 2.896 | | 24 | | 0.1207 | | 0.41 |

In accordance with Rule 1303(b), a non-combustion source requires screening analysis if emissions exceed 0.41 pounds per hour for $PM_{10}$ based on a 24-hour concentration. The facility meets the requirements of Rule 1303(b). Therefore, screening analysis is not required.

2. Daily Emissions

| Pollutant | Aggregate Plant Emissions (lbs/day) | < | Rule 212 Public Notice Limits (lbs/day) |
|---|---|---|---|
| $PM_{10}$ | 2.896 | | 30 |

The calculated average daily emissions are less than Rule 212 limits.

3. Annual Emissions

| Pollutant | Aggregate Plant Emissions (lbs/yr) | Overall Emissions (tons/yr) | < | Rule 1304 Limits (tons/yr) |
|---|---|---|---|---|
| $PM_{10}$ | 506.80 | 0.253 | | 4 |

In accordance with Rule 1304, the total potential to emit must be less than the limits set forth in Table A. Since this facility does not exceed this threshold, offsets are not required.

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## PART IV – ANALYSIS OF PERMIT RESTRICTIONS

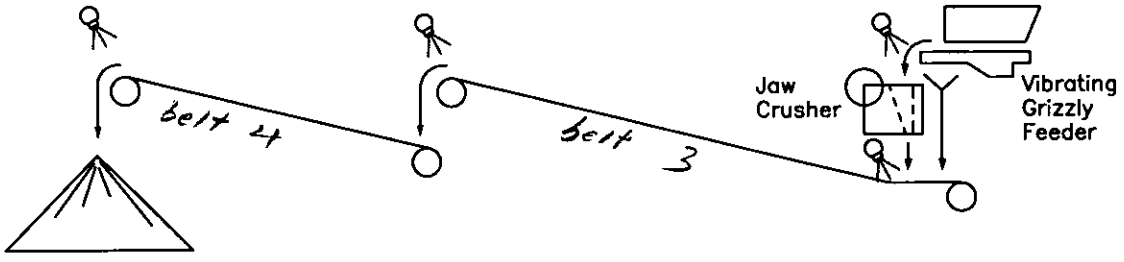
**A. Anticipated Production Limits are Listed Below:**

United Rock Products Co. is requesting a monthly limit. The aggregate production through the plant should be limited to 120,000 tons per month.

(4,000 tons/day × 30 days/month = 120,000 tons/month)

**B. Anticipated Material Limits are Listed Below:**

This facility will be limited to processing concrete.



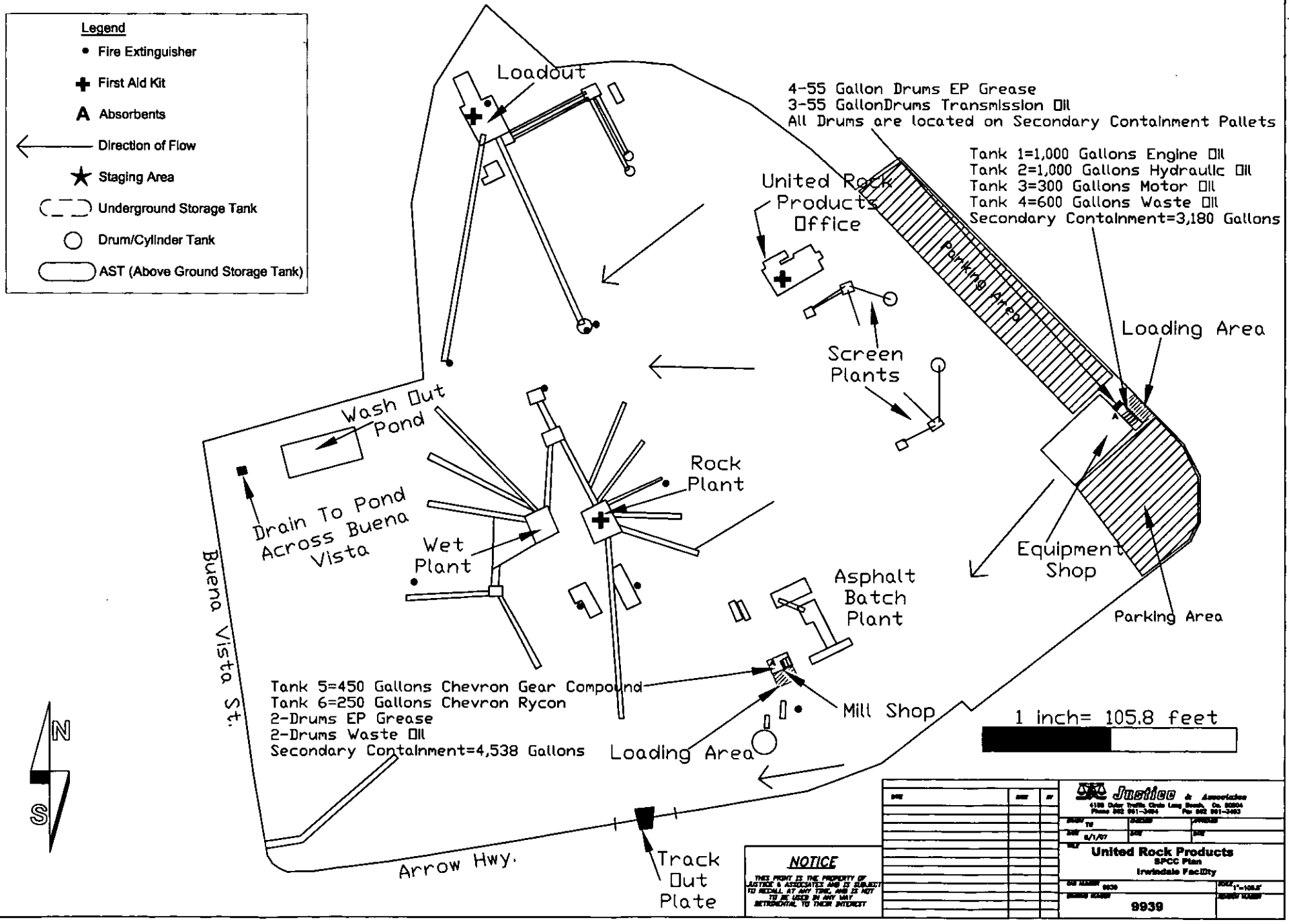

Water Sprays
Material Flow ——

Justice & Associates
4155 Outer Traffic Circle, Long Beach, CA 90804–2111
Phone 562 961–3494 Fax 562 961–3493

| DESCRIPTION | United Rock Products Co. Concrete Crushing Plant | | | |
|---|---|---|---|---|
| JOB NO. | CADCODE | DRAWN BY: | DATE | DWG. NO. |
| 10989 | 10989 | ST | 12/14/2007 | 10989FLOW |

# ATTACHMENT "A"

# VICINITY MAP


Legend
Fire Extinguisher
First Aid Kit
Absorbents
Direction of Flow
Staging Area
Underground Storage Tank
Drum/Cylinder Tank
AST (Above Ground Storage Tank)
Loadout
4-55 Gallon Drums EP Grease
3-55 GallonDrums Transmission Oil
All Drums are located on Secondary Containment Pallets
Tank 1=1,000 Gallons Engine Oil
Tank 2=1,000 Gallons Hydraulic Oil
Tank 3=300 Gallons Motor Oil
Tank 4=600 Gallons Waste Oil
Secondary Containment=3,180 Gallons
United Rock Products Office
Parking Area
Loading Area
Screen Plants
Wash Out Pond
Rock Plant
Drain To Pond Across Buena Vista
Wet Plant
Asphalt Batch Plant
Equipment Shop
Parking Area
Buena Vista St.
Tank 5=450 Gallons Chevron Gear Compound
Tank 6=250 Gallons Chevron Rycon
2-Drums EP Grease
2-Drums Waste Oil
Secondary Containment=4,538 Gallons
Loading Area
Mill Shop
1 inch= 105.8 feet
N
S
Arrow Hwy.
Track Out Plate
NOTICE
Justice & Associates
United Rock Products
SPCC Plan
Irwindale Facility
9939

# ATTACHMENT "B"

# AP-42 TABLE 11.19.2-2
# EMISSION FACTORS

Table 11.19.2-2 (English Units). EMISSION FACTORS FOR CRUSHED STONE PROCESSING OPERATIONS (lb/Ton)[a]

| Source [b] | Total Particulate Matter [r,s] | EMISSION FACTOR RATING | Total PM-10 | EMISSION FACTOR RATING | Total PM-2.5 | EMISSION FACTOR RATING |
|---|---|---|---|---|---|---|
| Primary Crushing (SCC 3-05-020-01) | ND | | ND[n] | | ND[n] | |
| Primary Crushing (controlled) (SCC 3-05-020-01) | ND | | ND[n] | | ND[n] | |
| Secondary Crushing (SCC 3-05-020-02) | ND | | ND[n] | | ND[n] | |
| Secondary Crushing (controlled) (SCC 3-05-020-02) | ND | | ND[n] | | ND[n] | |
| Tertiary Crushing (SCC 3-050030-03) | 0.0054[d] | E | 0.0024[o] | C | ND[n] | |
| Tertiary Crushing (controlled) (SCC 3-05-020-03) | 0.0012[d] | E | 0.00054[p] | C | 0.00010[q] | E |
| Fines Crushing (SCC 3-05-020-05) | 0.0390[e] | E | 0.0150[e] | E | ND | |
| Fines Crushing (controlled) (SCC 3-05-020-05) | 0.0030[f] | E | 0.0012[f] | E | 0.000070[q] | E |
| Screening (SCC 3-05-020-02, 03) | 0.025[c] | E | 0.0087[f] | C | ND | |
| Screening (controlled) (SCC 3-05-020-02, 03) | 0.0022[d] | E | 0.00074[m] | C | 0.000050[q] | E |
| Fines Screening (SCC 3-05-020-21) | 0.30[g] | E | 0.072[g] | E | ND | |
| Fines Screening (controlled) (SCC 3-05-020-21) | 0.0036[g] | E | 0.0022[g] | E | ND | |
| Conveyor Transfer Point (SCC 3-05-020-06) | 0.0030[h] | E | 0.00110[h] | D | ND | |
| Conveyor Transfer Point (controlled) (SCC 3-05-020-06) | 0.00014[i] | E | $4.6 \times 10^{-5}$[t] | D | $1.3 \times 10^{-5}$[q] | E |
| Wet Drilling - Unfragmented Stone (SCC 3-05-020-10) | ND | | $8.0 \times 10^{-5}$[j] | E | ND | |
| Truck Unloading -Fragmented Stone (SCC 3-05-020-31) | ND | | $1.6 \times 10^{-5}$[j] | E | ND | |
| Truck Unloading - Conveyor, crushed stone (SCC 3-05-020-32) | ND | | 0.00010[k] | E | ND | |

a. Emission factors represent uncontrolled emissions unless noted. Emission factors in lb/Ton of material of throughput. SCC = Source Classification Code. ND = No data.

b. Controlled sources (with wet suppression) are those that are part of the processing plant that employs current wet suppression technology similar to the study group. The moisture content of the study group without wet suppression systems operating (uncontrolled) ranged from 0.21 to 1.3 percent, and the same facilities operating wet suppression systems (controlled) ranged from 0.55 to 2.88 percent. Due to carry over of the small amount of moisture required, it has been shown that each source, with the exception of crushers, does not need to employ direct water sprays. Although the moisture content was the only variable measured, other process features may have as much influence on emissions from a given source. Visual observations from each source under normal operating conditions are probably the best indicator of which emission factor is most appropriate. Plants that employ substandard control measures as indicated by visual observations should use the uncontrolled factor with an appropriate control efficiency that best reflects the effectiveness of the controls employed.

c. References 1, 3, 7, and 8

d. References 3, 7, and 8

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December 14, 2007

South Coast Air Quality Management District
21865 East Copley Drive
Diamond Bar, CA 91765-4178

Attention: Rod Millican

Subject: United Rock Products Co.
Stationary Concrete Crushing Plant

Dear Rod:

Attached is an application package requesting a Permit to Operate a stationary concrete plant for United Rock Products Co.

Included in this application package are the appropriate 400-A forms, CEQA form, process flow diagram and check in the amount of $4,424.88 to cover the filing fees.

We trust the information provided will allow the District to evaluate the application request. Please give me a call should you have any questions at (562) 961-3494.

Best Regards,

Scott Taylor
Justice & Associates

cc: Ken Barker, United Rock Products Co.

J:\UnitedRock\Letters\110989 Letter.docx

SCAQMD

| JOB /SUB JOB NO | CO. | DIV | VENDOR | REFERENCE | CHECK NO. |
|---|---|---|---|---|---|
| | 30 | 200 | 38815 | | 019191 |

| INVOICE NUMBER | INVOICE DATE | DESCRIPTION | GROSS AMOUNT | DISCOUNT | NET AMOUNT |
|---|---|---|---|---|---|
| 121307 | 12/13/07 | FILING FEES | 4,424.88 | | 4,424.88 |
| | | TOTALS | 4,424.88 | | 4,424.88 |

DETACH AND RETAIN THIS STATEMENT
THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED ABOVE.
IF NOT CORRECT PLEASE NOTIFY US PROMPTLY. NO RECEIPT DESIRED.

# South Coast Air Quality Management District

## NOV P53644

Run Date : 9/14/2016 10:32:17

### Company

| | |
|---|---|
| Facility: | UNITED ROCK PRODUCTS CORPORATION (ID: 65341) |
| Location Address: | 1245 E ARROW, HWY IRWINDALE, CA 91706-1302 |
| Mailing Address: | 1100 E ORANGETHORPE, AVE ANAHEIM, CA 92801 |
| AIRS ID | 06037CF302 |

### Violation

| | |
|---|---|
| Notice Issued Date: | 10/27/2009 |
| Violation Date: | 10/27/2009 |
| Serve To: | MARTIN FUENTES |
| Title: | PRODUCTION SUPERINTENDENT |
| Issue By: | BRITNEY GALLIVAN (Team: TS) |
| Assignment No.: | 1135400 |
| Equipment Description: | Pile-Driving Hammer |
| Violation: | Exceeded character space. Please view the report tab. |

### Disposition

| | |
|---|---|
| Final Action Code: | CLO 5/12/2011 00:00:00 |
| Achieved Date: | 10/27/2009 |
| Due Date: | |
| Violation Days: | 0 |

### Rule/Comment

401

### Emittent

### Follow-Up

Status: INCOMP Inspector ID: BG03 Inspection Date: 10/27/09 00:00 Number:

### Lap Sample Numbers

### Device IDs.

### Inspector Comment

Violation:

Operating a pile-driving hammer while discharging air contaminants darker than Ringelman No. 2 for more than 4 minutes.

Compliance Status:

On this same date the mechanic arrived in the area and began repairing the equipment. When the mechanic was done working on the vehicle, Mr. Huss stated that the equipment's "anroid valve", which regulates the fuel flow, was faulty and this was causing the vehicle to emit unburnt fuel. I once again observed the pile driver in operation and noted that there were no longer any visible emissions coming from the equipment.

INSPECTOR: _____ DATE: _____
signature

SUPERVISOR: _____ DATE: _____
signature

User ID: lramos

User: lramos

# SCAQMD Facility Equipment List Report

Run Date : 09/14/2016 10:21 AM

Facility: 65341 UNITED ROCK PRODUCTS CORPORATION Status: Active MR: 0801 SIC: 1440 Team: I
Last Inspection: 11/08/2011 On Hold: N Suspended: N TS: TS-11 Industrial: Sector-based Inspections Quarter: 3000 - inspect in 1st quarter, every three years
Contact: ARNOLD BRINK (626) 3584558 RECLAIM: N TITLE V: N AIRS ID: 06037CF302 Assignment: 1271831
Location Address: 1245 E ARROW HWY, IRWINDALE 91706-1302 Sector:CK Inspector: MR01 MANUEL REGALA
Mailing Address: 135 S STATE COLLEGE BLVD, BREA 92821 Sector:OE Inspection Date: 11/08/2011
Instruction: Disposition: Operating in Compliance at time of inspection

| Application No. | Permit No. | Permit Issue Date | Permit Status | Equipment Category | BCAT/CCAT Description | Application Date | Application Status |
|---|---|---|---|---|---|---|---|

REPORT: 11/8/2011

1315 hrs - I arrived at United Rock Products Corp, located at 1245 arrow Hwy., Irwindale CA 91706 and met with Ken Barker, Environmental Manager, with tel # 714-578-9600.

Mr. Barker stated that P/Os D14490, D14492 and D14493, ICEs have been removed.

Accompanied by Mr. Barker, I observed P/O N19018, serv stat storage & dispensing. This equipment has 1 gasoline nozzle dispensing product and a 2,000 gal aboveground gasoline storage tank and is currently in use, gas pump okay, loops okay, retractor fixed, spill containers clean and dry, cap gaskets secure, complies with Rule 461. The last EVR was conducted on 3/28/2011 by William Madsen of Pacific Systems Electric Inc. and the equipment passed static pressure leak decay, and all other required tests.

I also observed the following equipment:

- F71627, aggregate screening plant # 1, not in operation. Production logs show that the highest production of aggregate was in July 2011 with 1,309 tons, below limit of 9900 tons of aggregate in any one month, complies with permit conditions.

- F71628, aggregate screening plant # 2, not in operation. Production logs show that the highest production of aggregate was in September, 2011 with 4,895 tons, below limit of 20,200 tons of aggregate in any one month, complies with permit conditions.

- F71629, base conveying and load out system, not in operation. I also observed a watering system that moistens the aggregate charged and the aggregate processed sufficiently moistened. Production logs show that the highest production of aggregate was in March, 2011 with 1,900 tons, below limit of 150,000 tons of aggregate in any one month. I also observed a water truck watering all roadways, complies with permit conditions.

- F71630, aggregate receiving and conveying system, not in operation. I also observed a watering system that moistens the aggregate charged and the aggregate processed sufficiently moistened. Production logs show that the highest production of aggregate was in June, 2011 with 53,068 tons, below limit of 180,000 tons of aggregate in any one month. I also observed a water truck watering all roadways, complies with permit conditions.

- F71631 crushed aggregate reclaiming, storage and load out system, not in operation. I also observed a watering system that moistens the aggregate charged and the aggregate processed sufficiently moistened. Production logs show that the highest production of aggregate was in October, 2010 with 89,189 tons, below limit of 480,000 tons of aggregate in any one month. I also observed a water truck watering all roadways, complies with permit conditions.

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____

User: lramos

# SCAQMD Facility Equipment List Report

Run Date : 09/14/2016 10:21 AM

Facility: 65341 UNITED ROCK PRODUCTS CORPORATION Status: Active MR: 0801 SIC: 1440 Team: I
Last Inspection: 11/08/2011 On Hold: N Suspended: N TS: TS-11 Industrial: Sector-based Inspections Quarter: 3000 - inspect in 1st quarter, every three years
Contact: ARNOLD BRINK (626) 3584558 RECLAIM: N TITLE V: N AIRS ID: 06037CF302 Assignment: 1271831
Location Address: 1245 E ARROW HWY, IRWINDALE 91706-1302 Sector:CK Inspector: MR01 MANUEL REGALA
Mailing Address: 135 S STATE COLLEGE BLVD, BREA 92821 Sector:OE Inspection Date: 11/08/2011
Instruction: Disposition: Operating in Compliance at time of inspection

| Application No. | Permit No. | Permit Issue Date | Permit Status | Equipment Category | BCAT/CCAT Description | Application Date | Application Status |
|---|---|---|---|---|---|---|---|

- F71632 washed sand and aggregate reclaiming, storage and load out system, not in operation. I also observed a watering system that moistens the aggregate charged and the aggregate processed sufficiently moistened. Production logs show that the highest production of aggregate was in November, 2010 with 108,355 tons, below limit of 480,000 tons of aggregate in any one month. I also observed a water truck watering all roadways, complies with permit conditions.

- F73756, aggregate pre-crushing conveying and stacking system, not in operation. I also observed a watering system that moistens the aggregate charged and the aggregate processed sufficiently moistened. Production logs show that the highest production of aggregate was in November, 2010 with 89,189 tons, below limit of 336,000 tons of aggregate in any one month. The equipment only processes wet material from clamshell dredge. I also observed a water truck watering all roadways, complies with permit conditions.

- F73757, aggregate pre-crushing conveying and stacking system # 1, not in operation. I also observed a watering system that moistens the aggregate charged and the aggregate processed sufficiently moistened. Production logs show that the highest production of aggregate was in September, 2011 with 110,501 tons, below limit of 228,000 tons of aggregate in any one month. The equipment only processes wet material from clamshell dredge. I also observed a water truck watering all roadways, complies with permit conditions.

- F73758, aggregate pre-crushing conveying and stacking system # 2, not in operation. I also observed a watering system that moistens the aggregate charged and the aggregate processed sufficiently moistened. Production logs show that the highest production of aggregate was in September, 2011 with 110,501 tons, below limit of 336,000 tons of aggregate in any one month. The equipment only processes wet material from clamshell dredge. I also observed a water truck watering all roadways, complies with permit conditions.

Reviewed by MV on 11/29/2011.

I also observed that all conveyors and piles are equipped with sprinklers that control dust. I also observed that all paved roads are watered and sweeped. I also observed that dust control methods are included in all loading, unloading, or transferring activities of materials. I also observed that the entire surface area of all open storage piles is maintained in a stabilized condition. I also observed a rumble gate and tire washers at the exit. This facility complies with Rule 1157.

- - - -

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____

User: lramos

# SCAQMD Facility Equipment List Report

Run Date : 09/14/2016 10:21 AM

Facility: 65341 UNITED ROCK PRODUCTS CORPORATION Status: Active MR: 0801 SIC: 1440 Team: I
Last Inspection: 11/08/2011 On Hold: N Suspended: N TS: TS-11 Industrial: Sector-based Inspections Quarter: 3000 - inspect in 1st quarter, every three years
Contact: ARNOLD BRINK (626) 3584558 RECLAIM: N TITLE V: N AIRS ID: 06037CF302 Assignment: 694788
Location Address: 1245 E ARROW HWY, IRWINDALE 91706-1302 Sector:CK Inspector: RL04 RHONDA LAUGESON
Mailing Address: 135 S STATE COLLEGE BLVD, BREA 92821 Sector:OE Inspection Date: 12/27/2001
Instruction: Disposition: Notice Of Violation

| Application No. | Permit No. | Permit Issue Date | Permit Status | Equipment Category | BCAT/CCAT Description | Application Date | Application Status |
|---|---|---|---|---|---|---|---|

REPORT: 12/27/01:

I conducted an inspection at the above location at the request of Scott Caso, Senior Staff Specialist, because the facility status was sold, but the equipment list showed active permits. I met with Earl Wise, Operations Manager, who accompanied me on the inspection.

Mr. Wise escorted me to the aggregate equipment, which were operating without any fugitive dust.

I inspected the gas storage and dispensing equipment, which is subject to Rule 461. The equipment was in fair condition.

Mr. Wise did not know where the IC Engines were located. His assumption was that the IC Engines were for the loaders for the aggregate equipment.

Mr. Wise could not locate the AQMD permits. The office assistant was on vacation and he believed they were in one of her files. The production logs and gas throughput records were also not available as the Controller was not in the office. I told Mr. Wise I would return after the holidays to look at the permits and production records. I also asked Mr. Wise to locate the IC Engines.

03/08/02:

I returned to the facility and met with Mr. Wise. Permits were available on this date, but production records were not available as Bryan Straight, Controller, was already gone for the day. Mr. Wise informed me they did not get the annual billing, so they were not able to pay 2002 permit fees. I informed him I would check on it and that it may be related to the fact that the facility was listed as sold.

03/14/02:

I returned to the facility and met with Mr. Straight and Mr. Wise. Production records indicate that the facility is in compliance with permit conditions. We reviewed the equipment list and Mr. Wise still believes that the IC Engines are the loaders. Mr. Wise and Mr. Straight said the facility does not have a portable IC Engine. Mr. Straight will contact Martha Delgadillo in Permit Services to straighten out the facility status and update the equipment inventory.

Gas throughput records show that the facility uses approximately 5,000 gallons of gas per month. I asked Mr. Straight for the phase I and II vapor recovery reverification test results. He stated he was not aware they needed to have the testing done. Mr. Straight showed me the Rule 461 letter sent to facilities informing them that the need to perform this test. Mr. Straight saw the bold and highlighted section that said "retail" and did not notice the non-retail section below it.

I served Mr. Straight Notice of Violation P34472 for failure to perform initial reverification test on or before 05/01/01 as required by Rule 461 (e) (2) (C)

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____

User: lramos

# SCAQMD Facility Equipment List Report

Run Date : 09/14/2016 10:21 AM

Facility: 65341 UNITED ROCK PRODUCTS CORPORATION Status: Active MR: 0801 SIC: 1440 Team: I
Last Inspection: 11/08/2011 On Hold: N Suspended: N TS: TS-11 Industrial: Sector-based Inspections Quarter: 3000 - inspect in 1st quarter, every three years
Contact: ARNOLD BRINK (626) 3584558 RECLAIM: N TITLE V: N AIRS ID: 06037CF302 Assignment: 694788
Location Address: 1245 E ARROW HWY, IRWINDALE 91706-1302 Sector:CK Inspector: RL04 RHONDA LAUGESON
Mailing Address: 135 S STATE COLLEGE BLVD, BREA 92821 Sector:OE Inspection Date: 12/27/2001
Instruction: Disposition: Notice Of Violation

| Application No. | Permit No. | Permit Issue Date | Permit Status | Equipment Category | BCAT/CCAT Description | Application Date | Application Status |
|---|---|---|---|---|---|---|---|

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____

# SCAQMD Notification Report

## Notification 322554

Run Date: 9/14/2016 12:30:34

| | | | | | |
|---|---|---|---|---|---|
| Receive By: | TGALLAGH on 12/19/2012 08:20:37 | Assignment No: | 1344411 | Inspection Date: | |
| Assign By: | | Inspector: | | | |
| Dispatch On: | | Disposition: | | | |
| Team: | P | AIRS ID: | | | |
| Activity: | PORTABLE EQUIPMENT RELOCATION | Title V: | N | | |
| Instruction: | | | | | |

Description: CARB reg. # 131366, will be used in Irwindale, for approx. 30 days.

Instance Start Date: 12/13/2012 00:00 Instance End Date: 01/13/2013 00:00

## Notifier

Facility: 145855 EDWARDS BROTHERS AND ASSOCIATES

First Name: JOHN Last Name: BACHMANN

Facility TS: TS-51 Toxics: Landfills, other

Address: 12321 LOWER AZUSA RD, ARCADIA, CA 91006

Phone: (951)830-9703 (Work)

## Site Location

Facility: 65341 UNITED ROCK PRODUCTS CORPORATION

Facility TS: TS-11 Industrial: Sector-based Inspections

Address: 1245 E ARROW HWY, IRWINDALE, CA 91706-1302 (Sector CK)

## Inspector Comment

INSPECTOR: _____ DATE: _____

signature

SUPERVISOR: _____ DATE: _____

signature

User ID: lramos

# South Coast Air Quality Management District

## NC E22207

Run Date : 9/14/2016 10:30:36

### Company

| | |
|---|---|
| Facility: | UNITED ROCK PRODUCTS CORPORATION (ID: 65341) |
| Location Address: | 1245 E ARROW, HWY IRWINDALE, CA 91706 |
| Mailing Address: | 1245 E ARROW, HWY IRWINDALE, CA 91706 |
| AIRS ID | 06037CF302 |

### Violation

| | |
|---|---|
| Notice Issued Date: | 8/2/2013 |
| Violation Date: | 8/2/2013 |
| Serve To: | MR. THOMAS SNIDER |
| Title: | FOREMAN |
| Issue By: | NICOLE SILVA (Team: TS) |
| Assignment No.: | 1382015 |
| Compliance Achieved Date: | 08/21/2013 |
| Equipment Description: | (generator) John Deere, Model 4045TF150C, S/N PE4045T177157, EPA Family 1JDXL06.8014, 100 hp |
| Compliance Requirements: | Do not operate any portable internal combustion engine rated over 50 bhp without first obtaining a valid CARB Statewide registration or AQMD permit to operate |

### Disposition

| | |
|---|---|
| Final Action Code: | CLO 8/30/2013 00:00:00 |
| Due Date: | 8/2/2013 |
| Violation Days: | 0 |

### Rule/Comment

203(A)

### Emittent

### Follow-Up

Status: INCOMP Inspector ID: NS03 Inspection Date: 08/21/13 00:00 Number:

### Device IDs.

### Inspector Comment

INSPECTOR: _____ DATE: _____

signature

SUPERVISOR: _____ DATE: _____

signature

User ID: lramos

# SCAQMD Notification Report

## Notification 371145

Run Date: 9/14/2016 12:30:48

| | | | | |
|---|---|---|---|---|
| Receive By: | TGALLAGH on 8/12/2014 13:00:00 | Assignment No: | 1448399 | Inspection Date: |
| Assign By: | tgallagh on 8/19/2014 08:22:41 | Inspector: | NICOLE SILVA (NS03) | |
| Dispatch On: | | Disposition: | | |
| Team: | P | AIRS ID: | | |
| Activity: | PORTABLE EQUIPMENT RELOCATION | Title V: | | |
| Instruction: | | | | |

Description: CARB reg. # 155325, a jaw crusher, is being used in Irwindale for approx. 6 months.

Instance Start Date: 05/06/2014 00:00 Instance End Date: 11/06/2014 00:00

## Notifier

Facility: 176548 GOODFELLOW CORP.

First Name: RYAN Last Name: DAHLKE

Facility TS:

Address: VARIOUS LOCATIONS IN SCAQMD, RIALTO, CA 92376

Phone: (909)270-7087 (Work)

## Site Location

Facility: 170628 SULLY-MILLER CONTRACTING COMPANY

Facility TS: TS-11 Industrial: Sector-based Inspections

Address: 1245 E ARROW HWY, IRWINDALE, CA 91706-1302 (Sector CK)

## Inspector Comment

INSPECTOR: _____ DATE: _____

signature

SUPERVISOR: _____ DATE: _____

signature

User ID: lramos

# SCAQMD Complaint Report

## Complaint 245355

Run Date: 9/14/2016 10:37:44

| | | | |
|---|---|---|---|
| Receive By: | MARYLYNG on 8/27/2014 12:26:46 | Assignment No: | 1450302 |
| Assign By: | marylyng on 8/27/2014 12:29:48 | Inspector: | BRITNEY GALLIVAN (BG03) |
| Dispatch On: | 8/27/2014 | Instruction: | |
| Team: | I | | |
| Type: | DUST | | |
| Inspection Date | 8/27/2014 00:00:00 | | |
| Description: | EMITTING HUGH CLOUD OF DUST - PLS CALL - ZZZ - NO ADDRESS GIVEN | | |

Instance Start Date:

Instance End Date:

## Complainant

First Name:

Address:

Phone:

## Alleged Source

Name: MINE

Address: SOUTH BOUND 605FWY @LIVE OAK, IRWINDALE, CA 91702 (Sector CK)

## Actual Source

Name: UNITED ROCK PRODUCTS CORPORATION ID: 65341

Address: 1245 E ARROW HWY, IRWINDALE, CA 91706-1302 (Sector CK)

Facility TS: TS-11 Industrial: Sector-based Inspections

## Disposition

NC on 9/10/2014 08:13:11

## Inspector Comment

08/27/2014 - I telephoned the complainant and discussed the complaint with them. I informed the complainant that I was investigating another assignment and would be able to investigate their complaint the following week. Applicable rules include Rule 402, Rule 403, Rule 401, Rule 1157, Rule 1155, and Rule 219.

09/03/2014 - I conducted surveillance of United Rock Products Corporation with SAQMD facility ID 65341. I observed visible emissions coming from the rock quarry west of Avenida Barbosa on Arrow Highway in Irwindale. It was difficult to find a position that would allow me to see the operation meeting the requirements of EPA Method 22. The operation is surrounded by a mound of dirt. I observed the emissions appeared to be coming from wind blowing up dirt along the outside of the mound surrounding the operation and may also be coming from rock quarry operations inside the mound. I met with Russ Caruso, vice president/general manager (626-7391140). I informed Mr. Caruso of the complaint. Mr. Caruso stated that he had not observed visible emissions coming from the query, but he had not been to the rock quarry operation site recently. I informed Mr. Caruso that I had observed visible emissions coming from the query operation. Mr. Caruso showed me that the site has a wheel wash system, a water truck with a 50 foot water cannon, a 2,000 water tanks, and a water well. Mr. Caruso stated that operations ceased at the query at 14:00 hours. I did not observe any operation at the rock quarry. Mr. Caruso and I observed wind blowing dust up from outside the mound. Mr. Caruso stated that he would call an operator to come use the water cannon to spray the area to prevent fugitive emissions.

I issued NC E24216 to 1) 403 (d)(2) - provide and maintain proof of compliance with Rule 403 (d)(2) (BACT of Table 1 control measures).

I telephoned the complainant and notified ] of the findings of my investigation. I reminded the requirements of Rules 402, 403, 401, 1155, and 1157. The complainant thanked me for my investigation of complaint and will report any future complaints by contacting the SCAQMD 24 hour complaint telephone hot line by dialing 1-800-CUT-SMOG (1-800-288-7664) or through the online complaint reporting system (http://www3.aqmd.gov/webappl/complaintsystemonline/NewComplaint.aspx).

INSPECTOR: signature _____ DATE: _____

SUPERVISOR: signature _____ DATE: _____

User ID: lramos

# South Coast Air Quality Management District

## NC E24216

Run Date : 9/14/2016 10:30:23

### Company

| | |
|---|---|
| Facility: | UNITED ROCK PRODUCTS CORPORATION (ID: 65341) |
| Location Address: | 1245 ARROW IRWINDALE, CA 91702 |
| Mailing Address: | 1245 ARROW IRWINDALE, CA 91702 |
| AIRS ID | 06037CF302 |

### Violation

| | |
|---|---|
| Notice Issued Date: | 9/5/2014 |
| Violation Date: | 9/5/2014 |
| Serve To: | RUSS CARUSD |
| Title: | VICE PRESIDENT |
| Issue By: | BRITNEY GALLIVAN (Team: TS) |
| Assignment No.: | 1453286 |
| Compliance Achieved Date: | 09/10/2014 |
| Equipment Description: | Aggregate Operations |
| Compliance Requirements: | 403 (d)(2) - provide and maintain proof of compliance with Rule 403 (d)(2) (BACT of Table 1 control measures) |

### Disposition

| | |
|---|---|
| Final Action Code: | CLO 9/10/2014 00:00:00 |
| Due Date: | 9/6/2014 |
| Violation Days: | 0 |

### Rule/Comment

403 (d)(2)

### Emittent

### Follow-Up

Status: INCOMP Inspector ID: BG03 Inspection Date: 09/10/14 00:00 Number:

### Device IDs.

### Inspector Comment

Compliance Verification:
On 09/10/2014 I recieved complaince via email.

INSPECTOR: _____ DATE: _____
signature

SUPERVISOR: _____ DATE: _____
signature

User ID: lramos

# SCAQMD Complaint Report

## Complaint 245650

Run Date: 9/14/2016 10:38:00

| | | | |
|---|---|---|---|
| Receive By: | GRACEN on 9/9/2014 12:38:00 | Assignment No: | 1453097 |
| Assign By: | gracen on 9/9/2014 12:39:34 | Inspector: | BRITNEY GALLIVAN (BG03) |
| Dispatch On: | 9/9/2014 | Instruction: | |
| Team: | I | | |
| Type: | DUST | | |
| Inspection Date | 9/9/2014 00:00:00 | | |
| Description: | Hugh dust clouds from rock quarry plant. | | |

Instance Start Date:

Instance End Date:

## Complainant

First Name:

Address:

Phone:

## Alleged Source

Name: UNITED ROCK PRODUCTS CORPORATION

Address: 1245 E ARROW HIGHWAY, IRWINDALE, CA 91702 (Sector CK)

## Actual Source

Name: UNITED ROCK PRODUCTS CORPORATION ID: 65341

Address: 1245 E ARROW HWY, IRWINDALE, CA 91706-1302 (Sector CK)

Facility TS: TS-11 Industrial: Sector-based Inspections

## Disposition

OC on 9/10/2014 07:56:13

## Inspector Comment

09/09/2014 - This is a reoccurring complaint. Please view Complaint 245355 for additional details. I conducted surveillance of United Rock Products Corporation with SAQMD facility ID 65341 and did not observe any visible emissions. Applicable rules include Rule 402, Rule 403, Rule 401, Rule 1157, Rule 1155, and Rule 219.

09/10/2014 - I returned to United Rock Products. I observed visible emissions coming from the query west of Avenida Barbosa on Arrow Highway in Irwindale. It was difficult to find a position that would allow me to see the operation meeting the requirements of EPA Method 22. I met with Russ Caruso, vice president/general manager (626-7391140). I informed Mr. Caruso of the complaint. Mr. Caruso stated that he had observed visible emissions coming from the query the day prior and taken immediate action to prevent future fugitive emission. I informed Mr. Caruso that I had observed visible emissions coming from the query operation. Mr. Caruso stated that operations ceased at the query at 14:00 hours. We drove over to the query and observed a grinder and a front loader operating without a water truck and creating visible emissions. Mr. Caruso had the operation cease immediately. Mr. Caruso spoke with the operator who was a hired contractor. The operator informed Mr. Caruso that the grinder had been down for part of the day and he was working after hours to meet the tonnage for the day. Mr. Caruso informed the operator that if he was to operate outside of normal hours he had to inform them so that they could have a water truck operating. Mr. Caruso called a water truck to the site.

I issued NC E24217 to 1) Rule 1157 (d)(1)(d) - to provide and maintain proof of compliance with Rule 1157 (d)(1)(d).

09/15/2014 - I telephoned the complainant and notified of the findings of my investigation. I reminded the requirements of Rules 402, 403, 401, 1155, and 1157. The complainant thanked me for my investigation of complaint and will report any future complaints by contacting the SCAQMD 24 hour complaint telephone hot line by dialing 1-800-CUT-SMOG (1-800-288-7664) or through the online complaint reporting system (http://www3.aqmd.gov/webappl/complaintsystemonline/NewComplaint.aspx).

INSPECTOR: signature _____ DATE: _____

SUPERVISOR: signature _____ DATE: _____

User ID: lramos

# South Coast Air Quality Management District

## NC E24217

Run Date : 9/14/2016 10:29:56

### Company

| | |
|---|---|
| Facility: | UNITED ROCK PRODUCTS CORPORATION (ID: 65341) |
| Location Address: | 1245 ARROW IRWINDALE, CA 91702 |
| Mailing Address: | 1245 ARROW IRWINDALE, CA 91702 |
| AIRS ID | 06037CF302 |

### Violation

| | |
|---|---|
| Notice Issued Date: | 9/10/2014 |
| Violation Date: | 9/10/2014 |
| Serve To: | RUSS CARUSO |
| Title: | VICE PRESIDENT |
| Issue By: | BRITNEY GALLIVAN (Team: TS) |
| Assignment No.: | 1454204 |
| Compliance Achieved Date: | 09/10/2014 |
| Equipment Description: | Aggregate operations |
| Compliance Requirements: | 1) Rule 1157 (d)(1)(d) - to provide and maintain proof of compliance with Rule 1157 (d)(1)(d). |

### Disposition

| | |
|---|---|
| Final Action Code: | CLO 9/10/2014 00:00:00 |
| Due Date: | 9/11/2014 |
| Violation Days: | 0 |

### Rule/Comment

1157 (d)(1)(D)

### Emittent

### Follow-Up

Status: INCOMP Inspector ID: BG03 Inspection Date: 09/10/14 00:00 Number:

### Device IDs.

### Inspector Comment

Compliance Verification:
On 09/10/2014 I recieved complaince via email.

INSPECTOR: _____ DATE: _____
signature

SUPERVISOR: _____ DATE: _____
signature

User ID: lramos

# SCAQMD Complaint Report

## Complaint 247683

Run Date: 9/14/2016 10:38:16

| | | | |
|---|---|---|---|
| Receive By: | MARYLYNG on 11/5/2014 09:45:59 | Assignment No: | 1464144 |
| Assign By: | marylyng on 11/5/2014 09:48:35 | Inspector: | BRITNEY GALLIVAN (BG03) |
| Dispatch On: | 11/5/2014 | Instruction: | |
| Team: | I | | |
| Type: | DUST | | |

Inspection Date

Description: DUST & DIRT BLOWING - ZZZ NO ADDRESS GIVEN

Instance Start Date: Instance End Date:

## Complainant

First Name:

Address:

Phone:

## Alleged Source

Name: ROCK & CEMENT QUARRIES

Address: ARROW HWY @ LONGDEN/605 FWY, IRWINDALE, CA 91702 (Sector CK)

## Actual Source

Name: UNITED ROCK PRODUCTS CORPORATION ID: 65341

Address: 1245 E ARROW HWY, IRWINDALE, CA 91706-1302 (Sector CK)

Facility TS: TS-11 Industrial: Sector-based Inspections

## Disposition

NV on 11/5/2014 18:09:43

## Inspector Comment

INSPECTOR: signature _____ DATE: _____

SUPERVISOR: signature _____ DATE: _____

User ID: lramos

# SCAQMD Complaint Report

## Complaint 252793

Run Date: 9/14/2016 10:38:29

| | | | |
|---|---|---|---|
| Receive By: | GRACEN on 5/21/2015 13:05:00 | Assignment No: | 1495052 |
| Assign By: | hughh on 5/21/2015 13:07:51 | Inspector: | SHAWN BENNAGE (SB06) |
| Dispatch On: | 5/21/2015 | Instruction: | |
| Team: | I | | |
| Type: | DUST | | |
| Inspection Date | 5/22/2015 00:00:00 | | |
| Description: | Tract out, impaired visability. | | |

Instance Start Date:

Instance End Date:

## Complainant

First Name:

Address:

Phone:

## Alleged Source

Name: QUARRY PLANT

Address: ARROW HWY/LIVEOAK, IRWINDALE, CA 91702 (Sector CK)

## Actual Source

Name: UNITED ROCK PRODUCTS CORPORATION ID: 65341

Address: 1245 E ARROW HWY, IRWINDALE, CA 91706-1302 (Sector CK)

Facility TS: TS-11 Industrial: Sector-based Inspections

## Disposition

NC on 9/25/2015 15:48:14

## Inspector Comment

On May 22, 2015 at approximately 1030 hrs I arrived at United Rock Products located in the City of Irwindale. I arrived at the facility in response to a dust complaint about track out. When I arrived I met with Mr. Russ Caruso, Vice President, who escorted me around the facility during my inspection. I informed Mr. Caruso that I was at the facility because of a complaint about track out.

During my inspection I observed a site egress where the track out devices did not meet the specifications of Rule 403(d)(5). The facility had installed a wheel shaker that was not a minimum of 24 feet long by 10 feet wide. I did not observe or measure 25 feet of cumulative track out coming the site egress. I did, however observe approximately 5 feet of track out coming from the site egress. I informed Mr. Caruso that the facility needed to meet the specifications of Rule 403(d)(5) and I issued Notice to Comply E29058 to the facility.

I departed the site at approximately 1125 hrs.

I contacted that the complainant to discuss the results of my inspection. I informed that complainant that I issued a Notice to Comply to the facility to install a track out device that met the specifications of Rule 403 (d)(5).

The facility emailed me pictures on May 29, 2015 to show that the facility installed additional wheel shakers that met the specifications of Rule 403(d)(5). The facility was incompliance with Notice to Comply E29058.

INSPECTOR: signature _____ DATE: _____

SUPERVISOR: signature _____ DATE: _____

User ID: lramos

# South Coast Air Quality Management District

## NOV P63451

Run Date : 9/14/2016 10:31:54

### Company

| | |
|---|---|
| Facility: | UNITED ROCK PRODUCTS CORPORATION (ID: 65341) |
| Location Address: | 1245 E ARROW, HWY IRWINDALE, CA 91706-1302 |
| Mailing Address: | 135 S STATE COLLEGE, BLVD BREA, CA 92821 |
| AIRS ID | 06037CF302 |

### Violation

| | |
|---|---|
| Notice Issued Date: | 9/17/2015 |
| Violation Date: | 9/17/2015 |
| Serve To: | |
| Title: | |
| Issue By: | |
| Assignment No.: | 1542842 |
| Equipment Description: | |

Violation:

### Disposition

| | |
|---|---|
| Final Action Code: | |
| Achieved Date: | |
| Due Date: | |
| Violation Days: | 0 |

### Rule/Comment

### Emittent

### Follow-Up

Status: Inspector ID: Inspection Date: Number:

### Lap Sample Numbers

### Device IDs.

### Inspector Comment

INSPECTOR: _____ DATE: _____

signature

SUPERVISOR: _____ DATE: _____

signature

User ID: lramos

# SCAQMD Notification Report

## Notification 115063

Run Date: 9/14/2016 12:28:18

| | | | |
|---|---|---|---|
| Receive By: | CPONCE on 9/22/2005 11:22:18 | Assignment No: 904736 | Inspection Date: |
| Assign By: | | Inspector: | |
| Dispatch On: | | Disposition: | |
| Team: | X | AIRS ID: | |
| Activity: | R1166 SOIL EXCAVATION | Title V: N | |
| Instruction: | | | |
| Description: | 3 @ 10K DSL; | | |
| Instance Start Date: | 09/23/2005 00:00 | Instance End Date: 09/23/2005 00:00 | |

## Notifier

| | |
|---|---|
| Facility: | 86448 H B COVEY INC |
| First Name: | RUDY Last Name: MONTOYA |
| Facility TS: | TS-20 Industrial: Various Locations Equipment |
| Address: | VARIOUS LOCATIONS IN SCAQMD, Unit 437788, DIAMOND BAR, CA 91765 |
| Phone: | (909)630-9818 (Work) |

## Site Location

| | |
|---|---|
| Facility: | UNITED ROCK 305054 |
| Facility TS: | |
| Address: | 1245 ARROW HWY, IRWINDALE, CA 91706 (Sector CK) |

## Inspector Comment

INSPECTOR: _____ DATE: _____

signature

SUPERVISOR: _____ DATE: _____

signature

User ID: lramos

| COMPLAINT RE( | COMPLAINT NO. | INSPECTION D | DISPATCHED D | COMPLAINT TYPE | DISPOSITION | ALLEGED SOURCE | STREET NO | STREET | CITY | ZIP | ACTUAL SC | ACTUAL AD | FACILITY ID | STREET NO | STREET | CITY | ZIP | ASSIGNMEI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5/21/2015 | 252793 | 5/22/2015 | 5/21/2015 | 964 | NC | QUARRY PLANT | | ARROW HWY/LIVEOAK | IRWINDALE | 91702 | UNITED ROCK PRODU( | | 65341 | 1245 | ARROW | IRWINDALE | 91706 | 1495052 |
| 11/5/2014 | 247683 | | 11/5/2014 | 964 | NV | ROCK & CEMENT QUARRIES | | ARROW HWY @ LONGDEN/( | IRWINDALE | 91702 | UNITED ROCK PRODU( | | 65341 | 1245 | ARROW | IRWINDALE | 91706 | 1464144 |
| 9/9/2014 | 245650 | 9/9/2014 | 9/9/2014 | 964 | OC | UNITED ROCK PRODUCT | 1245 | ARROW HIGHWAY | IRWINDALE | 91702 | UNITED ROCK PRODU( | | 65341 | 1245 | ARROW | IRWINDALE | 91706 | 1453097 |
| 8/27/2014 | 245355 | 8/27/2014 | 8/27/2014 | 964 | NC | MINE | | SOUTH BOUND 605FWY @LI | IRWINDALE | 91702 | UNITED ROCK PRODU( | | 65341 | 1245 | ARROW | IRWINDALE | 91706 | 1450302 |
| 4/16/2012 | 223237 | 4/17/2012 | 4/17/2012 | 961 | NO | UNITED ROCK PRODUCT | 1245 | ARROW HIGHWAY/ 605 FW | IRWINDALE | 91706 | UNITED ROCK PRODU( | | 65341 | 1245 | ARROW | IRWINDALE | 91706 | 1299776 |
| 7/8/2009 | 205065 | 7/8/2009 | 7/8/2009 | 964 | OC | ROCK QUARRY | | ARROW HWY / 605FWY | IRWINDALE | 91702 | UNITED ROCK PRODU( | | 65341 | 1245 | ARROW | IRWINDALE | 91706 | 1117128 |
| 4/26/2007 | 190710 | 5/1/2007 | 4/26/2007 | 964 | OC | QUARRY | | GALEN/IVORY | DUARTE | 91010 | UNITED ROCK PRODU( | | 65341 | 1245 | ARROW | IRWINDALE | 91706 | 988918 |
| 9/17/1996 | 99153 | | 9/17/1996 | 961 | OC | UNITED ROCK | | BUENA VISTA/ARROW | IRWINDALE | 91706 | UNITED ROCK | | 0 | | ARROW HV | IRWINDALE | 91706 | 544833 |
| 9/13/1996 | 99089 | | 9/17/1996 | 964 | OC | UNITED ROCK | | ARROW/BATEMAN | IRWINDALE | 91706 | UNITED ROCK | | 0 | | ARROW HV | IRWINDALE | 91706 | 544768 |
| 9/13/1996 | 99088 | | 9/17/1996 | 964 | OC | UNITED ROCK | | ARROW/BATEMAN | IRWINDALE | 91706 | UNITED ROCK | | 0 | | ARROW HV | IRWINDALE | 91706 | 544767 |
| 9/9/1996 | 98884 | | 9/10/1996 | 964 | OC | UNITED ROCK AND CONCRETE | | ARROW AND BATEMAN | IRWINDALE | 91706 | UNITED ROCK PRODU( | | 0 | | ARROW HV | IRWINDALE | 91706 | 484482 |
| 8/22/1996 | 98411 | | 8/22/1996 | 964 | OC | UNITED ROCK PRODUCT | 1245 | ARROW HWY | IRWINDALE | 91706 | UNITED ROCK PRODU( | | 0 | | ARROW HV | IRWINDALE | 91706 | 483628 |
| 8/16/1996 | 98240 | | 8/16/1996 | 964 | OC | UNITED ROCK PRODUCT | 1245 | ARROW HWy | IRWINDALE | 91706 | UNITED ROCK PRODU( | | 0 | | ARROW HV | IRWINDALE | 91706 | 483367 |
| 4/30/1996 | 95147 | | 4/30/1996 | 964 | PAST | UNITED ROCK | | BUENA VISTA | IRWINDALE | | UNITED ROCK | | 0 | | BUENA VIS | IRWINDALE | | 94873 |
| 9/7/1995 | 89502 | | 9/7/1995 | 964 | OC | UNITED ROCK PLANT | | | IRWINDALE | | UNITED ROCK PLANT | | 0 | | | IRWINDALE | | 89237 |
| 8/30/1995 | 89243 | | 8/30/1995 | 964 | PAST | UNITED ROCK PRODUCT | | ARROW | IRWINDALE | | UNITED ROCK PRODU( | | 0 | | ARROW | IRWINDALE | | 88978 |
| 10/1/1992 | 99579 | | | 964 | OC | UNITED ROCK | | BATEMAN | DUARTE | 91010 | UNITED ROCK PRODU( | | 65341 | 1245 | ARROW | IRWINDALE | 91706 | 545468 |
| 10/12/1989 | 30204 | | 10/12/1989 | 964 | ONV | UNITED CONCRETE | 2620 | BUENA VISTA | IRWINDALE | | UNITED CONCRETE | | 0 | 2620 | BUENA VIS | IRWINDALE | | 30174 |
| 9/7/1989 | 28596 | | 9/7/1989 | 966 | NO | UNITED READY MIX | 2620 | BUENA VISTA | IRWINDALE | | UNITED READY MIX | | 0 | 2620 | BUENA VIS | IRWINDALE | | 28570 |
| 9/1/1989 | 28412 | | 9/1/1989 | 964 | ONV | UNITED REDI MIX | 2620 | BUENA VISTA | IRWINDALE | | UNITED REDI MIX | | 0 | 2620 | BUENA VIS | IRWINDALE | | 28386 |
| 6/6/1988 | 14891 | | 6/6/1988 | 964 | ONV | UNITED READY MIX | | ARROW/BUENA VISTA | IRWINDALE | | UNITED READY MIX | | 0 | | ARROW/BU | IRWINDALE | | 14884 |

NT NO.

# SCAQMD Complaint Report

## Complaint 223237

Run Date: 9/14/2016 10:37:33

| | | | |
|---|---|---|---|
| Receive By: | KARLYNZ on 4/16/2012 17:20:00 | Assignment No: | 1299776 |
| Assign By: | arobledo on 4/17/2012 09:51:58 | Inspector: | ALICIA MARTINEZ (AM02) |
| Dispatch On: | 4/17/2012 | Instruction: | |
| Team: | I | | |
| Type: | SMOKE | | |

Inspection Date: 4/17/2012 00:00:00

Description: ONGOING FIRE @ THE ROCK PROCESSING PLANT CAUSING HUGHE CLOUDS OF BLACK SMOKE. THE FIRE DEPT IS ON SITE.

Instance Start Date:

Instance End Date:

## Complainant

First Name:

Last Name: ANONYMOUS

Address:

Phone:

## Alleged Source

Name: UNITED ROCK PRODUCT

Address: 1245 ARROW HIGHWAY/ 605 FWY, IRWINDALE, CA 91706 (Sector CK)

## Actual Source

Name: UNITED ROCK PRODUCT CORP ID: 65341

Address: 1245 ARROW HWY, IRWINDALE, CA 91706 (Sector CK)

Facility TS: TS-11 Industrial: Sector-based Inspections

## Disposition

NO on 4/18/2012 07:40:50

## Inspector Comment

On 4/17/2012, I received Complaint 223237 which is anonymous. The complainant indicated there was a fire at the alleged source causing huge clouds of black smoke.

At 1530 hrs, I arrived at United Rock Products Corp. (FID 65341). I met with Russ Caruso, Vice President, General Manager (626-739-1140). I explained to Mr. Caruso a complaint was received regarding a fire causing black smoke on 4/17/2012. Mr. Caruso indicated the fire occurred from 1710 hrs to 1737 hrs The fire dept. put the fire out. Mr. Caruso stated the fire was caused by a dead bolt being cut off which was red hot and landed on the conveyor belt causing the fire.

At the time of the inspection, the equipment was not in operation. There was no longer a fire occurring. The area was blocked off. I departed at 1550 hrs.

INSPECTOR: signature _____ DATE: _____

SUPERVISOR: signature _____ DATE: _____

# SCAQMD Facility Equipment List Report



Facility: 67343 UNITED ROCK PRODUCTS CORPORATION Status: Out of Business MR: 0801 SIC: Team:
Last Inspection: 01/24/1989 On Hold: Suspended: TS: Quarter: none - do not inspect
Contact: RECLAIM: N TITLE V: N AIRS ID: Assignment:
Location Address: 1245 E ARROW HWY, IRWINDALE 91706 Sector:CK Inspector:
Mailing Address: 13131 LOS ANGELES ST, IRWINDALE 91706-2242 Sector:CK Inspection Date:
Instruction: Disposition:

| Application No. | Permit No. | Permit Issue Date | Permit Status | Equipment Category | BCAT/CCAT Description | Application Date | Application Status |
|---|---|---|---|---|---|---|---|

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____

# SCAQMD Facility Equipment List Report



Facility: 66241 UNITED ROCK PRODUCTS 065341 Status: DUPLICATE MR: 0801 SIC: 3273 Team:
Last Inspection: 02/05/1990 On Hold: Suspended: TS: Quarter: none - do not inspect
Contact: RECLAIM: N TITLE V: N AIRS ID: Assignment:
Location Address: 1254 E ARROW HWY, IRWINDALE 91706 Sector:CK Inspector:
Mailing Address: 1245 E ARROW HWY, IRWINDALE 91706 Sector:CK Inspection Date:
Instruction: Disposition:

| Application No. | Permit No. | Permit Issue Date | Permit Status | Equipment Category | BCAT/CCAT Description | Application Date | Application Status |
|---|---|---|---|---|---|---|---|

RECENT ASSIGNMENTS:
04/21/1992 No. 510841 Inspector: RH03 Activity: NOV DATA FROM HP

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____

# Department of Toxic Substances Control (DTSC)

Department of Toxic Substances Control

Barbara A. Lee, Director
9211 Oakdale Avenue
Chatsworth, California 91311

*Matthew Rodriquez*
Secretary for
Environmental Protection

*Edmund G. Brown Jr.*
Governor

September 15, 2016

Ms. Meredith Church
Leighton Consulting, Inc.
17781 Cowan, Suite 140
Irvine, CA 92614

1137 Meridian Street, Irwindale, CA 91706
PR3-091316-03

Dear Ms. Church:

We have received your Public Records Act Request for records from the Department of Toxic Substances Control.

After a thorough review of our files we have found that no such records exist at this office pertaining to the site/facility referenced above.

We would like to inform you about EnviroStor, a database that provides information and documents on over 5,000 DTSC cleanup sites. EnviroStor can be accessed at: http://www.envirostor.dtsc.ca.gov/public. Also, a computer is available in the Central Files of each DTSC Regional Office for use by community members to view EnviroStor.

If you have any questions or would like further information regarding your request please contact me at (818) 717-6521.

Sincerely,

Robert Hardison

Robert Hardison/cs
Regional Records Coordinator

Printed on Recycled Paper

Department of Toxic Substances Control

*Matthew Rodriquez*
Secretary for
Environmental Protection

Barbara A. Lee, Director
5796 Corporate Avenue
Cypress, California 90630

*Edmund G. Brown Jr.*
Governor

September 13, 2016

Ms. Meredith Church
Leighton Consulting, Inc.
17781 Cowan, Suite 140
Irvine, California 92614

1137 MERIDIAN STREET, IRWINDALE, CALIFORNIA 91706
PR4-091316-01

Dear Ms. Church:

We have received your Public Records Act Request for records from the Department of Toxic Substances Control.

After a thorough review of our files we have found that no such records exist at this office pertaining to the site/facility reference above.

We would like to inform you about EnviroStor, a database that provides information and Documents on over 5,000 DTSC cleanup sites. EnviroStor can be accessed at: **http://www.envirostor.dtsc.ca.gov/public**. Also, a computer is available in the Central Files of each DTSC Regional Office for use by community members to view EnviroStor.

If you have any questions or would like further information regarding your request, please contact our Regional Records Coordinator at: (714) 484-5336.

Sincerely,

*Jone Barrio*
Regional Records Coordinator
Cypress Administrative Services

brm

Printed on Recycled Paper

Matthew Rodriquez
Secretary for
Environmental Protection

# Department of Toxic Substances Control

Barbara A. Lee, Director
9211 Oakdale Avenue
Chatsworth, California 91311

Edmund G. Brown Jr
Governor

September 27, 2016

Ms. Meredith Church, PG
Leighton Consulting, Inc.
17781 Cowan, Suite 140
Irvine, CA 92814

2151 Buena Vista Street, Duarte, CA 91010
PR3-092016-04

Dear Ms. Church:

We have received your Public Records Act Request for records from the Department of Toxic Substances Control.

After a thorough review of our files we have found that no such records exist at this office pertaining to the site/facility referenced above.

We would like to inform you about EnviroStor, a database that provides information and documents on over 5,000 DTSC cleanup sites. EnviroStor can be accessed at: http://www.envirostor.dtsc.ca.gov/public. Also, a computer is available in the Central Files of each DTSC Regional Office for use by community members to view EnviroStor. If you have any questions or would like further information regarding your request, please contact me at (818) 717-6522.

Sincerely,

Glenn Castillo/bh
Regional Records Coordinator

Printed on Recycled Paper

# Regional Water Quality Control Board (RWQCB)

# RWQCB – Incident Reports

DCS **Davis Consulting Services**

*P.O. Box 4183* *www.davisconsulting.co* *PH: 562-762-5131*
*Orange, CA 92863* *tdavis@davisconsulting.co* *Fax: 714-921-0392*

February 13, 2014

Regional Water Quality Control Board
Los Angeles Region
300 W 4th St #200
Los Angeles, CA 90013

Attention: Dr. Wen Yang

Subject: United Rock Products Pit #3- Interim Incident Report

Dear Dr. Yang,

This letter serves as an interim report on the incident that took place on Wednesday December 25, 2013. The incident involved the inadvertent and total submersion of a gravel dredge that had been floating at the United Rock Products (URP) Pit #3.

This interim report will be supplemented with additional interim reports, as necessary, and a final report once the dredge is once again afloat.

Initial Incident Response and Reporting

Davis Consulting Services (DCS) became aware of the incident early afternoon on Thursday, December 26, 2013. The incident was first discovered early that morning and was brought to DCS's attention by Ken Barker, Environmental Manager, from URP. Immediately upon notice, DCS contacted Dr. Wen Yang and Mr. Doug Cross of the Los Angeles Regional Water Quality Control Board (Regional Board) via telephone voicemail message and email.

DCS was informed on Wednesday December 26, 2013 that the submerged dredge was powered grid electricity and that there were no internal combustion engines on board. Also, it was reported that all hydraulic fluids were EPA approved vegetable oil based products to be used in or near open water. First water samples were taken Friday the 27th and sent to Associated Lab for analysis (see below).

On Monday December 30, 2013, Mr. Doug Cross met Mr. Tom Davis with DCS at Pit #3 for a site visit and visual observation of the incident locale. Mr. Cross was informed and observed that day the emergency response team was onsite and had been in place since the incident was discovered.

On that Monday response divers were in the water to determine whether there was evidence of fluid leaks (none observed) and the overall condition of the dredge.

Dredge Recovery

The dredge with associated equipment weighs approximately 500 tons. Refloating the dredge can only be performed by a professional salvage company with experienced staff and adequate equipment. Beginning on January 13, 2014, Resolve Salvage and Fire, Inc. has been onsite conducting the dredge recovery project.

Divers are currently disconnecting the major equipment components from the dredge so that they can be lifted above water with the floating crane. Once lifted, the floating crane takes the large components to shore for temporary storage.

Following the removal of the large components, 4 chain winches mounted on the floating square donut positioned around the remaining submerged piece, will raise it to the surface. At that point, water will be pumped out of the pontoons to refloat the dredge.

The refloating operation should be completed the week of March 17, 2014.

Daily the surface of the water is being cleaned of any debris that comes to the surface.

Ongoing Monitoring

A crew of at least 2 personnel is daily patrolling the open water within a small boat. Any debris that comes to the surface is collected and taken to the shore. These personnel are also responsible for placing and maintaining absorbent booms as a precautionary measure.

Water Quality Sampling and Testing

Since the incident eight water samples were taken over four days.

A. December 27, 2013: Two water samples were taken for Brash Industries
B. January 9, 2014: Two water samples were taken for Brash Industries
C. January 15, 2014: Two water samples were taken for United Rock Products
D: January 29, 2014: Two water samples were taken for Stetson Engineering

Laboratory analytical results are attached to this letter report.

If you have any questions, please call me at 562-762-5131.

Sincerely,



Tom Davis
President
Davis Consultant Services

CC: Ken Barker, United Rock Products

**Associated Laboratories**
*806 N. Batavia - Orange, CA 92868*
*Tel (714)771-6900 Fax (714)538-1209*
*www.associatedlabs.com*
*Info@associatedlabs.com*

ACCREDITED IN ACCORDANCE WITH nelac
04232CA

Client: Brash Industries
Address: 4635 Admiralty Way
Marina Del Rey, CA 90292

Attn: Marvin Sachse

Comments: S & M
4635 Admiral Wy.

Lab Request: 334225
Report Date: 12/30/2013
Date Received: 12/27/2013
Client ID: 8606

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 334225-001 | Col |
| 334225-002 | End of Pier |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

The reports of the Associated Laboratories are confidential property of our clients and may not be reproduced or used for publication in part or in full without our written permission. This is for the mutual protection of the public, our clients, and ourselves.

*TESTING & CONSULTING*
*Chemical*
*Microbiological*
*Environmental*

DRAFT REPORT

| | | | |
|---|---|---|---|
| **Matrix:** Water | **Client:** Brash Industries | | **Collector:** Client |
| **Sampled:** 12/27/2013 13:10 | **Site:** | | |
| **Sample #:** 334225-001 | **Client Sample #:** Col | | **Sample Type:** |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 6010 *NELAC* | **Prep Method:** EPA 3010A | | | | | | **QCBatchID:** QC1142738 |
| Antimony | ND | 1 | 0.02 | mg/L | 12/27/13 | kedy | |
| Arsenic | ND | 1 | 0.01 | mg/L | 12/27/13 | kedy | |
| Barium | **0.068** | 1 | 0.01 | mg/L | 12/27/13 | kedy | |
| Beryllium | ND | 1 | 0.005 | mg/L | 12/27/13 | kedy | |
| Cadmium | ND | 1 | 0.005 | mg/L | 12/27/13 | kedy | |
| Chromium | ND | 1 | 0.01 | mg/L | 12/27/13 | kedy | |
| Cobalt | ND | 1 | 0.005 | mg/L | 12/27/13 | kedy | |
| Copper | ND | 1 | 0.01 | mg/L | 12/27/13 | kedy | |
| Lead | ND | 1 | 0.005 | mg/L | 12/27/13 | kedy | |
| Molybdenum | **0.011** | 1 | 0.01 | mg/L | 12/27/13 | kedy | |
| Nickel | ND | 1 | 0.02 | mg/L | 12/27/13 | kedy | |
| Selenium | ND | 1 | 0.01 | mg/L | 12/27/13 | kedy | |
| Silver | ND | 1 | 0.005 | mg/L | 12/27/13 | kedy | Q1 |
| Thallium | ND | 1 | 0.005 | mg/L | 12/27/13 | kedy | |
| Vanadium | ND | 1 | 0.005 | mg/L | 12/27/13 | kedy | |
| Zinc | ND | 1 | 0.02 | mg/L | 12/27/13 | kedy | |
| **Method:** EPA 7470 *NELAC* | **Prep Method:** Method | | | | | | **QCBatchID:** QC1142728 |
| Mercury | ND | 1 | 0.4 | ug/L | | | |
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3510C | | | | | | **QCBatchID:** QC1142740 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 12/29/13 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 12/29/13 | lyt | |
| TPH (C22 to C36) | **0.32** | 1 | 0.3 | mg/L | 12/29/13 | lyt | |
| TPH Diesel | ND | 1 | 0.1 | mg/L | 12/29/13 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *135* | *60-140* | |

ND = Not Detected or < RDL

RDL = Reporting Detection Limit DF = Dilution Factor

| | | | |
|---|---|---|---|
| **Matrix:** Water | **Client:** Brash Industries | **Collector:** Client | |
| **Sampled:** 12/27/2013 13:10 | **Site:** | | |
| **Sample #:** 334225-002 | **Client Sample #:** End of Pier | **Sample Type:** | |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 6010 *NELAC* | **Prep Method:** EPA 3010A | | | | | **QCBatchID:** | QC1142738 |
| Antimony | ND | 1 | 0.02 | mg/L | 12/27/13 | kedy | |
| Arsenic | ND | 1 | 0.01 | mg/L | 12/27/13 | kedy | |
| Barium | **0.078** | 1 | 0.01 | mg/L | 12/27/13 | kedy | |
| Beryllium | ND | 1 | 0.005 | mg/L | 12/27/13 | kedy | |
| Cadmium | ND | 1 | 0.005 | mg/L | 12/27/13 | kedy | |
| Chromium | ND | 1 | 0.01 | mg/L | 12/27/13 | kedy | |
| Cobalt | ND | 1 | 0.005 | mg/L | 12/27/13 | kedy | |
| Copper | ND | 1 | 0.01 | mg/L | 12/27/13 | kedy | |
| Lead | **0.006** | 1 | 0.005 | mg/L | 12/27/13 | kedy | |
| Molybdenum | ND | 1 | 0.01 | mg/L | 12/27/13 | kedy | |
| Nickel | ND | 1 | 0.02 | mg/L | 12/27/13 | kedy | |
| Selenium | ND | 1 | 0.01 | mg/L | 12/27/13 | kedy | |
| Silver | ND | 1 | 0.005 | mg/L | 12/27/13 | kedy | Q1 |
| Thallium | ND | 1 | 0.005 | mg/L | 12/27/13 | kedy | |
| Vanadium | ND | 1 | 0.005 | mg/L | 12/27/13 | kedy | |
| Zinc | ND | 1 | 0.02 | mg/L | 12/27/13 | kedy | |
| **Method:** EPA 7470 *NELAC* | **Prep Method:** Method | | | | | **QCBatchID:** | QC1142728 |
| Mercury | ND | 1 | 0.4 | ug/L | | | |
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3510C | | | | | **QCBatchID:** | QC1142740 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 12/29/13 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 12/29/13 | lyt | |
| TPH (C22 to C36) | **0.50** | 1 | 0.3 | mg/L | 12/29/13 | lyt | |
| TPH Diesel | ND | 1 | 0.1 | mg/L | 12/29/13 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *120* | *60-140* | |

ND = Not Detected or < RDL

RDL = Reporting Detection Limit DF = Dilution Factor





**ASSOCIATED LABORATORIES**
806 North Batavia ▪ Orange, CA 92868
Phone: (714) 771-6900 ▪ Fax: (714) 771-9933

# Chain of Custody Record

Lab Job No. 334225
Page 1 of 1

REQUIRED TURN AROUND TIME: Standard: ____
72 Hours: ____ 48 Hours: ____ 24 Hours: X

| CUSTOMER INFORMATION | | PROJECT INFORMATION | |
|---|---|---|---|
| COMPANY: BRASH IND | | PROJECT NAME: S & M | |
| SEND REPORT TO: | | NUMBER: | |
| EMAIL: MARVIN@BRASH IND | | ADDRESS: 4635 ADMIRALTY WA | |
| ADDRESS: | | | |
| | | P.O. #: | |
| PHONE: 310 305 8637 | FAX: | SAMPLED BY: [illegible] | |

ANALYSIS REQUEST: ~~[illegible]~~ TPH Diesel ~~[illegible]~~ CAM 17

| | Sample ID | Date | Time | Matrix | Container Number/Size | Pres. | | | | | | | | | | | Test Instructions & Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | COL | 12/27/13 | 11:0 | $H_2O$ | 3 | HCl $H_2SO_4$ | | | | | | | | | | | NEED BF 9:00 AM |
| 2 | END OF PIER | | | | 3 | 1 | | | | | | | | | | | MONDAY |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | |

Total No. of Samples: Method of Shipment: Preservative: 1= Ice 2 =HCl 3 =$HNO_3$ 4 =$H_2SO_4$ 5 =NaOH 6 =Other

| Relinquished by 1. | Received By: 1. | Relinquished by 2. | Received By: 2. | Relinquished by 3. | Received By: 3. |
|---|---|---|---|---|---|
| M.A. Sachse | | | | | |
| Signature: [signature] | Signature: M. Edward | Signature: | Signature: | Signature: | Signature: |
| Printed Name: MARVIN SACH | Printed Name: | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| Date: 12/27/13 Time: | Date: 12/27/13 Time: 13:08 | Date: Time: | Date: Time: | Date: Time: | Date: Time: |

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

ASSOCIATED LABORATORIES
806 North Batavia – Orange, California 92868 – 714-771-6900 FAX 714-538-1209

# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: Brash Project: S&M.
Date Received: 12-27-13 Sampler's Name: Yes (No)
Sample temperature: _____
Sample(s) received in cooler: (Yes) No (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ✓ Ice ___ Ice Packs ___ Bubble Wrap ___ Styrofoam
___ Paper ___ None ___ Other _____
Cooler Temperature: 2.0°C

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| Section 3 | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | ✓ | | |
| Were custody seals present? | | ✓ | |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | | ✓ | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ~~✓~~ ne | ✓ | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | | ✓ |
| Were the containers labeled with correct preservatives? | ✓ | | |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | ✓ |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments
Wrong container for TPHcc
should be amber glass.

**Section 5**
Was Project Manager notified of discrepancies: (Y)/ N N/A D.R.
Project Manager's response: _____

Completed By: M. Elliott Date: 12/27/13

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*www.associatedlabs.com*
*Info@associatedlabs.com*

ACCREDITED IN ACCORDANCE WITH nelac 04232CA

Client: Brash Industries
Address: 4635 Admiralty Way
Marina Del Rey, CA 90292

Attn: Marvin Sachse

Comments: SM Pit 3

Lab Request: 334664
Report Date: 01/14/2014
Date Received: 01/09/2014
Client ID: 8606

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 334664-001 | SM Pit 3-1 |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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*Microbiological*
*Environmental*

| | | |
|---|---|---|
| **Matrix:** Water | **Client:** Brash Industries | **Collector:** Client |
| **Sampled:** 01/09/2014 13:50 | **Site:** | |
| **Sample #:** 334664-001 | **Client Sample #:** SM Pit 3-1 | **Sample Type:** |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3510C | | | | | **QCBatchID:** | QC1143010 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 01/10/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 01/10/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 01/10/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *70* | *60-140* | |

| QCBatchID: QC1143010 | Analyst: lytagas | Method: EPA 8015B |
|---|---|---|
| Matrix: Water | Analyzed: 01/10/2014 | Instrument: SVOA-GC (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1143010MB1** | | | | | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | |
| TPH Diesel | ND | mg/L | | 0.1 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount LCS | Spike Amount LCSD | Spike Result LCS | Spike Result LCSD | Units | Recoveries LCS | Recoveries LCSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1143010LCS1, QC1143010LCSD1** | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 1.0 | 0.84 | mg/L | 100 | 84 | 17 | 57-122 | 30 | |

# Notes and Definitions

| | |
|---|---|
| B | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| C | Laboratory Contamination. |
| D | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| DF | Dilution Factor |
| DW | Sample result is calculated on a dry weigh basis |
| J | Reported value is estimated |
| L | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| M | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| MDL | Method Detection Limit |
| NC | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| ND | Analyte was not detected or was less than the detection limit. |
| P | Sample was received without proper preservation according to EPA guidelines. |
| Q1 | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| RDL | Reporting Detection Limit |
| S | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| T | Sample was extracted/analyzed past the holding time. |
| T2 | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |

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## SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: BRASH IND. Project: SM PIT 3
Date Received: 01/09/14 Sampler's Name: Yes (No)
Sample temperature: _____
Sample(s) received in cooler: Yes (No) (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ____ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam
____ Paper ____None ___ Other_____
Cooler Temperature: _____

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| **Section 3** | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | ✓ | | |
| Were custody seals present? | | ✓ | |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | ✓ | | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ✓ | | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | | ✓ |
| Were the containers labeled with correct preservatives? | | | ✓ |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | ✓ |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments

**Section 5**
Was Project Manager notified of discrepancies: Y / N N/A
Project Manager's response: _____

Completed By: _____ Date: 01/09/14

**ASSOCIATED LABORATORIES**
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Phone: (714) 771-6900 ▪ Fax: (714) 771-9933

# Chain of Custody Record

Lab Job No. 334664
Page 1 of 1

| CUSTOMER INFORMATION | | PROJECT INFORMATION | |
|---|---|---|---|
| COMPANY BRASH IND | | PROJECT NAME: SM | |
| SEND REPORT TO: | | NUMBER: PIT 3 | |
| EMAIL: MARVIN@BRASHIND.COM | | ADDRESS: | |
| ADDRESS: | | | |
| | | P.O. #: | |
| PHONE: | FAX: | SAMPLED BY: | |

REQUIRED TURN AROUND TIME: Standard: ~~X~~
72 Hours: _____ 48 Hours: _____ 24 Hours: _____

Carbon Chain

ANALYSIS REQUEST: TPH 8015

| | Sample ID | Date | Time | Matrix | Container Number/Size | Pres. | Test Instructions & Comments |
|---|---|---|---|---|---|---|---|
| 1 | SM Pit 3-1 | 1/09/2014 | 1:50pm | W | 1 | NO | By Dredge So of Conveyor |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |
| 9 | | | | | | | |
| 10 | | | | | | | |
| 11 | | | | | | | |
| 12 | | | | | | | |
| 13 | | | | | | | |
| 14 | | | | | | | |
| 15 | | | | | | | |

Total No. of Samples: 1 Method of Shipment: Preservative: 1= Ice 2 =HCl 3 =$HNO_3$ 4 =$H_2SO_4$ 5 =NaOH 6 =Other

| Relinquished by 1. | Received By: 1. | Relinquished by 2. | Received By: 2. | Relinquished by 3. | Received By: 3. |
|---|---|---|---|---|---|
| Ken Barker | | | | | |
| Signature: Ken Barker | Signature: [signature] | Signature: | Signature: | Signature: | Signature: |
| Printed Name: Ken Barker | Printed Name: ZAID | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| Date: 1/09/14 Time: 3:09 | Date: 01/09/14 Time: 1510 | Date: Time: | Date: Time: | Date: Time: | Date: Time: |

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

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ACCREDITED IN ACCORDANCE WITH nelac 04232CA

Client: Brash Industries
Address: 4635 Admiralty Way
Marina Del Rey, CA 90292

Attn: Marvin Sachse

Comments: SM Pit 3-2

Lab Request: 334665
Report Date: 01/14/2014
Date Received: 01/09/2014
Client ID: 8606

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 334665-001 | SM Pit 3-2 |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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| | | | |
|---|---|---|---|
| **Matrix:** Water | **Client:** Brash Industries | **Collector:** Client | |
| **Sampled:** 01/09/2014 14:00 | **Site:** | | |
| **Sample #:** 334665-001 | **Client Sample #:** SM Pit 3-2 | **Sample Type:** | |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3510C | | | | | | **QCBatchID:** QC1143010 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 01/10/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 01/10/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 01/10/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *60* | *60-140* | |

| QCBatchID: QC1143010 | Analyst: lytagas | Method: EPA 8015B |
|---|---|---|
| Matrix: Water | Analyzed: 01/10/2014 | Instrument: SVOA-GC (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1143010MB1** | | | | | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | |
| TPH Diesel | ND | mg/L | | 0.1 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | | LCS | LCSD | | %Rec | RPD | |
| **QC1143010LCS1, QC1143010LCSD1** | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 1.0 | 0.84 | mg/L | 100 | 84 | 17 | 57-122 | 30 | |

# Notes and Definitions

| | |
|---|---|
| B | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| C | Laboratory Contamination. |
| D | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| DF | Dilution Factor |
| DW | Sample result is calculated on a dry weigh basis |
| J | Reported value is estimated |
| L | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| M | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| MDL | Method Detection Limit |
| NC | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| ND | Analyte was not detected or was less than the detection limit. |
| P | Sample was received without proper preservation according to EPA guidelines. |
| Q1 | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| RDL | Reporting Detection Limit |
| S | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| T | Sample was extracted/analyzed past the holding time. |
| T2 | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |

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## SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: BRASH IND. Project: SM PIT 3-2
Date Received: 01/09/14 Sampler's Name: Yes (No)
Sample temperature: _____
Sample(s) received in cooler: Yes (No) (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ____ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam
____ Paper ____None ___ Other_____
Cooler Temperature: _____

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| **Section 3** | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | ✓ | | |
| Were custody seals present? | | ✓ | |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | ✓ | | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ✓ | | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | | ✓ |
| Were the containers labeled with correct preservatives? | | | ✓ |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | ✓ |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments

**Section 5**
Was Project Manager notified of discrepancies: Y / N N/A
Project Manager's response: _____

Completed By: _____ Date: 01/09/14

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# Chain of Custody Record

Lab Job No. 334665
Page 1 of 1

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: _____ 48 Hours: _____ 24 Hours: _____

| CUSTOMER INFORMATION | | PROJECT INFORMATION |
|---|---|---|
| COMPANY: BRASH IND | | PROJECT NAME: SY |
| SEND REPORT TO: | | NUMBER: PIT 3-2 |
| EMAIL: MARLEN@BRASHIND.COM | | ADDRESS: |
| ADDRESS: 1635 ADAIRAEM WAY | | |
| | | P.O. #: |
| PHONE: | FAX: | SAMPLED BY: |

ANALYSIS REQUEST
TPH 8015 (M)

| | Sample ID | Date | Time | Matrix | Container Number/Size | Pres. | Test Instructions & Comments |
|---|---|---|---|---|---|---|---|
| 1 | SY PIT 3-2 | 1/09/2013 2:00 PM | 2:00PM | W | 1 | NO | Near Guy Wire End of Ramp |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |
| 9 | | | | | | | |
| 10 | | | | | | | |
| 11 | | | | | | | |
| 12 | | | | | | | |
| 13 | | | | | | | |
| 14 | | | | | | | |
| 15 | | | | | | | |

Total No. of Samples: 1 Method of Shipment:

Preservative: 1= Ice 2 =HCl 3 =$HNO_3$ 4 =$H_2SO_4$ 5 =NaOH 6 =Other

| Relinquished by 1. | Received By: 1. | Relinquished by 2. | Received By: 2. | Relinquished by 3. | Received By: 3. |
|---|---|---|---|---|---|
| Signature: Ken Barker | Signature: | Signature: | Signature: | Signature: | Signature: |
| Printed Name: Ken Barker | Printed Name: ZAID | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| Date: 1/09/14 Time: 3:09 | Date: 01/09/14 Time: 1510 | Date: Time: | Date: Time: | Date: Time: | Date: Time: |

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

# Associated Laboratories

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ACCREDITED IN ACCORDANCE WITH nelac 04232CA

| | | | |
|---|---|---|---|
| Client: | United Rock Products | Lab Request: | 334883 |
| Address: | 135 S. State College Blvd. | Report Date: | 01/27/2014 |
| | Suite #400 | Date Received: | 01/15/2014 |
| | Brea, CA 92821 | Client ID: | 12535 |
| Attn: | Ken Barker | | |

Comments: United Rock Products - Irwindale

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 334883-001 | Pit 3-1 |
| 334883-002 | Pit 3-2 |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.


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| | | | |
|---|---|---|---|
| **Matrix:** Water | **Client:** United Rock Products | **Collector:** Client | |
| **Sampled:** 01/15/2014 08:40 | **Site:** | | |
| **Sample #:** 334883-001 | **Client Sample #:** Pit 3-1 | **Sample Type:** | |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 200.7 | **Prep Method:** EPA 3010A | | | | | **QCBatchID:** | QC1143152 |
| Boron | **0.100** | 1 | 0.05 | mg/L | 01/16/14 | kedy | |
| Cadmium | ND | 1 | 0.005 | mg/L | 01/16/14 | kedy | |
| Chromium | ND | 1 | 0.01 | mg/L | 01/16/14 | kedy | |
| Lead | ND | 1 | 0.005 | mg/L | 01/16/14 | kedy | |
| Nickel | ND | 1 | 0.01 | mg/L | 01/16/14 | kedy | |
| **Method:** EPA 200.7 | **Prep Method:** EPA 3010A/Filtered | | | | | **QCBatchID:** | QC1143170 |
| Boron | **0.086** | 1 | 0.05 | mg/L | 01/17/14 | kedy | |
| Cadmium | ND | 1 | 0.005 | mg/L | 01/17/14 | kedy | |
| Chromium | ND | 1 | 0.01 | mg/L | 01/17/14 | kedy | |
| Lead | ND | 1 | 0.005 | mg/L | 01/17/14 | kedy | |
| Nickel | ND | 1 | 0.01 | mg/L | 01/17/14 | kedy | |
| **Method:** EPA 300.0 | **Prep Method:** Method | | | | | **QCBatchID:** | QC1143228 |
| Chloride | **12.9** | 1 | 1 | mg/L | 01/20/14 | wyu | |
| Sulfate | **65.4** | 1 | 1 | mg/L | 01/20/14 | wyu | |
| Nitrate, as NO3 | **1.27** | 1 | 0.44 | mg/L | 01/20/14 | wyu | |
| Nitrite, as NO2 | ND | 1 | 0.33 | mg/L | 01/20/14 | wyu | |
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1143178 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 01/17/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 01/17/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 01/17/14 | lyt | |
| TPH Diesel | ND | 1 | 0.1 | mg/L | 01/17/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *75* | *60-140* | |

| **Method:** EPA 8260 *NELAC* | **Prep Method:** EPA 5030B | | | | | **QCBatchID:** | QC1143132 |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,1,1-Trichloroethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,1,2,2-Tetrachloroethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,1,2-Trichloroethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,1,2-Trichlorotrifluoroethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,1-Dichloroethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,1-Dichloroethene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,1-Dichloropropene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,2,3-Trichlorobenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,2,3-Trichloropropane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,2,4-Trichlorobenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,2,4-Trimethylbenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,2-Dibromo-3-chloropropane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,2-Dibromoethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,2-Dichlorobenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,2-Dichloroethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,2-Dichloropropane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,3,5-Trimethylbenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,3-Dichlorobenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,3-Dichloropropane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,4-Dichlorobenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 2,2-Dichloropropane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 2-Butanone (MEK) | ND | 1 | 100 | ug/L | 01/16/14 | ryanp | |
| 2-Chloroethyl Vinyl Ether | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 2-Chlorotoluene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 4-Chlorotoluene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 4-Isopropyltoluene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |

| | | | |
|---|---|---|---|
| **Matrix:** Water | **Client:** United Rock Products | | **Collector:** Client |
| **Sampled:** 01/15/2014 08:40 | **Site:** | | |
| **Sample #:** 334883-001 | **Client Sample #:** Pit 3-1 | | **Sample Type:** |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| 4-Methyl-2-pentanone (MIBK) | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Acetone | ND | 1 | 100 | ug/L | 01/16/14 | ryanp | |
| Allyl Chloride | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Benzene | ND | 1 | 1 | ug/L | 01/16/14 | ryanp | |
| Bromobenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Bromochloromethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Bromodichloromethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Bromoform | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Bromomethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Carbon Tetrachloride | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Chlorobenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Chlorodibromomethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Chloroethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Chloroform | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Chloromethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| cis-1,2-Dichloroethene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| cis-1,3-dichloropropene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| cis-1,4-dichloro-2-butene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Dibromomethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Dichlorodifluoromethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Ethylbenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Hexachlorobutadiene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Isopropylbenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| m and p-Xylene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Methylene chloride | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Methyl-t-butyl Ether (MTBE) | ND | 1 | 1 | ug/L | 01/16/14 | ryanp | |
| Naphthalene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| N-butylbenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| N-propylbenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| o-Xylene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Sec-butylbenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Styrene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Tert-butylbenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Tetrachloroethene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Toluene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| trans-1,2-dichloroethene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| trans-1,3-dichloropropene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| trans-1,4-dichloro-2-butene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Trichloroethene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Trichlorofluoromethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Vinyl Chloride | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Xylenes (Total) | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (SUR)* | *120* | *70-145* | |
| *4-Bromofluorobenzene (SUR)* | *96* | *70-145* | |
| *Dibromodifluoromethane (SUR)* | *94* | *70-145* | |
| *Toluene-d8 (SUR)* | *101* | *70-145* | |

**Method:** SM 2320-B **Prep Method:** Method **QCBatchID:** QC1143306

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Bicarbonate (HCO3) | **131** | 1 | 5 | mg/L | 01/22/14 | dung | |
| Carbonate (CO3) | ND | 1 | 5 | mg/L | 01/22/14 | dung | |
| Hydroxide (OH) | ND | 1 | 5 | mg/L | 01/22/14 | dung | |
| Total Alkalinity (as CaCO3) | **108** | 1 | 5 | mg/L | 01/22/14 | dung | |

| | | |
|---|---|---|
| **Matrix:** Water | **Client:** United Rock Products | **Collector:** Client |
| **Sampled:** 01/15/2014 08:40 | **Site:** | |
| **Sample #:** 334883-001 | **Client Sample #:** Pit 3-1 | **Sample Type:** |

| Analyte | | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|
| **Method:** SM 2510-B | **Prep Method:** Method | | | | | | **QCBatchID:** | |
| Specific Conductance | | **396** | 1 | | umhos/cm | 01/22/14 | mmegaly | |
| **Method:** SM 2540-C | **Prep Method:** Method | | | | | | **QCBatchID:** | QC1143223 |
| Total Dissolved Solids | | **204** | 1 | 10 | mg/L | 01/17/14 | rybechay | |
| **Method:** SM 4500-H+B | **Prep Method:** Method | | | | | | **QCBatchID:** | |
| pH | | **8.14** | 1 | | pH Units | 01/15/14 | mmegaly | |
| **Method:** SM 5220-D | **Prep Method:** Method | | | | | | **QCBatchID:** | QC1143229 |
| Chemical Oxygen Demand (COD) | | ND | 1 | 4 | mg/L | 01/20/14 | hanhkhong | |

| | | | |
|---|---|---|---|
| **Matrix:** Water | **Client:** United Rock Products | | **Collector:** Client |
| **Sampled:** 01/15/2014 09:05 | **Site:** | | |
| **Sample #:** 334883-002 | **Client Sample #:** Pit 3-2 | | **Sample Type:** |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 200.7 | **Prep Method:** EPA 3010A | | | | | | **QCBatchID:** QC1143152 |
| Boron | **0.100** | 1 | 0.05 | mg/L | 01/16/14 | kedy | |
| Cadmium | ND | 1 | 0.005 | mg/L | 01/16/14 | kedy | |
| Chromium | ND | 1 | 0.01 | mg/L | 01/16/14 | kedy | |
| Lead | ND | 1 | 0.005 | mg/L | 01/16/14 | kedy | |
| Nickel | ND | 1 | 0.01 | mg/L | 01/16/14 | kedy | |
| **Method:** EPA 200.7 | **Prep Method:** EPA 3010A/Filtered | | | | | | **QCBatchID:** QC1143170 |
| Boron | **0.090** | 1 | 0.05 | mg/L | 01/17/14 | kedy | |
| Cadmium | ND | 1 | 0.005 | mg/L | 01/17/14 | kedy | |
| Chromium | ND | 1 | 0.01 | mg/L | 01/17/14 | kedy | |
| Lead | ND | 1 | 0.005 | mg/L | 01/17/14 | kedy | |
| Nickel | ND | 1 | 0.01 | mg/L | 01/17/14 | kedy | |
| **Method:** EPA 300.0 | **Prep Method:** Method | | | | | | **QCBatchID:** QC1143228 |
| Chloride | **12.8** | 1 | 1 | mg/L | 01/20/14 | wyu | |
| Sulfate | **65.2** | 1 | 1 | mg/L | 01/20/14 | wyu | |
| Nitrate, as NO3 | **1.32** | 1 | 0.44 | mg/L | 01/20/14 | wyu | |
| Nitrite, as NO2 | ND | 1 | 0.33 | mg/L | 01/20/14 | wyu | |
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3535A | | | | | | **QCBatchID:** QC1143178 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 01/17/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 01/17/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 01/17/14 | lyt | |
| TPH Diesel | ND | 1 | 0.1 | mg/L | 01/17/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *65* | *60-140* | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8260 *NELAC* | **Prep Method:** EPA 5030B | | | | | | **QCBatchID:** QC1143132 |
| 1,1,1,2-Tetrachloroethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,1,1-Trichloroethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,1,2,2-Tetrachloroethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,1,2-Trichloroethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,1,2-Trichlorotrifluoroethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,1-Dichloroethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,1-Dichloroethene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,1-Dichloropropene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,2,3-Trichlorobenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,2,3-Trichloropropane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,2,4-Trichlorobenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,2,4-Trimethylbenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,2-Dibromo-3-chloropropane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,2-Dibromoethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,2-Dichlorobenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,2-Dichloroethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,2-Dichloropropane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,3,5-Trimethylbenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,3-Dichlorobenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,3-Dichloropropane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 1,4-Dichlorobenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 2,2-Dichloropropane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 2-Butanone (MEK) | ND | 1 | 100 | ug/L | 01/16/14 | ryanp | |
| 2-Chloroethyl Vinyl Ether | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 2-Chlorotoluene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 4-Chlorotoluene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| 4-Isopropyltoluene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 01/15/2014 09:05 **Site:**
**Sample #:** 334883-002 **Client Sample #:** Pit 3-2 **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| 4-Methyl-2-pentanone (MIBK) | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Acetone | ND | 1 | 100 | ug/L | 01/16/14 | ryanp | |
| Allyl Chloride | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Benzene | ND | 1 | 1 | ug/L | 01/16/14 | ryanp | |
| Bromobenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Bromochloromethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Bromodichloromethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Bromoform | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Bromomethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Carbon Tetrachloride | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Chlorobenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Chlorodibromomethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Chloroethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Chloroform | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Chloromethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| cis-1,2-Dichloroethene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| cis-1,3-dichloropropene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| cis-1,4-dichloro-2-butene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Dibromomethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Dichlorodifluoromethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Ethylbenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Hexachlorobutadiene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Isopropylbenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| m and p-Xylene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Methylene chloride | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Methyl-t-butyl Ether (MTBE) | ND | 1 | 1 | ug/L | 01/16/14 | ryanp | |
| Naphthalene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| N-butylbenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| N-propylbenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| o-Xylene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Sec-butylbenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Styrene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Tert-butylbenzene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Tetrachloroethene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Toluene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| trans-1,2-dichloroethene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| trans-1,3-dichloropropene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| trans-1,4-dichloro-2-butene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Trichloroethene | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Trichlorofluoromethane | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Vinyl Chloride | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |
| Xylenes (Total) | ND | 1 | 5 | ug/L | 01/16/14 | ryanp | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (SUR)* | *120* | *70-145* | |
| *4-Bromofluorobenzene (SUR)* | *99* | *70-145* | |
| *Dibromodifluoromethane (SUR)* | *97* | *70-145* | |
| *Toluene-d8 (SUR)* | *100* | *70-145* | |

**Method:** SM 2320-B **Prep Method:** Method **QCBatchID:** QC1143306

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Bicarbonate (HCO3) | **128** | 1 | 5 | mg/L | 01/22/14 | dung | |
| Carbonate (CO3) | ND | 1 | 5 | mg/L | 01/22/14 | dung | |
| Hydroxide (OH) | ND | 1 | 5 | mg/L | 01/22/14 | dung | |
| Total Alkalinity (as CaCO3) | **105** | 1 | 5 | mg/L | 01/22/14 | dung | |

| | | | |
|---|---|---|---|
| **Matrix:** Water | **Client:** United Rock Products | | **Collector:** Client |
| **Sampled:** 01/15/2014 09:05 | **Site:** | | |
| **Sample #:** 334883-002 | **Client Sample #:** Pit 3-2 | | **Sample Type:** |

| Analyte | | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|---|
| **Method:** SM 2510-B | **Prep Method:** Method | | | | | | **QCBatchID:** | |
| Specific Conductance | | **399** | 1 | | umhos/cm | 01/22/14 | mmegaly | |
| **Method:** SM 2540-C | **Prep Method:** Method | | | | | | **QCBatchID:** | QC1143223 |
| Total Dissolved Solids | | **208** | 1 | 10 | mg/L | 01/17/14 | rybechay | |
| **Method:** SM 4500-H+B | **Prep Method:** Method | | | | | | **QCBatchID:** | |
| pH | | **8.12** | 1 | | pH Units | 01/15/14 | mmegaly | |
| **Method:** SM 5220-D | **Prep Method:** Method | | | | | | **QCBatchID:** | QC1143229 |
| Chemical Oxygen Demand (COD) | | ND | 1 | 4 | mg/L | 01/20/14 | hanhkhong | |

| QCBatchID: QC1143132 | Analyst: ryanp | Method: EPA 8260B |
|---|---|---|
| Matrix: Water | Analyzed: 01/16/2014 | Instrument: VOA-MS (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1143132MB1** | | | | | |
| 1,1-Dichloroethene | ND | ug/L | | 5 | |
| Benzene | ND | ug/L | | 1 | |
| Chlorobenzene | ND | ug/L | | 5 | |
| Ethylbenzene | ND | ug/L | | 5 | |
| m and p-Xylene | ND | ug/L | | 5 | |
| Methyl-t-butyl Ether (MTBE) | ND | ug/L | | 1 | |
| o-Xylene | ND | ug/L | | 5 | |
| Toluene | ND | ug/L | | 5 | |
| Trichloroethene | ND | ug/L | | 5 | |
| Xylenes (Total) | ND | ug/L | | 5 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount LCS | Spike Amount LCSD | Spike Result LCS | Spike Result LCSD | Units | Recoveries LCS | Recoveries LCSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1143132LCS1** | | | | | | | | | | | |
| 1,1-Dichloroethene | 50 | | 51 | | ug/L | 102 | | | 59-172 | | |
| Benzene | 50 | | 56 | | ug/L | 112 | | | 62-137 | | |
| Chlorobenzene | 50 | | 54 | | ug/L | 108 | | | 60-133 | | |
| Methyl-t-butyl Ether (MTBE) | 50 | | 46 | | ug/L | 92 | | | 62-137 | | |
| Toluene | 50 | | 54 | | ug/L | 108 | | | 59-139 | | |
| Trichloroethene | 50 | | 51 | | ug/L | 102 | | | 66-142 | | |

## Matrix Spike/Matrix Spike Duplicate Summary

| Analyte | Sample Amount | Spike Amount MS | Spike Amount MSD | Spike Result MS | Spike Result MSD | Units | Recoveries MS | Recoveries MSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1143132MS1, QC1143132MSD1** | | | | | | | | | | | | **Source: 334840-001** |
| 1,1-Dichloroethene | ND | 50 | 50 | 49 | 50 | ug/L | 98 | 100 | 2.0 | 59-172 | 22 | |
| Benzene | ND | 50 | 50 | 57 | 56 | ug/L | 114 | 112 | 1.8 | 62-137 | 24 | |
| Chlorobenzene | ND | 50 | 50 | 52 | 54 | ug/L | 104 | 108 | 3.8 | 60-133 | 24 | |
| Methyl-t-butyl Ether (MTBE) | ND | 50 | 50 | 47 | 49 | ug/L | 94 | 98 | 4.2 | 62-137 | 21 | |
| Toluene | ND | 50 | 50 | 53 | 53 | ug/L | 106 | 106 | 0.0 | 59-139 | 21 | |
| Trichloroethene | ND | 50 | 50 | 49 | 48 | ug/L | 98 | 96 | 2.1 | 66-142 | 21 | |

QCBatchID: QC1143152 Analyst: wyu Method: EPA 200.7

Matrix: Water Analyzed: 01/16/2014 Instrument: AAICP (group)

## Blank Summary

| Analyte | Blank Result | Units | RDL | Notes |
|---|---|---|---|---|
| **QC1143152MB1** | | | | |
| Arsenic | ND | mg/L | 0.005 | |
| Barium | ND | mg/L | 0.01 | |
| Boron | ND | mg/L | 0.05 | |
| Cadmium | ND | mg/L | 0.005 | |
| Chromium | ND | mg/L | 0.01 | |
| Copper | ND | mg/L | 0.01 | |
| Lead | ND | mg/L | 0.005 | |
| Manganese | ND | mg/L | 0.01 | |
| Molybdenum | ND | mg/L | 0.01 | |
| Nickel | ND | mg/L | 0.01 | |
| Selenium | ND | mg/L | 0.01 | |
| Silver | ND | mg/L | 0.005 | |
| Zinc | ND | mg/L | 0.01 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount LCS | Spike Amount LCSD | Spike Result LCS | Spike Result LCSD | Units | Recoveries LCS | Recoveries LCSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1143152LCS1** | | | | | | | | | | | |
| Arsenic | 2 | | 2.09 | | mg/L | 105 | | | 80-120 | | |
| Barium | 2 | | 2.17 | | mg/L | 109 | | | 80-120 | | |
| Boron | 2 | | 2.05 | | mg/L | 103 | | | 80-120 | | |
| Cadmium | 2 | | 2.08 | | mg/L | 104 | | | 80-120 | | |
| Chromium | 2 | | 2.11 | | mg/L | 106 | | | 80-120 | | |
| Copper | 2 | | 2.21 | | mg/L | 111 | | | 80-120 | | |
| Lead | 2 | | 2.14 | | mg/L | 107 | | | 80-120 | | |
| Manganese | 2 | | 2.14 | | mg/L | 107 | | | 80-120 | | |
| Molybdenum | 2 | | 2.10 | | mg/L | 105 | | | 80-120 | | |
| Nickel | 2 | | 2.11 | | mg/L | 106 | | | 80-120 | | |
| Selenium | 2 | | 2.06 | | mg/L | 103 | | | 80-120 | | |
| Silver | 1 | | 1.06 | | mg/L | 106 | | | 80-120 | | |
| Zinc | 2 | | 2.07 | | mg/L | 104 | | | 80-120 | | |

## Matrix Spike/Matrix Spike Duplicate Summary

| Analyte | Sample Amount | Spike Amount MS | Spike Amount MSD | Spike Result MS | Spike Result MSD | Units | Recoveries MS | Recoveries MSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1143152MS1** | | | | | | | | | | | | **Source: 334826-001** |
| Arsenic | 0.022 | 1 | | 1.08 | | mg/L | 106 | | | 75-125 | | |
| Barium | 0.073 | 1 | | 1.12 | | mg/L | 105 | | | 75-125 | | |
| Boron | 0.130 | 1 | | 1.13 | | mg/L | 100 | | | 75-125 | | |
| Cadmium | ND | 1 | | 1.02 | | mg/L | 102 | | | 75-125 | | |
| Chromium | 0.003 | 1 | | 1.04 | | mg/L | 104 | | | 75-125 | | |
| Copper | 0.186 | 1 | | 1.18 | | mg/L | 99 | | | 75-125 | | |
| Lead | 0.025 | 1 | | 1.04 | | mg/L | 102 | | | 75-125 | | |
| Manganese | 0.020 | 1 | | 1.05 | | mg/L | 103 | | | 75-125 | | |
| Molybdenum | 0.010 | 1 | | 1.03 | | mg/L | 102 | | | 75-125 | | |
| Nickel | 0.002 | 1 | | 1.03 | | mg/L | 103 | | | 75-125 | | |
| Selenium | ND | 1 | | 0.993 | | mg/L | 99 | | | 75-125 | | |
| Silver | 0.034 | 0.5 | | 0.548 | | mg/L | 103 | | | 75-125 | | |
| Zinc | 0.016 | 1 | | 1.03 | | mg/L | 101 | | | 75-125 | | |

| QCBatchID: QC1143170 | Analyst: wyu | Method: EPA 200.7 |
|---|---|---|
| Matrix: Water | Analyzed: 01/17/2014 | Instrument: AAICP (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1143170MB1** | | | | | |
| Boron | ND | mg/L | | 0.05 | |
| Cadmium | ND | mg/L | | 0.005 | |
| Chromium | ND | mg/L | | 0.01 | |
| Copper | ND | mg/L | | 0.01 | |
| Lead | ND | mg/L | | 0.005 | |
| Nickel | ND | mg/L | | 0.01 | |
| Silver | ND | mg/L | | 0.005 | |
| Zinc | ND | mg/L | | 0.01 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount LCS | Spike Amount LCSD | Spike Result LCS | Spike Result LCSD | Units | Recoveries LCS | Recoveries LCSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1143170LCS1** | | | | | | | | | | | |
| Boron | 2 | | 2.19 | | mg/L | 110 | | | 80-120 | | |
| Boron | 2 | | 2.19 | | mg/L | 110 | | | 80-120 | | |
| Cadmium | 2 | | 2.28 | | mg/L | 114 | | | 80-120 | | |
| Cadmium | 2 | | 2.28 | | mg/L | 114 | | | 80-120 | | |
| Chromium | 2 | | 2.26 | | mg/L | 113 | | | 80-120 | | |
| Chromium | 2 | | 2.26 | | mg/L | 113 | | | 80-120 | | |
| Copper | 2 | | 1.97 | | mg/L | 99 | | | 80-120 | | |
| Copper | 2 | | 1.97 | | mg/L | 99 | | | 80-120 | | |
| Lead | 2 | | 2.27 | | mg/L | 114 | | | 80-120 | | |
| Lead | 2 | | 2.27 | | mg/L | 114 | | | 80-120 | | |
| Nickel | 2 | | 2.28 | | mg/L | 114 | | | 80-120 | | |
| Nickel | 2 | | 2.28 | | mg/L | 114 | | | 80-120 | | |
| Silver | 1 | | 1.20 | | mg/L | 120 | | | 80-120 | | |
| Silver | 1 | | 1.20 | | mg/L | 120 | | | 80-120 | | |
| Zinc | 2 | | 2.25 | | mg/L | 113 | | | 80-120 | | |
| Zinc | 2 | | 2.25 | | mg/L | 113 | | | 80-120 | | |

## Matrix Spike/Matrix Spike Duplicate Summary

| Analyte | Sample Amount | Spike Amount MS | Spike Amount MSD | Spike Result MS | Spike Result MSD | Units | Recoveries MS | Recoveries MSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1143170MS1** | | | | | | | | | | | | **Source: 334883-001** |
| Boron | 0.086 | 1 | | 0.989 | | mg/L | 90 | | | 75-125 | | |
| Cadmium | ND | 1 | | 0.990 | | mg/L | 99 | | | 75-125 | | |
| Chromium | ND | 1 | | 0.976 | | mg/L | 98 | | | 75-125 | | |
| Lead | ND | 1 | | 0.992 | | mg/L | 99 | | | 75-125 | | |
| Nickel | ND | 1 | | 0.962 | | mg/L | 96 | | | 75-125 | | |

| QCBatchID: QC1143178 | Analyst: lytagas | Method: EPA 8015B |
|---|---|---|
| Matrix: Water | Analyzed: 01/17/2014 | Instrument: SVOA-GC (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1143178MB1** | | | | | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | |
| TPH Diesel | ND | mg/L | | 0.1 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | | LCS | LCSD | | %Rec | RPD | |
| **QC1143178LCS1, QC1143178LCSD1** | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 0.83 | 1.1 | mg/L | 83 | 110 | 28 | 57-122 | 30 | |

| QCBatchID: QC1143223 | Analyst: rybechay | Method: SM 2540-C |
|---|---|---|
| Matrix: Water | Analyzed: 01/20/2014 | Instrument: CHEM (group) |

## *Blank Summary*

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1143223MB1** | | | | | |
| Total Dissolved Solids | ND | mg/L | | 10 | |

## *Lab Control Spike/ Lab Control Spike Duplicate Summary*

| Analyte | Spike Amount LCS | Spike Amount LCSD | Spike Result LCS | Spike Result LCSD | Units | Recoveries LCS | Recoveries LCSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1143223LCS1** | | | | | | | | | | | |
| Total Dissolved Solids | 293 | | 282 | | mg/L | 96 | | | 90-110 | | |

## *Duplicate Summary*

| Analyte | Sample Amount | Duplicate Amount | Units | RPD | Limits RPD | Notes |
|---|---|---|---|---|---|---|
| **QC1143223DUP1** | | | | | | **Source: 334822-003** |
| Total Dissolved Solids | 17300 | 17700 | mg/L | 2.3 | 5 | |
| **QC1143223DUP2** | | | | | | **Source: 335025-001** |
| Total Dissolved Solids | 4360 | 4340 | mg/L | 0.5 | 5 | |

| QCBatchID: QC1143228 | Analyst: wyu | Method: EPA 300.0 |
|---|---|---|
| Matrix: Water | Analyzed: 01/20/2014 | Instrument: CHEM (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1143228MB1** | | | | | |
| Chloride | ND | mg/L | | 1 | |
| Nitrate, as NO3 | ND | mg/L | | 0.44 | |
| Nitrite, as NO2 | ND | mg/L | | 0.33 | |
| Sulfate | ND | mg/L | | 1 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | | LCS | LCSD | | %Rec | RPD | |
| **QC1143228LCS1** | | | | | | | | | | | |
| Chloride | 40 | | 38.6 | | mg/L | 97 | | | 90-110 | | |
| Nitrate, as NO3 | 20 | | 18.9 | | mg/L | 95 | | | 90-110 | | |
| Nitrite, as NO2 | 10 | | 10.5 | | mg/L | 105 | | | 90-110 | | |
| Sulfate | 40 | | 40.4 | | mg/L | 101 | | | 90-110 | | |

## Matrix Spike/Matrix Spike Duplicate Summary

| Analyte | Sample Amount | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MS | MSD | MS | MSD | | MS | MSD | | %Rec | RPD | |
| **QC1143228MS1, QC1143228MSD1** | | | | | | | | | | | | **Source: 334883-001** |
| Chloride | 12.9 | 200 | 200 | 191 | 190 | mg/L | 89 | 89 | 0.5 | 75-125 | 20 | |
| Nitrate, as NO3 | 1.27 | 100 | 100 | 91.3 | 88.8 | mg/L | 90 | 88 | 2.8 | 75-125 | 20 | |
| Nitrite, as NO2 | ND | 100 | 100 | 118 | 117 | mg/L | 118 | 117 | 0.9 | 75-125 | 20 | |
| Sulfate | 65.4 | 200 | 200 | 258 | 259 | mg/L | 96 | 97 | 0.4 | 75-125 | 20 | |

| QCBatchID: QC1143229 | Analyst: hanhkhong | Method: SM 5220-D |
|---|---|---|
| Matrix: Water | Analyzed: 01/20/2014 | Instrument: CHEM (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1143229MB1** | | | | | |
| Chemical Oxygen Demand (COD) | ND | mg/L | | 4 | |
| Soluble COD | ND | mg/L | | 4 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | | LCS | LCSD | | %Rec | RPD | |
| **QC1143229LCS1** | | | | | | | | | | | |
| Chemical Oxygen Demand (COD) | 100 | | 97.0 | | mg/L | 97 | | | 80-120 | | |

## Matrix Spike/Matrix Spike Duplicate Summary

| Analyte | Sample Amount | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MS | MSD | MS | MSD | | MS | MSD | | %Rec | RPD | |
| **QC1143229MS1, QC1143229MSD1** | | | | | | | | | | | | **Source: 334873-001** |
| Chemical Oxygen Demand (COD) | ND | 100 | 100 | 96.0 | 94.0 | mg/L | 96 | 94 | 2.1 | 75-125 | 20 | |

| | | | |
|---|---|---|---|
| **QCBatchID:** QC1143306 | **Analyst:** dung | **Method:** SM 2320-B | |
| **Matrix:** Water | **Analyzed:** 01/23/2014 | **Instrument:** CHEM (group) | |

## *Blank Summary*

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1143306MB1** | | | | | |
| Bicarbonate (HCO3) | ND | mg/L | | 5 | |
| Carbonate (CO3) | ND | mg/L | | 5 | |
| Hydroxide (OH) | ND | mg/L | | 5 | |
| Total Alkalinity (as CaCO3) | ND | mg/L | | 5 | |

## *Duplicate Summary*

| Analyte | Sample Amount | Duplicate Amount | Units | RPD | Limits RPD | Notes |
|---|---|---|---|---|---|---|
| **QC1143306DUP1** | | | | | | **Source: 334883-001** |
| Bicarbonate (HCO3) | 131 | 128.1 | mg/L | 2.2 | 20 | |
| Carbonate (CO3) | ND | ND | mg/L | 0.0 | 20 | |
| Hydroxide (OH) | ND | ND | mg/L | 0.0 | 20 | |
| Total Alkalinity (as CaCO3) | 108 | 105 | mg/L | 2.8 | 20 | |

# Notes and Definitions

| | |
|---|---|
| **B** | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| **C** | Laboratory Contamination. |
| **D** | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| **DF** | Dilution Factor |
| **DW** | Sample result is calculated on a dry weigh basis |
| **J** | Reported value is estimated |
| **L** | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| **M** | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| **MDL** | Method Detection Limit |
| **NC** | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| **ND** | Analyte was not detected or was less than the detection limit. |
| **P** | Sample was received without proper preservation according to EPA guidelines. |
| **Q1** | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| **Q2** | Analyte calibration was not verified and the result was estimated and reported with qualifier. |
| **Q3** | Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier. |
| **RDL** | Reporting Detection Limit |
| **S** | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| **T** | Sample was extracted/analyzed past the holding time. |
| **T2** | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |
| **TIC** | Tentatively Identified Compounds |

ASSOCIATED LABORATORIES
806 North Batavia – Orange, California 92868 – 714-771-6900 FAX 714-538-1209

# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: UNITED ROCK PRODUCTS Project: UNITED ROCK PRODUCTS-IRWINDALE
Date Received: 01/15/14 Sampler's Name: (Yes) No
Sample temperature: _____
Sample(s) received in cooler: (Yes) No (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ✓ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam
___ Paper ____None ___ Other_____
Cooler Temperature: 3°C

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| **Section 3** | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | ✓ | | |
| Were custody seals present? | | ✓ | |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | ✓ | | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ✓ | | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | ✓ | |
| Were the containers labeled with correct preservatives? | ✓ | | |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | ✓ |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments

**Section 5**
Was Project Manager notified of discrepancies: Y / N N/A
Project Manager's response: _____

Completed By: _____ Date: 01/15/14

# CHAIN OF CUSTODY RECORD

**Chambers Environmental Services**
4510 Mt. Henry Ave, San Diego, CA 92117
858.279.3266

334883

**Client Name/Consultant:** United Rock Products
**Address:** 1355 S. STATE COLLEGE BLVD, STE. 400
**City/State/Zip:** BREA, CA 92821
**Project Manager:** Ken Barker
714-578-9600 **Fax No.:** 714-449-2294
**Sampler Name: (Print)** D. Chambers
**Sampler Signature:** D. Chambers

Lab: Associated Laboratories
**Report To:** SAME
**Invoice To:** SAME
**Project ID:** United Rock Products - IRWINDALE
**Project #:**

| Sample ID / Description | Date Sampled | Time Sampled | No. of Containers | Grab | Composite | Field Filtered | Matrix: Groundwater | Wastewater | Drinking Water | Sludge | Soil | Other (specify): | Analyze For: VOC's 8260 | 1-4 Dioxane | BTEX MTBE | Oxygenates | TPH Extended Range | Elec. Conductance | T.D. Cl, T. Cr, T.-pB, T. No2 | COD, TDS | Nitrate, Sulfate, Boron | PCE, TCE, MTBE, BTEX | Carbonate, Bi-Carbonate | TPH-Diesel | Chloride, pH | Multiple Dilutions | High Concentrations | Alk., Chloride, E.C., pH | 24H 48H 7-day rush | Standard TAT | Fax Results | Send QC with report |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PIT 3-1 | 1/15/14 | 8:40 | 10 | x | | N | x | | | | | | X | | | | X | x | x | x | x | | | x | x | | | x | | X | | |
| PIT 3-2 | ↓ | 9:05 | 10 | X | | N | X | | | | | | X | | | | X | X | X | X | X | | | X | X | | | X | | X | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

**Special Instructions:**
Call and confirm before analysis.

**Method of Shipment:** FEDEX, Courrier, Client drop

**Laboratory Comments:**
Temperature Upon Receipt: 3°C
VOCs Free of Headspace? Y (N)

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| D. Chambers | 1/15/14 | 11:59 | | 1/15/14 | 11:59 |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| | | | | | |

# Certificate of Analysis

**Report Date:** 02/05/14 13:23
**Received Date:** 01/29/14 14:50
**Turnaround Time:** 5 workdays

**Project:** 1205-42 United Rock Products Pit No. 3

**Phones:** (626) 967-6202
**Fax:** (626) 331-7065

**P.O. #:**

**Attn:** Tuan Nguyen

**Client:** Stetson Engineers, Inc. - Covina
861 Village Oaks Drive, Suite 100
Covina, CA 91724

Dear Tuan Nguyen :

Enclosed are the results of analyses for samples received 1/29/2014 with the Chain of Custody document. The samples were received in good condition, at 11.8 °C and on ice. All analysis met the method criteria except as noted below or in the report with data qualifiers.

**Lab Sample ID: 4A29050-01** **Sample ID: URP Pit No. 3 Dredge Site** **Matrix:** Water
**Sampled by: Tuan Nguyen** **Sampled: 01/29/14 10:40**

| Analyte | Result | MDL | MRL | Units | Dil | Method | Prepared | Analyzed | Batch | Qualifier |
|---|---|---|---|---|---|---|---|---|---|---|
| **Aluminum, Total** | **120** | | 5.0 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:40 | W4A1246 | |
| Antimony, Total | ND | | 0.50 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:40 | W4A1246 | |
| **Arsenic, Total** | **3.8** | | 0.40 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:29 | W4A1246 | |
| **Barium, Total** | **67** | | 0.50 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:40 | W4A1246 | |
| Beryllium, Total | ND | | 0.10 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:40 | W4A1246 | |
| Cadmium, Total | ND | | 0.10 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:40 | W4A1246 | |
| **Chromium, Total** | **0.34** | | 0.20 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:29 | W4A1246 | |
| **Copper, Total** | **1.4** | | 0.50 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:40 | W4A1246 | |
| Lead, Total | ND | | 0.20 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:40 | W4A1246 | |
| **Manganese, Total** | **5.1** | | 0.20 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:40 | W4A1246 | |
| **Nickel, Total** | **1.3** | | 0.80 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:40 | W4A1246 | |
| Selenium, Total | ND | | 0.40 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:29 | W4A1246 | |
| Silver, Total | ND | | 0.20 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:40 | W4A1246 | |
| Thallium, Total | ND | | 0.20 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:40 | W4A1246 | |
| Zinc, Total | ND | | 5.0 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:40 | W4A1246 | |
| Cyanide, Total | ND | | 5.0 | ug/l | 1 | EPA 335.4 | 2/3/14 | 2/3/14 15:02 | W4B0017 | |
| 1,1,1,2-Tetrachloroethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| 1,1,1-Trichloroethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| 1,1,2-Trichloroethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| 1,1-Dichloroethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| 1,1-Dichloroethene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| 1,1-Dichloropropene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| 1,2,3-Trichlorobenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| 1,2,3-Trichloropropane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| 1,2,4-Trichlorobenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| 1,2,4-Trimethylbenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |


Weck Laboratories, Inc 14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634
www.wecklabs.com

# Certificate of Analysis

**Lab Sample ID:** 4A29050-01 **Sample ID:** URP Pit No. 3 Dredge Site **Matrix:** Water
**Sampled by:** Tuan Nguyen **Sampled:** 01/29/14 10:40

| Analyte | Result | MDL | MRL | Units | Dil | Method | Prepared | Analyzed | Batch | Qualifier |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| 1,2-Dichloropropane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| 1,3,5-Trimethylbenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| 1,3-Dichloropropane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| 1,3-Dichloropropene, Total | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| 2,2-Dichloropropane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| 2-Butanone | ND | | 5.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| 2-Chloroethyl vinyl ether | ND | | 1.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| 2-Chlorotoluene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| 2-Hexanone | ND | | 5.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| 4-Chlorotoluene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| 4-Methyl-2-pentanone | ND | | 5.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Benzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Bromobenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Bromochloromethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Bromodichloromethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Bromoform | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Bromomethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Carbon tetrachloride | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Chlorobenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Chloroethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Chloroform | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Chloromethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| cis-1,2-Dichloroethene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| cis-1,3-Dichloropropene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Dibromochloromethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Dibromomethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Dichlorodifluoromethane (Freon 12) | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Di-isopropyl ether | ND | | 2.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Ethyl tert-butyl ether | ND | | 2.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Ethylbenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Freon 113 | ND | | 5.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Hexachlorobutadiene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Isopropylbenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| m,p-Xylene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| m-Dichlorobenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Methyl tert-butyl ether (MTBE) | ND | | 2.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Methylene chloride | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Naphthalene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| n-Butylbenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| n-Propylbenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| o-Dichlorobenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| o-Xylene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| p-Dichlorobenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| p-Isopropyltoluene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| sec-Butylbenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |


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# Certificate of Analysis

**Lab Sample ID:** 4A29050-01 **Sample ID:** URP Pit No. 3 Dredge Site **Matrix:** Water
**Sampled by:** Tuan Nguyen **Sampled:** 01/29/14 10:40

| Analyte | Result | MDL | MRL | Units | Dil | Method | Prepared | Analyzed | Batch | Qualifier |
|---|---|---|---|---|---|---|---|---|---|---|
| Styrene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Tentatively Identified Compounds | ND | | | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | TIC |
| Tert-amyl methyl ether | ND | | 2.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| tert-Butylbenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Tetrachloroethene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| THMs, Total | ND | | 2.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Toluene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| trans-1,2-Dichloroethene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| trans-1,3-Dichloropropene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Trichloroethene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Trichlorofluoromethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Vinyl chloride | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| Xylenes, Total | ND | | 1.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:59 | W4A1239 | |
| *Surrogate: 1,2-Dichlorobenzene-d4* | *85 %* | | *70-130* | % | | Concentration: *8.47* | | | | |
| *Surrogate: 4-Bromofluorobenzene* | *96 %* | | *70-130* | % | | Concentration: *9.65* | | | | |
| **1,4,8-Dodecatriene, (E,E,E)-** | **0.31** | | | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/4/14 9:57 | W4A1327 | TIC |
| Acenaphthene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Acenaphthylene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Acetochlor | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Alachlor | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Anthracene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Atrazine | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Benzo (a) anthracene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Benzo (a) pyrene | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Benzo (b) fluoranthene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Benzo (g,h,i) perylene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Benzo (k) fluoranthene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Bis(2-ethylhexyl)adipate | ND | | 5.0 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Bis(2-ethylhexyl)phthalate | ND | | 3.0 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Bromacil | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Butachlor | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Butyl benzyl phthalate | ND | | 2.0 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Captan | ND | | 1.0 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Chloropropham | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Chrysene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Cyanazine | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Diazinon | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Dibenzo (a,h) anthracene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Diethyl phthalate | ND | | 2.0 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Dimethoate | ND | | 0.20 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Dimethyl phthalate | ND | | 2.0 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Di-n-butyl phthalate | ND | | 2.0 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Di-n-octyl phthalate | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Diphenamid | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Disulfoton | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| EPTC | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |



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# Certificate of Analysis

**Lab Sample ID:** 4A29050-01 **Sample ID:** URP Pit No. 3 Dredge Site **Matrix:** Water
**Sampled by:** Tuan Nguyen **Sampled:** 01/29/14 10:40

| Analyte | Result | MDL | MRL | Units | Dil | Method | Prepared | Analyzed | Batch | Qualifier |
|---|---|---|---|---|---|---|---|---|---|---|
| Ethion | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Fluoranthene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Fluorene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| **heneicosane, 3-methyl-** | **0.35** | | | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/4/14 9:57 | W4A1327 | TIC |
| Indeno (1,2,3-cd) pyrene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Metolachlor | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Metribuzin | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Molinate | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Naphthalene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Pentachloronitrobenzene (PCNB) | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Phenanthrene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| **Phthalic acid, di(2-propylpentyl) ester** | **0.41** | | | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/4/14 9:57 | W4A1327 | TIC |
| Prometon | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Prometryn | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Pyrene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Simazine | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Terbacil | ND | | 2.0 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| **Tetracosane** | **0.49** | | | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/4/14 9:57 | W4A1327 | TIC |
| Thiobencarb | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| Trithion | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 16:56 | W4A1327 | |
| **unknown #1** | **0.46** | | | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/4/14 9:57 | W4A1327 | TIC |
| **Unknown #2 (possible column bleeding)** | **0.28** | | | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/4/14 9:57 | W4A1327 | TIC |
| **Unknown #3 ( possible column bleeding)** | **0.32** | | | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/4/14 9:57 | W4A1327 | TIC |
| **unknown #4** | **0.34** | | | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/4/14 9:57 | W4A1327 | TIC |
| *Surrogate: 1,3-Dimethyl-2-nitrobenzene* | *108 %* | | *73-138* | % | | Concentration: *5.41* | | | | |
| *Surrogate: Perylene-d12* | *120 %* | | *30-118* | % | | Concentration: *6.02* | | | | *S-11* |
| *Surrogate: Triphenyl phosphate* | *114 %* | | *70-149* | % | | Concentration: *5.71* | | | | |

**Lab Sample ID:** 4A29050-02 **Sample ID:** URP Pit No. 3 Pier **Matrix:** Water
**Sampled by:** Tuan Nguyen **Sampled:** 01/29/14 11:00

| Analyte | Result | MDL | MRL | Units | Dil | Method | Prepared | Analyzed | Batch | Qualifier |
|---|---|---|---|---|---|---|---|---|---|---|
| **Aluminum, Total** | **79** | | 5.0 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:43 | W4A1246 | |
| Antimony, Total | ND | | 0.50 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:43 | W4A1246 | |
| **Arsenic, Total** | **3.7** | | 0.40 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:32 | W4A1246 | |
| **Barium, Total** | **66** | | 0.50 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:43 | W4A1246 | |
| Beryllium, Total | ND | | 0.10 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:43 | W4A1246 | |
| Cadmium, Total | ND | | 0.10 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:43 | W4A1246 | |
| **Chromium, Total** | **0.32** | | 0.20 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:32 | W4A1246 | |
| **Copper, Total** | **1.2** | | 0.50 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:43 | W4A1246 | |
| Lead, Total | ND | | 0.20 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:43 | W4A1246 | |
| **Manganese, Total** | **3.9** | | 0.20 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:43 | W4A1246 | |
| **Nickel, Total** | **1.2** | | 0.80 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:43 | W4A1246 | |
| Selenium, Total | ND | | 0.40 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:32 | W4A1246 | |
| Silver, Total | ND | | 0.20 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:43 | W4A1246 | |
| Thallium, Total | ND | | 0.20 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:43 | W4A1246 | |


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# Certificate of Analysis

**Lab Sample ID:** 4A29050-02 **Sample ID:** URP Pit No. 3 Pier **Matrix:** Water
**Sampled by:** Tuan Nguyen **Sampled:** 01/29/14 11:00

| Analyte | Result | MDL | MRL | Units | Dil | Method | Prepared | Analyzed | Batch | Qualifier |
|---|---|---|---|---|---|---|---|---|---|---|
| Zinc, Total | ND | | 5.0 | ug/l | 1 | EPA 200.8 | 2/3/14 | 2/4/14 14:43 | W4A1246 | |
| Cyanide, Total | ND | | 5.0 | ug/l | 1 | EPA 335.4 | 2/3/14 | 2/3/14 15:07 | W4B0017 | |
| 1,1,1,2-Tetrachloroethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| 1,1,1-Trichloroethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| 1,1,2-Trichloroethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| 1,1-Dichloroethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| 1,1-Dichloroethene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| 1,1-Dichloropropene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| 1,2,3-Trichlorobenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| 1,2,3-Trichloropropane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| 1,2,4-Trichlorobenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| 1,2,4-Trimethylbenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| 1,2-Dichloroethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| 1,2-Dichloropropane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| 1,3,5-Trimethylbenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| 1,3-Dichloropropane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| 1,3-Dichloropropene, Total | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| 2,2-Dichloropropane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| 2-Butanone | ND | | 5.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| 2-Chloroethyl vinyl ether | ND | | 1.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| 2-Chlorotoluene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| 2-Hexanone | ND | | 5.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| 4-Chlorotoluene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| 4-Methyl-2-pentanone | ND | | 5.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Benzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Bromobenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Bromochloromethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Bromodichloromethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Bromoform | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Bromomethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Carbon tetrachloride | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Chlorobenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Chloroethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Chloroform | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Chloromethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| cis-1,2-Dichloroethene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| cis-1,3-Dichloropropene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Dibromochloromethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Dibromomethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Dichlorodifluoromethane (Freon 12) | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Di-isopropyl ether | ND | | 2.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Ethyl tert-butyl ether | ND | | 2.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Ethylbenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Freon 113 | ND | | 5.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Hexachlorobutadiene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |


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# Certificate of Analysis

**Lab Sample ID:** 4A29050-02 **Sample ID:** URP Pit No. 3 Pier **Matrix:** Water
**Sampled by:** Tuan Nguyen **Sampled:** 01/29/14 11:00

| Analyte | Result | MDL | MRL | Units | Dil | Method | Prepared | Analyzed | Batch | Qualifier |
|---|---|---|---|---|---|---|---|---|---|---|
| Isopropylbenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| m,p-Xylene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| m-Dichlorobenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Methyl tert-butyl ether (MTBE) | ND | | 2.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Methylene chloride | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Naphthalene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| n-Butylbenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| n-Propylbenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| o-Dichlorobenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| o-Xylene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| p-Dichlorobenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| p-Isopropyltoluene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| sec-Butylbenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Styrene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Tentatively Identified Compounds | ND | | | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | TIC |
| Tert-amyl methyl ether | ND | | 2.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| tert-Butylbenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Tetrachloroethene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| THMs, Total | ND | | 2.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Toluene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| trans-1,2-Dichloroethene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| trans-1,3-Dichloropropene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Trichloroethene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Trichlorofluoromethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Vinyl chloride | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| Xylenes, Total | ND | | 1.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 22:32 | W4A1239 | |
| *Surrogate: 1,2-Dichlorobenzene-d4* | *83 %* | | *70-130* | % | | Concentration: *8.31* | | | | |
| *Surrogate: 4-Bromofluorobenzene* | *94 %* | | *70-130* | % | | Concentration: *9.40* | | | | |
| Acenaphthene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Acenaphthylene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Acetochlor | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Alachlor | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Anthracene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Atrazine | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| **Benzenesulfonamide, N,4-dimethyl-** | **0.46** | | | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/4/14 9:57 | W4A1327 | TIC |
| Benzo (a) anthracene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Benzo (a) pyrene | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Benzo (b) fluoranthene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Benzo (g,h,i) perylene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Benzo (k) fluoranthene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Bis(2-ethylhexyl)adipate | ND | | 5.0 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Bis(2-ethylhexyl)phthalate | ND | | 3.0 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Bromacil | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Butachlor | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Butyl benzyl phthalate | ND | | 2.0 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Captan | ND | | 1.0 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |


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# Certificate of Analysis

**Lab Sample ID:** 4A29050-02 **Sample ID:** URP Pit No. 3 Pier **Matrix:** Water
**Sampled by:** Tuan Nguyen **Sampled:** 01/29/14 11:00

| Analyte | Result | MDL | MRL | Units | Dil | Method | Prepared | Analyzed | Batch | Qualifier |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloropropham | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Chrysene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Cyanazine | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Diazinon | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Dibenzo (a,h) anthracene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Diethyl phthalate | ND | | 2.0 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Dimethoate | ND | | 0.20 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Dimethyl phthalate | ND | | 2.0 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Di-n-butyl phthalate | ND | | 2.0 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Di-n-octyl phthalate | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Diphenamid | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Disulfoton | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| EPTC | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Ethion | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Fluoranthene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Fluorene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Indeno (1,2,3-cd) pyrene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Metolachlor | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Metribuzin | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Molinate | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Naphthalene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Pentachloronitrobenzene (PCNB) | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Phenanthrene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| **Phthalic acid, di(2-propylpentyl) ester** | **0.33** | | | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/4/14 9:57 | W4A1327 | TIC |
| Prometon | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Prometryn | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Pyrene | ND | | 0.50 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Simazine | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Terbacil | ND | | 2.0 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Thiobencarb | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| Trithion | ND | | 0.10 | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/3/14 17:22 | W4A1327 | |
| **unknown #1** | **0.44** | | | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/4/14 9:57 | W4A1327 | TIC |
| **Unknown #2 (possible column bleeding)** | **0.64** | | | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/4/14 9:57 | W4A1327 | TIC |
| **unknown #3** | **0.30** | | | ug/l | 1 | EPA 525.2 | 1/31/14 | 2/4/14 9:57 | W4A1327 | TIC |
| *Surrogate: 1,3-Dimethyl-2-nitrobenzene* | *111 %* | | *73-138* | % | | Concentration: *5.57* | | | | |
| *Surrogate: Perylene-d12* | *107 %* | | *30-118* | % | | Concentration: *5.34* | | | | |
| *Surrogate: Triphenyl phosphate* | *119 %* | | *70-149* | % | | Concentration: *5.93* | | | | |

**Lab Sample ID:** 4A29050-03 **Sample ID:** Travel Blank **Matrix:** Water
**Sampled by:** Tuan Nguyen **Sampled:** 01/29/14 00:00

| Analyte | Result | MDL | MRL | Units | Dil | Method | Prepared | Analyzed | Batch | Qualifier |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| 1,1,1-Trichloroethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| 1,1,2,2-Tetrachloroethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| 1,1,2-Trichloroethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |


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# Certificate of Analysis

**Lab Sample ID:** 4A29050-03 **Sample ID:** Travel Blank **Matrix:** Water
**Sampled by:** Tuan Nguyen **Sampled:** 01/29/14 00:00

| Analyte | Result | MDL | MRL | Units | Dil | Method | Prepared | Analyzed | Batch | Qualifier |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| 1,1-Dichloroethene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| 1,1-Dichloropropene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| 1,2,3-Trichlorobenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| 1,2,3-Trichloropropane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| 1,2,4-Trichlorobenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| 1,2,4-Trimethylbenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| 1,2-Dichloroethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| 1,2-Dichloropropane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| 1,3,5-Trimethylbenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| 1,3-Dichloropropane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| 1,3-Dichloropropene, Total | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| 2,2-Dichloropropane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| 2-Butanone | ND | | 5.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| 2-Chloroethyl vinyl ether | ND | | 1.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| 2-Chlorotoluene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| 2-Hexanone | ND | | 5.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| 4-Chlorotoluene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| 4-Methyl-2-pentanone | ND | | 5.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Benzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Bromobenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Bromochloromethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Bromodichloromethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Bromoform | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Bromomethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Carbon tetrachloride | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Chlorobenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Chloroethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Chloroform | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Chloromethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| cis-1,2-Dichloroethene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| cis-1,3-Dichloropropene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Dibromochloromethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Dibromomethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Dichlorodifluoromethane (Freon 12) | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Di-isopropyl ether | ND | | 2.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Ethyl tert-butyl ether | ND | | 2.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Ethylbenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Freon 113 | ND | | 5.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Hexachlorobutadiene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Isopropylbenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| m,p-Xylene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| m-Dichlorobenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Methyl tert-butyl ether (MTBE) | ND | | 2.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Methylene chloride | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Naphthalene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |


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# Certificate of Analysis

**Lab Sample ID:** 4A29050-03 **Sample ID:** Travel Blank **Matrix:** Water
**Sampled by:** Tuan Nguyen **Sampled:** 01/29/14 00:00

| Analyte | Result | MDL | MRL | Units | Dil | Method | Prepared | Analyzed | Batch | Qualifier |
|---|---|---|---|---|---|---|---|---|---|---|
| n-Butylbenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| n-Propylbenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| o-Dichlorobenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| o-Xylene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| p-Dichlorobenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| p-Isopropyltoluene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| sec-Butylbenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Styrene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Tentatively Identified Compounds | ND | | | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | TIC |
| Tert-amyl methyl ether | ND | | 2.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| tert-Butylbenzene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Tetrachloroethene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| THMs, Total | ND | | 2.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Toluene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| trans-1,2-Dichloroethene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| trans-1,3-Dichloropropene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Trichloroethene | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Trichlorofluoromethane | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Vinyl chloride | ND | | 0.50 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| Xylenes, Total | ND | | 1.0 | ug/l | 1 | EPA 524.2 | 1/30/14 | 1/30/14 21:26 | W4A1239 | |
| *Surrogate: 1,2-Dichlorobenzene-d4* | *82 %* | | *70-130* | % | | Concentration: *8.22* | | | | |
| *Surrogate: 4-Bromofluorobenzene* | *93 %* | | *70-130* | % | | Concentration: *9.33* | | | | |


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# Certificate of Analysis

## Quality Control Section

### Conventional Chemistry/Physical Parameters by APHA/EPA/ASTM Methods - Quality Control

**Batch W4B0017 - EPA 335.4**

**Blank (W4B0017-BLK1)** — **Prepared: 02/03/14 Analyzed: 02/03/14 15:01**

| Analyte | Sample Result | QC Result | Qualifier | Units | Spike Level | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | | ND | | ug/l | | | | | |

**LCS (W4B0017-BS1)** — **Prepared: 02/03/14 Analyzed: 02/03/14 15:06**

| Analyte | Sample Result | QC Result | Qualifier | Units | Spike Level | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | | 65.2 | | ug/l | 71.5 | 91 | 90-110 | | |

**Matrix Spike (W4B0017-MS1)** — **Source: 4A29050-01** — **Prepared: 02/03/14 Analyzed: 02/03/14 15:03**

| Analyte | Sample Result | QC Result | Qualifier | Units | Spike Level | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | ND | 59.3 | MS-01 | ug/l | 71.5 | 83 | 90-110 | | |

**Matrix Spike Dup (W4B0017-MSD1)** — **Source: 4A29050-01** — **Prepared: 02/03/14 Analyzed: 02/03/14 15:04**

| Analyte | Sample Result | QC Result | Qualifier | Units | Spike Level | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | ND | 59.4 | MS-01 | ug/l | 71.5 | 83 | 90-110 | 0.2 | 20 |

### Metals by EPA 200 Series Methods - Quality Control

**Batch W4A1246 - EPA 200.8**

**Blank (W4A1246-BLK1)** — **Prepared: 02/03/14 Analyzed: 02/04/14 14:10**

| Analyte | Sample Result | QC Result | Qualifier | Units | Spike Level | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum, Total | | ND | | ug/l | | | | | |
| Antimony, Total | | ND | | ug/l | | | | | |
| Arsenic, Total | | ND | | ug/l | | | | | |
| Barium, Total | | ND | | ug/l | | | | | |
| Beryllium, Total | | ND | | ug/l | | | | | |
| Cadmium, Total | | ND | | ug/l | | | | | |
| Chromium, Total | | ND | | ug/l | | | | | |
| Copper, Total | | ND | | ug/l | | | | | |
| Lead, Total | | ND | | ug/l | | | | | |
| Manganese, Total | | ND | | ug/l | | | | | |
| Nickel, Total | | ND | | ug/l | | | | | |
| Selenium, Total | | ND | | ug/l | | | | | |
| Silver, Total | | ND | B-07 | ug/l | | | | | |
| Thallium, Total | | ND | | ug/l | | | | | |
| Zinc, Total | | ND | | ug/l | | | | | |

**LCS (W4A1246-BS1)** — **Prepared: 02/03/14 Analyzed: 02/04/14 14:14**

| Analyte | Sample Result | QC Result | Qualifier | Units | Spike Level | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum, Total | | 52.5 | | ug/l | 50.0 | 105 | 85-115 | | |
| Antimony, Total | | 52.5 | | ug/l | 50.0 | 105 | 85-115 | | |
| Arsenic, Total | | 52.0 | | ug/l | 50.0 | 104 | 85-115 | | |
| Barium, Total | | 52.8 | | ug/l | 50.0 | 106 | 85-115 | | |
| Beryllium, Total | | 51.3 | | ug/l | 50.0 | 103 | 85-115 | | |


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## Metals by EPA 200 Series Methods - Quality Control

**Batch W4A1246 - EPA 200.8**

**LCS (W4A1246-BS1)** **Prepared: 02/03/14 Analyzed: 02/04/14 14:14**

| Analyte | Sample Result | QC Result | Qualifier | Units | Spike Level | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium, Total | | 51.8 | | ug/l | 50.0 | 104 | 85-115 | | |
| Chromium, Total | | 50.9 | | ug/l | 50.0 | 102 | 85-115 | | |
| Copper, Total | | 52.1 | | ug/l | 50.0 | 104 | 85-115 | | |
| Lead, Total | | 51.4 | | ug/l | 50.0 | 103 | 85-115 | | |
| Manganese, Total | | 50.2 | | ug/l | 50.0 | 100 | 85-115 | | |
| Nickel, Total | | 51.7 | | ug/l | 50.0 | 103 | 85-115 | | |
| Selenium, Total | | 52.7 | | ug/l | 50.0 | 105 | 85-115 | | |
| Silver, Total | | 54.3 | | ug/l | 50.0 | 109 | 85-115 | | |
| Thallium, Total | | 52.6 | | ug/l | 50.0 | 105 | 85-115 | | |
| Zinc, Total | | 53.2 | | ug/l | 50.0 | 106 | 85-115 | | |

**Matrix Spike (W4A1246-MS1)** **Source: 4A29050-02** **Prepared: 02/03/14 Analyzed: 02/04/14 14:18**

| Analyte | Sample Result | QC Result | Qualifier | Units | Spike Level | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum, Total | 79.2 | 154 | MS-01 | ug/l | 50.0 | 150 | 70-130 | | |
| Antimony, Total | 0.476 | 54.2 | | ug/l | 50.0 | 107 | 70-130 | | |
| Arsenic, Total | 3.72 | 56.5 | | ug/l | 50.0 | 105 | 70-130 | | |
| Barium, Total | 66.0 | 120 | | ug/l | 50.0 | 108 | 70-130 | | |
| Beryllium, Total | 0.0206 | 50.7 | | ug/l | 50.0 | 101 | 70-130 | | |
| Cadmium, Total | 0.0944 | 51.7 | | ug/l | 50.0 | 103 | 70-130 | | |
| Chromium, Total | 0.315 | 47.5 | | ug/l | 50.0 | 94 | 70-130 | | |
| Copper, Total | 1.20 | 51.5 | | ug/l | 50.0 | 101 | 70-130 | | |
| Lead, Total | 0.127 | 53.4 | | ug/l | 50.0 | 107 | 70-130 | | |
| Manganese, Total | 3.91 | 51.0 | | ug/l | 50.0 | 94 | 70-130 | | |
| Nickel, Total | 1.21 | 52.5 | | ug/l | 50.0 | 102 | 70-130 | | |
| Selenium, Total | 0.186 | 51.7 | | ug/l | 50.0 | 103 | 70-130 | | |
| Silver, Total | 0.0792 | 52.8 | | ug/l | 50.0 | 105 | 70-130 | | |
| Thallium, Total | ND | 55.4 | | ug/l | 50.0 | 111 | 70-130 | | |
| Zinc, Total | 3.46 | 52.8 | | ug/l | 50.0 | 99 | 70-130 | | |

**Matrix Spike Dup (W4A1246-MSD1)** **Source: 4A29050-02** **Prepared: 02/03/14 Analyzed: 02/04/14 14:21**

| Analyte | Sample Result | QC Result | Qualifier | Units | Spike Level | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum, Total | 79.2 | 156 | MS-01 | ug/l | 50.0 | 154 | 70-130 | 1 | 30 |
| Antimony, Total | 0.476 | 53.8 | | ug/l | 50.0 | 107 | 70-130 | 0.6 | 30 |
| Arsenic, Total | 3.72 | 57.0 | | ug/l | 50.0 | 106 | 70-130 | 0.9 | 30 |
| Barium, Total | 66.0 | 118 | | ug/l | 50.0 | 104 | 70-130 | 1 | 30 |
| Beryllium, Total | 0.0206 | 50.4 | | ug/l | 50.0 | 101 | 70-130 | 0.6 | 30 |
| Cadmium, Total | 0.0944 | 51.4 | | ug/l | 50.0 | 103 | 70-130 | 0.5 | 30 |
| Chromium, Total | 0.315 | 47.1 | | ug/l | 50.0 | 94 | 70-130 | 0.8 | 30 |
| Copper, Total | 1.20 | 52.2 | | ug/l | 50.0 | 102 | 70-130 | 1 | 30 |
| Lead, Total | 0.127 | 54.0 | | ug/l | 50.0 | 108 | 70-130 | 1 | 30 |
| Manganese, Total | 3.91 | 50.2 | | ug/l | 50.0 | 92 | 70-130 | 2 | 30 |
| Nickel, Total | 1.21 | 52.8 | | ug/l | 50.0 | 103 | 70-130 | 0.7 | 30 |
| Selenium, Total | 0.186 | 52.1 | | ug/l | 50.0 | 104 | 70-130 | 0.6 | 30 |
| Silver, Total | 0.0792 | 52.2 | | ug/l | 50.0 | 104 | 70-130 | 1 | 30 |


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# Certificate of Analysis

## Metals by EPA 200 Series Methods - Quality Control

**Batch W4A1246 - EPA 200.8**

**Matrix Spike Dup (W4A1246-MSD1)** **Source: 4A29050-02** **Prepared: 02/03/14 Analyzed: 02/04/14 14:21**

| Analyte | Sample Result | QC Result | Qualifier | Units | Spike Level | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Thallium, Total | ND | 55.6 | | ug/l | 50.0 | 111 | 70-130 | 0.5 | 30 |
| Zinc, Total | 3.46 | 53.3 | | ug/l | 50.0 | 100 | 70-130 | 0.8 | 30 |

## Semivolatile Organic Compounds by GC/MS - Quality Control

**Batch W4A1327 - EPA 525.2**

**Blank (W4A1327-BLK1)** **Prepared: 01/31/14 Analyzed: 02/03/14 15:41**

| Analyte | Sample Result | QC Result | Qualifier | Units | Spike Level | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| *Surrogate: 1,3-Dimethyl-2-nitrobenzene* | | *5.15* | | ug/l | *5.00* | *103* | *73-138* | | |
| *Surrogate: Perylene-d12* | | *2.25* | | ug/l | *5.00* | *45* | *30-118* | | |
| *Surrogate: Triphenyl phosphate* | | *3.55* | | ug/l | *5.00* | *71* | *70-149* | | |
| Tentatively Identified Compounds | | ND | TIC | ug/l | | | | | |
| Acenaphthene | | ND | | ug/l | | | | | |
| Acenaphthylene | | ND | | ug/l | | | | | |
| Acetochlor | | ND | | ug/l | | | | | |
| Alachlor | | ND | | ug/l | | | | | |
| Anthracene | | ND | | ug/l | | | | | |
| Atrazine | | ND | | ug/l | | | | | |
| Benzo (a) anthracene | | ND | | ug/l | | | | | |
| Benzo (a) pyrene | | ND | | ug/l | | | | | |
| Benzo (b) fluoranthene | | ND | | ug/l | | | | | |
| Benzo (g,h,i) perylene | | ND | | ug/l | | | | | |
| Benzo (k) fluoranthene | | ND | | ug/l | | | | | |
| Bis(2-ethylhexyl)adipate | | ND | | ug/l | | | | | |
| Bis(2-ethylhexyl)phthalate | | ND | | ug/l | | | | | |
| Bromacil | | ND | | ug/l | | | | | |
| Butachlor | | ND | | ug/l | | | | | |
| Butyl benzyl phthalate | | ND | | ug/l | | | | | |
| Captan | | ND | | ug/l | | | | | |
| Chloropropham | | ND | | ug/l | | | | | |
| Chrysene | | ND | | ug/l | | | | | |
| Cyanazine | | ND | | ug/l | | | | | |
| Diazinon | | ND | | ug/l | | | | | |
| Dibenzo (a,h) anthracene | | ND | | ug/l | | | | | |
| Diethyl phthalate | | ND | | ug/l | | | | | |
| Dimethoate | | ND | | ug/l | | | | | |
| Dimethyl phthalate | | ND | | ug/l | | | | | |
| Di-n-butyl phthalate | | ND | | ug/l | | | | | |
| Di-n-octyl phthalate | | ND | | ug/l | | | | | |
| Diphenamid | | ND | | ug/l | | | | | |
| Disulfoton | | ND | | ug/l | | | | | |
| EPTC | | ND | | ug/l | | | | | |
| Ethion | | ND | | ug/l | | | | | |
| Fluoranthene | | ND | | ug/l | | | | | |


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# Certificate of Analysis

## Semivolatile Organic Compounds by GC/MS - Quality Control

**Batch W4A1327 - EPA 525.2**

**Blank (W4A1327-BLK1)** **Prepared: 01/31/14 Analyzed: 02/03/14 15:41**

| Analyte | Sample Result | QC Result | Qualifier | Units | Spike Level | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Fluorene | | ND | | ug/l | | | | | |
| Indeno (1,2,3-cd) pyrene | | ND | | ug/l | | | | | |
| Metolachlor | | ND | | ug/l | | | | | |
| Metribuzin | | ND | | ug/l | | | | | |
| Molinate | | ND | | ug/l | | | | | |
| Naphthalene | | ND | | ug/l | | | | | |
| Pentachloronitrobenzene (PCNB) | | ND | | ug/l | | | | | |
| Phenanthrene | | ND | | ug/l | | | | | |
| Prometon | | ND | | ug/l | | | | | |
| Prometryn | | ND | | ug/l | | | | | |
| Pyrene | | ND | | ug/l | | | | | |
| Simazine | | ND | | ug/l | | | | | |
| Terbacil | | ND | | ug/l | | | | | |
| Thiobencarb | | ND | | ug/l | | | | | |
| Trithion | | ND | | ug/l | | | | | |

**LCS (W4A1327-BS1)** **Prepared: 01/31/14 Analyzed: 02/03/14 16:06**

| Analyte | Sample Result | QC Result | Qualifier | Units | Spike Level | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| *Surrogate: 1,3-Dimethyl-2-nitrobenzene* | | *5.56* | | ug/l | *5.00* | *111* | *73-138* | | |
| *Surrogate: Perylene-d12* | | *6.26* | *S-11* | ug/l | *5.00* | *125* | *30-118* | | |
| *Surrogate: Triphenyl phosphate* | | *5.40* | | ug/l | *5.00* | *108* | *70-149* | | |
| Acenaphthene | | 4.60 | | ug/l | 5.00 | 92 | 81-113 | | |
| Acenaphthylene | | 4.21 | | ug/l | 5.00 | 84 | 63-122 | | |
| Acetochlor | | 4.50 | | ug/l | 5.00 | 90 | 55-126 | | |
| Alachlor | | 4.41 | | ug/l | 5.00 | 88 | 55-124 | | |
| Anthracene | | 4.10 | | ug/l | 5.00 | 82 | 41-111 | | |
| Atrazine | | 5.32 | | ug/l | 5.00 | 106 | 67-131 | | |
| Benzo (a) anthracene | | 4.50 | | ug/l | 5.00 | 90 | 24-132 | | |
| Benzo (a) pyrene | | 2.82 | | ug/l | 5.00 | 56 | 40-147 | | |
| Benzo (b) fluoranthene | | 3.89 | | ug/l | 5.00 | 78 | 51-143 | | |
| Benzo (g,h,i) perylene | | 2.28 | | ug/l | 5.00 | 46 | 24-191 | | |
| Benzo (k) fluoranthene | | 3.68 | | ug/l | 5.00 | 74 | 45-151 | | |
| Bis(2-ethylhexyl)adipate | | 5.91 | | ug/l | 5.00 | 118 | 71-158 | | |
| Bis(2-ethylhexyl)phthalate | | 5.66 | | ug/l | 5.00 | 113 | 68-154 | | |
| Bromacil | | 3.12 | | ug/l | 5.00 | 62 | 62-139 | | |
| Butachlor | | 4.67 | | ug/l | 5.00 | 93 | 61-127 | | |
| Butyl benzyl phthalate | | 5.87 | | ug/l | 5.00 | 117 | 65-147 | | |
| Captan | | 3.90 | | ug/l | 5.00 | 78 | 14-159 | | |
| Chloropropham | | 5.50 | | ug/l | 5.00 | 110 | 77-143 | | |
| Chrysene | | 4.35 | | ug/l | 5.00 | 87 | 72-124 | | |
| Cyanazine | | 5.06 | | ug/l | 5.00 | 101 | 61-129 | | |
| Diazinon | | 4.06 | | ug/l | 5.00 | 81 | 30-120 | | |
| Dibenzo (a,h) anthracene | | 2.01 | | ug/l | 5.00 | 40 | 33-188 | | |
| Diethyl phthalate | | 4.94 | | ug/l | 5.00 | 99 | 85-123 | | |



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# Certificate of Analysis

## Semivolatile Organic Compounds by GC/MS - Quality Control

**Batch W4A1327 - EPA 525.2**

**LCS (W4A1327-BS1)** **Prepared: 01/31/14 Analyzed: 02/03/14 16:06**

| Analyte | Sample Result | QC Result | Qualifier | Units | Spike Level | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Dimethoate | | 2.30 | | ug/l | 5.00 | 46 | 38-102 | | |
| Dimethyl phthalate | | 4.89 | | ug/l | 5.00 | 98 | 90-116 | | |
| Di-n-butyl phthalate | | 4.83 | | ug/l | 5.00 | 97 | 68-132 | | |
| Di-n-octyl phthalate | | 5.15 | | ug/l | 5.00 | 103 | 58-153 | | |
| Diphenamid | | 5.01 | | ug/l | 5.00 | 100 | 77-124 | | |
| Disulfoton | | 4.89 | | ug/l | 5.00 | 98 | 54-156 | | |
| EPTC | | 4.89 | | ug/l | 5.00 | 98 | 82-116 | | |
| Ethion | | 4.51 | | ug/l | 5.00 | 90 | 52-130 | | |
| Fluoranthene | | 4.72 | | ug/l | 5.00 | 94 | 59-128 | | |
| Fluorene | | 4.81 | | ug/l | 5.00 | 96 | 82-120 | | |
| Indeno (1,2,3-cd) pyrene | | 2.80 | | ug/l | 5.00 | 56 | 35-181 | | |
| Metolachlor | | 4.54 | | ug/l | 5.00 | 91 | 61-123 | | |
| Metribuzin | | 5.40 | | ug/l | 5.00 | 108 | 50-121 | | |
| Molinate | | 5.21 | | ug/l | 5.00 | 104 | 82-117 | | |
| Naphthalene | | 4.43 | | ug/l | 5.00 | 89 | 75-116 | | |
| Pentachloronitrobenzene (PCNB) | | 5.54 | | ug/l | 5.00 | 111 | 71-114 | | |
| Phenanthrene | | 4.72 | | ug/l | 5.00 | 94 | 73-121 | | |
| Prometon | | 3.54 | | ug/l | 5.00 | 71 | 17-101 | | |
| Prometryn | | 4.71 | | ug/l | 5.00 | 94 | 57-122 | | |
| Pyrene | | 4.53 | | ug/l | 5.00 | 91 | 46-126 | | |
| Simazine | | 4.61 | | ug/l | 5.00 | 92 | 53-116 | | |
| Terbacil | | 4.71 | | ug/l | 5.00 | 94 | 70-135 | | |
| Thiobencarb | | 4.19 | | ug/l | 5.00 | 84 | 56-125 | | |
| Trithion | | 4.71 | | ug/l | 5.00 | 94 | 60-124 | | |

**LCS Dup (W4A1327-BSD1)** **Prepared: 01/31/14 Analyzed: 02/03/14 16:31**

| Analyte | Sample Result | QC Result | Qualifier | Units | Spike Level | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| *Surrogate: 1,3-Dimethyl-2-nitrobenzene* | | *5.36* | | ug/l | *5.00* | *107* | *73-138* | | |
| *Surrogate: Perylene-d12* | | *6.22* | *S-11* | ug/l | *5.00* | *124* | *30-118* | | |
| *Surrogate: Triphenyl phosphate* | | *5.79* | | ug/l | *5.00* | *116* | *70-149* | | |
| Acenaphthene | | 4.91 | | ug/l | 5.00 | 98 | 81-113 | 7 | 30 |
| Acenaphthylene | | 4.43 | | ug/l | 5.00 | 89 | 63-122 | 5 | 30 |
| Acetochlor | | 4.08 | | ug/l | 5.00 | 82 | 55-126 | 10 | 30 |
| Alachlor | | 4.02 | | ug/l | 5.00 | 80 | 55-124 | 9 | 30 |
| Anthracene | | 4.19 | | ug/l | 5.00 | 84 | 41-111 | 2 | 30 |
| Atrazine | | 5.36 | | ug/l | 5.00 | 107 | 67-131 | 0.7 | 30 |
| Benzo (a) anthracene | | 5.01 | | ug/l | 5.00 | 100 | 24-132 | 11 | 30 |
| Benzo (a) pyrene | | 2.91 | | ug/l | 5.00 | 58 | 40-147 | 3 | 30 |
| Benzo (b) fluoranthene | | 4.18 | | ug/l | 5.00 | 84 | 51-143 | 7 | 30 |
| Benzo (g,h,i) perylene | | 2.35 | | ug/l | 5.00 | 47 | 24-191 | 3 | 30 |
| Benzo (k) fluoranthene | | 3.78 | | ug/l | 5.00 | 76 | 45-151 | 3 | 30 |
| Bis(2-ethylhexyl)adipate | | 6.74 | | ug/l | 5.00 | 135 | 71-158 | 13 | 30 |
| Bis(2-ethylhexyl)phthalate | | 6.50 | | ug/l | 5.00 | 130 | 68-154 | 14 | 30 |
| Bromacil | | 2.74 | BS-04 | ug/l | 5.00 | 55 | 62-139 | 13 | 30 |



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## Semivolatile Organic Compounds by GC/MS - Quality Control

**Batch W4A1327 - EPA 525.2**

**LCS Dup (W4A1327-BSD1)** **Prepared: 01/31/14 Analyzed: 02/03/14 16:31**

| Analyte | Sample Result | QC Result | Qualifier | Units | Spike Level | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Butachlor | | 4.71 | | ug/l | 5.00 | 94 | 61-127 | 0.9 | 30 |
| Butyl benzyl phthalate | | 6.67 | | ug/l | 5.00 | 133 | 65-147 | 13 | 30 |
| Captan | | 3.69 | | ug/l | 5.00 | 74 | 14-159 | 6 | 30 |
| Chloropropham | | 5.86 | | ug/l | 5.00 | 117 | 77-143 | 6 | 30 |
| Chrysene | | 4.44 | | ug/l | 5.00 | 89 | 72-124 | 2 | 30 |
| Cyanazine | | 4.77 | | ug/l | 5.00 | 95 | 61-129 | 6 | 30 |
| Diazinon | | 3.83 | | ug/l | 5.00 | 77 | 30-120 | 6 | 30 |
| Dibenzo (a,h) anthracene | | 2.12 | | ug/l | 5.00 | 42 | 33-188 | 5 | 30 |
| Diethyl phthalate | | 5.24 | | ug/l | 5.00 | 105 | 85-123 | 6 | 30 |
| Dimethoate | | 2.18 | | ug/l | 5.00 | 44 | 38-102 | 5 | 30 |
| Dimethyl phthalate | | 4.77 | | ug/l | 5.00 | 95 | 90-116 | 2 | 30 |
| Di-n-butyl phthalate | | 5.47 | | ug/l | 5.00 | 109 | 68-132 | 12 | 30 |
| Di-n-octyl phthalate | | 5.58 | | ug/l | 5.00 | 112 | 58-153 | 8 | 30 |
| Diphenamid | | 4.86 | | ug/l | 5.00 | 97 | 77-124 | 3 | 30 |
| Disulfoton | | 5.29 | | ug/l | 5.00 | 106 | 54-156 | 8 | 30 |
| EPTC | | 5.16 | | ug/l | 5.00 | 103 | 82-116 | 5 | 30 |
| Ethion | | 4.66 | | ug/l | 5.00 | 93 | 52-130 | 3 | 30 |
| Fluoranthene | | 5.11 | | ug/l | 5.00 | 102 | 59-128 | 8 | 30 |
| Fluorene | | 5.14 | | ug/l | 5.00 | 103 | 82-120 | 7 | 30 |
| Indeno (1,2,3-cd) pyrene | | 2.96 | | ug/l | 5.00 | 59 | 35-181 | 6 | 30 |
| Metolachlor | | 4.18 | | ug/l | 5.00 | 84 | 61-123 | 8 | 30 |
| Metribuzin | | 4.68 | | ug/l | 5.00 | 94 | 50-121 | 14 | 30 |
| Molinate | | 5.35 | | ug/l | 5.00 | 107 | 82-117 | 3 | 30 |
| Naphthalene | | 4.50 | | ug/l | 5.00 | 90 | 75-116 | 2 | 30 |
| Pentachloronitrobenzene (PCNB) | | 5.77 | BS-04 | ug/l | 5.00 | 115 | 71-114 | 4 | 30 |
| Phenanthrene | | 4.94 | | ug/l | 5.00 | 99 | 73-121 | 5 | 30 |
| Prometon | | 3.07 | | ug/l | 5.00 | 61 | 17-101 | 14 | 30 |
| Prometryn | | 4.32 | | ug/l | 5.00 | 86 | 57-122 | 9 | 30 |
| Pyrene | | 4.92 | | ug/l | 5.00 | 98 | 46-126 | 8 | 30 |
| Simazine | | 4.18 | | ug/l | 5.00 | 84 | 53-116 | 10 | 30 |
| Terbacil | | 4.33 | | ug/l | 5.00 | 87 | 70-135 | 8 | 30 |
| Thiobencarb | | 4.01 | | ug/l | 5.00 | 80 | 56-125 | 4 | 30 |
| Trithion | | 5.01 | | ug/l | 5.00 | 100 | 60-124 | 6 | 30 |

## Volatile Organic Compounds by EPA Method 524.2 - Quality Control

**Batch W4A1239 - EPA 524.2**

**Blank (W4A1239-BLK1)** **Prepared: 01/30/14 Analyzed: 01/30/14 20:53**

| Analyte | Sample Result | QC Result | Qualifier | Units | Spike Level | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| *Surrogate: 1,2-Dichlorobenzene-d4* | | *8.48* | | ug/l | *10.0* | *85* | *70-130* | | |
| *Surrogate: 4-Bromofluorobenzene* | | *9.67* | | ug/l | *10.0* | *97* | *70-130* | | |
| Tentatively Identified Compounds | | ND | TIC | ug/l | | | | | |
| Dichlorodifluoromethane (Freon 12) | | ND | | ug/l | | | | | |
| Chloromethane | | ND | | ug/l | | | | | |



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## Volatile Organic Compounds by EPA Method 524.2 - Quality Control

**Batch W4A1239 - EPA 524.2**

**Blank (W4A1239-BLK1)** **Prepared: 01/30/14 Analyzed: 01/30/14 20:53**

| Analyte | Sample Result | QC Result | Qualifier | Units | Spike Level | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Vinyl chloride | | ND | | ug/l | | | | | |
| Bromomethane | | ND | | ug/l | | | | | |
| Chloroethane | | ND | | ug/l | | | | | |
| Trichlorofluoromethane | | ND | | ug/l | | | | | |
| Freon 113 | | ND | | ug/l | | | | | |
| 1,1-Dichloroethene | | ND | | ug/l | | | | | |
| Methylene chloride | | ND | | ug/l | | | | | |
| trans-1,2-Dichloroethene | | ND | | ug/l | | | | | |
| Methyl tert-butyl ether (MTBE) | | ND | | ug/l | | | | | |
| 1,1-Dichloroethane | | ND | | ug/l | | | | | |
| Di-isopropyl ether | | ND | | ug/l | | | | | |
| Ethyl tert-butyl ether | | ND | | ug/l | | | | | |
| 2-Butanone | | ND | | ug/l | | | | | |
| 2,2-Dichloropropane | | ND | | ug/l | | | | | |
| cis-1,2-Dichloroethene | | ND | | ug/l | | | | | |
| Bromochloromethane | | ND | | ug/l | | | | | |
| Chloroform | | ND | | ug/l | | | | | |
| 1,1,1-Trichloroethane | | ND | | ug/l | | | | | |
| Carbon tetrachloride | | ND | | ug/l | | | | | |
| 1,1-Dichloropropene | | ND | | ug/l | | | | | |
| Benzene | | ND | | ug/l | | | | | |
| 1,2-Dichloroethane | | ND | | ug/l | | | | | |
| Tert-amyl methyl ether | | ND | | ug/l | | | | | |
| Trichloroethene | | ND | | ug/l | | | | | |
| 1,2-Dichloropropane | | ND | | ug/l | | | | | |
| Dibromomethane | | ND | | ug/l | | | | | |
| Bromodichloromethane | | ND | | ug/l | | | | | |
| cis-1,3-Dichloropropene | | ND | | ug/l | | | | | |
| 4-Methyl-2-pentanone | | ND | | ug/l | | | | | |
| 2-Chloroethyl vinyl ether | | ND | | ug/l | | | | | |
| Toluene | | ND | | ug/l | | | | | |
| trans-1,3-Dichloropropene | | ND | | ug/l | | | | | |
| 1,1,2-Trichloroethane | | ND | | ug/l | | | | | |
| Tetrachloroethene | | ND | | ug/l | | | | | |
| 1,3-Dichloropropane | | ND | | ug/l | | | | | |
| Dibromochloromethane | | ND | | ug/l | | | | | |
| 2-Hexanone | | ND | | ug/l | | | | | |
| Chlorobenzene | | ND | | ug/l | | | | | |
| 1,1,1,2-Tetrachloroethane | | ND | | ug/l | | | | | |
| Ethylbenzene | | ND | | ug/l | | | | | |
| m,p-Xylene | | ND | | ug/l | | | | | |
| o-Xylene | | ND | | ug/l | | | | | |
| Styrene | | ND | | ug/l | | | | | |
| Bromoform | | ND | | ug/l | | | | | |



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# Certificate of Analysis

## Volatile Organic Compounds by EPA Method 524.2 - Quality Control

**Batch W4A1239 - EPA 524.2**

**Blank (W4A1239-BLK1)** **Prepared: 01/30/14 Analyzed: 01/30/14 20:53**

| Analyte | Sample Result | QC Result | Qualifier | Units | Spike Level | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Isopropylbenzene | | ND | | ug/l | | | | | |
| Bromobenzene | | ND | | ug/l | | | | | |
| 1,1,2,2-Tetrachloroethane | | ND | | ug/l | | | | | |
| 1,2,3-Trichloropropane | | ND | | ug/l | | | | | |
| n-Propylbenzene | | ND | | ug/l | | | | | |
| 2-Chlorotoluene | | ND | | ug/l | | | | | |
| 4-Chlorotoluene | | ND | | ug/l | | | | | |
| 1,3,5-Trimethylbenzene | | ND | | ug/l | | | | | |
| tert-Butylbenzene | | ND | | ug/l | | | | | |
| 1,2,4-Trimethylbenzene | | ND | | ug/l | | | | | |
| sec-Butylbenzene | | ND | | ug/l | | | | | |
| m-Dichlorobenzene | | ND | | ug/l | | | | | |
| p-Isopropyltoluene | | ND | | ug/l | | | | | |
| p-Dichlorobenzene | | ND | | ug/l | | | | | |
| o-Dichlorobenzene | | ND | | ug/l | | | | | |
| n-Butylbenzene | | ND | | ug/l | | | | | |
| 1,2,4-Trichlorobenzene | | ND | | ug/l | | | | | |
| Hexachlorobutadiene | | ND | | ug/l | | | | | |
| Naphthalene | | ND | | ug/l | | | | | |
| 1,2,3-Trichlorobenzene | | ND | | ug/l | | | | | |
| Xylenes, Total | | ND | | ug/l | | | | | |
| 1,3-Dichloropropene, Total | | ND | | ug/l | | | | | |
| THMs, Total | | ND | | ug/l | | | | | |

**LCS (W4A1239-BS1)** **Prepared: 01/30/14 Analyzed: 01/30/14 18:40**

| Analyte | Sample Result | QC Result | Qualifier | Units | Spike Level | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| *Surrogate: 1,2-Dichlorobenzene-d4* | | *9.21* | | ug/l | *10.0* | *92* | *70-130* | | |
| *Surrogate: 4-Bromofluorobenzene* | | *9.82* | | ug/l | *10.0* | *98* | *70-130* | | |
| Dichlorodifluoromethane (Freon 12) | | 5.76 | | ug/l | 6.00 | 96 | 70-130 | | |
| Chloromethane | | 5.87 | | ug/l | 6.00 | 98 | 70-130 | | |
| Vinyl chloride | | 5.99 | | ug/l | 6.00 | 100 | 70-130 | | |
| Bromomethane | | 6.42 | | ug/l | 6.00 | 107 | 70-130 | | |
| Chloroethane | | 5.80 | | ug/l | 6.00 | 97 | 70-130 | | |
| Trichlorofluoromethane | | 5.91 | | ug/l | 6.00 | 98 | 70-130 | | |
| Freon 113 | | 6.30 | | ug/l | 6.00 | 105 | 70-130 | | |
| 1,1-Dichloroethene | | 5.68 | | ug/l | 6.00 | 95 | 70-130 | | |
| Methylene chloride | | 5.81 | | ug/l | 6.00 | 97 | 70-130 | | |
| trans-1,2-Dichloroethene | | 5.68 | | ug/l | 6.00 | 95 | 70-130 | | |
| Methyl tert-butyl ether (MTBE) | | 5.85 | | ug/l | 6.00 | 98 | 70-130 | | |
| 1,1-Dichloroethane | | 6.00 | | ug/l | 6.00 | 100 | 70-130 | | |
| Di-isopropyl ether | | 6.12 | | ug/l | 6.00 | 102 | 70-130 | | |
| Ethyl tert-butyl ether | | 5.75 | | ug/l | 6.00 | 96 | 70-130 | | |
| 2-Butanone | | 6.24 | | ug/l | 6.00 | 104 | 70-130 | | |
| 2,2-Dichloropropane | | 4.89 | | ug/l | 6.00 | 82 | 70-130 | | |


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# Certificate of Analysis

## Volatile Organic Compounds by EPA Method 524.2 - Quality Control

**Batch W4A1239 - EPA 524.2**

**LCS (W4A1239-BS1)** **Prepared: 01/30/14 Analyzed: 01/30/14 18:40**

| Analyte | Sample Result | QC Result | Qualifier | Units | Spike Level | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| cis-1,2-Dichloroethene | | 5.66 | | ug/l | 6.00 | 94 | 70-130 | | |
| Bromochloromethane | | 5.84 | | ug/l | 6.00 | 97 | 70-130 | | |
| Chloroform | | 5.95 | | ug/l | 6.00 | 99 | 70-130 | | |
| 1,1,1-Trichloroethane | | 5.96 | | ug/l | 6.00 | 99 | 70-130 | | |
| Carbon tetrachloride | | 5.85 | | ug/l | 6.00 | 98 | 70-130 | | |
| 1,1-Dichloropropene | | 6.52 | | ug/l | 6.00 | 109 | 70-130 | | |
| Benzene | | 5.65 | | ug/l | 6.00 | 94 | 70-130 | | |
| 1,2-Dichloroethane | | 5.91 | | ug/l | 6.00 | 98 | 70-130 | | |
| Tert-amyl methyl ether | | 6.12 | | ug/l | 6.00 | 102 | 70-130 | | |
| Trichloroethene | | 5.83 | | ug/l | 6.00 | 97 | 70-130 | | |
| 1,2-Dichloropropane | | 6.64 | | ug/l | 6.00 | 111 | 70-130 | | |
| Dibromomethane | | 6.54 | | ug/l | 6.00 | 109 | 70-130 | | |
| Bromodichloromethane | | 5.97 | | ug/l | 6.00 | 100 | 70-130 | | |
| cis-1,3-Dichloropropene | | 6.23 | | ug/l | 6.00 | 104 | 70-130 | | |
| 4-Methyl-2-pentanone | | 5.60 | | ug/l | 6.00 | 93 | 70-130 | | |
| 2-Chloroethyl vinyl ether | | 5.93 | | ug/l | 6.00 | 99 | 70-130 | | |
| Toluene | | 5.65 | | ug/l | 6.00 | 94 | 70-130 | | |
| trans-1,3-Dichloropropene | | 6.18 | | ug/l | 6.00 | 103 | 70-130 | | |
| 1,1,2-Trichloroethane | | 5.86 | | ug/l | 6.00 | 98 | 70-130 | | |
| Tetrachloroethene | | 5.87 | | ug/l | 6.00 | 98 | 70-130 | | |
| 1,3-Dichloropropane | | 6.59 | | ug/l | 6.00 | 110 | 70-130 | | |
| Dibromochloromethane | | 6.29 | | ug/l | 6.00 | 105 | 70-130 | | |
| 2-Hexanone | | 5.63 | | ug/l | 6.00 | 94 | 70-130 | | |
| Chlorobenzene | | 5.84 | | ug/l | 6.00 | 97 | 70-130 | | |
| 1,1,1,2-Tetrachloroethane | | 5.69 | | ug/l | 6.00 | 95 | 70-130 | | |
| Ethylbenzene | | 5.61 | | ug/l | 6.00 | 94 | 70-130 | | |
| m,p-Xylene | | 5.73 | | ug/l | 6.00 | 96 | 70-130 | | |
| o-Xylene | | 5.53 | | ug/l | 6.00 | 92 | 70-130 | | |
| Styrene | | 5.72 | | ug/l | 6.00 | 95 | 70-130 | | |
| Bromoform | | 6.52 | | ug/l | 6.00 | 109 | 70-130 | | |
| Isopropylbenzene | | 6.27 | | ug/l | 6.00 | 104 | 70-130 | | |
| Bromobenzene | | 5.80 | | ug/l | 6.00 | 97 | 70-130 | | |
| 1,1,2,2-Tetrachloroethane | | 6.06 | | ug/l | 6.00 | 101 | 70-130 | | |
| 1,2,3-Trichloropropane | | 6.58 | | ug/l | 6.00 | 110 | 70-130 | | |
| n-Propylbenzene | | 6.36 | | ug/l | 6.00 | 106 | 70-130 | | |
| 2-Chlorotoluene | | 5.98 | | ug/l | 6.00 | 100 | 70-130 | | |
| 4-Chlorotoluene | | 6.14 | | ug/l | 6.00 | 102 | 70-130 | | |
| 1,3,5-Trimethylbenzene | | 5.62 | | ug/l | 6.00 | 94 | 70-130 | | |
| tert-Butylbenzene | | 6.32 | | ug/l | 6.00 | 105 | 70-130 | | |
| 1,2,4-Trimethylbenzene | | 5.65 | | ug/l | 6.00 | 94 | 70-130 | | |
| sec-Butylbenzene | | 6.45 | | ug/l | 6.00 | 108 | 70-130 | | |
| m-Dichlorobenzene | | 5.87 | | ug/l | 6.00 | 98 | 70-130 | | |
| p-Isopropyltoluene | | 5.80 | | ug/l | 6.00 | 97 | 70-130 | | |
| p-Dichlorobenzene | | 5.88 | | ug/l | 6.00 | 98 | 70-130 | | |



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# Certificate of Analysis

## Volatile Organic Compounds by EPA Method 524.2 - Quality Control

**Batch W4A1239 - EPA 524.2**

**LCS (W4A1239-BS1)** **Prepared: 01/30/14 Analyzed: 01/30/14 18:40**

| Analyte | Sample Result | QC Result | Qualifier | Units | Spike Level | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| o-Dichlorobenzene | | 5.98 | | ug/l | 6.00 | 100 | 70-130 | | |
| n-Butylbenzene | | 5.63 | | ug/l | 6.00 | 94 | 70-130 | | |
| 1,2,4-Trichlorobenzene | | 5.76 | | ug/l | 6.00 | 96 | 70-130 | | |
| Hexachlorobutadiene | | 5.55 | | ug/l | 6.00 | 92 | 70-130 | | |
| Naphthalene | | 5.55 | | ug/l | 6.00 | 92 | 70-130 | | |
| 1,2,3-Trichlorobenzene | | 5.80 | | ug/l | 6.00 | 97 | 70-130 | | |
| Carbon Disulfide | | 5.87 | | ug/l | 6.00 | 98 | 70-130 | | |
| Acetone | | 5.52 | | ug/l | 6.00 | 92 | 70-130 | | |
| Acrylonitrile | | ND | | ug/l | | | 70-130 | | |

**LCS Dup (W4A1239-BSD1)** **Prepared: 01/30/14 Analyzed: 01/30/14 19:13**

| Analyte | Sample Result | QC Result | Qualifier | Units | Spike Level | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| *Surrogate: 1,2-Dichlorobenzene-d4* | | *9.47* | | ug/l | *10.0* | *95* | *70-130* | | |
| *Surrogate: 4-Bromofluorobenzene* | | *9.98* | | ug/l | *10.0* | *100* | *70-130* | | |
| Dichlorodifluoromethane (Freon 12) | | 5.75 | | ug/l | 6.00 | 96 | 70-130 | 0.2 | 30 |
| Chloromethane | | 5.62 | | ug/l | 6.00 | 94 | 70-130 | 4 | 30 |
| Vinyl chloride | | 6.04 | | ug/l | 6.00 | 101 | 70-130 | 0.8 | 30 |
| Bromomethane | | 6.31 | | ug/l | 6.00 | 105 | 70-130 | 2 | 30 |
| Chloroethane | | 5.81 | | ug/l | 6.00 | 97 | 70-130 | 0.2 | 30 |
| Trichlorofluoromethane | | 5.95 | | ug/l | 6.00 | 99 | 70-130 | 0.7 | 30 |
| Freon 113 | | 6.38 | | ug/l | 6.00 | 106 | 70-130 | 1 | 30 |
| 1,1-Dichloroethene | | 5.80 | | ug/l | 6.00 | 97 | 70-130 | 2 | 30 |
| Methylene chloride | | 5.87 | | ug/l | 6.00 | 98 | 70-130 | 1 | 30 |
| trans-1,2-Dichloroethene | | 5.76 | | ug/l | 6.00 | 96 | 70-130 | 1 | 30 |
| Methyl tert-butyl ether (MTBE) | | 6.27 | | ug/l | 6.00 | 104 | 70-130 | 7 | 30 |
| 1,1-Dichloroethane | | 6.11 | | ug/l | 6.00 | 102 | 70-130 | 2 | 30 |
| Di-isopropyl ether | | 6.38 | | ug/l | 6.00 | 106 | 70-130 | 4 | 30 |
| Ethyl tert-butyl ether | | 6.09 | | ug/l | 6.00 | 102 | 70-130 | 6 | 30 |
| 2-Butanone | | 6.58 | | ug/l | 6.00 | 110 | 70-130 | 5 | 30 |
| 2,2-Dichloropropane | | 4.86 | | ug/l | 6.00 | 81 | 70-130 | 0.6 | 30 |
| cis-1,2-Dichloroethene | | 5.71 | | ug/l | 6.00 | 95 | 70-130 | 0.9 | 30 |
| Bromochloromethane | | 6.30 | | ug/l | 6.00 | 105 | 70-130 | 8 | 30 |
| Chloroform | | 6.04 | | ug/l | 6.00 | 101 | 70-130 | 2 | 30 |
| 1,1,1-Trichloroethane | | 6.02 | | ug/l | 6.00 | 100 | 70-130 | 1 | 30 |
| Carbon tetrachloride | | 5.86 | | ug/l | 6.00 | 98 | 70-130 | 0.2 | 30 |
| 1,1-Dichloropropene | | 6.54 | | ug/l | 6.00 | 109 | 70-130 | 0.3 | 30 |
| Benzene | | 5.69 | | ug/l | 6.00 | 95 | 70-130 | 0.7 | 30 |
| 1,2-Dichloroethane | | 6.17 | | ug/l | 6.00 | 103 | 70-130 | 4 | 30 |
| Tert-amyl methyl ether | | 6.53 | | ug/l | 6.00 | 109 | 70-130 | 6 | 30 |
| Trichloroethene | | 5.89 | | ug/l | 6.00 | 98 | 70-130 | 1 | 30 |
| 1,2-Dichloropropane | | 6.88 | | ug/l | 6.00 | 115 | 70-130 | 4 | 30 |
| Dibromomethane | | 6.86 | | ug/l | 6.00 | 114 | 70-130 | 5 | 30 |
| Bromodichloromethane | | 6.31 | | ug/l | 6.00 | 105 | 70-130 | 6 | 30 |
| cis-1,3-Dichloropropene | | 6.53 | | ug/l | 6.00 | 109 | 70-130 | 5 | 30 |



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# Certificate of Analysis

## Volatile Organic Compounds by EPA Method 524.2 - Quality Control

**Batch W4A1239 - EPA 524.2**

**LCS Dup (W4A1239-BSD1)** **Prepared: 01/30/14 Analyzed: 01/30/14 19:13**

| Analyte | Sample Result | QC Result | Qualifier | Units | Spike Level | %REC | %REC Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| 4-Methyl-2-pentanone | | 6.27 | | ug/l | 6.00 | 104 | 70-130 | 11 | 30 |
| 2-Chloroethyl vinyl ether | | 6.32 | | ug/l | 6.00 | 105 | 70-130 | 6 | 30 |
| Toluene | | 5.69 | | ug/l | 6.00 | 95 | 70-130 | 0.7 | 30 |
| trans-1,3-Dichloropropene | | 6.49 | | ug/l | 6.00 | 108 | 70-130 | 5 | 30 |
| 1,1,2-Trichloroethane | | 6.26 | | ug/l | 6.00 | 104 | 70-130 | 7 | 30 |
| Tetrachloroethene | | 5.87 | | ug/l | 6.00 | 98 | 70-130 | 0 | 30 |
| 1,3-Dichloropropane | | 7.11 | | ug/l | 6.00 | 118 | 70-130 | 8 | 30 |
| Dibromochloromethane | | 6.85 | | ug/l | 6.00 | 114 | 70-130 | 9 | 30 |
| 2-Hexanone | | 6.94 | | ug/l | 6.00 | 116 | 70-130 | 21 | 30 |
| Chlorobenzene | | 5.94 | | ug/l | 6.00 | 99 | 70-130 | 2 | 30 |
| 1,1,1,2-Tetrachloroethane | | 5.88 | | ug/l | 6.00 | 98 | 70-130 | 3 | 30 |
| Ethylbenzene | | 5.60 | | ug/l | 6.00 | 93 | 70-130 | 0.2 | 30 |
| m,p-Xylene | | 5.72 | | ug/l | 6.00 | 95 | 70-130 | 0.2 | 30 |
| o-Xylene | | 5.57 | | ug/l | 6.00 | 93 | 70-130 | 0.7 | 30 |
| Styrene | | 5.86 | | ug/l | 6.00 | 98 | 70-130 | 2 | 30 |
| Bromoform | | 6.79 | | ug/l | 6.00 | 113 | 70-130 | 4 | 30 |
| Isopropylbenzene | | 6.26 | | ug/l | 6.00 | 104 | 70-130 | 0.2 | 30 |
| Bromobenzene | | 5.94 | | ug/l | 6.00 | 99 | 70-130 | 2 | 30 |
| 1,1,2,2-Tetrachloroethane | | 6.76 | | ug/l | 6.00 | 113 | 70-130 | 11 | 30 |
| 1,2,3-Trichloropropane | | 7.07 | | ug/l | 6.00 | 118 | 70-130 | 7 | 30 |
| n-Propylbenzene | | 6.28 | | ug/l | 6.00 | 105 | 70-130 | 1 | 30 |
| 2-Chlorotoluene | | 5.94 | | ug/l | 6.00 | 99 | 70-130 | 0.7 | 30 |
| 4-Chlorotoluene | | 6.07 | | ug/l | 6.00 | 101 | 70-130 | 1 | 30 |
| 1,3,5-Trimethylbenzene | | 5.58 | | ug/l | 6.00 | 93 | 70-130 | 0.7 | 30 |
| tert-Butylbenzene | | 6.26 | | ug/l | 6.00 | 104 | 70-130 | 1 | 30 |
| 1,2,4-Trimethylbenzene | | 5.63 | | ug/l | 6.00 | 94 | 70-130 | 0.4 | 30 |
| sec-Butylbenzene | | 6.40 | | ug/l | 6.00 | 107 | 70-130 | 0.8 | 30 |
| m-Dichlorobenzene | | 5.95 | | ug/l | 6.00 | 99 | 70-130 | 1 | 30 |
| p-Isopropyltoluene | | 5.79 | | ug/l | 6.00 | 96 | 70-130 | 0.2 | 30 |
| p-Dichlorobenzene | | 5.99 | | ug/l | 6.00 | 100 | 70-130 | 2 | 30 |
| o-Dichlorobenzene | | 6.20 | | ug/l | 6.00 | 103 | 70-130 | 4 | 30 |
| n-Butylbenzene | | 5.58 | | ug/l | 6.00 | 93 | 70-130 | 0.9 | 30 |
| 1,2,4-Trichlorobenzene | | 5.99 | | ug/l | 6.00 | 100 | 70-130 | 4 | 30 |
| Hexachlorobutadiene | | 5.56 | | ug/l | 6.00 | 93 | 70-130 | 0.2 | 30 |
| Naphthalene | | 6.10 | | ug/l | 6.00 | 102 | 70-130 | 9 | 30 |
| 1,2,3-Trichlorobenzene | | 6.17 | | ug/l | 6.00 | 103 | 70-130 | 6 | 30 |


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# Certificate of Analysis

**Notes:**
The Chain of Custody document is part of the analytical report.
Any remaining sample(s) for testing will be disposed of one month from the final report date unless other arrangements are made in advance.
All results are expressed on wet weight basis unless otherwise specified.

An Absence of Total Coliform meets the drinking water standards as established by the State of California Department of Health Services.
The Reporting Limit (RL) is referenced as laboratory's Practical Quantitation Limit (PQL).
For Potable water analysis, the Reporting Limit (RL) is referenced as Detection Limit for reporting purposes (DLRs) defined by EPA.

If sample collected by Weck Laboratories, sampled in accordance to lab SOP MIS002

**Authorized Signature**
Contact: Hai Van Nguyen
(Project Manager)

ELAP # 1132
LACSD # 10143
NELAC # 04229CA

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. Weck Laboratories certifies that the test results meet all requirements of NELAC unless noted in the Case Narrative. This analytical report must be reproduced in its entirety.*

**Flags for Data Qualifiers:**

| | |
|---|---|
| **B-07** | This analyte was found in the method blank at levels above the MDL but below the reporting limit. |
| **BS-04** | The recovery of this analyte in LCS or LCSD was outside control limit. Sample was accepted based on the remaining LCS, LCSD or LCS-LL. |
| **MS-01** | The spike recovery for this QC sample is outside of established control limits possibly due to sample matrix interference. |
| **S-11** | Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate. |
| **TIC** | Tentatively Identified Compound using mass spectrometry. The reported concentration is relative concentration based on the nearest internal standard. If the library search produces no matches at, or above 85%, the compound is reported as unknown. |
| ND | NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL). |
| Sub | Subcontracted analysis, original report enclosed. |
| DL | Method Detection Limit |
| RL | Method Reporting Limit |
| MDA | Minimum Detectable Activity |
| NR | Not Reportable |


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Los Angeles Regional Water Quality Control Board

# FACILITY INSPECTION REPORT

**CIWQS Inspection ID: 14882604**

**Facility Name:** United Rock Products Pit #3 (CI 5801)

**Inspector:** Douglas Cross, EG DAC December 30, 2013

**Reviewed by:** Wen Yang, Sr. EG December 30, 2013

**Summary:** Routine annual compliance inspection and follow-up after dredging equipment sank. No violations of WDRs were observed...

---

**Date and Time Of Inspection:** December 30, 2013, 10:00 AM – 11:00 AM, announced

**Weather:** Clear. No rain in the area in the previous week.

**Contact:** Tom Davis, Davis Consulting Services, Consultant for Unite Rock Products was present during the inspection.

**Purpose:** A routine inspection and response to a call to ensure compliance of waste discharge requirements (WDRs) for the operations of an inert landfill.

**Background:** The United Rock Products (URP) Pit No. 3 is a 110-acre aggregate mining pit at 1137 Meridian Street, Irwindale, California, that is permitted under waste discharge requirements (WDRs) Order No. 01-131, adopted by the Regional Board on September 19, 2001, to be operated concurrently as an inert landfill as part of land reclamation. The bottom of the pit is filled with groundwater that has been exposed by mining activities. Mined aggregate materials are transported to the URP Plant to the south of the pit via convey belts that add up to more than three miles in total. Inert materials that are permitted to be discharged at the site include mining wastes, such as native geological materials generated from aggregate mining activities, as well as uncontaminated soil, rock and gravel, broken concrete, bricks, glass and ceramics, broken asphalt paving fragments and shredded tires.

On December 26, 2013, Mr. Tom Davis contacted Regional Board staff that the double clam dredging unit, used for mining native materials below water, had sunk and could pose a threat to groundwater quality. The unit uses biodegradable hydraulic fluid and oils that are EPA approved. The dredging unit most likely sank on December 25, 2013. The inspection was conducted to observe possible effects from the submerged dredging unit and to ensure that the site is in compliance with the WDRs.

**Observations:** No oils or petroleum product were observed on the water surface or on land. The mining pit was actively mined for aggregate on dry native ground on the north side. Inert mining wastes (native geological materials composed of mainly silt) were being disposed of at the northeastern corner of the site. No wastes imported from outside was observed.

**Conclusion:** No violations of the WDRs were observed during the inspection.

**Attachments:** Photos taken during inspection.

**Photos 1 and 2.** United Rock Products Pit No. 3 as of December 30, 2013. Panoramic picture of the pit looking toward the southwestern corner, the west side, and the north western corner. The dredging unit has sunk in the lake of exposed groundwater near the end of the movable dock. Arrows point to the approximate location of the submerged dredging unit.



**Photo 3.** Submerged dredging unit located near the end of the movable dock. An absorbent boom has been placed around the location of the submerged dredge.

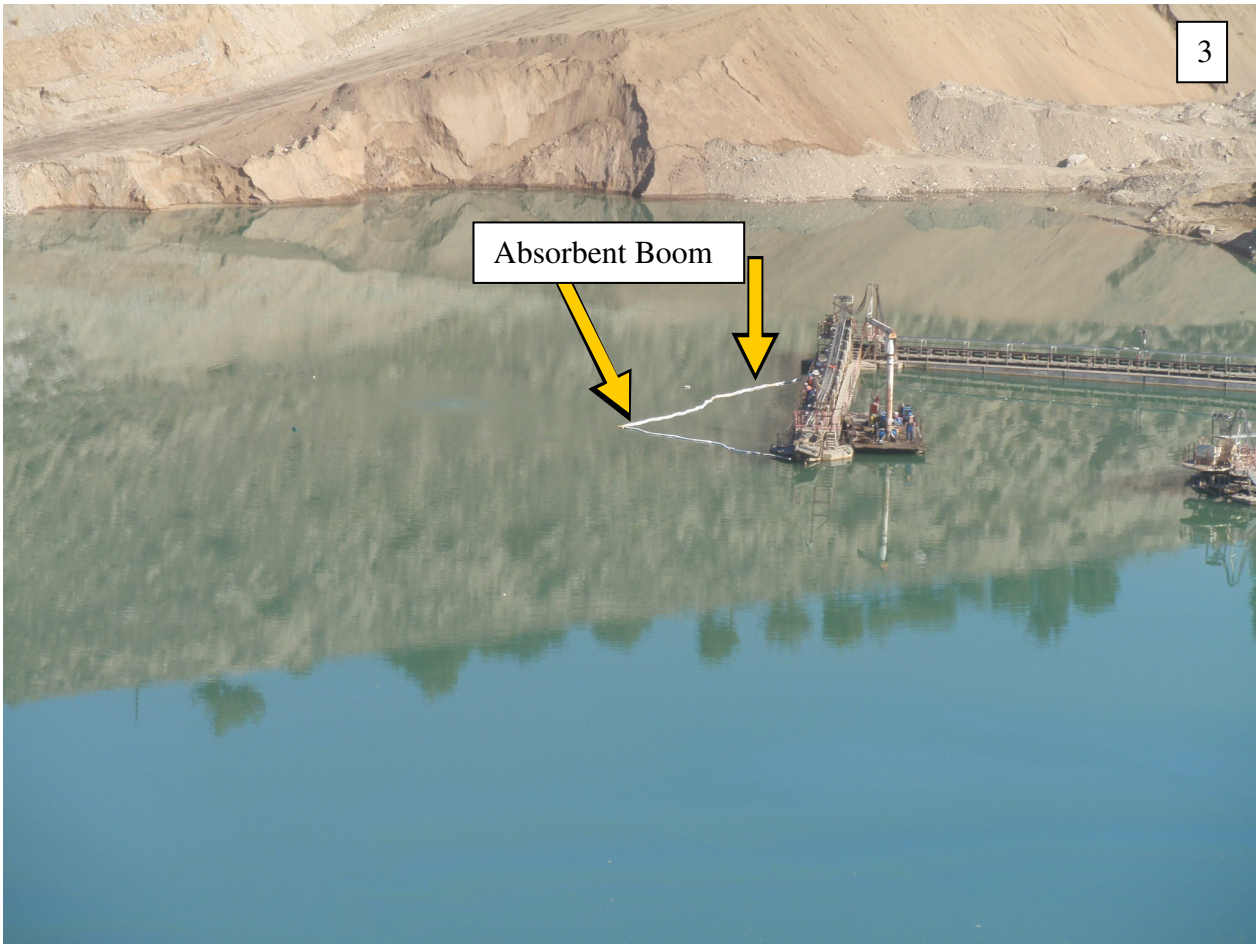

**Photo 4.** An excavator digs in the area of active mining. The unusually low groundwater conditions allow URP to excavate in areas that used to be underwater.

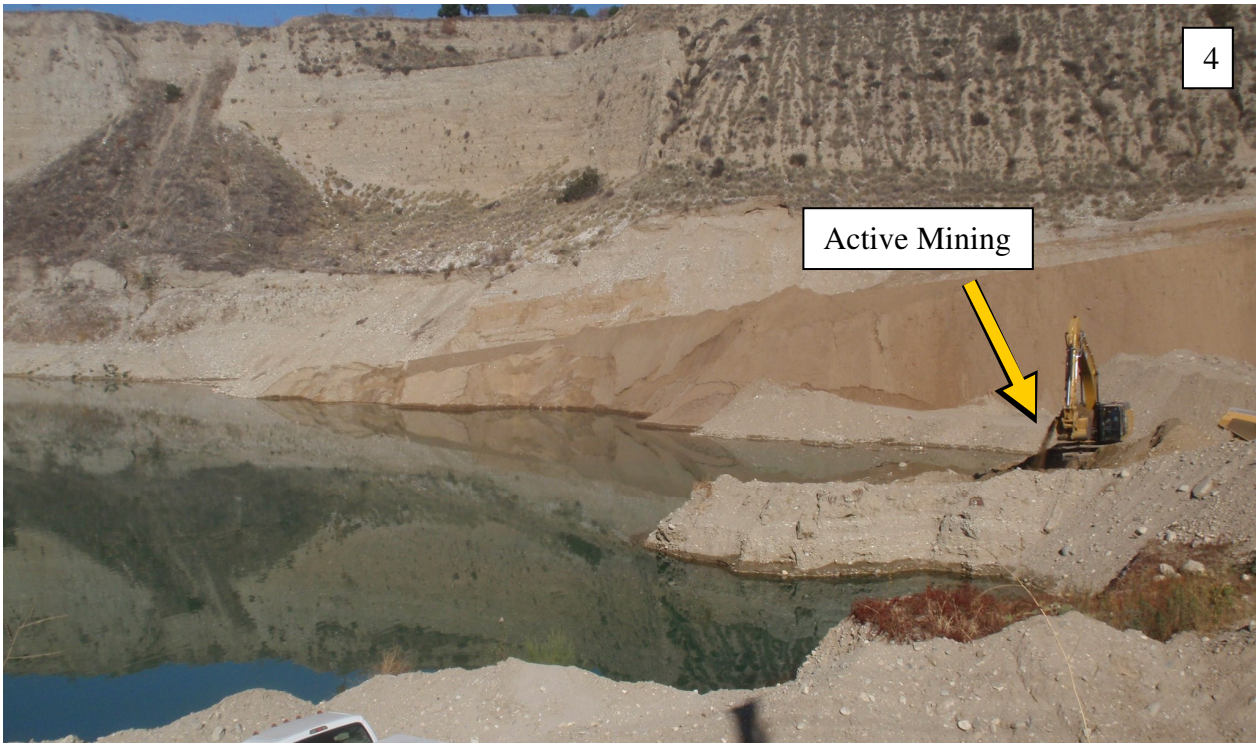


**Photo 5.** Looking toward the northwest corner where active mining and disposal is taking place.



# CHAIN OF CUSTODY RECORD

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Analytical Laboratory Services - Since 1964
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Tel 626-336-2139 ♦ Fax 626-336-2634 ♦ www.wecklabs.com

**STANDARD** HA29050



| CLIENT NAME: | PROJECT: 1205 - 42 TITLE 22 |
|---|---|
| **MAIN SAN GABRIEL BASIN WATERMASTER / STETSON** | UNITED ROCK PRODUCTS PIT NO. 3 |
| ADDRESS: | PHONE: (626) 967 - 6202 |
| STETSON ENGINEERS INC. | FAX: (626) 331 - 7065 |
| 861 VILLAGE OAKS DRIVE, SUITE 100 | EMAIL: tuann@stetsonengineers.com |
| COVINA, CA 91724 | |
| PROJECT MANAGER | SAMPLER |
| KEVIN SMEAD | TUAN NGUYEN |

**SPECIAL HANDLING**

- ☐ Same Day Rush 150%
- ☐ 24 Hour Rush 100%
- ☐ 48-72 Hour Rush 75%
- ☑ 4 - 5 Day Rush 30%
- ☐ Rush Extractions 50%
- ☐ 10 - 15 Business Days
- ☐ QA/QC Data Package

Charges will apply for weekends/holidays

Method of Shipment:

| ID# (For lab Use Only) | DATE SAMPLED | TIME SAMPLED | SMPL TYPE | SAMPLE IDENTIFICATION/SITE LOCATION | # OF CONT. | VOCs + TICs (EPA 524) | SOCs + TICs (EPA 525) | Title 22 INORGANICS (METALS) | CYANIDE | | | | | | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 01/29/14 | 10:40 | GW | URP PIT NO. 3 DREDGE SITE | 7 | X | X | X | X | | | | | | |
| | 01/29/14 | 11:00 | GW | URP PIT NO. 3 PIER | 7 | X | X | X | X | | | | | | |
| | | | | TRAVEL BLANK | 1 | X | | | | | | | | | |
| | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | |

| RELINQUISHED BY | DATE / TIME | RECEIVED BY |
|---|---|---|
| Tuan Nguyen | 01/29/14 @ 14:50 | 1/29/14 1450 |
| RELINQUISHED BY | DATE / TIME | RECEIVED BY |
| RELINQUISHED BY | DATE / TIME | RECEIVED BY |

**SAMPLE CONDITION:**

| | |
|---|---|
| Actual Temperature: | 11.8 |
| Received On Ice | (Y) / N |
| Preserved | (Y) / N |
| Evidence Seals Present | Y / (N) |
| Container Attacked | Y / (N) |
| Preserved at Lab | Y / (N) |

**SAMPLE TYPE CODE:**

AQ=Aqueous
NA= Non Aqueous
SL = Sludge
DW = Drinking Water
WW = Waste Water
RW = Rain Water
GW = Ground Water
SO = Soil
SW = Solid Waste
OL = Oil
OT = Other Matrix

PRESCHEDULED RUSH ANALYSES WILL TAKE PRIORITY OVER UNSCHEDULED RUSH REQUESTS

Client agrees to Terms & Conditions at: www.wecklabs.com

SPECIAL REQUIREMENTS / BILLING INFORMATION

**Associated Laboratories**
*806 N. Batavia - Orange, CA 92868*
*Tel (714)771-6900 Fax (714)538-1209*
*www.associatedlabs.com*
*Info@associatedlabs.com*

ACCREDITED IN ACCORDANCE WITH nelac 04232CA

Client: United Rock Products
Address: 135 S. State College Blvd.
Suite #400
Brea, CA 92821
Attn: Ken Barker

Lab Request: 336121
Report Date: 02/24/2014
Date Received: 02/10/2014
Client ID: 12535

Comments: Pit #3

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 336121-001 | #1 Pit 3 |
| 336121-002 | #2 Pit 3 |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

John Gozanna Jr

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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*TESTING & CONSULTING*
*Chemical*
*Microbiological*
*Environmental*

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 02/10/2014 11:45 **Site:**
**Sample #:** 336121-001 **Client Sample #:** #1 Pit 3 **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1143828 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 02/12/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 02/12/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 02/12/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *95* | *60-140* | |

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 02/10/2014 11:55 **Site:**
**Sample #:** 336121-002 **Client Sample #:** #2 Pit 3 **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1143828 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 02/12/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 02/12/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 02/12/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *90* | *60-140* | |

| QCBatchID: QC1143828 | Analyst: lytagas | Method: EPA 8015B |
|---|---|---|
| Matrix: Water | Analyzed: 02/12/2014 | Instrument: SVOA-GC (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1143828MB1** | | | | | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | |
| TPH Diesel | ND | mg/L | | 0.1 | |
| TPH Motor Oil | ND | mg/L | | 0.3 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | | LCS | LCSD | | %Rec | RPD | |
| **QC1143828LCS1, QC1143828LCSD1** | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 0.88 | 0.75 | mg/L | 88 | 75 | 16 | 57-122 | 30 | |

# Notes and Definitions

| | |
|---|---|
| B | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| C | Laboratory Contamination. |
| D | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| DF | Dilution Factor |
| DW | Sample result is calculated on a dry weigh basis |
| J | Reported value is estimated |
| L | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| M | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| MDL | Method Detection Limit |
| NC | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| ND | Analyte was not detected or was less than the detection limit. |
| P | Sample was received without proper preservation according to EPA guidelines. |
| Q1 | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| Q2 | Analyte calibration was not verified and the result was estimated and reported with qualifier. |
| Q3 | Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier. |
| RDL | Reporting Detection Limit |
| S | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| T | Sample was extracted/analyzed past the holding time. |
| T2 | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |
| TIC | Tentatively Identified Compounds |

ASSOCIATED LABORATORIES
806 North Batavia – Orange, California 92868 – 714-771-6900 FAX 714-538-1209

# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: United Rock Prod. Project: P,T#3
Date Received: 2-10-14
Sample temperature: 13.5C
Sampler's Name: ~~Yes~~ No
Sample(s) received in cooler: Yes (No) (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ____ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam
____ Paper ____None ___ Other_____
Cooler Temperature: _____

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| **Section 3** | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | ✓ | | |
| Were custody seals present? | | ✓ | |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | ✓ | | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ✓ | | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | | ✓ |
| Were the containers labeled with correct preservatives? | | | ✓ |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | ✓ |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments

**Section 5**
Was Project Manager notified of discrepancies: Y / N N/A
Project Manager's response: _____

Completed By: M. Elliott Date: 2/10/14

**ASSOCIATED LABORATORIES**
806 North Batavia ▪ Orange, CA 92868
Phone: (714) 771-6900 ▪ Fax: (714) 771-9933

# Chain of Custody Record

Lab Job No. 336121
Page _____ of _____

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: _____ 48 Hours: _____ 24 Hours: _____

| CUSTOMER INFORMATION | PROJECT INFORMATION |
|---|---|
| COMPANY: United Rock Products | PROJECT NAME: Pit #3 |
| SEND REPORT TO: Ken Barker | NUMBER: |
| EMAIL: Ken.Barker@Scally-Miller.com | ADDRESS: |
| ADDRESS: 135 S. State College Blvd. #400 | |
| Brea, CA 92821-5819 | P.O. #: |
| PHONE: 626-523-7319 FAX: | SAMPLED BY: Ken Barker |

| | Sample ID | Date | Time | Matrix | Container Number/Size | Pres. | ANALYSIS REQUEST 8015 - Full Carbon Range | Test Instructions & Comments |
|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 1 | | | |
| 2 | #1 Pit 3 | 2/10/14 | 11:45 | W | 1-1L | 1 | X | |
| 3 | #2 Pit 3 | 2/10/14 | 11:55 | W | 1-1L | 1 | X | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |

Total No. of Samples: 2 Method of Shipment: Drop off Preservative: (1) = Ice 2 = HCl 3 = $HNO_3$ 4 = $H_2SO_4$ 5 = NaOH 6 = Other

| Relinquished by 1. | Received By: 1. | Relinquished by 2. | Received By: 2. | Relinquished by 3. | Received By: 3. |
|---|---|---|---|---|---|
| Signature: Ken Barker | Signature: | Signature: | Signature: | Signature: | Signature: |
| Printed Name: Ken Barker | Printed Name: | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| Date: 2/10/14 Time: | Date: 2/10/14 Time: 1347 | Date: Time: | Date: Time: | Date: Time: | Date: Time: |

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

DCS DAVIS CONSULTING SERVICES

*P.O. Box 4183* *www.davisconsulting.co* *PH: 562-762-5131*

*Orange, CA 92863* *tdavis@davisconsulting.co* *Fax: 714-921-0392*

April 25, 2014

Regional Water Quality Control Board
Los Angeles Region
300 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Dr. Wen Yang

Subject: United Rock Products Pit #3 - Interim Incident Report

Dear Dr. Yang:

This letter serves as the second interim (First report dated February 13, 2014) report on the incident that took place on Wednesday, December 25, 2013. The incident involved the inadvertent and total submersion of a gravel dredge that had been floating at the United Rock Products (URP) Pit #3.

This interim report will be supplemented with additional interim reports, as necessary, and a final incident report will be filed once the dredge is again afloat.

Dredge Recovery

At this point in time the dredge has been fully recovered and all dredge components are ashore and under repair.

Ongoing Monitoring

A crew of at least two personnel is daily patrolling the open water within a small boat. Any debris that comes to the surface is collected and taken to the shore. These personnel are also responsible for placing and maintaining absorbent booms as a precautionary measure.

Water Quality Sampling and Testing

Since the last interim incident report, 20 additional water samples were taken on 10 days:

A. February 10, 2014: Two samples were taken
B. February 14, 2014: Two samples were taken
C. February 19, 2014: Two samples were taken
D. February 26, 2014: Two samples were taken
E. March 05, 2014: Two samples were taken
F. March 12, 2014: Two samples were taken
G. March 19, 2014: Two samples were taken
H. March 25, 2014: Two samples were taken
I. April 02, 2014: Two samples were taken
J. April 09, 2014: Two samples were taken

The laboratory analytical results are attached to this report.

If you have any questions, please call me at 562-762-5131.

Sincerely,



Tom Davis
President
Davis Consulting Services

CC: Ken Barker, United Rock Products

**Associated Laboratories**
*806 N. Batavia - Orange, CA 92868*
*Tel (714)771-6900 Fax (714)538-1209*
*www.associatedlabs.com*
*Info@associatedlabs.com*

ACCREDITED IN ACCORDANCE WITH nelac 04232CA

Client: United Rock Products
Address: 135 S. State College Blvd.
Suite #400
Brea, CA 92821
Attn: Ken Barker

Lab Request: 336121
Report Date: 02/24/2014
Date Received: 02/10/2014
Client ID: 12535

Comments: Pit #3

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 336121-001 | #1 Pit 3 |
| 336121-002 | #2 Pit 3 |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

John Gozanna Jr

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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*TESTING & CONSULTING*
*Chemical*
*Microbiological*
*Environmental*

Matrix: Water | Client: United Rock Products | Collector: Client
Sampled: 02/10/2014 11:45 | Site:
Sample #: 336121-001 | Client Sample #: #1 Pit 3 | Sample Type:

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Method: EPA 8015 NELAC | Prep Method: EPA 3535A | | | | | QCBatchID: | QC1143828 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 02/12/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 02/12/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 02/12/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *95* | *60-140* | |

Matrix: Water | Client: United Rock Products | Collector: Client
Sampled: 02/10/2014 11:55 | Site:
Sample #: 336121-002 | Client Sample #: #2 Pit 3 | Sample Type:

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Method: EPA 8015 NELAC | Prep Method: EPA 3535A | | | | | QCBatchID: | QC1143828 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 02/12/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 02/12/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 02/12/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *90* | *60-140* | |

| QCBatchID: QC1143828 | Analyst: lytagas | Method: EPA 8015B |
|---|---|---|
| Matrix: Water | Analyzed: 02/12/2014 | Instrument: SVOA-GC (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| QC1143828MB1 | | | | | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | |
| TPH Diesel | ND | mg/L | | 0.1 | |
| TPH Motor Oil | ND | mg/L | | 0.3 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | | LCS | LCSD | | %Rec | RPD | |
| QC1143828LCS1, QC1143828LCSD1 | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 0.88 | 0.75 | mg/L | 88 | 75 | 16 | 57-122 | 30 | |

## Notes and Definitions

| | |
|---|---|
| B | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| C | Laboratory Contamination. |
| D | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| DF | Dilution Factor |
| DW | Sample result is calculated on a dry weigh basis |
| J | Reported value is estimated |
| L | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| M | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| MDL | Method Detection Limit |
| NC | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| ND | Analyte was not detected or was less than the detection limit. |
| P | Sample was received without proper preservation according to EPA guidelines. |
| Q1 | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| Q2 | Analyte calibration was not verified and the result was estimated and reported with qualifier. |
| Q3 | Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier. |
| RDL | Reporting Detection Limit |
| S | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| T | Sample was extracted/analyzed past the holding time. |
| T2 | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |
| TIC | Tentatively Identified Compounds |

ASSOCIATED LABORATORIES
806 North Batavia – Orange, California 92868 – 714-771-6900 FAX 714-538-1209

# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: United Rock Prod. Project: P/T #3
Date Received: 2-10-14
Sample temperature: 13.5C
Sampler's Name: (Yes) No
Sample(s) received in cooler: Yes (No) (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ____ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam
____ Paper ____ None ___ Other _____
Cooler Temperature: _____

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| Section 3 | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | ✓ | | |
| Were custody seals present? | | ✓ | |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | ✓ | | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ✓ | | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | | ✓ |
| Were the containers labeled with correct preservatives? | | | ✓ |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | ✓ |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments

**Section 5**
Was Project Manager notified of discrepancies: Y / N N/A
Project Manager's response: _____

Completed By: M. Elbert Date: 2/10/14

**ASSOCIATED LABORATORIES**
806 North Batavia ▪ Orange, CA 92868
Phone: (714) 771-6900 ▪ Fax: (714) 771-9933

# Chain of Custody Record

Lab Job No. 336121
Page _____ of _____

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: _____ 48 Hours: _____ 24 Hours: _____

| CUSTOMER INFORMATION | PROJECT INFORMATION |
|---|---|
| COMPANY: United Rock Products | PROJECT NAME: Pit #3 |
| SEND REPORT TO: Ken Barker | NUMBER: |
| EMAIL: Ken.Barker@Sally-Miller.com | ADDRESS: |
| ADDRESS: 135 S. State College Blvd. #400 Brea, CA 92821-5819 | P.O. #: |
| PHONE: 626-523-7314 FAX: | SAMPLED BY: Ken Barker |

| | Sample ID | Date | Time | Matrix | Container Number/Size | Pres. | ANALYSIS REQUEST: 8015 - Full Carbon Range | Test Instructions & Comments |
|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 1 | | | |
| 2 | #1 Pit 3 | 2/10/14 | 11:45 | W | 1-1L | 1 | X | |
| 3 | #2 Pit 3 | 2/10/14 | 11:55 | W | 1-1L | 1 | X | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |

Total No. of Samples: 2 Method of Shipment: Drop off

Preservative: (1) = Ice 2 = HCl 3 = $HNO_3$ 4 = $H_2SO_4$ 5 = NaOH 6 = Other

| Relinquished by 1. | Received By: 1. | Relinquished by 2. | Received By: 2. | Relinquished by 3. | Received By: 3. |
|---|---|---|---|---|---|
| Signature: Ken Barker | Signature: | Signature: | Signature: | Signature: | Signature: |
| Printed Name: Ken Barker | Printed Name: | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| Date: 2/10/14 Time: | Date: 2/10/14 Time: 13:47 | Date: Time: | Date: Time: | Date: Time: | Date: Time: |

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

**Associated Laboratories**
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*Tel (714)771-6900 Fax (714)538-1209*
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*Info@associatedlabs.com*

ACCREDITED IN ACCORDANCE WITH nelac
04232CA

Client: United Rock Products
Address: 135 S. State College Blvd.
Suite #400
Brea, CA 92821
Attn: Ken Barker

Comments: Pit 3

Lab Request: 336414
Report Date: 02/24/2014
Date Received: 02/14/2014
Client ID: 12535

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 336414-001 | #1 Pit 3 |
| 336414-002 | #2 Pit 3 |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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*TESTING & CONSULTING*
*Chemical*
*Microbiological*
*Environmental*

Matrix: Water | Client: United Rock Products | Collector: Client
Sampled: 02/14/2014 12:10 | Site:
Sample #: 336414-001 | Client Sample #: #1 Pit 3 | Sample Type:

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Method: EPA 8015 NELAC | Prep Method: EPA 3535A | | | | | QCBatchID: | QC1144006 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 02/18/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 02/18/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 02/18/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *130* | *60-140* | |

Matrix: Water | Client: United Rock Products | Collector: Client
Sampled: 02/14/2014 12:20 | Site:
Sample #: 336414-002 | Client Sample #: #2 Pit 3 | Sample Type:

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Method: EPA 8015 NELAC | Prep Method: EPA 3535A | | | | | QCBatchID: | QC1144006 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 02/18/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 02/18/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 02/18/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *105* | *60-140* | |

| QCBatchID: QC1144006 | Analyst: lytagas | Method: EPA 8015B |
|---|---|---|
| Matrix: Water | Analyzed: 02/18/2014 | Instrument: SVOA-GC (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1144006MB1** | | | | | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | |
| TPH Diesel | ND | mg/L | | 0.1 | |
| TPH Motor Oil | ND | mg/L | | 0.3 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | | LCS | LCSD | | %Rec | RPD | |
| **QC1144006LCS1, QC1144006LCSD1** | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 0.70 | 0.88 | mg/L | 70 | 88 | 23 | 57-122 | 30 | |

## Notes and Definitions

| | |
|---|---|
| B | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| C | Laboratory Contamination. |
| D | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| DF | Dilution Factor |
| DW | Sample result is calculated on a dry weigh basis |
| J | Reported value is estimated |
| L | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| M | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| MDL | Method Detection Limit |
| NC | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| ND | Analyte was not detected or was less than the detection limit. |
| P | Sample was received without proper preservation according to EPA guidelines. |
| Q1 | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| Q2 | Analyte calibration was not verified and the result was estimated and reported with qualifier. |
| Q3 | Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier. |
| RDL | Reporting Detection Limit |
| S | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| T | Sample was extracted/analyzed past the holding time. |
| T2 | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |
| TIC | Tentatively Identified Compounds |

ASSOCIATED LABORATORIES
806 North Batavia – Orange, California 92868 – 714-771-6900 FAX 714-538-1209

# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: UNITED ROCK PROD. Project: PIT 3
Date Received: 2/19/19 Sampler's Name: (Yes) No
Sample temperature: 19°C
Sample(s) received in cooler: Yes (No) (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ____ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam
____ Paper ✓ None ___ Other _____
Cooler Temperature: _____

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| Section 3 | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | — | | |
| Were custody seals present? | | | — |
| If Yes – were they intact? | | | — |
| Were all samples sealed in plastic bags? | — | | |
| Did all samples arrive intact? If no, indicate below. | — | | |
| Did all bottle labels agree with COC? (ID, dates and times) | — | | |
| Were correct containers used for the tests required? | — | | |
| Was a sufficient amount of sample sent for tests indicated? | — | | |
| Was there headspace in VOA vials? | | | — |
| Were the containers labeled with correct preservatives? | | | — |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | — |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments

**Section 5**
Was Project Manager notified of discrepancies: Y / N N/A
Project Manager's response: _____

Completed By: _____ Date: 2/19/19.

**ASSOCIATED LABORATORIES**
806 North Batavia ▪ Orange, CA 92868
Phone: (714) 771-6900 ▪ Fax: (714) 771-9933

# Chain of Custody Record

Lab Job No. 336414
Page _____ of _____

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: _____ 48 Hours: _____ 24 Hours: _____

| CUSTOMER INFORMATION | | PROJECT INFORMATION | |
|---|---|---|---|
| COMPANY: United Rock Products | | PROJECT NAME: Pit 3 | |
| SEND REPORT TO: Ken Barker | | NUMBER: | |
| EMAIL: Ken.Barker@Scott-Miller.com | | ADDRESS: | |
| ADDRESS: 135 S. State College Blvd #400 Brea, CA 92821 | | P.O. #: | |
| PHONE: | FAX: | SAMPLED BY: Ken Barker | |

| | Sample ID | Date | Time | Matrix | Container Number/Size | Pres. | ANALYSIS REQUEST: 8015 Complete Carbon Range | Test Instructions & Comments |
|---|---|---|---|---|---|---|---|---|
| 1 | ~~#~~ 1 Pit 3 | 2/14/14 | 12:10 | W | 1 L | | X | |
| 2 | #2 Pit 3 | 2/14/14 | 12:20 | W | 1 L | | X | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |

Total No. of Samples: 2 Method of Shipment:

Preservative: (1) Ice 2 =HCl 3 =$HNO_3$ 4 =$H_2SO_4$ 5 =NaOH 6 =Other

| Relinquished by 1. | Received By: 1. | Relinquished by 2. | Received By: 2. | Relinquished by 3. | Received By: 3. |
|---|---|---|---|---|---|
| Ken Barker | | | | | |
| Signature: Ken Barker | Signature: | Signature: | Signature: | Signature: | Signature: |
| Printed Name: Ken Barker | Printed Name: BRIAN F | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| Date: 2/14/14 Time: 13:44 | Date: 2/14/14 Time: 13:45 | Date: Time: | Date: Time: | Date: Time: | Date: Time: |

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

**Associated Laboratories**
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*Tel (714)771-6900 Fax (714)538-1209*
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*Info@associatedlabs.com*

ACCREDITED IN ACCORDANCE WITH nelac
04232CA

Client: United Rock Products
Address: 135 S. State College Blvd.
Suite #400
Brea, CA 92821
Attn: Ken Barker

Comments: Pit 3

Lab Request: 336558
Report Date: 02/27/2014
Date Received: 02/19/2014
Client ID: 12535

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 336558-001 | #1 Pit 3 |
| 336558-002 | #2 Pit 3 |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

John Yozamma for

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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*TESTING & CONSULTING*
*Chemical*
*Microbiological*
*Environmental*

Matrix: Water | Client: United Rock Products | Collector: Client
Sampled: 02/19/2014 09:10 | Site:
Sample #: 336558-001 | Client Sample #: #1 Pit 3 | Sample Type:

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Method: EPA 8015 NELAC | Prep Method: EPA 3535A | | | | | QCBatchID: | QC1144137 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 02/21/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 02/21/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 02/21/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *75* | *60-140* | |

Matrix: Water | Client: United Rock Products | Collector: Client
Sampled: 02/19/2014 09:20 | Site:
Sample #: 336558-002 | Client Sample #: #2 Pit 3 | Sample Type:

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Method: EPA 8015 NELAC | Prep Method: EPA 3535A | | | | | QCBatchID: | QC1144137 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 02/21/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 02/21/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 02/21/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *95* | *60-140* | |

QCBatchID: QC1144137 Analyst: lytagas Method: EPA 8015B

Matrix: Water Analyzed: 02/21/2014 Instrument: SVOA-GC (group)

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1144137MB1** | | | | | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | |
| TPH Diesel | ND | mg/L | | 0.1 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | | LCS | LCSD | | %Rec | RPD | |
| **QC1144137LCS1, QC1144137LCSD1** | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 0.78 | 0.62 | mg/L | 78 | 62 | 23 | 57-122 | 30 | |

## Notes and Definitions

| | |
|---|---|
| B | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| C | Laboratory Contamination. |
| D | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| DF | Dilution Factor |
| DW | Sample result is calculated on a dry weigh basis |
| J | Reported value is estimated |
| L | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| M | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| MDL | Method Detection Limit |
| NC | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| ND | Analyte was not detected or was less than the detection limit. |
| P | Sample was received without proper preservation according to EPA guidelines. |
| Q1 | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| Q2 | Analyte calibration was not verified and the result was estimated and reported with qualifier. |
| Q3 | Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier. |
| RDL | Reporting Detection Limit |
| S | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| T | Sample was extracted/analyzed past the holding time. |
| T2 | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |
| TIC | Tentatively Identified Compounds |

*ASSOCIATED LABORATORIES*
*806 North Batavia – Orange, California 92868 – 714-771-6900* *FAX 714-538-1209*

## SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: United Rock Prod. Project: Pit 3
Date Received: 2-19-14 Sampler's Name: (Yes) No
Sample temperature: 15.5c
Sample(s) received in cooler: Yes (No) (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ____ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam
____ Paper ____ None ___ Other _____
Cooler Temperature: _____

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| Section 3 | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | ✓ | | |
| Were custody seals present? | | ✓ | |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | ✓ | | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ✓ | | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | | ✓ |
| Were the containers labeled with correct preservatives? | | | ✓ |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | ✓ |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments

**Section 5**
Was Project Manager notified of discrepancies: Y / N N/A
Project Manager's response: _____

Completed By: M. Ebert Date: 2/19/14

**ASSOCIATED LABORATORIES**
806 North Batavia ▪ Orange, CA 92868
Phone: (714) 771-6900 ▪ Fax: (714) 771-9933

# Chain of Custody Record

Lab Job No. 336558
Page _____ of _____

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: _____ 48 Hours: _____ 24 Hours: _____

| CUSTOMER INFORMATION | PROJECT INFORMATION |
|---|---|
| COMPANY: United Rock Products | PROJECT NAME: Pit 3 |
| SEND REPORT TO: Ken Barker | NUMBER: |
| EMAIL: Ken.Barker@SullyMiller.com | ADDRESS: |
| ADDRESS: 1355 State College Blvd Ste 200 | P.O. #: |
| Brea, CA 92821-5819 | SAMPLED BY: Ken Barker |
| PHONE: 626 523 1319 FAX: | |

| | Sample ID | Date | Time | Matrix | Container Number/Size | Pres. | ANALYSIS REQUEST: 8015 Full Carbon Range | Test Instructions & Comments |
|---|---|---|---|---|---|---|---|---|
| 1 | #1 Pit 3 | 2/19/14 | 9:10 | | 1 L | | X | |
| 2 | #2 Pit 3 | 2/19/14 | 9:20 | | 1 L | | X | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |

Total No. of Samples: 2 Method of Shipment: Drop OFF Preservative: (1) = Ice 2 = HCl 3 = $HNO_3$ 4 = $H_2SO_4$ 5 = NaOH 6 = Other

| Relinquished by 1. | Received By: 1. | Relinquished by 2. | Received By: 2. | Relinquished by 3. | Received By: 3. |
|---|---|---|---|---|---|
| Ken Barker | | | | | |
| Signature: Ken Barker | Signature: | Signature: | Signature: | Signature: | Signature: |
| Printed Name: Ken Barker | Printed Name: | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| Date: 2/19/14 Time: 11:53 | Date: 2/19/14 Time: 11:53 | Date: Time: | Date: Time: | Date: Time: | Date: Time: |

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

**Associated Laboratories**
*806 N. Batavia - Orange, CA 92868*
*Tel (714)771-6900 Fax (714)538-1209*
*www.associatedlabs.com*
*Info@associatedlabs.com*

ACCREDITED IN ACCORDANCE WITH nelac
04232CA

Client: United Rock Products
Address: 135 S. State College Blvd.
Suite #400
Brea, CA 92821
Attn: Ken Barker

Comments: Pit 3

Lab Request: 336907
Report Date: 03/11/2014
Date Received: 02/26/2014
Client ID: 12535

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 336907-001 | Pit 3 #1 Dredge |
| 336907-002 | Pit 3 #2 S.W. Shore |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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*TESTING & CONSULTING*
*Chemical*
*Microbiological*
*Environmental*

Matrix: Water | Client: United Rock Products | Collector: Client
Sampled: 02/26/2014 10:15 | Site:
Sample #: 336907-001 | Client Sample #: Pit 3 #1 Dredge | Sample Type:

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Method: EPA 8015 NELAC | Prep Method: EPA 3535A | | | | | QCBatchID: QC1144323 | |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 02/28/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 02/28/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 02/28/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *80* | *60-140* | |

Matrix: Water | Client: United Rock Products | Collector: Client
Sampled: 02/26/2014 10:25 | Site:
Sample #: 336907-002 | Client Sample #: Pit 3 #2 S.W. Shore | Sample Type:

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Method: EPA 8015 NELAC | Prep Method: EPA 3535A | | | | | QCBatchID: QC1144323 | |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 02/28/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 02/28/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 02/28/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *125* | *60-140* | |

| QCBatchID: QC1144323 | Analyst: lytagas | Method: EPA 8015B |
|---|---|---|
| Matrix: Water | Analyzed: 02/28/2014 | Instrument: SVOA-GC (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1144323MB1** | | | | | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | |
| TPH (C13 to C22) | ND | mg/L | | 0.2 | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | |
| TPH (C23 to C40) | ND | mg/L | | 0.3 | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | |
| TPH (C6 to C12) | ND | mg/L | | 0.2 | |
| TPH Diesel | ND | mg/L | | 0.1 | |
| TPH Motor Oil | ND | mg/L | | 0.3 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount LCS | Spike Amount LCSD | Spike Result LCS | Spike Result LCSD | Units | Recoveries LCS | Recoveries LCSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1144323LCS1, QC1144323LCSD1** | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 0.61 | 0.77 | mg/L | 61 | 77 | 23 | 57-122 | 30 | |

## Notes and Definitions

| | |
|---|---|
| B | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| C | Laboratory Contamination. |
| D | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| DF | Dilution Factor |
| DW | Sample result is calculated on a dry weigh basis |
| J | Reported value is estimated |
| L | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| M | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| MDL | Method Detection Limit |
| NC | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| ND | Analyte was not detected or was less than the detection limit. |
| P | Sample was received without proper preservation according to EPA guidelines. |
| Q1 | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| Q2 | Analyte calibration was not verified and the result was estimated and reported with qualifier. |
| Q3 | Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier. |
| RDL | Reporting Detection Limit |
| S | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| T | Sample was extracted/analyzed past the holding time. |
| T2 | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |
| TIC | Tentatively Identified Compounds |

ASSOCIATED LABORATORIES
806 North Batavia – Orange, California 92868 – 714-771-6900 FAX 714-538-1209

# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: United Rock Project: Pit 3
Date Received: 2-26-14 Sampler's Name: (Yes) No
Sample temperature: _____
Sample(s) received in cooler: (Yes) No (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ____ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam
____ Paper ____None ___ Other_____
Cooler Temperature:_____

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| **Section 3** | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | ✓ | | |
| Were custody seals present? | | ✓ | |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | | ✓ | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ✓ | | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | | ✓ |
| Were the containers labeled with correct preservatives? | | | ✓ |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | ✓ |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments

**Section 5**
Was Project Manager notified of discrepancies: Y / N N/A
Project Manager's response:_____

Completed By: M. Albert Date: 2/26/14

**ASSOCIATED LABORATORIES**
806 North Batavia ▪ Orange, CA 92868
Phone: (714) 771-6900 ▪ Fax: (714) 771-9933

# Chain of Custody Record

Lab Job No. 336907
Page _____ of _____

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: _____ 48 Hours: _____ 24 Hours: _____

| CUSTOMER INFORMATION | | PROJECT INFORMATION | |
|---|---|---|---|
| COMPANY | United Rock Products | PROJECT NAME: | Pit 3 |
| SEND REPORT TO: | Ken Barker | NUMBER: | |
| EMAIL: | Ken.Barker@sullymiller.com | ADDRESS: | |
| ADDRESS: | 135 S. State College Blvd #400 Brea, CA | P.O. #: | |
| PHONE: | 626 5231319 | SAMPLED BY: | |
| FAX: | | | |

ANALYSIS REQUEST: 4015 Full Carbon Range

| | Sample ID | Date | Time | Matrix | Container Number/Size | Pres. | | Test Instructions & Comments |
|---|---|---|---|---|---|---|---|---|
| 1 | Pit3 #1 Dredge | 2/26/14 | 10:15 | | 1 L | | X | |
| 2 | Pit3 #2 S.W. Shore | 2/26/14 | 10:25 | | 1 L | | X | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |

Total No. of Samples: 2 Method of Shipment: Drop off Preservative: (1) = Ice 2 = HCl 3 = $HNO_3$ 4 = $H_2SO_4$ 5 = NaOH 6 = Other

| Relinquished by 1. | Received By: 1. | Relinquished by 2. | Received By: 2. | Relinquished by 3. | Received By: 3. |
|---|---|---|---|---|---|
| Signature: Ken Barker | Signature: | Signature: | Signature: | Signature: | Signature: |
| Printed Name: Ken Barker | Printed Name: | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| Date: 2/26/14 Time: 11:42AM | Date: 2/26/14 Time: 11:42 | Date: Time: | Date: Time: | Date: Time: | Date: Time: |

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

**Associated Laboratories**
*806 N. Batavia - Orange, CA 92868*
*Tel (714)771-6900 Fax (714)538-1209*
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*Info@associatedlabs.com*

ACCREDITED IN ACCORDANCE WITH nelac
04232CA

Client: United Rock Products
Address: 135 S. State College Blvd.
Suite #400
Brea, CA 92821
Attn: Ken Barker

Lab Request: 337534
Report Date: 03/19/2014
Date Received: 03/05/2014
Client ID: 12535

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 337534-001 | #1 Predge |
| 337534-002 | #2 S.W. Shore |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

John Yozamma of

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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*TESTING & CONSULTING*
*Chemical*
*Microbiological*
*Environmental*

Matrix: Water | Client: United Rock Products | Collector: Client
Sampled: 03/05/2014 09:30 | Site:
Sample #: 337534-001 | Client Sample #: #1 Pledge | Sample Type:

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Method: EPA 8015 NELAC | Prep Method: EPA 3535A | | | | | QCBatchID: | QC1144720 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 03/12/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 03/12/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 03/12/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *65* | *60-140* | |

Matrix: Water | Client: United Rock Products | Collector: Client
Sampled: 03/05/2014 09:40 | Site:
Sample #: 337534-002 | Client Sample #: #2 S.W. Shore | Sample Type:

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Method: EPA 8015 NELAC | Prep Method: EPA 3535A | | | | | QCBatchID: | QC1144720 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 03/12/14 | lyt | |
| TPH (C10 to C22) | **0.24** | 1 | 0.2 | mg/L | 03/12/14 | lyt | |
| TPH (C22 to C36) | **0.56** | 1 | 0.3 | mg/L | 03/12/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *80* | *60-140* | |

| QCBatchID: QC1144720 | Analyst: lytagas | Method: EPA 8015B |
|---|---|---|
| Matrix: Water | Analyzed: 03/12/2014 | Instrument: SVOA-GC (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1144720MB1** | | | | | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | |
| TPH Diesel | ND | mg/L | | 0.1 | |
| TPH Motor Oil | ND | mg/L | | 0.3 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount LCS | Spike Amount LCSD | Spike Result LCS | Spike Result LCSD | Units | Recoveries LCS | Recoveries LCSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1144720LCS1, QC1144720LCSD1** | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 0.62 | 0.58 | mg/L | 62 | 58 | 7 | 57-122 | 30 | |

## Notes and Definitions

| | |
|---|---|
| B | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| BQ1 | No valid test replicates. Result may be greater. Best result was reported with qualifier. Sample toxicity possible. |
| BQ2 | No valid test replicates. |
| BQ3 | Minimum DO is less than 1.0 mg/L. Result may be greater and reported with qualifier. |
| C | Laboratory Contamination. |
| D | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| DF | Dilution Factor |
| DW | Sample result is calculated on a dry weigh basis |
| J | Reported value is estimated |
| L | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| M | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| MDL | Method Detection Limit |
| NC | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| ND | Analyte was not detected or was less than the detection limit. |
| P | Sample was received without proper preservation according to EPA guidelines. |
| Q1 | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| Q2 | Analyte calibration was not verified and the result was estimated and reported with qualifier. |
| Q3 | Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier. |
| RDL | Reporting Detection Limit |
| S | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| T | Sample was extracted/analyzed past the holding time. |
| T2 | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |
| TIC | Tentatively Identified Compounds |

ASSOCIATED LABORATORIES
806 North Batavia – Orange, California 92868 – 714-771-6900 FAX 714-538-1209

# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: United Rock Prod. Project: _____
Date Received: 3-5-14 Sampler's Name: ~~Yes~~ No
Sample temperature: _____
Sample(s) received in cooler: Yes No (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ____ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam
____ Paper ____None ___ Other_____
Cooler Temperature: _____

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| **Section 3** | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | ✓ | | |
| Were custody seals present? | | ✓ | |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | ✓ | | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ✓ | | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | | ✓ |
| Were the containers labeled with correct preservatives? | | | ✓ |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | ✓ |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments

**Section 5**
Was Project Manager notified of discrepancies: Y / N N/A
Project Manager's response: _____

Completed By: M. Ebert Date: 3/5/14

**ASSOCIATED LABORATORIES**
806 North Batavia ▪ Orange, CA 92868
Phone: (714) 771-6900 ▪ Fax: (714) 771-9933

# Chain of Custody Record

Lab Job No. 337534
Page 1 of 1

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: _____ 48 Hours: _____ 24 Hours: _____

| CUSTOMER INFORMATION | PROJECT INFORMATION |
|---|---|
| COMPANY United Rock Products | PROJECT NAME: |
| SEND REPORT TO: Ken Barker | NUMBER: |
| EMAIL: Ken.Barker@Sully-Miller.com | ADDRESS: |
| ADDRESS: 135 S. State College Blvd #400 Brea, CA 92821-5819 | P.O. #: |
| PHONE: 826 523 1319 FAX: | SAMPLED BY: Ken Barker |

| | Sample ID | Date | Time | Matrix | Container Number/Size | Pres. | ANALYSIS REQUEST 8015 ~~Carb~~ Full Carbon Range | | | | | | | | | | Test Instructions & Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | #1 Dredge | 3/5/2014 | 9:30 | W | 1 L | | X | | | | | | | | | | |
| 2 | #2 S.W. Shore | 3/5/2014 | 9:40 | W | 1 L | | X | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | |

Total No. of Samples: 2 Method of Shipment: Dropoff Preservative: 1 = Ice 2 = HCl 3 = $HNO_3$ 4 = $H_2SO_4$ 5 = NaOH 6 = Other

| Relinquished by 1. | Received By: 1. | Relinquished by 2. | Received By: 2. | Relinquished by 3. | Received By: 3. |
|---|---|---|---|---|---|
| Ken Barker | | | | | |
| Signature: Ken Barker | Signature: M. Erbert | Signature: | Signature: | Signature: | Signature: |
| Printed Name: Ken Barker | Printed Name: | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| Date: 3/5/14 Time: 11:36 | Date: 3/5/14 Time: 11:36 | Date: Time: | Date: Time: | Date: Time: | Date: Time: |

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

**Associated Laboratories**
*806 N. Batavia - Orange, CA 92868*
*Tel (714)771-6900 Fax (714)538-1209*
*www.associatedlabs.com*
*Info@associatedlabs.com*

ACCREDITED IN ACCORDANCE WITH nelac
04232CA

Client: United Rock Products
Address: 135 S. State College Blvd.
Suite #400
Brea, CA 92821
Attn: Ken Barker

Comments: Pit 3

Lab Request: 337872
Report Date: 03/25/2014
Date Received: 03/12/2014
Client ID: 12535

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 337872-001 | Dredge Sample 1 |
| 337872-002 | Shore S.W. Sample 2 |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

John Yoganna Jr

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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*TESTING & CONSULTING*
*Chemical*
*Microbiological*
*Environmental*

Matrix: Water | Client: United Rock Products | Collector: Client
Sampled: 03/12/2014 09:15 | Site:
Sample #: 337872-001 | Client Sample #: Dredge Sample 1 | Sample Type:

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Method: EPA 8015 NELAC | Prep Method: EPA 3535A | | | | | QCBatchID: | QC1144720 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 03/14/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 03/14/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 03/14/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *100* | *60-140* | |

Matrix: Water | Client: United Rock Products | Collector: Client
Sampled: 03/12/2014 09:25 | Site:
Sample #: 337872-002 | Client Sample #: Shore S.W. Sample 2 | Sample Type:

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Method: EPA 8015 NELAC | Prep Method: EPA 3535A | | | | | QCBatchID: | QC1144720 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 03/14/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 03/14/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 03/14/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *95* | *60-140* | |

| QCBatchID: QC1144720 | Analyst: lytagas | Method: EPA 8015B |
|---|---|---|
| Matrix: Water | Analyzed: 03/12/2014 | Instrument: SVOA-GC (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1144720MB1** | | | | | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | |
| TPH Diesel | ND | mg/L | | 0.1 | |
| TPH Motor Oil | ND | mg/L | | 0.3 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | | LCS | LCSD | | %Rec | RPD | |
| **QC1144720LCS1, QC1144720LCSD1** | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 0.62 | 0.58 | mg/L | 62 | 58 | 7 | 57-122 | 30 | |

## Notes and Definitions

| | |
|---|---|
| B | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| BQ1 | No valid test replicates. Result may be greater. Best result was reported with qualifier. Sample toxicity possible. |
| BQ2 | No valid test replicates. |
| BQ3 | Minimum DO is less than 1.0 mg/L. Result may be greater and reported with qualifier. |
| C | Laboratory Contamination. |
| D | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| DF | Dilution Factor |
| DW | Sample result is calculated on a dry weigh basis |
| J | Reported value is estimated |
| L | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| M | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| MDL | Method Detection Limit |
| NC | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| ND | Analyte was not detected or was less than the detection limit. |
| P | Sample was received without proper preservation according to EPA guidelines. |
| Q1 | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| Q2 | Analyte calibration was not verified and the result was estimated and reported with qualifier. |
| Q3 | Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier. |
| RDL | Reporting Detection Limit |
| S | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| T | Sample was extracted/analyzed past the holding time. |
| T2 | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |
| TIC | Tentatively Identified Compounds |

ASSOCIATED LABORATORIES
806 North Batavia – Orange, California 92868 – 714-771-6900 FAX 714-538-1209

# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: UNITED ROCK PRODUCTS Project: PIT 3
Date Received: 3/12/14 Sampler's Name: Yes (No)
Sample temperature: _____
Sample(s) received in cooler: Yes (No) (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ____ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam
____ Paper ____ None ___ Other_____
Cooler Temperature: _____

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| Section 3 | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | ✓ | | |
| Were custody seals present? | | ✓ | |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | | ✓ | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ✓ | | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | | ✓ |
| Were the containers labeled with correct preservatives? | | | ✓ |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | ✓ |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments

**Section 5**
Was Project Manager notified of discrepancies: Y / N N/A
Project Manager's response: _____

Completed By: _____ Date: 3/12/14

**ASSOCIATED LABORATORIES**
806 North Batavia ▪ Orange, CA 92868
Phone: (714) 771-6900 ▪ Fax: (714) 771-9933

# Chain of Custody Record

Lab Job No. 337872
Page 1 of 1

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: _____ 48 Hours: _____ 24 Hours: _____

| CUSTOMER INFORMATION | PROJECT INFORMATION |
|---|---|
| COMPANY United Rock Products | PROJECT NAME: Pit 3 |
| SEND REPORT TO: Ken Barker | NUMBER: |
| EMAIL: Ken.Barker@Sally-Miller.com | ADDRESS: |
| ADDRESS: 135 S. State College Blvd, #400 Brea, CA 92821 | P.O. #: |
| PHONE: 629 523 1319 FAX: | SAMPLED BY: |

ANALYSIS REQUEST: X 8015 Full Carbon Range

| | Sample ID | Date | Time | Matrix | Container Number/Size | Pres. | | | | | | | | | | | Test Instructions & Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Dredge Sample 1 | 3/12/14 | 9:15 | W | 1 L | | X | | | | | | | | | | |
| 2 | Shore S.W. Sample 2 | 3/12/14 | 9:25 | W. | 1 L | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | |

Total No. of Samples: 2 Method of Shipment: Hand Delivery Preservative: 1 = Ice 2 = HCl 3 = $HNO_3$ 4 = $H_2SO_4$ 5 = NaOH 6 = Other

| Relinquished by 1. | Received By: 1. | Relinquished by 2. | Received By: 2. | Relinquished by 3. | Received By: 3. |
|---|---|---|---|---|---|
| Ken Barker | | | | | |
| Signature: Ken Barker | Signature: [signature] | Signature: | Signature: | Signature: | Signature: |
| Printed Name: Ken Barker | Printed Name: ZAID | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| Date: 3/12/14 Time: 1307 | Date: 3/12/14 Time: 1307 | Date: Time: | Date: Time: | Date: Time: | Date: Time: |

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

**Associated Laboratories**
*806 N. Batavia - Orange, CA 92868*
*Tel (714)771-6900 Fax (714)538-1209*
*www.associatedlabs.com*
*Info@associatedlabs.com*

ACCREDITED IN ACCORDANCE WITH nelac 04232CA

Client: United Rock Products
Address: 135 S. State College Blvd.
Suite #400
Brea, CA 92821
Attn: Ken Barker

Comments: Pit 3

Lab Request: 338196
Report Date: 04/03/2014
Date Received: 03/19/2014
Client ID: 12535

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 338196-001 | Dredge Sample #1 |
| 338196-002 | Shore S.W. Sample #2 |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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*TESTING & CONSULTING*
*Chemical*
*Microbiological*
*Environmental*

Matrix: Water | Client: United Rock Products | Collector: Client
Sampled: 03/19/2014 14:10 | Site:
Sample #: 338196-001 | Client Sample #: Dredge Sample #1 | Sample Type:

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Method: EPA 8015 NELAC | Prep Method: EPA 3535A | | | | | QCBatchID: | QC1144973 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 03/21/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 03/21/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 03/21/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *120* | *60-140* | |

Matrix: Water | Client: United Rock Products | Collector: Client
Sampled: 03/19/2014 14:15 | Site:
Sample #: 338196-002 | Client Sample #: Shore S.W. Sample #2 | Sample Type:

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Method: EPA 8015 NELAC | Prep Method: EPA 3535A | | | | | QCBatchID: | QC1144973 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 03/21/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 03/21/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 03/21/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *130* | *60-140* | |

| QCBatchID: QC1144973 | Analyst: lytagas | Method: EPA 8015B |
|---|---|---|
| Matrix: Water | Analyzed: 03/21/2014 | Instrument: SVOA-GC (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1144973MB1** | | | | | |
| Stoddard Solvent | ND | mg/L | | 0.3 | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | |
| TPH Diesel | ND | mg/L | | 0.1 | |

## Lab Control Spike/Lab Control Spike Duplicate Summary

| Analyte | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | | LCS | LCSD | | %Rec | RPD | |
| **QC1144973LCS1, QC1144973LCSD1** | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 0.85 | 0.72 | mg/L | 85 | 72 | 17 | 57-122 | 30 | |

## Notes and Definitions

| | |
|---|---|
| B | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| BQ1 | No valid test replicates. Result may be greater. Best result was reported with qualifier. Sample toxicity possible. |
| BQ2 | No valid test replicates. |
| BQ3 | Minimum DO is less than 1.0 mg/L. Result may be greater and reported with qualifier. |
| C | Laboratory Contamination. |
| D | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| DF | Dilution Factor |
| DW | Sample result is calculated on a dry weigh basis |
| J | Reported value is estimated |
| L | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| M | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| MDL | Method Detection Limit |
| NC | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| ND | Analyte was not detected or was less than the detection limit. |
| P | Sample was received without proper preservation according to EPA guidelines. |
| Q1 | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| Q2 | Analyte calibration was not verified and the result was estimated and reported with qualifier. |
| Q3 | Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier. |
| Q4 | Analyte result out of calibration range and was reported with qualifier |
| RDL | Reporting Detection Limit |
| S | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| T | Sample was extracted/analyzed past the holding time. |
| T2 | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |
| TIC | Tentatively Identified Compounds |

ASSOCIATED LABORATORIES
806 North Batavia – Orange, California 92868 – 714-771-6900 FAX 714-538-1209

# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: United Rock Prod. Project: Pit 3
Date Received: 3-19-14 Sampler's Name: (Yes) No
Sample temperature: _____
Sample(s) received in cooler: Yes (No) (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ____ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam
____ Paper ____ None ___ Other _____
Cooler Temperature: _____

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| **Section 3** | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | ✓ | | |
| Were custody seals present? | | ✓ | |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | ✓ | | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ✓ | | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | | ✓ |
| Were the containers labeled with correct preservatives? | | | ✓ |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | ✓ |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments

**Section 5**
Was Project Manager notified of discrepancies: Y / N N/A
Project Manager's response: _____

Completed By: M. Ehrst Date: 3/19/14

**ASSOCIATED LABORATORIES**
806 North Batavia ▪ Orange, CA 92868
Phone: (714) 771-6900 ▪ Fax: (714) 771-9933

# Chain of Custody Record

Lab Job No. 338196
Page 1 of 1

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: ____ 48 Hours: ____ 24 Hours: ____

| CUSTOMER INFORMATION | | PROJECT INFORMATION | |
|---|---|---|---|
| COMPANY | United Rock Products | PROJECT NAME: | Pit 3 |
| SEND REPORT TO: | Ken Barker | NUMBER: | |
| EMAIL: | Ken.Barker@sally-mill.com | ADDRESS: | |
| ADDRESS: | 135 S. State College Blvd #400 | P.O. #: | |
| PHONE: | 626 523 1319 | SAMPLED BY: | Ken Barker |
| FAX: | | | |

| | Sample ID | Date | Time | Matrix | Container Number/Size | Pres. | ANALYSIS REQUEST: 8015 Full Carbons Range | Test Instructions & Comments |
|---|---|---|---|---|---|---|---|---|
| 1 | Dredge Sample #1 | 3/19/14 | 2:10 | w | 1 L | | X | |
| 2 | Shore S.W. Sample #2 | 3/19/14 | 2:15 | w | 1 L | | X | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |

Total No. of Samples: 2 Method of Shipment: Hand Delivered Preservative: (1=Ice) 2 =HCl 3 =$HNO_3$ 4 =$H_2SO_4$ 5 =NaOH 6 =Other

| Relinquished by 1. | Received By: 1. | Relinquished by 2. | Received By: 2. | Relinquished by 3. | Received By: 3. |
|---|---|---|---|---|---|
| Ken Barker | | | | | |
| Signature: Ken Barker | Signature: | Signature: | Signature: | Signature: | Signature: |
| Printed Name: Ken Barker | Printed Name: | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| Date: 3/19/14 Time: 15:25 | Date: 3/19/14 Time: 15:25 | Date: Time: | Date: Time: | Date: Time: | Date: Time: |

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

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*Tel (714)771-6900 Fax (714)538-1209*
*www.associatedlabs.com*
*Info@associatedlabs.com*

ACCREDITED IN ACCORDANCE WITH nelac
04232CA

Client: United Rock Products
Address: 135 S. State College Blvd.
Suite #400
Brea, CA 92821
Attn: Ken Barker

Comments: Pit 3

Lab Request: 338418
Report Date: 04/08/2014
Date Received: 03/25/2014
Client ID: 12535

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 338418-001 | Sample 1 Dredge |
| 338418-002 | Sample 2 S.W Shore |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

John Gozanna Jr

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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*TESTING & CONSULTING*
*Chemical*
*Microbiological*
*Environmental*

Matrix: Water | Client: United Rock Products | Collector: Client
Sampled: 03/25/2014 08:15 | Site:
Sample #: 338418-001 | Client Sample #: Sample 1 Dredge | Sample Type:

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Method: EPA 8015 NELAC | Prep Method: EPA 3535A | | | | | QCBatchID: | QC1145101 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 04/02/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 04/02/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 04/02/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *100* | *60-140* | |

Matrix: Water | Client: United Rock Products | Collector: Client
Sampled: 03/25/2014 08:25 | Site:
Sample #: 338418-002 | Client Sample #: Sample 2 S.W Shore | Sample Type:

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Method: EPA 8015 NELAC | Prep Method: EPA 3535A | | | | | QCBatchID: | QC1145101 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 04/02/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 04/02/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 04/02/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *110* | *60-140* | |

| QCBatchID: QC1145101 | Analyst: lytagas | Method: EPA 8015B |
|---|---|---|
| Matrix: Water | Analyzed: 03/27/2014 | Instrument: SVOA-GC (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1145101MB1** | | | | | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | |
| TPH Diesel | ND | mg/L | | 0.1 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | | LCS | LCSD | | %Rec | RPD | |
| **QC1145101LCS1, QC1145101LCSD1** | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 0.89 | 0.70 | mg/L | 89 | 70 | 24 | 57-122 | 30 | |

## Notes and Definitions

| | |
|---|---|
| B | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| BQ1 | No valid test replicates. Result may be greater. Best result was reported with qualifier. Sample toxicity possible. |
| BQ2 | No valid test replicates. |
| BQ3 | Minimum DO is less than 1.0 mg/L. Result may be greater and reported with qualifier. |
| C | Laboratory Contamination. |
| D | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| DF | Dilution Factor |
| DW | Sample result is calculated on a dry weigh basis |
| J | Reported value is estimated |
| L | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| M | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| MDL | Method Detection Limit |
| NC | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| ND | Analyte was not detected or was less than the detection limit. |
| P | Sample was received without proper preservation according to EPA guidelines. |
| Q1 | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| Q2 | Analyte calibration was not verified and the result was estimated and reported with qualifier. |
| Q3 | Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier. |
| Q4 | Analyte result out of calibration range and was reported with qualifier |
| RDL | Reporting Detection Limit |
| S | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| T | Sample was extracted/analyzed past the holding time. |
| T2 | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |
| TIC | Tentatively Identified Compounds |

ASSOCIATED LABORATORIES
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# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: UNITED ROCK PROD. Project: PIT 3
Date Received: 3/25/14 Sampler's Name: (Yes) No
Sample temperature: 15°C
Sample(s) received in cooler: Yes (No) (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ____ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam
____ Paper ✓ None ___ Other _____
Cooler Temperature: _____

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| Section 3 | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | ✓ | | |
| Were custody seals present? | | | ✓ |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | ✓ | | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ✓ | | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | | ✓ |
| Were the containers labeled with correct preservatives? | | | ✓ |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | ✓ |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments

**Section 5**
Was Project Manager notified of discrepancies: Y / N N/A
Project Manager's response: _____

Completed By: _____ Date: 3/25/14

**ASSOCIATED LABORATORIES**
806 North Batavia ▪ Orange, CA 92868
Phone: (714) 771-6900 ▪ Fax: (714) 771-9933

# Chain of Custody Record

Lab Job No. 338418
Page 1 of 1

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: _____ 48 Hours: _____ 24 Hours: _____

| CUSTOMER INFORMATION | PROJECT INFORMATION |
|---|---|
| COMPANY: United Rock Products | PROJECT NAME: Pit 3 |
| SEND REPORT TO: Ken Barker | NUMBER: |
| EMAIL: Ken.Barker@Sully-Miller.com | ADDRESS: |
| ADDRESS: 135 S. State College Blvd. ~~[illegible]~~ | |
| | P.O. #: |
| PHONE: 626 523 1319 FAX: | SAMPLED BY: Ken Barker |

ANALYSIS REQUEST: 8015 Full Carbon Range

| | Sample ID | Date | Time | Matrix | Container Number/Size | Pres. | 8015 Full Carbon Range | | | | | | | | | | Test Instructions & Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Sample 1 Dredge | 3/25/14 | 8:15 | W | 1 L | | X | | | | | | | | | | |
| 2 | Sample 2 S.W. Shore | 3/25/14 | 8:25 | W | 1 L | | X | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
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| 10 | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | |

Total No. of Samples: 2 Method of Shipment: Hand Delivered Preservative: 1 = Ice 2 = HCl 3 = $HNO_3$ 4 = $H_2SO_4$ 5 = NaOH 6 = Other

| Relinquished by 1. | Received By: 1. | Relinquished by 2. | Received By: 2. | Relinquished by 3. | Received By: 3. |
|---|---|---|---|---|---|
| Ken Barker | | | | | |
| Signature: Ken Barker | Signature: [signature] | Signature: | Signature: | Signature: | Signature: |
| Printed Name: | Printed Name: ATCAF | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| Date: 3/25/14 Time: 10:40 | Date: 3/25/14 Time: 10:40 | Date: Time: | Date: Time: | Date: Time: | Date: Time: |

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

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*806 N. Batavia - Orange, CA 92868*
*Tel (714)771-6900 Fax (714)538-1209*
*www.associatedlabs.com*
*Info@associatedlabs.com*

ACCREDITED IN ACCORDANCE WITH nelac 04232CA

Client: United Rock Products
Address: 135 S. State College Blvd.
Suite #400
Brea, CA 92821
Attn: Ken Barker

Comments: Pit 3

Lab Request: 338790
Report Date: 04/14/2014
Date Received: 04/02/2014
Client ID: 12535

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 338790-001 | Sample 1 Dredge |
| 338790-002 | Sample 2 SW Shore |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

John Yozamma cf.

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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*TESTING & CONSULTING*
*Chemical*
*Microbiological*
*Environmental*

| | | |
|---|---|---|
| **Matrix:** Water | **Client:** United Rock Products | **Collector:** Client |
| **Sampled:** 04/02/2014 09:30 | **Site:** | |
| **Sample #:** 338790-001 | **Client Sample #:** Sample 1 Dredge | **Sample Type:** |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3535A | | | | | QCBatchID: | QC1145372 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 04/03/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 04/03/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 04/03/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *60* | *60-140* | |

| | | |
|---|---|---|
| **Matrix:** Water | **Client:** United Rock Products | **Collector:** Client |
| **Sampled:** 04/02/2014 09:45 | **Site:** | |
| **Sample #:** 338790-002 | **Client Sample #:** Sample 2 SW Shore | **Sample Type:** |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3535A | | | | | QCBatchID: | QC1145372 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 04/03/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 04/03/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 04/03/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *110* | *60-140* | |

QCBatchID: QC1145372 Analyst: lytagas Method: EPA 8015B

Matrix: Water Analyzed: 04/03/2014 Instrument: SVOA-GC (group)

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1145372MB1** | | | | | |
| Hydraulic Oil | ND | mg/L | | 0.3 | |
| Stoddard Solvent | ND | mg/L | | 0.3 | |
| TPH (>C32) | ND | mg/L | | 0.3 | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | |
| TPH (C10 to C28) | ND | mg/L | | 0.2 | |
| TPH (C12 to C28) | ND | mg/L | | 0.2 | |
| TPH (C13 to C22) | ND | mg/L | | 0.2 | |
| TPH (C13 to C23) | ND | mg/L | | 0.2 | |
| TPH (C17 to C36) | ND | mg/L | | 0.3 | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | |
| TPH (C23 to C32) | ND | mg/L | | 0.3 | |
| TPH (C23 to C40) | ND | mg/L | | 0.3 | |
| TPH (C28 to C36) | ND | mg/L | | 0.3 | |
| TPH (C28 to C40) | ND | mg/L | | 0.3 | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | |
| TPH (C6 to C12) | ND | mg/L | | 0.2 | |
| TPH (C6 to C8) | ND | mg/L | | 0.2 | |
| TPH (C9 to C16) | ND | mg/L | | 0.2 | |
| TPH Diesel | ND | mg/L | | 0.1 | |
| TPH Gasoline | ND | mg/L | | 0.2 | |
| TPH Jet Fuel 4 | ND | mg/L | | 0.3 | |
| TPH Jet Fuel 5 | ND | mg/L | | 0.3 | |
| TPH Jet Fuel 8 | ND | mg/L | | 0.3 | |
| TPH Jet Fuel A | ND | mg/L | | 0.3 | |
| TPH Motor Oil | ND | mg/L | | 0.3 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount LCS | Spike Amount LCSD | Spike Result LCS | Spike Result LCSD | Units | Recoveries LCS | Recoveries LCSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1145372LCS1, QC1145372LCSD1** | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 0.78 | 0.60 | mg/L | 78 | 60 | 26 | 57-122 | 30 | |

## Notes and Definitions

| | |
|---|---|
| B | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| BQ1 | No valid test replicates. Result may be greater. Best result was reported with qualifier. Sample toxicity possible. |
| BQ2 | No valid test replicates. |
| BQ3 | Minimum DO is less than 1.0 mg/L. Result may be greater and reported with qualifier. |
| C | Laboratory Contamination. |
| D | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| DF | Dilution Factor |
| DW | Sample result is calculated on a dry weigh basis |
| J | Reported value is estimated |
| L | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| M | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| MDL | Method Detection Limit |
| NC | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| ND | Analyte was not detected or was less than the detection limit. |
| P | Sample was received without proper preservation according to EPA guidelines. |
| Q1 | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| Q2 | Analyte calibration was not verified and the result was estimated and reported with qualifier. |
| Q3 | Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier. |
| Q4 | Analyte result out of calibration range and was reported with qualifier |
| RDL | Reporting Detection Limit |
| S | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| T | Sample was extracted/analyzed past the holding time. |
| T2 | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |
| TIC | Tentatively Identified Compounds |

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# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: United Rock Prod. Project: Pit 3
Date Received: 4-2-14 Sampler's Name: (Yes) No
Sample temperature: _____
Sample(s) received in cooler: (Yes) No (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ✓ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam
____ Paper ____ None ___ Other_____
Cooler Temperature: 0 °C

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| Section 3 | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | ✓ | | |
| Were custody seals present? | | ✓ | |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | ✓ | | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ✓ | | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | | ✓ |
| Were the containers labeled with correct preservatives? | | | ✓ |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | ✓ |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments

**Section 5**
Was Project Manager notified of discrepancies: Y / N N/A
Project Manager's response: _____

Completed By: M. Ebert Date: 4/2/14

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# Chain of Custody Record

Lab Job No. 338790
Page _____ of _____

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: _____ 48 Hours: _____ 24 Hours: _____

| CUSTOMER INFORMATION | PROJECT INFORMATION |
|---|---|
| COMPANY: United Rock Products | PROJECT NAME: Pit 3 |
| SEND REPORT TO: Ken Barker | NUMBER: |
| EMAIL: ken.barker@sully-miller.com | ADDRESS: |
| ADDRESS: 135 S. State College Blvd. #400 | P.O. #: |
| PHONE: 626 523 1819 FAX: | SAMPLED BY: Ken Barker |

| | Sample ID | Date | Time | Matrix | Container Number/Size | Pres. | ANALYSIS REQUEST: 8015 - Full carbon range | Test Instructions & Comments |
|---|---|---|---|---|---|---|---|---|
| 1 | Sample 1 Dredge | 4/2/14 | 9:30 | W | 1L | | X | |
| 2 | Sample 2 SW Shore | 4/2/14 | 9:45 | W | 1L | | X | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
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| 6 | | | | | | | | |
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| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |

Total No. of Samples: 2 Method of Shipment: Hand Deliver Preservative: (1) Ice 2 =HCl 3 =$HNO_3$ 4 =$H_2SO_4$ 5 =NaOH 6 =Other

| Relinquished by 1. | Received By: 1. | Relinquished by 2. | Received By: 2. | Relinquished by 3. | Received By: 3. |
|---|---|---|---|---|---|
| Signature: Ken Barker | Signature: Dan Chambers | Signature: | Signature: | Signature: | Signature: |
| Printed Name: Ken Barker | Printed Name: Dan Chambers | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| Date: 4/2/14 Time: 10:15 | Date: 4/2/14 Time: 10:15 | Date: 4/21/14 Time: 13:24 | Date: Time: | Date: Time: | Date: Time: |

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

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*www.associatedlabs.com*
*Info@associatedlabs.com*

ACCREDITED IN ACCORDANCE WITH nelac
04232CA

Client: United Rock Products
Address: 135 S. State College Blvd.
Suite #400
Brea, CA 92821
Attn: Ken Barker

Comments: Pit 3

Lab Request: 339203
Report Date: 04/21/2014
Date Received: 04/09/2014
Client ID: 12535

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 339203-001 | Sample 1 Dredge |
| 339203-002 | Sample 2 S.W. Shore |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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*TESTING & CONSULTING*
*Chemical*
*Microbiological*
*Environmental*

Matrix: Water | Client: United Rock Products | Collector: Client
Sampled: 04/09/2014 10:30 | Site:
Sample #: 339203-001 | Client Sample #: Sample 1 Dredge | Sample Type:

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Method: EPA 8015 NELAC | Prep Method: EPA 3535A | | | | | QCBatchID: | QC1145584 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 04/11/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 04/11/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 04/11/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *100* | *60-140* | |

Matrix: Water | Client: United Rock Products | Collector: Client
Sampled: 04/09/2014 10:35 | Site:
Sample #: 339203-002 | Client Sample #: Sample 2 S.W. Shore | Sample Type:

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Method: EPA 8015 NELAC | Prep Method: EPA 3535A | | | | | QCBatchID: | QC1145584 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 04/11/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 04/11/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 04/11/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *130* | *60-140* | |

QCBatchID: QC1145584 Analyst: lytagas Method: EPA 8015B

Matrix: Water Analyzed: 04/11/2014 Instrument: SVOA-GC (group)

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1145584MB1** | | | | | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | |
| TPH Diesel | ND | mg/L | | 0.1 | |
| TPH Gasoline | ND | mg/L | | 0.2 | |
| TPH Motor Oil | ND | mg/L | | 0.3 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | | LCS | LCSD | | %Rec | RPD | |
| **QC1145584LCS1, QC1145584LCSD1** | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 0.85 | 0.90 | mg/L | 85 | 90 | 6 | 57-122 | 30 | |

## Notes and Definitions

| | |
|---|---|
| B | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| BQ1 | No valid test replicates. Result may be greater. Best result was reported with qualifier. Sample toxicity possible. |
| BQ2 | No valid test replicates. |
| BQ3 | Minimum DO is less than 1.0 mg/L. Result may be greater and reported with qualifier. |
| C | Laboratory Contamination. |
| D | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| DF | Dilution Factor |
| DW | Sample result is calculated on a dry weigh basis |
| J | Reported value is estimated |
| L | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| M | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| MDL | Method Detection Limit |
| NC | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| ND | Analyte was not detected or was less than the detection limit. |
| P | Sample was received without proper preservation according to EPA guidelines. |
| Q1 | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| Q2 | Analyte calibration was not verified and the result was estimated and reported with qualifier. |
| Q3 | Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier. |
| Q4 | Analyte result out of calibration range and was reported with qualifier |
| RDL | Reporting Detection Limit |
| S | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| T | Sample was extracted/analyzed past the holding time. |
| T2 | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |
| TIC | Tentatively Identified Compounds |

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# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: United Rock Prod. Project: Pit 3
Date Received: 04-09-14 Sampler's Name: (Yes) No
Sample temperature: _____
Sample(s) received in cooler: Yes (No) (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ____ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam
____ Paper ____ None ___ Other_____
Cooler Temperature: _____

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| **Section 3** | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | ✓ | | |
| Were custody seals present? | | ✓ | |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | ✓ | | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ✓ | | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | | ✓ |
| Were the containers labeled with correct preservatives? | | | ✓ |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | ✓ |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments

**Section 5**
Was Project Manager notified of discrepancies: Y / N N/A
Project Manager's response: _____

Completed By: M. Eibert Date: 04/09/14

**ASSOCIATED LABORATORIES**
806 North Batavia ▪ Orange, CA 92868
Phone: (714) 771-6900 ▪ Fax: (714) 771-9933

# Chain of Custody Record

Lab Job No. 339203
Page _____ of _____

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: _____ 48 Hours: _____ 24 Hours: _____

| CUSTOMER INFORMATION | | PROJECT INFORMATION |
|---|---|---|
| COMPANY: Chatted Rock Products | | PROJECT NAME: Pit 3 |
| SEND REPORT TO: Ken.Barker@SullyMiller.com | | NUMBER: |
| EMAIL: Ken Barker | | ADDRESS: |
| ADDRESS: 1355 S. State College Blvd Anaheim | | |
| | | P.O. #: |
| PHONE: 626 523 1319 | FAX: | SAMPLED BY: Ron Baker |

| | Sample ID | Date | Time | Matrix | Container Number/Size | Pres. | ANALYSIS REQUEST: 8015 Fuel Carbon Range | Test Instructions & Comments |
|---|---|---|---|---|---|---|---|---|
| 1 | Sample 1 Pre Pit | 4/9/14 | 10:30 | W | 1L | | X | |
| 2 | Sample 2 S.W. Shore | 4/9/14 | 10:35 | W | 1L | | X | |
| 3 | | | | | | | | |
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| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |

Total No. of Samples: 2 Method of Shipment: Hand Delivery Preservative: (1) = Ice 2 = HCl 3 = $HNO_3$ 4 = $H_2SO_4$ 5 = NaOH 6 = Other

| Relinquished by 1. | Received By: 1. | Relinquished by 2. | Received By: 2. | Relinquished by 3. | Received By: 3. |
|---|---|---|---|---|---|
| Signature: Ken Barker | Signature: | Signature: | Signature: | Signature: | Signature: |
| Printed Name: Ken Barker | Printed Name: | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| Date: 4/9/14 Time: 14:55 | Date: 04/09/14 Time: 14:55 | Date: Time: | Date: Time: | Date: Time: | Date: Time: |

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

Batch Ty/Number RB 2507045 Post Out of Balance N Offset Method Y Multi-Currency Conversion Y
Batch Date 04/28/2014 InterCo Settlement Mthd 3 Multi-Currency InterCo JE Y

| ... Ty | Document Number | ..... Co | G/L Date | R V | Co | Account Number / Description | Cur Cod | Debit | Credit | Units | Sub-ledger | T y | Asset Number | Explanation / Remark | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AE | 1091196 | 00000 | 04/26/2014 | | 00173 | 173.11135 | USD | | 284.68- | | | | | Offset By Document RC 1091196 | |
| | | | | | | Trade AR Billed (MFG) | | | | | | | | AE | 1.0 |
| AE | 1091196 | 00000 | 04/26/2014 | | 00173 | 173.11135 | USD | 284.68 | | | | | | Offset By Document RC 1091196 | |
| | | | | | | Trade AR Billed (MFG) | | | | | | | | AE | 2.0 |
| AE | 1091197 | 00000 | 04/26/2014 | | 00173 | 173.11135 | USD | | 176.01- | | | | | Offset By Document RC 1091197 | |
| | | | | | | Trade AR Billed (MFG) | | | | | | | | AE | 1.0 |
| AE | 1091197 | 00000 | 04/26/2014 | | 00173 | 173.11135 | USD | 176.01 | | | | | | Offset By Document RC 1091197 | |
| | | | | | | Trade AR Billed (MFG) | | | | | | | | AE | 2.0 |
| AE | 1091198 | 00000 | 04/26/2014 | | 00173 | 173.11135 | USD | | 1,261.96- | | | | | Offset By Document RC 1091198 | |
| | | | | | | Trade AR Billed (MFG) | | | | | | | | AE | 1.0 |
| AE | 1091198 | 00000 | 04/26/2014 | | 00173 | 173.11135 | USD | 1,261.96 | | | | | | Offset By Document RC 1091198 | |
| | | | | | | Trade AR Billed (MFG) | | | | | | | | AE | 2.0 |
| AE | 1091199 | 00000 | 04/26/2014 | | 00173 | 173.11135 | USD | | 1,035.50- | | | | | Offset By Document RC 1091199 | |
| | | | | | | Trade AR Billed (MFG) | | | | | | | | AE | 1.0 |
| AE | 1091199 | 00000 | 04/26/2014 | | 00173 | 173.11135 | USD | 1,035.50 | | | | | | Offset By Document RC 1091199 | |
| | | | | | | Trade AR Billed (MFG) | | | | | | | | AE | 2.0 |
| AE | 1091200 | 00000 | 04/26/2014 | | 00173 | 173.11135 | USD | | 862.45- | | | | | Offset By Document RC 1091200 | |
| | | | | | | Trade AR Billed (MFG) | | | | | | | | AE | 1.0 |
| AE | 1091200 | 00000 | 04/26/2014 | | 00173 | 173.11135 | USD | 862.45 | | | | | | Offset By Document RC 1091200 | |
| | | | | | | Trade AR Billed (MFG) | | | | | | | | AE | 2.0 |
| AE | 1091201 | 00000 | 04/26/2014 | | 00173 | 173.11135 | USD | | 1,521.70- | | | | | Offset By Document RC 1091201 | |
| | | | | | | Trade AR Billed (MFG) | | | | | | | | AE | 1.0 |
| AE | 1091201 | 00000 | 04/26/2014 | | 00173 | 173.11135 | USD | 1,521.70 | | | | | | Offset By Document RC 1091201 | |
| | | | | | | Trade AR Billed (MFG) | | | | | | | | AE | 2.0 |
| | | | | | | Ledger Type Totals | AA | 5,142.30 | 5,142.30- | | | | | | |

# RWQCB – Waste Disposal and Groundwater Monitoring Reports

135 S. State College Blvd. Suite 400 Brea, CA 92821 (714) 578-9600

January 10, 2012

California Regional
Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Information Technology Unit

Subject: Waste Discharge Requirements- United Rock Pit 3
1137 Meridian Street
Irwindale, CA 91706
File No. 72-124, Order No.73-32, CI 5801

Pursuant to the General Provisions for Reporting (Condition #I) of the Monitoring and Reporting Program (File CI 5801) and Condition #3 of the Reporting Conditions, we are respectively submitting our quarterly report.

Please be advised there was no discharge placed in Pit #3 during the 3rd Quarter of the calendar year 2011.

All waste deposited within the site to date are in compliance with the discharge requirements of Order No. 72-124, File No. 73-32.

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the 10th day of January, 2012 in Brea, California.

Very truly yours,

Ken Barker
Environmental Manager

Cc: Scott Taylor, Winfield and Associates
Kwok Tam, City of Irwindale Engineer

135 S. State College Blvd. Suite 400 Brea, CA 92821 (714) 578-9600

January 10, 2012

California Regional
Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Information Technology Unit

Subject: Waste Discharge Requirements- United Rock Pit 3
1137 Meridian Street
Irwindale, CA 91706
File No. 72-124, Order No.73-32, CI 5801

Pursuant to the General Provisions for Reporting (Condition #I) of the Monitoring and Reporting Program (File CI 5801) and Condition #3 of the Reporting Conditions, we are respectively submitting our quarterly report.

Please be advised there was no discharge placed in Pit #3 during the 4th Quarter of the calendar year 2011.

All waste deposited within the site to date are in compliance with the discharge requirements of Order No. 72-124, File No. 73-32.

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the 10th day of January, 2012 in Brea, California.

Very truly yours,

Ken Barker
Environmental Manager

Cc: Scott Taylor, Winfield and Associates
Kwok Tam, City of Irwindale Engineer

135 S. State College Blvd. Suite 400 Brea, CA 92821 (714) 578-9600

July 12, 2012

California Regional
Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Information Technology Unit

Subject: Waste Discharge Requirements- United Rock Pit 3
1137 Meridian Street
Irwindale, CA 91706
File No. 72-124, Order No.01-131, CI 5801

Pursuant to the General Provisions for Reporting (Condition #I) of the Monitoring and Reporting Program (File CI 5801) and Condition #3 of the Reporting Conditions, we are respectively submitting our quarterly report.

Please be advised there was no discharge placed in Pit #3 during the 1st Quarter of the calendar year 2012.

All waste deposited within the site to date are in compliance with the discharge requirements of File No. 72-124, Order No. 01-131.

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the 12th day of July, 2012 in Brea, California

Very truly yours,

Ken Barker
Environmental Manager

Cc: Kathy Hubbard, Alta Environmental
Kwok Tam, City of Irwindale Engineer

135 S. State College Blvd. Suite 400 Brea, CA 92821 (714) 578-9600

July 12, 2012

California Regional
Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Information Technology Unit

Subject: Waste Discharge Requirements- United Rock Pit 3
1137 Meridian Street
Irwindale, CA 91706
File No. 72-124, Order No.01-131, CI 5801

Pursuant to the General Provisions for Reporting (Condition #I) of the Monitoring and Reporting Program (File CI 5801) and Condition #3 of the Reporting Conditions, we are respectively submitting our quarterly report.

Please be advised there was no discharge placed in Pit #3 during the 2nd Quarter of the calendar year 2012.

All waste deposited within the site to date are in compliance with the discharge requirements of File No. 72-124, Order No. 01-131.

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the 12th day of July, 2012 in Brea, California

Very truly yours,

Ken Barker
Environmental Manager

Cc: Kathy Hubbard, Alta Environmental
Kwok Tam, City of Irwindale Engineer

135 S. State College Blvd. Suite 400 Brea, CA 92821 (714) 578-9600

December, 05 2012

California Regional
Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Information Technology Unit

Subject: Waste Discharge Requirements- United Rock Pit 3
1137 Meridian Street
Irwindale, CA 91706
File No. 72-124, Order No.01-131, CI 5801

Pursuant to the General Provisions for Reporting (Condition #I) of the Monitoring and Reporting Program (File CI 5801) and Condition #3 of the Reporting Conditions, we are respectively submitting our quarterly report.

Please be advised there was no discharge placed in Pit #3 during the 3nd Quarter of the calendar year 2012.

All waste deposited within the site to date are in compliance with the discharge requirements of File No. 72-124, Order No. 01-131.

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the 5th day of December, 2012 in Brea, California

Very truly yours,

Ken Barker
Environmental Manager

Cc: Kathy Hubbard, Alta Environmental
Kwok Tam, City of Irwindale Engineer

135 S. State College Blvd. Suite 400 Brea, CA 92821 (714) 578-9600

December 31, 2012

California Regional
Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Information Technology Unit

Subject: Waste Discharge Requirements- United Rock Pit 3
1137 Meridian Street
Irwindale, CA 91706
File No. 72-124, Order No.01-131, CI 5801

Pursuant to the General Provisions for Reporting (Condition #I) of the Monitoring and Reporting Program (File CI 5801) and Condition #3 of the Reporting Conditions, we are respectively submitting our quarterly report.

Please be advised there was no discharge placed in Pit #3 during the 4th Quarter of the calendar year 2012.

All waste deposited within the site to date are in compliance with the discharge requirements of File No. 72-124, Order No. 01-131.

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the 31st day of December, 2012 in Brea, California

Very truly yours,

Ken Barker
Environmental Manager

Cc: Kathy Hubbard, Alta Environmental
Kwok Tam, City of Irwindale Engineer

135 S. State College Blvd. Suite 400 Brea, CA 92821 (714) 578-9600

April 12, 2013

California Regional
Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Information Technology Unit

Subject: Waste Discharge Requirements- United Rock Pit 3
1137 Meridian Street
Irwindale, CA 91706
File No. 72-124, Order No.01-131, CI 5801

Pursuant to the General Provisions for Reporting (Condition #I) of the Monitoring and Reporting Program (File CI 5801) and Condition #3 of the Reporting Conditions, we are respectively submitting our quarterly report.

Please be advised there was no discharge placed in Pit #3 during the 1st Quarter of the calendar year 2013.

All waste deposited within the site to date are in compliance with the discharge requirements of File No. 72-124, Order No. 01-131.

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the 12st day of April, 2013 in Irwindale California.

Very truly yours,

Russ Caruso
General Manager

Cc: Kathy Hubbard, Alta Environmental
Kwok Tam, City of Irwindale Engineer

135 S. State College Blvd. Suite 400 Brea, CA 92821 (714) 578-9600

July 3, 2013

California Regional
Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Information Technology Unit

Subject: Waste Discharge Requirements- United Rock Pit 3
1137 Meridian Street
Irwindale, CA 91706
File No. 72-124, Order No.01-131, CI 5801

Pursuant to the General Provisions for Reporting (Condition #I) of the Monitoring and Reporting Program (File CI 5801) and Condition #3 of the Reporting Conditions, we are respectively submitting our quarterly report.

Please be advised there was no discharge placed in Pit #3 during the 2nd Quarter of the calendar year 2013.

All waste deposited within the site to date are in compliance with the discharge requirements of File No. 72-124, Order No. 01-131.

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the 3rd day of July, 2013 in Irwindale California.

Very truly yours,

Russ Caruso
General Manager

Cc: Kathy Hubbard, Alta Environmental
Kwok Tam, City of Irwindale Engineer

135 S. State College Blvd. Suite 400 Brea, CA 92821 (714) 578-9600

October 15, 2013

California Regional
Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Information Technology Unit

Subject: Waste Discharge Requirements- United Rock Pit 3
1137 Meridian Street
Irwindale, CA 91706
File No. 72-124, Order No.01-131, CI 5801

Pursuant to the General Provisions for Reporting (Condition #I) of the Monitoring and Reporting Program (File CI 5801) and Condition #3 of the Reporting Conditions, we are respectively submitting our quarterly report.

Please be advised there was no discharge placed in Pit #3 during the 3rd Quarter of the calendar year 2013.

All waste deposited within the site to date are in compliance with the discharge requirements of File No. 72-124, Order No. 01-131.

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the 15th day of October, 2013 in Irwindale California.

Very truly yours,

Russ Caruso
General Manager

Cc: Kathy Hubbard, Alta Environmental
Kwok Tam, City of Irwindale Engineer

135 S. State College Blvd. Suite 400 Brea, CA 92821 (714) 578-9600

January 10, 2014

California Regional
Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Information Technology Unit

Subject: Waste Discharge Requirements- United Rock Pit 3
1137 Meridian Street
Irwindale, CA 91706
File No. 72-124, Order No.01-131, CI 5801

Pursuant to the General Provisions for Reporting (Condition #I) of the Monitoring and Reporting Program (File CI 5801) and Condition #3 of the Reporting Conditions, we are respectively submitting our quarterly report.

Please be advised there was no discharge placed in Pit #3 during the 4th Quarter of the calendar year 2013.

All waste deposited within the site to date are in compliance with the discharge requirements of File No. 72-124, Order No. 01-131.

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the 10th day of January, 2014 in Brea California.

Very truly yours,

Russ Caruso
General Manager

Cc: Kathy Hubbard, Alta Environmental
Kwok Tam, City of Irwindale Engineer

135 S. State College Blvd. Suite 400 Brea, CA 92821 (714) 578-9600

April 14, 2014

California Regional
Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Information Technology Unit

Subject: Waste Discharge Requirements- United Rock Pit 3
1137 Meridian Street
Irwindale, CA 91706
File No. 72-124, Order No.01-131, CI 5801

Pursuant to the General Provisions for Reporting (Section A) of the Monitoring and Reporting Program (File CI 5801) and Section III of the Reporting Conditions, we are respectively submitting our quarterly report.

| | Cubic Yards |
|---|---|
| January | 3,000 |
| February | 0 |
| March | 0 |

The estimated life of the site is 84 years 9 months.

For the first quarter of 2014 a Total of 3,000 cubic yards were placed. All waste deposited during this reporting period are in compliance with Waste Discharge Requirements (WDRs)(File No No. 72-124, Order No. 01-131). Also, no wastes have been deposited outside of the site as specified in the WDR's.

No purged ground water from monitoring wells is used at the site.

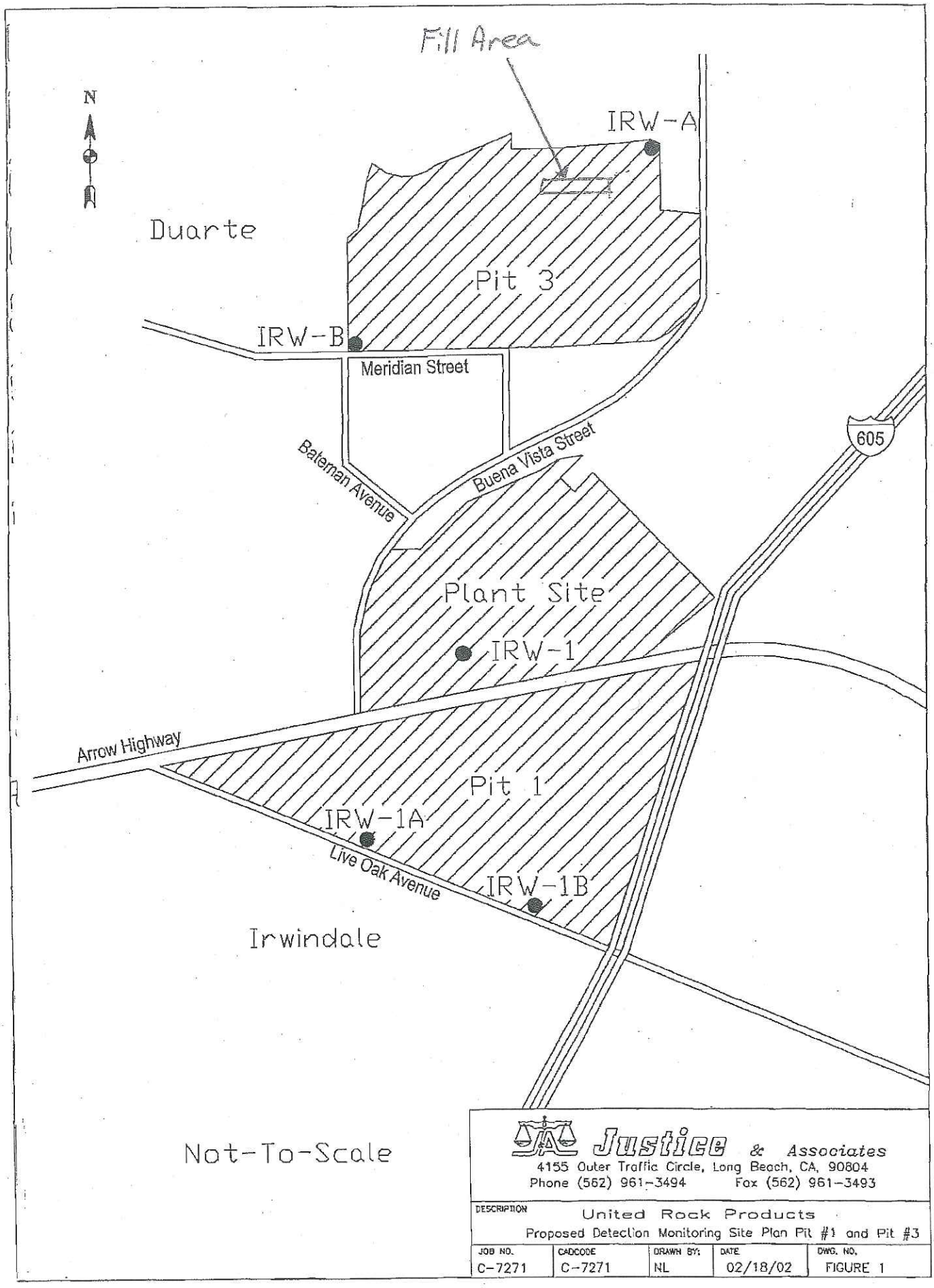
I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the 14st day of April, 2014 in Irwindale, California.

Very truly yours,

Russ Caruso
General Manager

Cc: Kathy Hubbard, Alta Environmental
William Tam, City of Irwindale Engineer




Justice & Associates
4155 Outer Traffic Circle, Long Beach, CA, 90804
Phone (562) 961-3494 Fax (562) 961-3493

DESCRIPTION: United Rock Products
Proposed Detection Monitoring Site Plan Pit #1 and Pit #3

| JOB NO. | CADCODE | DRAWN BY: | DATE | DWG. NO. |
|---|---|---|---|---|
| C-7271 | C-7271 | NL | 02/18/02 | FIGURE 1 |

135 S. State College Blvd. Suite 400 Brea, CA 92821 (714) 578-9600

July 8, 2014, 2014

California Regional
Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Information Technology Unit

Subject: Waste Discharge Requirements- United Rock Pit 3
1137 Meridian Street
Irwindale, CA 91706
File No. 72-124, Order No.01-131, CI 5801

Pursuant to the General Provisions for Reporting (Section A) of the Monitoring and Reporting Program (File CI 5801) and Section III of the Reporting Conditions, we are respectively submitting our quarterly report.

Please be advised that there was no discharge placed in Pit #3 during the 2nd Quarter of calendar year 2014.

The estimated life of the site is 84 years 6 months.

No purged ground water from monitoring wells is used at the site.

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the 8th day of July, 2014 in Irwindale, California.

Very truly yours,

Russ Caruso
General Manager

Cc: Kathy Hubbard, Alta Environmental
William Tam, City of Irwindale Engineer

1245 E. Arrow Highway, Irwindale, CA 91706

August 15, 2014

Regional Water Quality Control Board
Los Angeles Region
300 W 4th St #200
Los Angeles, CA 90013

Attention: Dr. Wen Yang

Subject: Submittal of Revised Technical Report-Groundwater Monitoring Work Plan for United Rock Products Pit #3, Irwindale, California Prepared by Davis Consulting Services Dated July 22, 2014

Dear Dr. Yang,

On May 24, 2002, and on behalf of United Rock Products, Justice & Associates submitted the Revised Technical Report Groundwater Monitoring Work Plan- United Rock Products for Pit #1 and Pit #3. The Los Angeles Regional Water Quality Control Board approved the referenced 2002 report in a letter dated July 12, 2002. The purpose of this Revised Technical Report is to amend the previous 2002 Justice & Associates report generally as it relates to Pit #3 as follows:

A. Revise the down-gradient monitoring protocol.

B. Increase depth of proposed up-gradient and down-gradient monitoring wells for Pit #3 from 205 feet below ground surface (bgs) to 250 feet bgs.

C. Modify proposed up-gradient and down-gradient monitoring well design.

The installation and development of the two monitoring wells described in this Technical Report were completed on August 9 2014.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, complete and subject to field verification. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

If you have any questions, please call me at 626 523 1319.

Sincerely,

Ken Barker
Environmental Manager
United Rock Products

CC: Tom Davis, Davis Consulting Services

September 15, 2014

Mr. Ken Barker, Environmental Manager
United Rock Products Corporation
1245 Arrow Highway
Irwindale, CA 91706

**APPROVAL OF REVISED GROUNDWATER MONITORING WORK PLAN – UNITED ROCK PRODUCTS PIT #3, IRWINDALE, CALIFORNIA (FILE NO. 72-124, ORDER NO. 01-131, CI – 5801, GEOTRACKER GLOBAL ID L10001370669)**

Dear Mr. Barker,

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board), is in receipt of a document titled *Revised Technical Report, Groundwater Monitoring Work Plan* (Revised Work Plan), dated July 22, 2014, prepared by Davis Consulting Services, and submitted to the Regional Board on your behalf on August 4, 2014. Subsequently, you submitted a transmittal letter for the Revised Work Plan to the Regional Board on August 14, 2014.

United Rock Products (URP, or Discharger) operates the URP Pit #3 (site), a 110-acre active aggregate mining pit at 1137 Meridian Street, Irwindale, California, that is concurrently operated as an inert landfill as permitted under waste discharge requirements (WDRs) Order No. 01-131 adopted by the Regional Board on September 19, 2001. Inert wastes that are permitted to be discharged at the site include native geological materials generated from aggregate mining activities, uncontaminated soil, rock and gravel, broken concrete, bricks, glass and ceramics, broken asphalt paving fragments and shredded tires. Section D.1 of the WDRs requires that the Discharger shall develop a work plan for groundwater monitoring at the site and shall start groundwater monitoring at least one year prior to receiving any wastes other than native geological materials generated by URP's mining activities.

On March 29, 2002, the Regional Board Executive Office approved a work plan for the construction of groundwater monitoring wells at the URP Pit #3 site. However, no groundwater monitoring well for the site was constructed until recently because no wastes other than native geological materials have been discharged at the site. The Revised Work Plan proposes revisions to the 2002 work plan that include A) the addition of a down-gradient monitoring well, B) increasing the depth of both the up-gradient and down-gradient wells from 205 feet to 250 feet, and C) modifications of design of the proposed groundwater monitoring wells.

We have reviewed the Revised Work Plan and found it meets the requirements of the WDRs. The Revised Work Plan is therefore approved. Groundwater monitoring at the site, including sampling and testing of exposed groundwater at the mining pit, shall be conducted as required in the Monitoring and Reporting Program (CI 5801) included in the WDRs. No wastes other than native geological materials shall be discharged at the site until at least one year's groundwater monitoring data is collected and reviewed by Regional Board staff.

If you have any questions, please contact Dr. Wen Yang, Chief of the Land Disposal Unit at the Regional Board, at (213) 620-2253, or email to wen.yang@waterboards.ca.gov.

Sincerely,

Samuel Unger

Samuel Unger, P.E.
Executive Officer

cc: Gerardo Villalobos, Los Angeles County, DHS
Carol Williams, Main San Gabriel Basin Watermaster
William Tam, City of Irwindale
Tom Davis, Davis Consultant Services

135 S. State College Blvd. Suite 400 Brea, CA 92821 (714) 578-9600

October 9, 2014

California Regional
Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Information Technology Unit

Subject: Waste Discharge Requirements- United Rock Pit 3
1137 Meridian Street
Irwindale, CA 91706
File No. 72-124, Order No.01-131, CI 5801

Pursuant to the General Provisions for Reporting (Section A) of the Monitoring and Reporting Program (File CI 5801) and Section III of the Reporting Conditions, we are respectively submitting our quarterly report.

Please be advised that there was no discharge placed in Pit #3 during the 3rd Quarter of calendar year 2014.

The estimated life of the site is 84 years 0 months.

No purged ground water from monitoring wells is used at the site.

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the 9th day of October, 2014 in Irwindale, California.

Very truly yours,

Ken Barker
Environmental Manager

Cc: Kathy Hubbard, Alta Environmental
William Tam, City of Irwindale Engineer

Agency:

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**
**LOS ANGELES REGION**

320 West 4th Street, Suite 200
Los Angeles, CA 90013-2343

# Waste Disposal And Groundwater Monitoring Report

## Third Quarter 2014

United Rock Products – Pit #3
Irwindale, California
RWQCB File No. 72-124
Under Monitoring & Reporting Program No. CI 5801

**Prepared For:**

United Rock Products Corporation
1137 Meridian Street
Irwindale, CA 91706

Date: October 15, 2014

3777 Long Beach, Blvd
Long Beach, CA 90807
(562) 495-5777 Fax: (562) 495-5877

CONTACT: Kathy Hubbard

Reference: URPC-14-4746

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Figure 2 Groundwater Contour Map

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Table 1 Groundwater Monitoring Program for Third Quarter 2014
Table 2 Water Quality Data Summary – Third Quarter 2014

**APPENDICES**

Appendix A Groundwater Sampling Protocol
Appendix B Associated Laboratories Analytical Results/Chambers Environmental Field Logs and Chain-of-Custody Forms
Appendix C Groundwater Database
Appendix D Graphical Summaries 2014
Appendix E Landfill Waste Disposal

## 1.0 INTRODUCTION

Alta Environmental (Alta – formerly Justice & Associates [J&A]) was retained by United Rock Products Corporation (URP) to conduct groundwater monitoring and reporting for URP's Pit #3. The purpose of this report is to provide an evaluation of the groundwater monitoring and the estimated average monthly quantities (in cubic yards) and types of materials deposited. Average monthly quantities and types of materials deposited are reported by URP in Appendix F.

## 2.0 FACILITY DESCRIPTION

URP (Discharger) owns and operates URP's Pit #3 (the Site), a construction aggregate mining pit at 1137 Meridian Street, in Irwindale, California. The site is bounded on the north by the Buena Vista Channel, on the south by Arrow Highway and on the east by Buena Vista Street (Figure 1). The center of the site is located at approximately 34°06'56" N and 117°59'23"W.

The Site includes approximately 110 acres of land and has been mined for sand and gravel by the Discharger and its predecessors since the early 1900s. Ground surface elevation around the pit varies from 406 feet above mean sea level (amsl) at the west edge of the pit to 431 feet amsl at the east edge of the pit.

The majority of the pit bottom has exposed groundwater resulting from the mining operation. The City of Irwindale approved conditional use permit CUP 6-04 in 2004. The CUP permits URP to mine the pit to a maximum depth of 440feet bgs or until December 31, 2037, whichever comes first. The Site also has a reclamation plan approved in 2004 that states the excavation will be used as a groundwater recharge basin once the material has been depleted. Alternatively, the reclamation plan calls for the pit to be filled or partially filled.

The proposed discharge methods to the pit include backfilling the waste material from the Rock Plant to Pit #3 by means of sluicing and trucking. The sluicing process involves mixing the waste materials (primarily clay and silt) with groundwater that has been used in the mining process and pumping the mixture to various locations at the pit. Water is used in the mining process to wash fine material (clay and silt) off the coarse material (gravel and sand). No chemicals are added in either the mining or the sluicing processes.

Order No. 01-131 is the waste discharge requirements for the disposal of inert wastes into the Site during mine reclamation.

## 3.0 CURRENT MONITORING REQUIREMENTS

The monitoring is done to satisfy the Monitoring and Reporting Program (MRP) requirements of Order 01-131, File 72-124 and CI 5801, which was adopted by the Regional Water Quality Control Board (RWQCB) on September 21, 2001. The MRP requires quarterly groundwater and waste disposal reporting during the first year and semi-annually thereafter. In the event sampling is not performed during those months, substitute sampling shall occur as soon as possible after, and the reason for delay shall be given. The sampling schedule will continue to be semi-annual regardless of the substitute sampling. In addition, each monitoring report submitted to the Regional Board shall include a tabular list of the estimated average quantities of materials deposited at the site in each month and the methods of disposal. This report contains the summary of both requirements.

### 3.1. Chronology of Order 01-131, File 72-124 and CI 5801

URP and its predecessors have excavated and processed aggregate from this site since as early as 1910. The majority of the pit has groundwater exposed by mining operations. URP purchased the property and operation in 1988.

The LARWQB adopted WDRs in 1973 for the previous owner, Livingston-Graham, to discharge inert materials to Pit #3. In 1988 the pit was purchased by United Rock Products and the pit is now known as URP Pit #3. New WDR's were adopted in 2001 and the previous order from 1973 was rescinded.

In May 2002 Justice & Associates submitted a Technical Report on behalf of United Rock Products to meet the 2001 WDR monitoring requirement. The technical report was approved in July 2002. A Revised Technical Report dated July 2014 was prepared to amend the 2002 report. Changes in the 2014 revised technical report included; revised sampling protocols for down-gradient wells, increasing the depth of up-gradient and down-gradient wells; and a modification to up-gradient and down-gradient monitoring well design.

## 4.0 GROUNDWATER MONITORING

### 4.1. Third Quarter 2014

Pursuant to the WDR for Pit #3 (Order 01-131, File 72-124 and CI 5801), water level measurements should be collected from monitoring wells IRW-1 located at the Rock Plant and IRW-1A and IRW-1B located at Pit #1 in addition to monitoring wells IRW-3A and IRW-3B located at Pit #3. This well network should be used to estimate gradient in the vicinity of Pit #3. However, during the third quarter 2014, only IRW-3A and IRW-3B were measured. Therefore, the groundwater gradient was not determined and the groundwater velocity was not calculated. During the fourth quarter 2014, at least three wells will be measured to enable calculation of the groundwater velocity in the vicinity of Pit #3. The calculation will use Darcy's Law, estimates of soil hydraulic conductivity and soil effective porosity.

Third Quarter measurements for 2014 for IRW-3A and IRW-3B were collected on September 3, 2014. Table 1 presents 2014 water level data.

**Table 1**
**Groundwater Monitoring Program for Third Quarter 2014**

| Well # | General Well Location from Landfill | Date Measured | Depth to Groundwater (feet) | Total Well Depth (feet bgs) | Groundwater Elevation (feet relative to MSL) | Reference Point Elevation (feet above MSL) |
|---|---|---|---|---|---|---|
| IRW-1 | Cross-Gradient | - | - | 300 | - | 405.60 |
| IRW-1A | Up-gradient | - | - | 196.6 | - | 380.94 |
| IRW-1B | Cross-Gradient | - | - | 195.3 | - | 380.03 |
| IRW-3A | Up-gradient | 09/03/2014 | 249.21 | 249.60 | 188.06 | 437.27 |
| IRW-3B | Down-gradient | 09/03/2014 | 222.97 | 250.1 | 183.78 | 406.75 |

### 4.2. Groundwater Velocity and Direction

The groundwater contours for the third quarter 2014 were not calculated due to insufficient data. Wells IRW-1, IRW-1A and IRW-1B were not measured during the sampling event. All wells will be measured during the next quarter monitoring to establish the groundwater gradient.

### 4.3. Monitoring Methods

The monitoring stations for the quarterly report consist of wells IRW-1, IRW-1A, IRW-1B, IRW-3A and IRW-3B as defined in the Revised Technical Report. Based on the reported groundwater gradient in the upper San Gabriel Basin, it has been determined that these wells will provide required information for compliance with MRP CI-5801.

Chambers Environmental performed the measurements for IRW-3A and IRW-3B. The Monitoring methods used were in accordance with EPA guidelines set forth in the Groundwater Sampling Protocol (Refer to Appendix A). Prior to conducting field measurements, the groundwater level probe was calibrated to ensure accuracy of measurements and cleaned prior to and after each measurement to minimize cross-contamination.

## 5.0 GROUNDWATER SAMPLING

The 2014 Revised Technical Report requires that samples be collected from IRW-3A, the up-gradient well at the Northeast corner of Pit #3. Samples should also be collected from IRW-3B at the Southwest corner of Pit #3. Based on the general easterly flow direction of the groundwater in the vicinity of the subject site and the condition that only native geological material washed with local water will be sluiced back into Pit #3, the approved sampling network for Pit #3 also includes groundwater samples from the standing water in the south end of the pit. For each monitoring period, one grab groundwater sample should be collected from both wells and the standing water in the pit. The standing water monitoring will occur as long as there is standing water in the pit. Grab samples of the standing water in the pit will be collected using a stainless steel bailer from a depth of 10 to 15 feet below water surface. Groundwater samples from IRW-3A and IRW-3B will be collected using a submersible pump or passive sampling methods. The first round of samples should also be analyzed for the monitoring parameters listed on US EPA Appendix I and II Constituents. However, since these parameters were not analyzed during the first round of sampling, they will be analyzed during the next quarter (fourth quarter 2014).

Associated Laboratories is a State of California Department of Health Services accredited laboratory. This laboratory performed the chemical analyses in accordance with the current EPA guidelines and procedures. Appendix B contains the analytical results and chain-of-custody record for this quarterly report.

5.1. Groundwater Evaluation

A groundwater database presenting all analytical results is located in Appendix C. Table 2 represents a comparative analysis between the analytical results and the water protection standards established for URP Pit #3 as identified in the WDRs.

**Table 2**
**Water Quality Data Summary**
**First Quarter 2014 Sampling Event**

| Constituent | Water Quality Protection Standards | Monitoring Station | | |
|---|---|---|---|---|
| | | IRW-SW1 | IRW-3A | IRW-3B |
| Date Sampled | | 09/03/2014 | 09/03/2014 | 09/03/2014 |
| Total Dissolved Solids (TDS) | 450 mg/l | 148 | - | 210 |
| Chloride (Cl) | 100 mg/l | 15.0 | - | 15.9 |
| Sulfate ($SO_4$) | 100 mg/l | 64.5 | - | 41.6 |
| Nitrate (as ($NO_3$) | 45 mg/l | <1 | - | 0.85 |
| Boron | 0.5 mg/l | 0.147 | - | 0.204 |
| pH | 6.5 – 8.5 | 8.42 | - | 7.92 |

The sample results for samples collected in September 2014 indicate that standing groundwater in Pit #3 and groundwater collected from the down-gradient well IRW-3B currently meets Water Quality Protection Standards for all constituents. The standards are established for this facility by Order No. 01-013 and are based on the water quality objectives for the western area of the main San Gabriel Basin contained in the Basin Plan.

There was an insufficient amount of groundwater in IRW-3A to collect samples for analysis. The low aquifer is likely an effect of the significant drought conditions in Southern California. Samples shall be collected for the next Quarterly report. In the event that the well remains dry, alternative sampling options shall be discussed with the LARWQCB.

5.2. Purged Groundwater

Purged groundwater from the monitoring well is used at the Site for dust suppression (within 20-foot radius of each well). 1440 ml of purged water

was generated during the September 3, 2014 sampling event (Refer to Appendix B).

5.3. Sluice Material and Waste Disposal

During July through September 2014 reporting period, no material was placed in Pit #3.

The landfill waste disposal information is included in Appendix G.

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

Alta conducted a review of the groundwater analytical data for the third quarter 2014 report. Based on field observations and analytical results, it appears that deposited waste and current waste disposal practices are not adversely impacting local groundwater quality.

Based on the data collected as required by the sampling and monitoring plan detailed in the Waste Discharge Requirements Order, none of the water quality protection standards listed in Table 2 are elevated above the limits listed in the Order. However, monitoring well IRW-3A was not sampled due to lack of water. In addition, well depths in IRW-1, IRW-1A, and IRW-1B were not measured and the gradient was not calculated. This information shall be collected during the next sampling quarter along with the EPA Appendix I and II constituents.

We appreciate the opportunity to provide groundwater monitoring and reporting services. If you have any questions or comments concerning this report, please feel free to contact me at (562) 495-5777.

# 7.0 CERTIFICATION

## 7.1. Professional Certifications

The hydrogeologic information, results of groundwater testing, conclusions and recommendations in this report have been reviewed by of a California-registered professional engineer. This certification of conditions comprises a declaration of his professional judgment. It does not constitute a warranty or guarantee.




Steven Morrill, PE
Senior Project Manager/Senior Engineer III
Alta Environmental

## 8.0 REFERENCES

Justice & Associates, Sully-Miller Irwindale Facility Phase I Environmental Site Assessment, 9-97

Justice & Associates, United Rock Products, Pit #3 & #3 Final Dredge Operation

Spill Prevention Control and Countermeasure Plan, 5-98

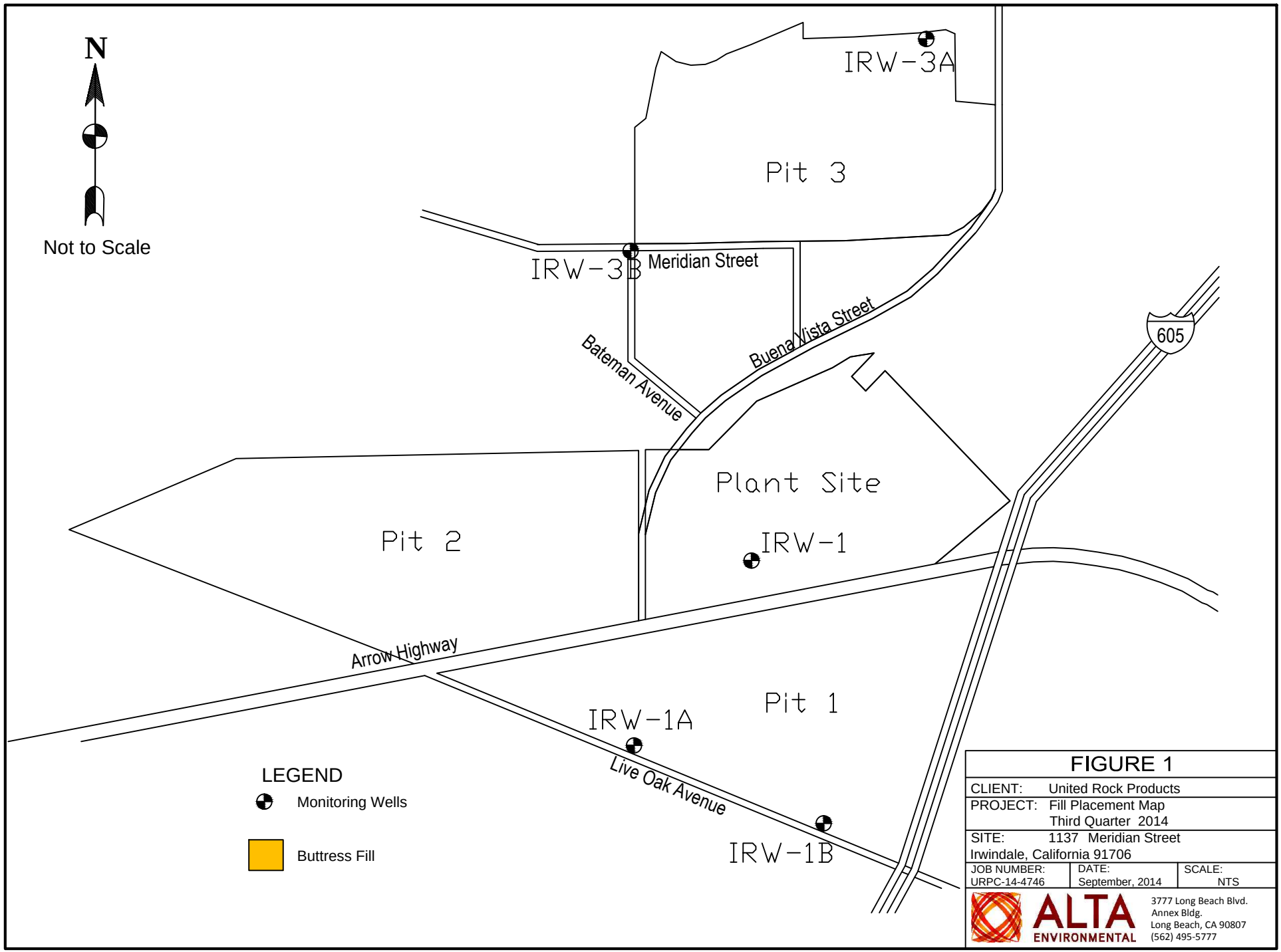
Luhdorff & Scalmanini, Supplemental Groundwater Investigation and Mitigation Monitoring Program, July 2001

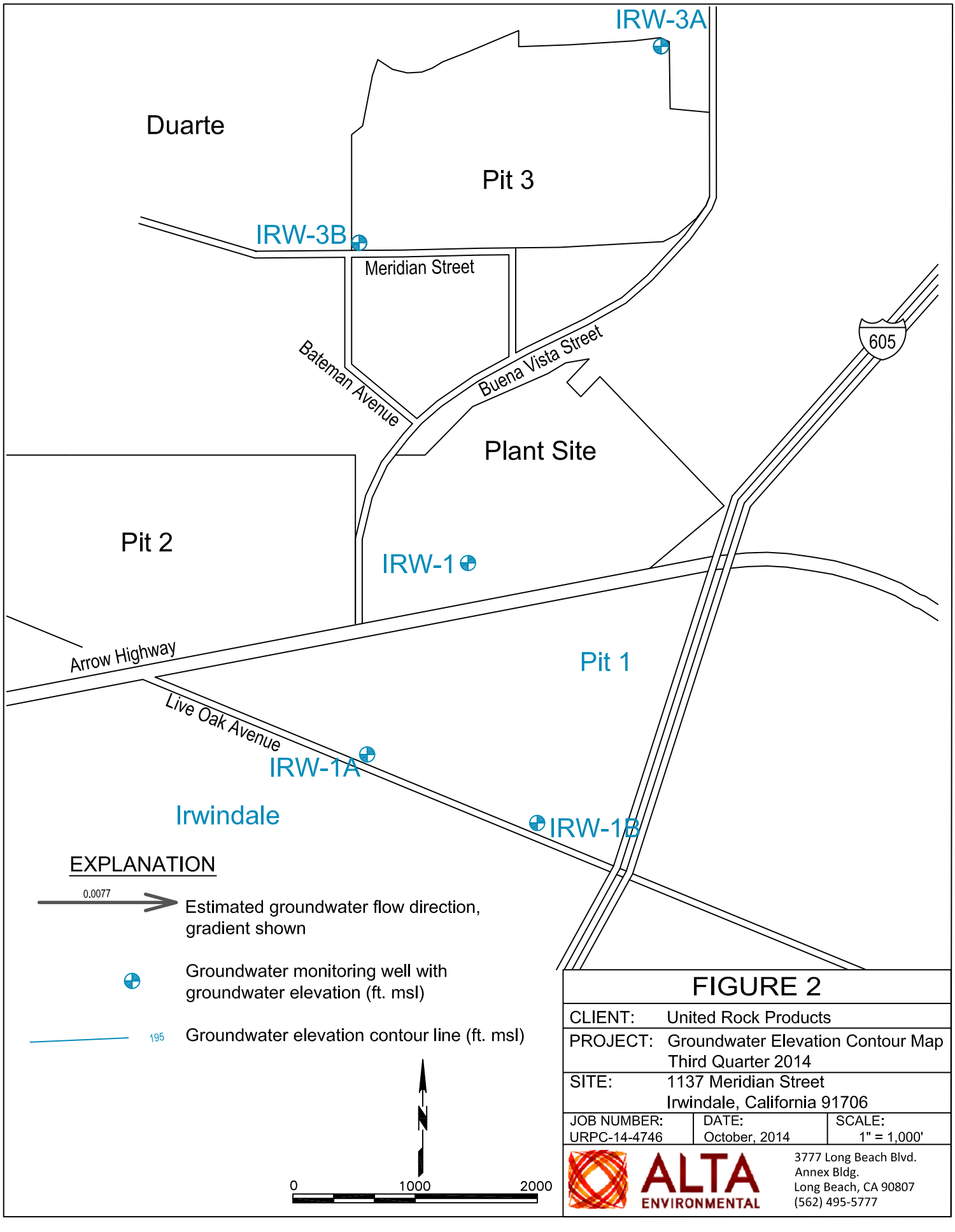
Waste Discharge Requirements – United Rock Products – Pit #3 Irwindale, CA (File No. 72-124; Order No. 01-131, CI 5801)

Surface Waters-Field Operations Manual for Lakes USEPA Office of Research and Development EPA/620/R-97/001/June 1997

Technical Guidance Manual for Hydrogeologic Investigations and Groundwater Monitoring, State of Ohio EPA, 1995

# FIGURES


N
Not to Scale
IRW-3A
Pit 3
IRW-3B
Meridian Street
Bateman Avenue
Buena Vista Street
605
Plant Site
IRW-1
Pit 2
Arrow Highway
Pit 1
IRW-1A
Live Oak Avenue
IRW-1B
LEGEND
Monitoring Wells
Buttress Fill
FIGURE 1
CLIENT: United Rock Products
PROJECT: Fill Placement Map
Third Quarter 2014
SITE: 1137 Meridian Street
Irwindale, California 91706
JOB NUMBER: URPC-14-4746
DATE: September, 2014
SCALE: NTS
ALTA ENVIRONMENTAL
3777 Long Beach Blvd.
Annex Bldg.
Long Beach, CA 90807
(562) 495-5777




# FIGURE 2

| | |
|---|---|
| CLIENT: | United Rock Products |
| PROJECT: | Groundwater Elevation Contour Map<br>Third Quarter 2014 |
| SITE: | 1137 Meridian Street<br>Irwindale, California 91706 |

| JOB NUMBER: | DATE: | SCALE: |
|---|---|---|
| URPC-14-4746 | October, 2014 | 1" = 1,000' |

ALTA ENVIRONMENTAL
3777 Long Beach Blvd.
Annex Bldg.
Long Beach, CA 90807
(562) 495-5777

W:\Clients T-Z\United Rock Products (URPC)\URPC-14-4746 Pit #3 annual reporting\Photos - Drawings\Ground Water Contour Map 2014.dwg

# APPENDIX A

# GROUNDWATER SAMPLING PROTOCOL

# STANDARD FIELD PROCEDURES FOR MONITORING AND SAMPLING GROUNDWATER MONITORING WELLS AT URP Pit #3

## SEALED WELLS

One or more wells at the site are sealed and have down-hole pumps for discharging groundwater. Down-hole monitoring and sampling equipment cannot be used in those wells. Sealed wells must be monitored, purged and sampled using the down-hole pumps. Purge volume is estimated using historical depth-to-water and depth-to-bottom information. Once water is obtained from the discharge of the down-hole pumps, the procedures for recording water quality readings and for packaging groundwater samples for laboratory analysis are the same as for open wells, below.

## OPEN WELLS

The following standard operating procedures apply to wells that are accessible using down-hole monitoring and sampling equipment.

## DECONTAMINATION OF MONITORING AND SAMPLING EQUIPMENT

All down-hole monitoring and sampling equipment is decontaminated using a non-phosphate detergent solution prior to placing equipment into each well. A triple-rinse procedure is used to clean the equipment. The general triple-rinse decontamination procedure is as follows:

- Wash equipment in the first rinse containing detergent and clean tap water;
- Rinse thoroughly in the third rinse containing clean tap water;
- Rinse in the third rinse containing distilled or deionized water; and
- Allow equipment to air dry prior to next use.

## WELL GAUGING

All wells are gauged using an electronic measuring tape capable of recording depth-to-water to the nearest 0.01 foot. Depth-to-water is measured to a survey mark on the top of each well casing. In the absence of a survey mark, the well is gauged from the north side of the top-of-casing. Each depth-to-water measurement is performed twice to assure accuracy. After measuring the depth-to-water, either the electronic tape or a clean non-electronic tape is lowered to the bottom of the well to obtain a depth-to-bottom reading for each well. All measurements are recorded on standard field forms.

## PRE-PURGE WATER QUALITY MEASUREMENTS

Prior to purging, a small volume of groundwater is purged from each well using a clean PVC or stainless-steel bailer. That water is used to perform field tests for $CO_2$ and alkalinity. A Hatch Digital Titrator Model 16900 or similar field instrument capable of measuring the required parameters is used to obtain field readings. All field readings are recorded on standard field forms.

## WELL PURGING

One casing volume of water is calculated for each well using the depth-to-water and depth-to-bottom field readings and the diameter of the well casing. Using a clean PVC or stainless steel bailer with new string attached, each well is purged of three to five casing volumes of water prior to collecting water samples for laboratory analysis. Water volumes removed from each well are recorded on standard field forms. After each casing volume of water is removed from the well, field water quality parameters are recorded (see below). Upon completion of purging, the water level is allowed to recover to at least 80% of its pre-purge volume prior to sampling. For slow-recharging wells, water samples are collected after two hours if 80% recovery is not achieved.

If prior groundwater analytical results show that the groundwater in a specific well is sufficiently clean, purged groundwater from the well is spread on the ground in the vicinity of the well. If the groundwater is known to contain contaminants above State action levels, the purged water is placed into DOT-approved steel 55-gallon drums.

Drums containing purge water are sealed, appropriately labeled and temporarily stored on site until a licensed hauler is contracted to remove the drums. All drummed purge water is disposed of at a State-licensed water recycling facility.

## WATER QUALITY MEASUREMENTS DURING PURGING

After purging each casing volume of water from each well, field readings are taken of water quality parameters. A Beta Technologies, Inc. Hydac Water Quality Meter or similar instrument is used to record the temperature, electrical conductivity and pH of the groundwater. At least two out of three of those parameters must stabilize to within 10% between the last two readings before a water sample is collected. A minimum of three casing volumes are removed prior to sampling if water quality parameters stabilize. If water quality parameters do not stabilize, groundwater samples are collected after purging a maximum of five casing volumes. All field readings are recorded on standard field forms.

## WATER SAMPLE COLLECTION

A new polypropylene disposable bailer is used to collect the laboratory water samples from each well. Each disposable bailer is discarded after use in one well. Water from the bailer is placed into laboratory-supplied sample containers containing appropriate preservatives for the requested analytic. The bottles are filled, capped and placed in a cooler on ice. All samples collected for laboratory analysis are transported in the chilled cooler to a State-certified laboratory following standard chain-of-custody procedures.

## EXPOSED GROUNDWATER GRAB SAMPLES

A Discrete grab samples shall be collected from the exposed groundwater in the pit, using a stainless steel bailer from the surface. During the life of the WDRs, the shape and size of the lake will change. Consequently, we are not recommending specific points, but will keep the points near the southwest shoreline far enough away from the shore to test the full water column and as far away from each separate point as possible.

# APPENDIX B

# ASSOCIATED LABORATORIES ANALYTICAL RESULTS / CHAMBERS ENVIRONMENTAL FIELD LOGS AND CHAIN-OF-CUSTODY FORMS

ALTA ENVIRONMENTAL

**Associated Laboratories**
*806 N. Batavia - Orange, CA 92868*
*Tel (714)771-6900 Fax (714)538-1209*
*www.associatedlabs.com*
*Info@associatedlabs.com*

ACCREDITED IN ACCORDANCE WITH nelac
04232CA

Client: United Rock Products
Address: 135 S. State College Blvd.
Suite #400
Brea, CA 92821
Attn: Ken Barker

Lab Request: 345685
Report Date: 09/12/2014
Date Received: 09/03/2014
Client ID: 12535

Comments: Pit-3: United Rock Products

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 345685-001 | IRW-B |
| 345685-002 | Pit 3 |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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*TESTING & CONSULTING*
*Chemical*
*Microbiological*
*Environmental*

| | | | |
|---|---|---|---|
| **Matrix:** Water | **Client:** United Rock Products | | **Collector:** Client |
| **Sampled:** 09/03/2014 11:11 | **Site:** | | |
| **Sample #:** 345685-001 | **Client Sample #:** IRW-B | | **Sample Type:** |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 200.7 | **Prep Method:** EPA 3010A | | | | | **QCBatchID:** | QC1149176 |
| **Boron** | **0.204** | 1 | 0.05 | mg/L | 09/04/14 | wyu | |
| Cadmium | ND | 1 | 0.005 | mg/L | 09/04/14 | wyu | |
| Chromium | ND | 1 | 0.01 | mg/L | 09/04/14 | wyu | |
| Lead | ND | 1 | 0.005 | mg/L | 09/04/14 | wyu | |
| Nickel | ND | 1 | 0.01 | mg/L | 09/04/14 | wyu | |
| **Method:** EPA 300.0 | **Prep Method:** Method | | | | | **QCBatchID:** | QC1149199 |
| **Chloride** | **15.9** | 1 | 1 | mg/L | 09/04/14 | KimNguyen | |
| **Sulfate** | **41.6** | 1 | 1 | mg/L | 09/04/14 | KimNguyen | |
| **Nitrate, as NO3** | **0.85** | 1 | 0.44 | mg/L | 09/04/14 | KimNguyen | |
| **Method:** EPA 8260B *NELAC* | **Prep Method:** EPA 5030B | | | | | **QCBatchID:** | QC1149190 |
| Benzene | ND | 1 | 1 | ug/L | 09/04/14 | bbuilt | |
| Methyl-t-butyl Ether (MTBE) | ND | 1 | 1 | ug/L | 09/04/14 | bbuilt | |
| Tetrachloroethene | ND | 1 | 5 | ug/L | 09/04/14 | bbuilt | |
| Trichloroethene | ND | 1 | 5 | ug/L | 09/04/14 | bbuilt | |
| Vinyl Chloride | ND | 1 | 5 | ug/L | 09/04/14 | bbuilt | |

| *Surrogate* | *% Recovery* | *Limits* | *Notes* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (SUR)* | *122* | *70-145* | |
| *4-Bromofluorobenzene (SUR)* | *103* | *70-145* | |
| *Dibromodifluoromethane (SUR)* | *106* | *70-145* | |
| *Toluene-d8 (SUR)* | *100* | *70-145* | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Method:** SM 2320-B | **Prep Method:** Method | | | | | **QCBatchID:** | QC1149257 |
| **Bicarbonate (HCO3)** | **159** | 1 | 5 | mg/L | 09/08/14 | hanhkhong | |
| Carbonate (CO3) | ND | 1 | 5 | mg/L | 09/08/14 | hanhkhong | |
| Hydroxide (OH) | ND | 1 | 5 | mg/L | 09/08/14 | hanhkhong | |
| **Total Alkalinity (as CaCO3)** | **130** | 1 | 5 | mg/L | 09/08/14 | hanhkhong | |
| **Method:** SM 2340-B | **Prep Method:** None | | | | | **QCBatchID:** | QC1149176 |
| **Total Hardness** | **157** | 1 | 0.5 | mg/L | 09/10/14 | wyu | |
| **Method:** SM 2510-B | **Prep Method:** Method | | | | | **QCBatchID:** | |
| **Specific Conductance** | **397** | 1 | | umhos/cm | 09/04/14 | tanguyen | |
| **Method:** SM 2540-C | **Prep Method:** Method | | | | | **QCBatchID:** | QC1149285 |
| **Total Dissolved Solids** | **210** | 1 | 10 | mg/L | 09/09/14 | mmegaly | |
| **Method:** SM 4500-CO2-C | **Prep Method:** Method | | | | | **QCBatchID:** | |
| **Carbon Dioxide, Free** | **748** | 1 | 1 | mg/L | 09/04/14 | dung | |
| **Method:** SM 4500-H+B | **Prep Method:** Method | | | | | **QCBatchID:** | |
| **pH** | **5.61** | 1 | | pH Units | 09/04/14 | tanguyen | T2 |
| **Method:** SM 5220-D | **Prep Method:** Method | | | | | **QCBatchID:** | QC1149230 |
| Chemical Oxygen Demand (COD) | ND | 1 | 4 | mg/L | 09/05/14 | hanhkhong | |

| | | | |
|---|---|---|---|
| **Matrix:** Water | **Client:** United Rock Products | **Collector:** Client | |
| **Sampled:** 09/03/2014 12:30 | **Site:** | | |
| **Sample #:** 345685-002 | **Client Sample #:** Pit 3 | **Sample Type:** | |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 200.7 | **Prep Method:** EPA 3010A | | | | | **QCBatchID:** | QC1149176 |
| **Boron** | **0.147** | 1 | 0.05 | mg/L | 09/04/14 | wyu | |
| Cadmium | ND | 1 | 0.005 | mg/L | 09/04/14 | wyu | |
| Chromium | ND | 1 | 0.01 | mg/L | 09/04/14 | wyu | |
| Lead | ND | 1 | 0.005 | mg/L | 09/04/14 | wyu | |
| Nickel | ND | 1 | 0.01 | mg/L | 09/04/14 | wyu | |
| **Method:** EPA 300.0 | **Prep Method:** Method | | | | | **QCBatchID:** | QC1149199 |
| **Chloride** | **15.0** | 1 | 1 | mg/L | 09/04/14 | KimNguyen | |
| **Sulfate** | **64.5** | 1 | 1 | mg/L | 09/04/14 | KimNguyen | |
| Nitrate, as NO3 | ND | 1 | 0.44 | mg/L | 09/04/14 | KimNguyen | |
| **Method:** EPA 8260B *NELAC* | **Prep Method:** EPA 5030B | | | | | **QCBatchID:** | QC1149190 |
| Benzene | ND | 1 | 1 | ug/L | 09/04/14 | bbuilt | |
| Methyl-t-butyl Ether (MTBE) | ND | 1 | 1 | ug/L | 09/04/14 | bbuilt | |
| Tetrachloroethene | ND | 1 | 5 | ug/L | 09/04/14 | bbuilt | |
| Trichloroethene | ND | 1 | 5 | ug/L | 09/04/14 | bbuilt | |
| Vinyl Chloride | ND | 1 | 5 | ug/L | 09/04/14 | bbuilt | |

| *Surrogate* | *% Recovery* | *Limits* | *Notes* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (SUR)* | *123* | *70-145* | |
| *4-Bromofluorobenzene (SUR)* | *108* | *70-145* | |
| *Dibromodifluoromethane (SUR)* | *104* | *70-145* | |
| *Toluene-d8 (SUR)* | *98* | *70-145* | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Method:** SM 2320-B | **Prep Method:** Method | | | | | **QCBatchID:** | QC1149257 |
| **Bicarbonate (HCO3)** | **88.0** | 1 | 5 | mg/L | 09/08/14 | hanhkhong | |
| Carbonate (CO3) | ND | 1 | 5 | mg/L | 09/08/14 | hanhkhong | |
| Hydroxide (OH) | ND | 1 | 5 | mg/L | 09/08/14 | hanhkhong | |
| **Total Alkalinity (as CaCO3)** | **76.0** | 1 | 5 | mg/L | 09/08/14 | hanhkhong | |
| **Method:** SM 2340-B | **Prep Method:** None | | | | | **QCBatchID:** | QC1149176 |
| **Total Hardness** | **144** | 1 | 0.5 | mg/L | 09/10/14 | wyu | |
| **Method:** SM 2510-B | **Prep Method:** Method | | | | | **QCBatchID:** | |
| **Specific Conductance** | **348** | 1 | | umhos/cm | 09/04/14 | tanguyen | |
| **Method:** SM 2540-C | **Prep Method:** Method | | | | | **QCBatchID:** | QC1149285 |
| **Total Dissolved Solids** | **148** | 1 | 10 | mg/L | 09/09/14 | mmegaly | |
| **Method:** SM 4500-CO2-C | **Prep Method:** Method | | | | | **QCBatchID:** | |
| Carbon Dioxide, Free | ND | 1 | 1 | mg/L | 09/04/14 | dung | |
| **Method:** SM 4500-H+B | **Prep Method:** Method | | | | | **QCBatchID:** | |
| **pH** | **8.44** | 1 | | pH Units | 09/04/14 | tanguyen | T2 |
| **Method:** SM 5220-D | **Prep Method:** Method | | | | | **QCBatchID:** | QC1149230 |
| Chemical Oxygen Demand (COD) | ND | 1 | 4 | mg/L | 09/05/14 | hanhkhong | |

| QCBatchID: QC1149176 | Analyst: KimNguyen | Method: SM 2340-B |
|---|---|---|
| Matrix: Water | Analyzed: 09/04/2014 | Instrument: AAICP (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1149176MB1** | | | | | |
| Arsenic | ND | mg/L | | 0.005 | |
| Boron | ND | mg/L | | 0.05 | |
| Cadmium | ND | mg/L | | 0.005 | |
| Calcium | ND | mg/L | | 0.1 | |
| Chromium | ND | mg/L | | 0.01 | |
| Copper | ND | mg/L | | 0.01 | |
| Iron | ND | mg/L | | 0.02 | |
| Lead | ND | mg/L | | 0.005 | |
| Magnesium | ND | mg/L | | 0.1 | |
| Manganese | ND | mg/L | | 0.01 | |
| Nickel | ND | mg/L | | 0.01 | |
| Potassium | ND | mg/L | | 0.5 | |
| Silver | ND | mg/L | | 0.005 | |
| Sodium | ND | mg/L | | 0.5 | |
| Zinc | ND | mg/L | | 0.01 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount LCS | Spike Amount LCSD | Spike Result LCS | Spike Result LCSD | Units | Recoveries LCS | Recoveries LCSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1149176LCS1** | | | | | | | | | | | |
| Arsenic | 2 | | 2.02 | | mg/L | 101 | | | 80-120 | | |
| Boron | 2 | | 1.96 | | mg/L | 98 | | | 80-120 | | |
| Cadmium | 2 | | 1.92 | | mg/L | 96 | | | 80-120 | | |
| Calcium | 2 | | 2.11 | | mg/L | 106 | | | 80-120 | | |
| Chromium | 2 | | 2.06 | | mg/L | 103 | | | 80-120 | | |
| Copper | 2 | | 2.15 | | mg/L | 108 | | | 80-120 | | |
| Iron | 2 | | 1.93 | | mg/L | 97 | | | 80-120 | | |
| Lead | 2 | | 2.09 | | mg/L | 105 | | | 80-120 | | |
| Magnesium | 2 | | 2.09 | | mg/L | 105 | | | 80-120 | | |
| Manganese | 2 | | 2.09 | | mg/L | 105 | | | 80-120 | | |
| Nickel | 2 | | 2.07 | | mg/L | 104 | | | 80-120 | | |
| Potassium | 20 | | 18.7 | | mg/L | 94 | | | 80-120 | | |
| Silver | 1 | | 0.917 | | mg/L | 92 | | | 80-120 | | |
| Sodium | 2 | | 2.10 | | mg/L | 105 | | | 80-120 | | |
| Zinc | 2 | | 2.06 | | mg/L | 103 | | | 80-120 | | |

## Matrix Spike/Matrix Spike Duplicate Summary

| Analyte | Sample Amount | Spike Amount MS | Spike Amount MSD | Spike Result MS | Spike Result MSD | Units | Recoveries MS | Recoveries MSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1149176MS1** | | | | | | | | | | | | **Source: 345685-001** |
| Arsenic | ND | 1 | | 0.944 | | mg/L | 96 | | | 75-125 | | |
| Boron | 0.204 | 1 | | 1.13 | | mg/L | 93 | | | 75-125 | | |
| Cadmium | ND | 1 | | 0.912 | | mg/L | 92 | | | 75-125 | | |
| Calcium | 41.7 | 10 | | 50.7 | | mg/L | 90 | | | 75-125 | | |
| Chromium | ND | 1 | | 1.00 | | mg/L | 100 | | | 75-125 | | |
| Copper | 0.004 | 1 | | 0.948 | | mg/L | 94 | | | 75-125 | | |
| Iron | 2.26 | 1 | | 4.01 | | mg/L | 175 | | | 75-125 | | |
| Lead | ND | 1 | | 0.946 | | mg/L | 95 | | | 75-125 | | |
| Magnesium | 9.40 | 10 | | 19.0 | | mg/L | 96 | | | 75-125 | | |
| Manganese | 0.162 | 1 | | 1.10 | | mg/L | 94 | | | 75-125 | | |

| QCBatchID: QC1149176 | Analyst: KimNguyen | Method: SM 2340-B |
|---|---|---|
| Matrix: Water | Analyzed: 09/04/2014 | Instrument: AAICP (group) |

| Analyte | Sample Amount | Spike Amount MS | Spike Amount MSD | Spike Result MS | Spike Result MSD | Units | Recoveries MS | Recoveries MSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1149176MS1** | | | | | | | | | | | | **Source: 345685-001** |
| Nickel | 0.002 | 1 | | 0.946 | | mg/L | 94 | | | 75-125 | | |
| Potassium | 3.62 | 10 | | 12.7 | | mg/L | 91 | | | 75-125 | | |
| Silver | ND | 0.5 | | 0.456 | | mg/L | 91 | | | 75-125 | | |
| Sodium | 20.0 | 10 | | 27.8 | | mg/L | 78 | | | 75-125 | | |
| Zinc | 0.021 | 1 | | 0.943 | | mg/L | 92 | | | 75-125 | | |
| **QC1149176MS2** | | | | | | | | | | | | **Source: 345685-002** |
| Arsenic | 0.020 | 1 | | 0.976 | | mg/L | 96 | | | 75-125 | | |
| Boron | 0.147 | 1 | | 1.14 | | mg/L | 99 | | | 75-125 | | |
| Cadmium | ND | 1 | | 0.916 | | mg/L | 92 | | | 75-125 | | |
| Calcium | 34.1 | 10 | | 43.2 | | mg/L | 91 | | | 75-125 | | |
| Chromium | 0.004 | 1 | | 1.01 | | mg/L | 101 | | | 75-125 | | |
| Copper | 0.006 | 1 | | 0.968 | | mg/L | 96 | | | 75-125 | | |
| Iron | 2.08 | 1 | | 2.67 | | mg/L | 59 | | | 75-125 | | |
| Lead | ND | 1 | | 0.965 | | mg/L | 96 | | | 75-125 | | |
| Magnesium | 10.0 | 10 | | 19.0 | | mg/L | 90 | | | 75-125 | | |
| Manganese | 0.059 | 1 | | 0.985 | | mg/L | 93 | | | 75-125 | | |
| Nickel | 0.002 | 1 | | 0.963 | | mg/L | 96 | | | 75-125 | | |
| Potassium | 4.40 | 10 | | 13.9 | | mg/L | 95 | | | 75-125 | | |
| Silver | ND | 0.5 | | 0.457 | | mg/L | 91 | | | 75-125 | | |
| Sodium | 19.4 | 10 | | 29.1 | | mg/L | 97 | | | 75-125 | | |
| Zinc | 0.011 | 1 | | 0.957 | | mg/L | 95 | | | 75-125 | | |

| QCBatchID: QC1149190 | Analyst: bbuilt | Method: EPA 8260B |
|---|---|---|
| Matrix: Water | Analyzed: 09/04/2014 | Instrument: VOA-MS (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1149190MB1** | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | | 5 | |
| 1,1,1-Trichloroethane | ND | ug/L | | 5 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | | 5 | |
| 1,1,2-Trichloroethane | ND | ug/L | | 5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | | 5 | |
| 1,1-Dichloroethane | ND | ug/L | | 5 | |
| 1,1-Dichloroethene | ND | ug/L | | 5 | |
| 1,1-Dichloropropene | ND | ug/L | | 5 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | | 5 | |
| 1,2,3-Trichloropropane | ND | ug/L | | 5 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | | 5 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | | 5 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | | 5 | |
| 1,2-Dibromoethane | ND | ug/L | | 5 | |
| 1,2-Dichlorobenzene | ND | ug/L | | 5 | |
| 1,2-Dichloroethane | ND | ug/L | | 5 | |
| 1,2-Dichloropropane | ND | ug/L | | 5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | | 5 | |
| 1,3-Dichlorobenzene | ND | ug/L | | 5 | |
| 1,3-Dichloropropane | ND | ug/L | | 5 | |
| 1,4-Dichlorobenzene | ND | ug/L | | 5 | |
| 2,2-Dichloropropane | ND | ug/L | | 5 | |
| 2-Butanone (MEK) | ND | ug/L | | 100 | |
| 2-Chloroethyl Vinyl Ether | ND | ug/L | | 5 | |
| 2-Chlorotoluene | ND | ug/L | | 5 | |
| 4-Chlorotoluene | ND | ug/L | | 5 | |
| 4-Isopropyltoluene | ND | ug/L | | 5 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | | 5 | |
| Acetone | ND | ug/L | | 100 | |
| Allyl Chloride | ND | ug/L | | 5 | |
| Benzene | ND | ug/L | | 1 | |
| Bromobenzene | ND | ug/L | | 5 | |
| Bromochloromethane | ND | ug/L | | 5 | |
| Bromodichloromethane | ND | ug/L | | 5 | |
| Bromoform | ND | ug/L | | 5 | |
| Bromomethane | ND | ug/L | | 5 | |
| Carbon Tetrachloride | ND | ug/L | | 5 | |
| Chlorobenzene | ND | ug/L | | 5 | |
| Chlorodibromomethane | ND | ug/L | | 5 | |
| Chloroethane | ND | ug/L | | 5 | |
| Chloroform | ND | ug/L | | 5 | |
| Chloromethane | ND | ug/L | | 5 | |
| cis-1,2-Dichloroethene | ND | ug/L | | 5 | |
| cis-1,3-dichloropropene | ND | ug/L | | 5 | |
| cis-1,4-dichloro-2-butene | ND | ug/L | | 5 | |
| Dibromomethane | ND | ug/L | | 5 | |
| Dichlorodifluoromethane | ND | ug/L | | 5 | |
| Ethylbenzene | ND | ug/L | | 5 | |
| Hexachlorobutadiene | ND | ug/L | | 5 | |
| Isopropylbenzene | ND | ug/L | | 5 | |

| QCBatchID: QC1149190 | Analyst: bbuilt | Method: EPA 8260B |
|---|---|---|
| Matrix: Water | Analyzed: 09/04/2014 | Instrument: VOA-MS (group) |

| Analyte | Blank Result | Units | | RDL | Notes | |
|---|---|---|---|---|---|---|
| **QC1149190MB1** | | | | | | |
| m and p-Xylene | ND | ug/L | | 5 | | |
| Methylene chloride | ND | ug/L | | 5 | | |
| Methyl-t-butyl Ether (MTBE) | ND | ug/L | | 1 | | |
| Naphthalene | ND | ug/L | | 5 | | |
| N-butylbenzene | ND | ug/L | | 5 | | |
| N-propylbenzene | ND | ug/L | | 5 | | |
| o-Xylene | ND | ug/L | | 5 | | |
| Sec-butylbenzene | ND | ug/L | | 5 | | |
| Styrene | ND | ug/L | | 5 | | |
| t-Butyl alcohol (TBA) | ND | ug/L | | 10 | | |
| Tert-butylbenzene | ND | ug/L | | 5 | | |
| Tetrachloroethene | ND | ug/L | | 5 | | |
| Toluene | ND | ug/L | | 5 | | |
| trans-1,2-dichloroethene | ND | ug/L | | 5 | | |
| trans-1,3-dichloropropene | ND | ug/L | | 5 | | |
| trans-1,4-dichloro-2-butene | ND | ug/L | | 5 | | |
| Trichloroethene | ND | ug/L | | 5 | | |
| Trichlorofluoromethane | ND | ug/L | | 5 | | |
| Vinyl Chloride | ND | ug/L | | 5 | | |
| Xylenes (Total) | ND | ug/L | | 5 | | |

## *Lab Control Spike/ Lab Control Spike Duplicate Summary*

| Analyte | Spike Amount LCS | Spike Amount LCSD | Spike Result LCS | Spike Result LCSD | Units | Recoveries LCS | Recoveries LCSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1149190LCS1** | | | | | | | | | | | |
| 1,1-Dichloroethene | 50 | | 50 | | ug/L | 100 | | | 59-172 | | |
| Benzene | 50 | | 48 | | ug/L | 96 | | | 62-137 | | |
| Chlorobenzene | 50 | | 51 | | ug/L | 102 | | | 60-133 | | |
| Methyl-t-butyl Ether (MTBE) | 50 | | 38 | | ug/L | 76 | | | 62-137 | | |
| Toluene | 50 | | 46 | | ug/L | 92 | | | 59-139 | | |
| Trichloroethene | 50 | | 45 | | ug/L | 90 | | | 66-142 | | |

## *Matrix Spike/Matrix Spike Duplicate Summary*

| Analyte | Sample Amount | Spike Amount MS | Spike Amount MSD | Spike Result MS | Spike Result MSD | Units | Recoveries MS | Recoveries MSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1149190MS1, QC1149190MSD1** | | | | | | | | | | | | **Source: 345685-001** |
| 1,1-Dichloroethene | ND | 50 | 50 | 50 | 49 | ug/L | 100 | 98 | 2.0 | 59-172 | 22 | |
| Benzene | ND | 50 | 50 | 50 | 50 | ug/L | 100 | 100 | 0.0 | 62-137 | 24 | |
| Chlorobenzene | ND | 50 | 50 | 50 | 51 | ug/L | 100 | 102 | 2.0 | 60-133 | 24 | |
| Methyl-t-butyl Ether (MTBE) | ND | 50 | 50 | 43 | 43 | ug/L | 86 | 86 | 0.0 | 62-137 | 21 | |
| Toluene | ND | 50 | 50 | 46 | 47 | ug/L | 92 | 94 | 2.2 | 59-139 | 21 | |
| Trichloroethene | ND | 50 | 50 | 45 | 45 | ug/L | 90 | 90 | 0.0 | 66-142 | 21 | |

| QCBatchID: QC1149199 | Analyst: KimNguyen | Method: EPA 300.0 |
|---|---|---|
| Matrix: Water | Analyzed: 09/05/2014 | Instrument: CHEM (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes | |
|---|---|---|---|---|---|---|
| **QC1149199MB1** | | | | | | |
| Bromide | ND | mg/L | | 0.5 | | |
| Chloride | ND | mg/L | | 1 | | |
| Nitrate, as Nitrogen | ND | mg/L | | 0.1 | | |
| Nitrate, as NO3 | ND | mg/L | | 0.44 | | |
| Nitrite, as Nitrogen | ND | mg/L | | 0.1 | | |
| Sulfate | ND | mg/L | | 1 | | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount LCS | Spike Amount LCSD | Spike Result LCS | Spike Result LCSD | Units | Recoveries LCS | Recoveries LCSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1149199LCS1** | | | | | | | | | | | |
| Bromide | 25 | | 25.3 | | mg/L | 101 | | | 90-110 | | |
| Chloride | 50 | | 47.4 | | mg/L | 95 | | | 90-110 | | |
| Nitrate, as Nitrogen | 5 | | 4.98 | | mg/L | 100 | | | 90-110 | | |
| Nitrate, as NO3 | 22.15 | | 22.1 | | mg/L | 100 | | | 90-110 | | |
| Nitrite, as Nitrogen | 5 | | 5.11 | | mg/L | 102 | | | 90-110 | | |
| Sulfate | 50 | | 48.1 | | mg/L | 96 | | | 90-110 | | |

## Matrix Spike/Matrix Spike Duplicate Summary

| Analyte | Sample Amount | Spike Amount MS | Spike Amount MSD | Spike Result MS | Spike Result MSD | Units | Recoveries MS | Recoveries MSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1149199MS1, QC1149199MSD1** | | | | | | | | | | | | **Source: 345799-001** |
| Bromide | 2.69 | 250 | 250 | 285 | 283 | mg/L | 113 | 112 | 0.7 | 75-125 | 20 | |
| Chloride | 316 | 500 | 500 | 763 | 756 | mg/L | 89 | 88 | 0.9 | 75-125 | 20 | |
| Nitrate, as Nitrogen | 8.34 | 56.4 | 56.4 | 67.4 | 66.8 | mg/L | 105 | 104 | 0.9 | 75-125 | 20 | |
| Nitrate, as NO3 | 36.9 | 250 | 250 | 299 | 296 | mg/L | 105 | 104 | 1.0 | 75-125 | 20 | |
| Nitrite, as Nitrogen | 3.93 | 76.2 | 76.2 | 86.6 | 86.1 | mg/L | 108 | 108 | 0.6 | 75-125 | 20 | |
| Sulfate | 320 | 500 | 500 | 773 | 756 | mg/L | 91 | 87 | 2.2 | 75-125 | 20 | |

| QCBatchID: QC1149230 | Analyst: hanhkhong | Method: SM 5220-D |
|---|---|---|
| Matrix: Water | Analyzed: 09/08/2014 | Instrument: CHEM (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes | |
|---|---|---|---|---|---|---|
| **QC1149230MB1** | | | | | | |
| Chemical Oxygen Demand (COD) | ND | mg/L | | 4 | | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount LCS | Spike Amount LCSD | Spike Result LCS | Spike Result LCSD | Units | Recoveries LCS | Recoveries LCSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1149230LCS1** | | | | | | | | | | | |
| Chemical Oxygen Demand (COD) | 100 | | 100 | | mg/L | 100 | | | 80-120 | | |

## Matrix Spike/Matrix Spike Duplicate Summary

| Analyte | Sample Amount | Spike Amount MS | Spike Amount MSD | Spike Result MS | Spike Result MSD | Units | Recoveries MS | Recoveries MSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1149230MS1, QC1149230MSD1** | | | | | | | | | | | | **Source: 345685-001** |
| Chemical Oxygen Demand (COD) | ND | 100 | 100 | 104 | 96.0 | mg/L | 104 | 96 | 8.0 | 75-125 | 20 | |

| | | | |
|---|---|---|---|
| **QCBatchID:** QC1149257 | **Analyst:** hanhkhong | **Method:** SM 2320-B | |
| **Matrix:** Water | **Analyzed:** 09/08/2014 | **Instrument:** CHEM (group) | |

## *Duplicate Summary*

| Analyte | Sample Amount | Duplicate Amount | Units | RPD | Limits RPD | Notes |
|---|---|---|---|---|---|---|
| **QC1149257DUP1** | | | | | | **Source: 345645-001** |
| Bicarbonate (HCO3) | 195 | 192 | mg/L | 1.6 | 20 | |
| Carbonate (CO3) | ND | ND | mg/L | 0.0 | 20 | |
| Hydroxide (OH) | ND | ND | mg/L | 0.0 | 20 | |
| Total Alkalinity (as CaCO3) | 160 | 158 | mg/L | 1.3 | 20 | |

| QCBatchID: QC1149285 | Analyst: ame | Method: SM 2540-C |
|---|---|---|
| Matrix: Water | Analyzed: 09/08/2014 | Instrument: CHEM (group) |

## *Blank Summary*

| Analyte | Blank Result | Units | | RDL | Notes | |
|---|---|---|---|---|---|---|
| **QC1149285MB1** | | | | | | |
| Total Dissolved Solids | ND | mg/L | | 10 | | |

## *Lab Control Spike/ Lab Control Spike Duplicate Summary*

| Analyte | Spike Amount LCS | Spike Amount LCSD | Spike Result LCS | Spike Result LCSD | Units | Recoveries LCS | Recoveries LCSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1149285LCS1** | | | | | | | | | | | |
| Total Dissolved Solids | 293 | | 285 | | mg/L | 97 | | | 90-110 | | |

## *Duplicate Summary*

| Analyte | Sample Amount | Duplicate Amount | Units | RPD | Limits RPD | Notes |
|---|---|---|---|---|---|---|
| **QC1149285DUP1** | | | | | | **Source: 345837-002** |
| Total Dissolved Solids | 144 | 146 | mg/L | | 5 | |
| **QC1149285DUP2** | | | | | | **Source: 345876-003** |
| Total Dissolved Solids | 474 | 456 | mg/L | | 5 | |

# Data Qualifiers and Definitions

## Qualifiers

| | |
|---|---|
| B | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| B1 | Analyte was present in an sample and associated method blank greater than MDL but less than DRL. Associated sample data was reported with qualifier. |
| BQ1 | No valid test replicates. Result may be greater. Best result was reported with qualifier. Sample toxicity possible. |
| BQ2 | No valid test replicates. |
| BQ3 | Minimum DO is less than 1.0 mg/L. Result may be greater and reported with qualifier. |
| C | Laboratory Contamination. |
| D | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| DW | Sample result is calculated on a dry weigh basis |
| J | Reported value is estimated |
| L | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| M | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| NC | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| P | Sample was received without proper preservation according to EPA guidelines. |
| Q1 | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| Q2 | Analyte calibration was not verified and the result was estimated and reported with qualifier. |
| Q3 | Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier. |
| Q4 | Analyte result out of calibration range and was reported with qualifier |
| S | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| T | Sample was extracted/analyzed past the holding time. |
| T2 | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |
| TIC | Tentatively Identified Compounds |

## Definitions

| | |
|---|---|
| DF | Dilution Factor |
| MDL | Method Detection Limit |
| ND | Analyte was not detected or was less than the detection limit. |
| RDL | Reporting Detection Limit |

MONTROSE ENVIRONMENTAL

Associated Laboratories
Environmental Analytical Services

# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**

Client: URP

Project: PIT-3

Date Received: 9-3-14

Sampler's Signature Present: (Yes) No

Sample temperature: _____

Sample(s) received in cooler: (Yes) No (Skip Section 2)

Shipping Information: _____

**Section 2**

Was the cooler packed with: ✓ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam

Cooler Temperature: 3.0C ____ Paper ____None ___ Other_____ *(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤ 10 Deg. C or arrival on ice )*

| **Section 3** | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Were IDs present? | ✓ | | |
| Were sampling dates & times present? | ✓ | | |
| Was a signature present? | ✓ | | |
| Were tests clearly indicated? | ✓ | | |
| Were custody seals present? | | ✓ | |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | ✓ | | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ✓ | | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | ✓ | |
| Were the containers labeled with correct preservatives? | ✓ | | |
| Was total residual chlorine measured (Fish Bioassay samples only)? * **If the answer is no, please inform Fish Bioassay Dept. immediately.* | | | ✓ |

**Section 4**

Explanations/Comments

**Section 5**

Was Project Manager notified of discrepancies: Y / N N/A

Project Manager's response: _____

Completed By: M. Eberle Date: 9/3/14

# CHAIN OF CUSTODY RECORD

**Chambers Environmental Services**
4510 Mt. Henry Ave, San Diego, CA 92117
858.279.3266

**Client Name/Consultant:** United Rock Products
**Address:** 135 S. State College Blvd, Suite 400
**City/State/Zip:** Brea, CA 92821
**Project Manager:** Ken Barker

Lab: Associated Laboratories
3456085
**Report To:** Same
**Invoice To:** Same
**Project ID:** Pit-3: United Rock Products
**Project #:**

**Sampler Name: (Print)** D. Chambers
**Sampler Signature:** D. Chambers

| Sample ID / Description | Date Sampled | Time Sampled | No. of Containers | Grab | Composite | Field Filtered | Matrix: Groundwater | Wastewater | Drinking Water | Sludge | Soil | Other (specify): | Analyze For: VOC'S 8260 | MTBE, Vinyl Chloride | Benzene, PCE, TCE | Oxygenates | Cadmium / Chromium | Elec. Conductance | T Hardness as CaCO3 | COD, TDS | Nitrate, Sulfate, Boron | CO2, Lead, Nickel | Carbonate, Bi-Carbonate | TPH-Diesel | | Multiple Dilutions | High Concentrations | Alk., Chloride, E.C., pH | 24H 48H 7-day rush | Standard TAT | Fax Results | Comments: ~~Send QC with report~~ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| IRW-13 | 9/3/14 | 11:11 | 9 | x | | N | x | | | | | | | X | X | | X | X | X | X | X | X | X | | | | | X | | X | |
| Pit 3 | ↓ | 12:30 | 9 | X | | N | X | | | | | | | X | X | | X | X | X | X | X | X | X | | | | | X | | X | | Pond Sample |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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**Special Instructions:**
Call and confirm before analysis.

**Method of Shipment:** FEDEX, Courier, (Client drop)

**Laboratory Comments:**
Temperature Upon Receipt:
VOCs Free of Headspace? Y N

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| D. Chambers | 9/3/14 | 14:34 | | 9/3/14 | 14:34 |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| | | | | | |

Project Name: United Rock Products

Date: 9/3/14

**Water Level Data Sheet**

Project Number: _____

| Well ID | Time | DTW | Ref Pt. | ~ Elev. | Well TD | | Comments: |
|---|---|---|---|---|---|---|---|
| | | | TOC | | | | |
| IRW-A | 8:20 | 249.21 | North | 437.27 | ~~250~~ | 249.60 | PIT 3, NORTHEAST |
| IRW-B | 9:20 | 222.97 | North | 406.75 | 250.1 | | PIT 3, SOUTHWEST |

DTFP = Depth to Free Product
DTW = Depth to Water
FPT = Free Product Thickness
TD = Total Depth
DNAPL = Dense Non-Aqueous Phase Liquid

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: DWC

**Chambers Environmental Services, Inc**
**Sampling Data Sheet**

Date: 9/3/14

Well ID: 12W-A

**Purge Data**

| (Variable) | 0.2 C | 3-5% | 0.2 u | 20mv | 0.2mg/L | 10% | ML | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | Temp. | E.C.(uS) | pH | ORP | DO | Turbidity | Volume | DTW | Notes |
| Start: 8:30 | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | 249.6 | Bailer lowered |
| 8:35 | | | | | | | | ↓ | Bailer lowered |
| | | | | | | | | | |
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| | | | | | | | | | |
| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

Purge Pump: BAILER
Pump Set Time: N/A
Pump/Inlet Depth (BGS): N/A

Decon:
Triple-Rinse

Total Vol. Purged N/A
Final Temp.: ↓
Final EC: ↓
Final pH: ↓
Final ORP: ↓
Final DO: ↓
Draw Down: ↓

Sample Start: N/A
Sample St: N/A
Analyses: Sample Container:
-
-

Sample ID: -
(If different from above)
DTW @ Sample: N/A

**Well Data**

| | |
|---|---|
| Bore OD: | 10 |
| Casing ID: | 4 |
| **Well TD:** | 249.60 |
| **D.T.W.:** | 249.21 |
| Ft./ Water: | 0.39 |

Special Notes for This Well:

WATER TRAPPED IN END CAP. Bailer UNABLE to RETRIEVE WATER.

NO SAMPLE COLLECTED

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

**Methods:** 1=3 BV sample after 80%.
2= 1 BV and monitor parameters each 0.5 BV.
3=Low-flow.
4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: DWC

## Chambers Environmental Services, Inc
## Sampling Data Sheet

Date: 9/3/14

Well ID: IRW-D

**Purge Data**

| (Variable) Time | 0.2 C Temp. | 3-5% E.C.(uS) | 0.2 u pH | 20mv ORP | 0.2mg/L DO | 10% Turbidity | ML Volume | DTW | Notes |
|---|---|---|---|---|---|---|---|---|---|
| Start: 9:50 | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | 222.87 | |
| 10:20 | Pump Failure. | | New Pump | Initiated. | | | | " | |
| 10:40 | Re-start | | " | " | | | | " | |
| 10:55 | 30.4 | 751 | 7.77 | 240 | 7.04 | 10.10 | 480 | 222.97 | |
| 10:59 | 28.3 | 448 | 7.97 | 222 | 7.48 | 6.12 | 720 | 222.97 | |
| 11:03 | 27.8 | 468 | 7.95 | 182 | 7.38 | 8.66 | 960 | ↓ | |
| 11:06 | 27.7 | 467 | 7.91 | 185 | 7.25 | 60+ | 1200 | ↓ | Very silty water |
| 11:09 | 27.6 | 461 | 7.90 | 184 | 7.20 | 60+ | 1440 | ↓ | " " " |
| Stop: 11:10 | | | | | | | | | |
| Rate: (ML/Min.) | 80 | | | | | | | | |

Purge Pump: Bladder
Pump Set Time: NA
Pump/Inlet Depth (BGS): 230'

Decon:
Triple-Rinse

Total Vol. Purged 1440 ml
Final Temp.: 27.6
Final EC: 461
Final pH: 7.90
Final ORP: 184
Final DO: 7.20
Draw Down: 0

Sample Start: 11:11
Sample St
Analyses: Sample Container:

Sample ID: ✓
(If different from above)
DTW @ Sample: 222.97

**Well Data**
Bore OD:
Casing ID:
**Well TD:**
**D.T.W.:**
Ft./ Water:

Special Notes for This Well:

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

**Methods:** 1=3 BV sample after 80%.
2= 1 BV and monitor parameters each 0.5 BV
3=Low-flow.
4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

Site:United Rock Products

Site Address: Irwindale, CA

Sampler: Duc

## *Chambers Environmental Services, Inc*
## Sampling Data Sheet

Date: 9-3-14

Well ID: PIT 3

**Purge Data**

| (Variable) | 0.2 C | 3-5% | 0.2 u | 20mv | 0.2mg/L | 10% | ML | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | Temp. | E.C. (MS) | pH | ORP | DO | Turbidity | Volume | DTW | Notes |
| Start: | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | | |
| 12:25 | 28.8 | 3.16 | 8.42 | 120 | 4.46 | 22.5 | — | - | PIT POND SAMPLE |
| | | | | | | | | | |
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| | | | | | | | | | |
| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

Purge Pump: N/A
Pump Set Time: N/A
Pump/Inlet Depth (BGS): N/A

Decon:
Triple-Rinse

Total Vol. Purged N/A
Final Temp.: 28.8
Final EC: 3.16 MS
Final pH: 8.42
Final ORP: 120
Final DO: 4.46
Draw Down: N/A

Sample Start: 12:30
Sample St
Analyses: Sample Container:

**Well Data**
Bore OD:
Casing ID:
**Well TD:**
**D.T.W.:**
Ft./ Water:

Special Notes for This Well:

Sample ID: —
(If different from above)
DTW @ Sample: N/A

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

**Methods:** 1=3 BV sample after 80%.
2= 1 BV and monitor parameters each 0.5 BV
3=Low-flow.
4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

# CHAIN OF CUSTODY RECORD

**Chambers Environmental Services**
4510 Mt. Henry Ave, San Diego, CA 92117
858.279.3266

Client Name/Consultant: United Rock Products
Address: 135 S. State College Blvd, Suite 400
City/State/Zip: Brea, CA 92821
Project Manager: Ken Barker

Lab: Associated Laboratories
Report To: Same
Invoice To: Same
Project ID: Pit-3: United Rock Products
Project #:

Sampler Name: (Print) D. Chambers
Sampler Signature: D. Chambers

| Sample ID / Description | Date Sampled | Time Sampled | No. of Containers | Grab | Composite | Field Filtered | Matrix: Groundwater | Wastewater | Drinking Water | Sludge | Soil | Other (specify): | Analyze For: VOC's 8260 | MTBE, Vinyl Chloride | Benzene, PCE, TCE | Oxygenates | Cadmium / Chromium | Elec. Conductance | T Hardness as CaCO3 | COD, TDS | Nitrate, Sulfate, Boron | CO2, Lead, Nickel | Carbonate, Bi-Carbonate | TPH-Diesel | Multiple Dilutions | High Concentrations | Alk., Chloride, E.C., pH | 24H 48H 7-day rush | Standard TAT | Fax Results | Comments ~~Send QC with report~~ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| IRW-B3 | 9/3/14 | 11:11 | 9 | x | | N | x | | | | | | | X | X | | X | X | X | X | X | X | X | X | | | X | | X | |
| Pit 3 | ↓ | 12:30 | 9 | X | | N | X | | | | | | | X | X | | X | X | X | X | X | X | X | X | | | X | | X | | Possible Sample |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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**Special Instructions:**
Call and confirm before analysis.*

**Method of Shipment:** FEDEX, Courier, (Client drop)

**Laboratory Comments:**
Temperature Upon Receipt:
VOCs Free of Headspace? Y N

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| D. Chambers | 9/3/14 | 14 34 | [illegible] | 9/3/14 | 14:34 |
| Relinquished by: | Date | Time | Received by: | Date | Time |

# APPENDIX C

# GROUNDWATER DATABASE

## Pite #3 UNITED ROCK PRODUCTS DATABASE

| WATER LEVEL | | GROUNDWATER PARAMETERS | | | | | GENERAL MINERAL (mg/l) | | | | TRACE ELEMENTS | | | | GENERAL CHEMISTRY | | | | | | ORGANICS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | See attached organics portion - Note (1) | | | | |
| Sample Point | Date | pH | T(°F) | EC (µmhos/cm) | $CO_2$ (mg/l) | Alk (mg/l) | $SO_4$ | Cl | $NO_3$ | TDS | Ni (µg/l) | Pb (µg/l) | Cd (µg/l) | Cr (µg/l) | COD (mg/l) | OH (mg/l) | TH (mg/l) | $HCO_3$ (mg/l) | $CO_3$ (mg/l) | B (mg/l) | Benzene (µg/l) | MTBE (µg/l) | TCE (µg/l) | Tetra chloro ethene (µg/l) | Vinyl Chroide (µg/l) |
| IRW-3A | 3-Sep-14 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | NA | NA | NA | NA | NA |
| IRW-3B | 3-Sep-14 | 7.9 | 81.6 | 397 | 748 | 130 | 41.6 | 15.9 | 0.85 | 210 | <10 | <5 | <5 | <10 | 4 | <5 | 157 | 159 | <5 | 0.204 | <1 | <1 | <5 | <5 | <5 |
| SW-1 | 3-Sep-14 | 8.42 | 83.84 | 348 | <1 | 76 | 64.5 | 15 | 0.44 | 148 | <10 | <5 | <5 | <10 | 4 | <5 | 144 | 88 | <5 | 0.147 | <1 | <1 | <5 | <5 | <5 |

-- Information not available
(1) The WDR's required analysis for EPA App. I and II parameters for the first sampling event. Analysis of EPA App. I and II parameters shall be reported in the fourth quarter 2014 report.
(2) Samples not collected in well

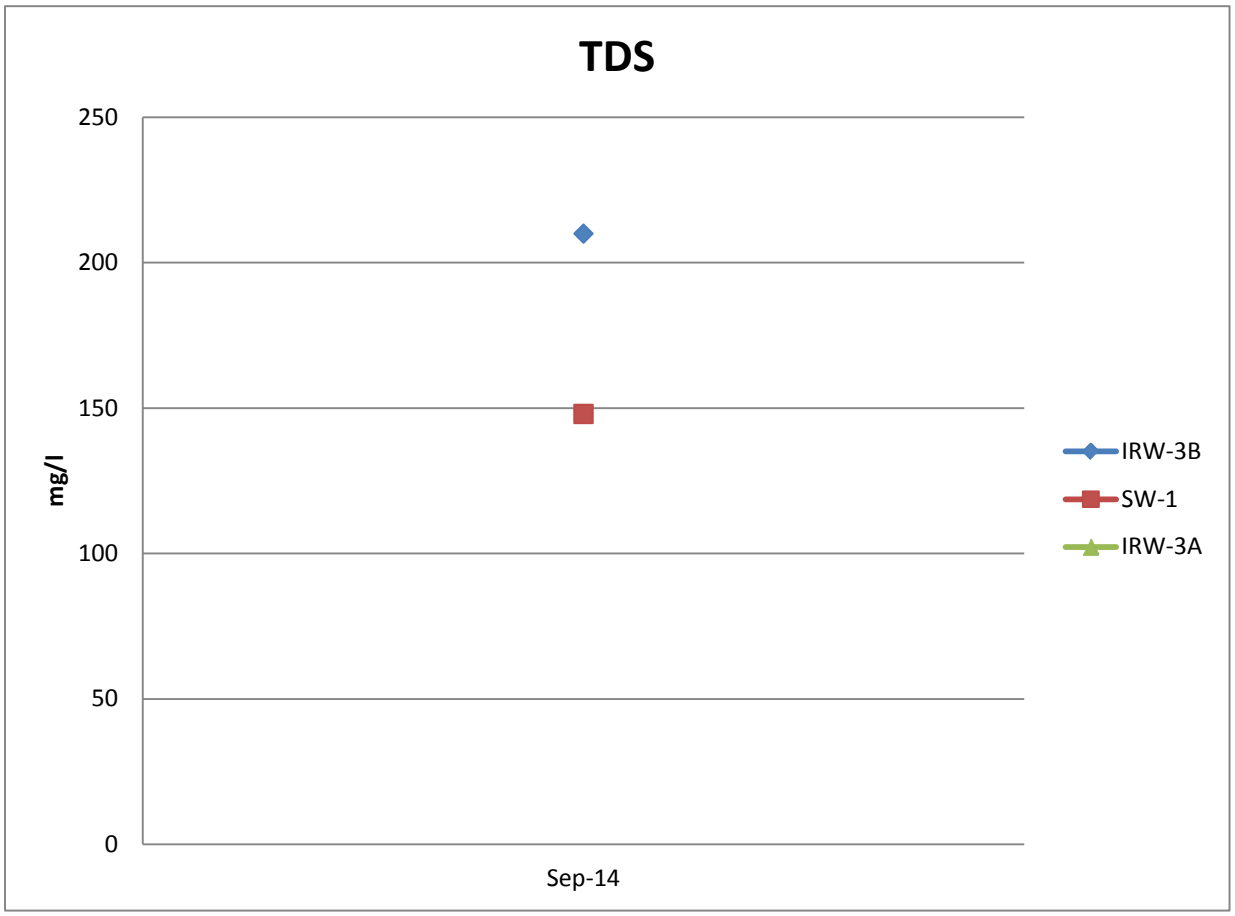


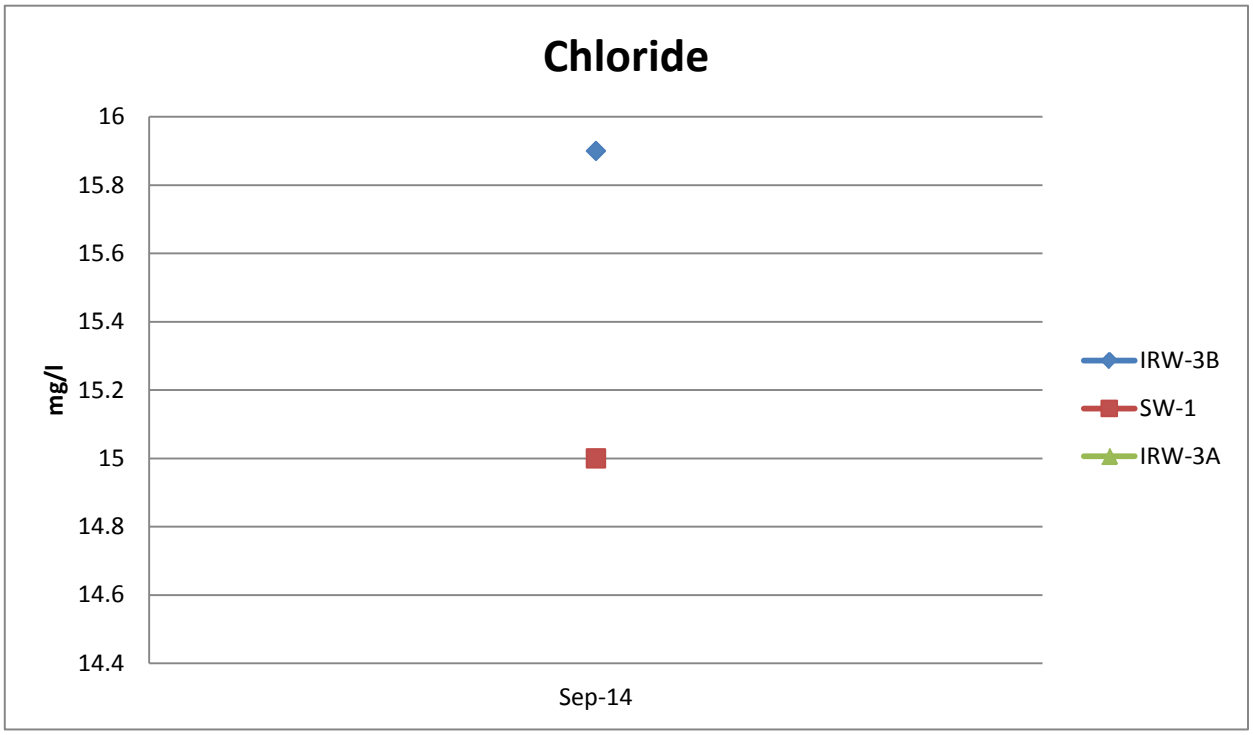
ALTA ENVIRONMENTAL

# APPENDIX D

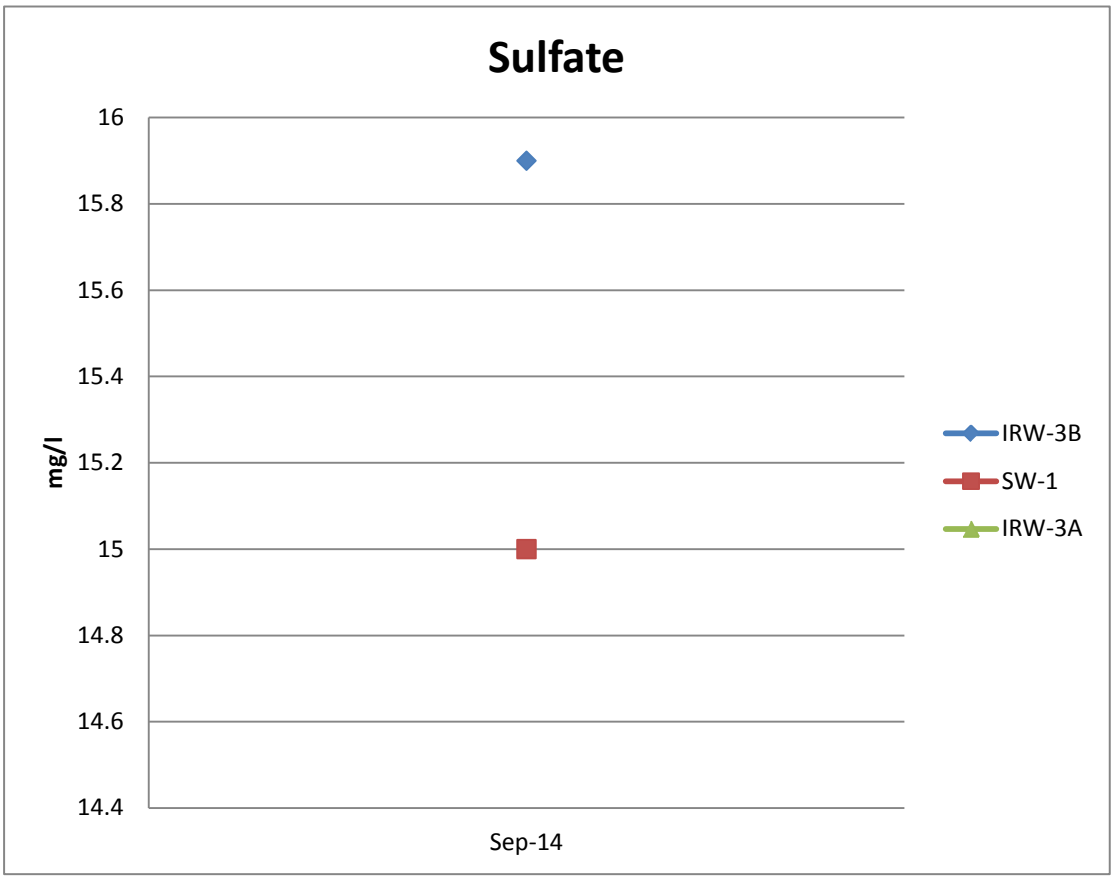
# GRAPHICAL SUMMARIES

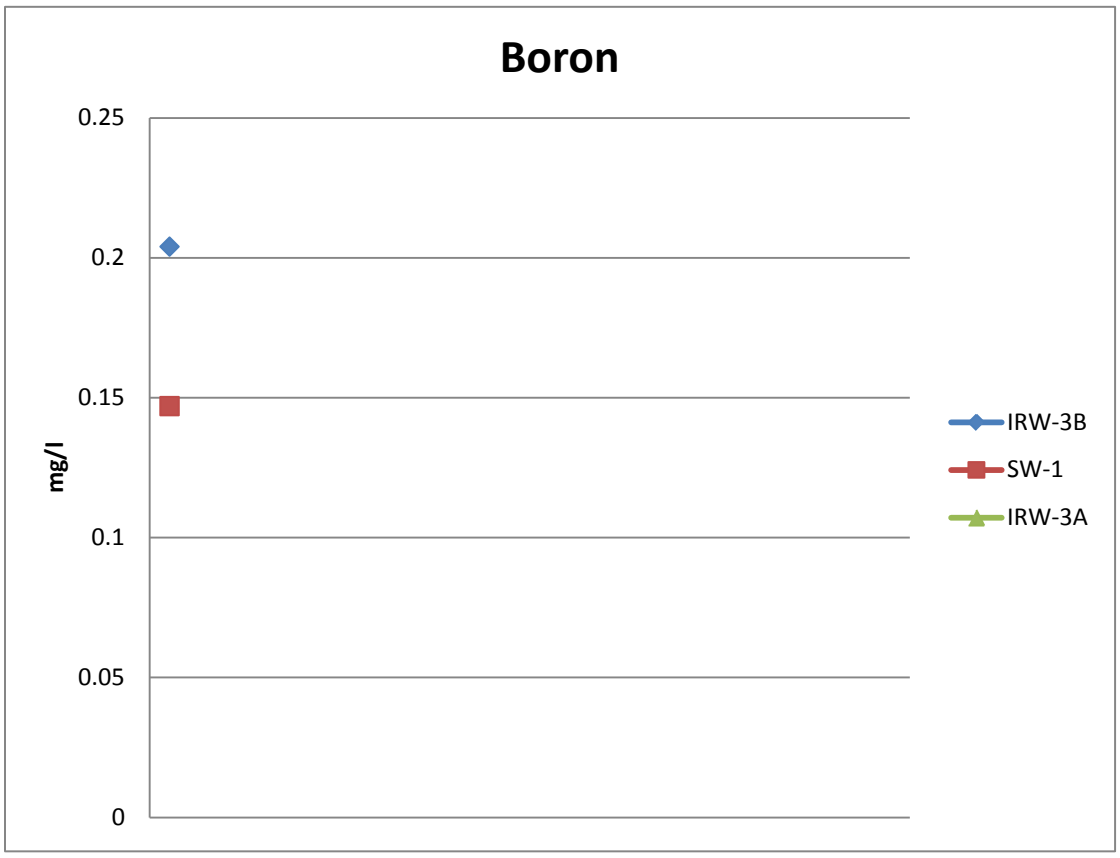
## 2014 Graphical Summaries



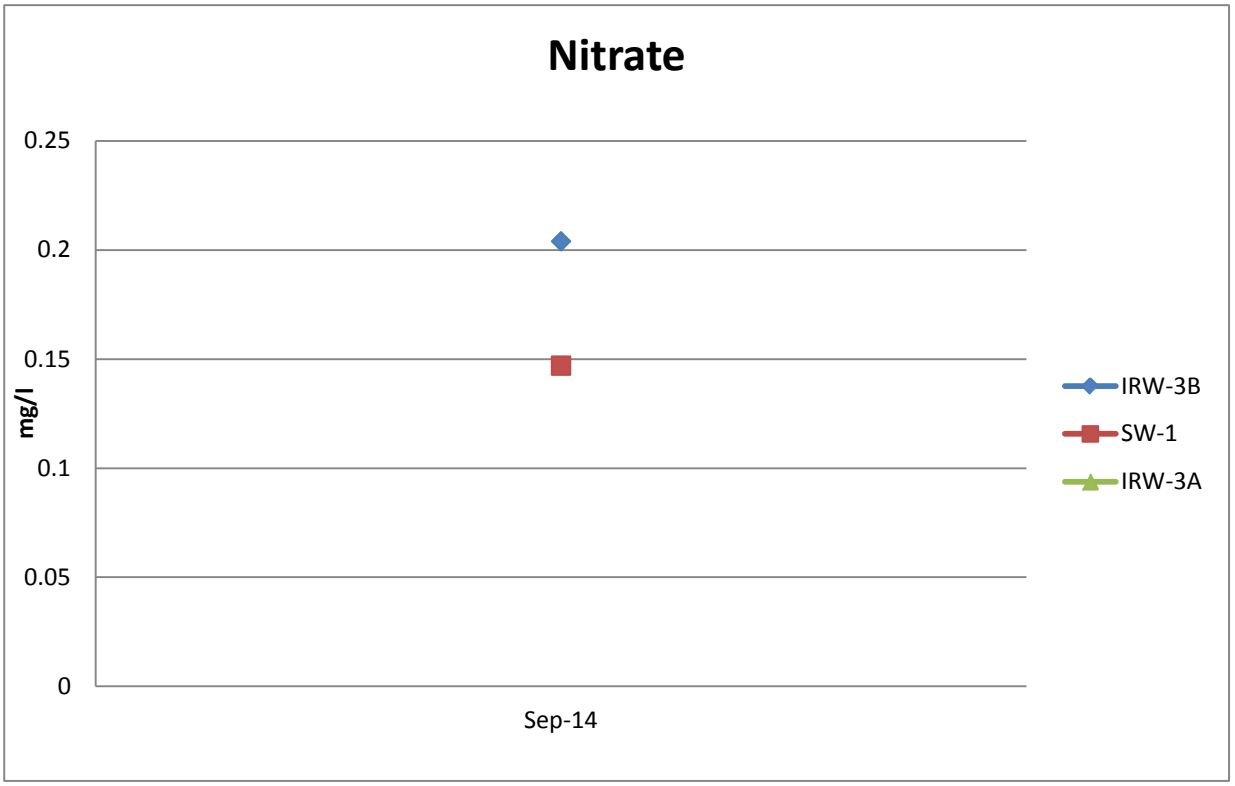



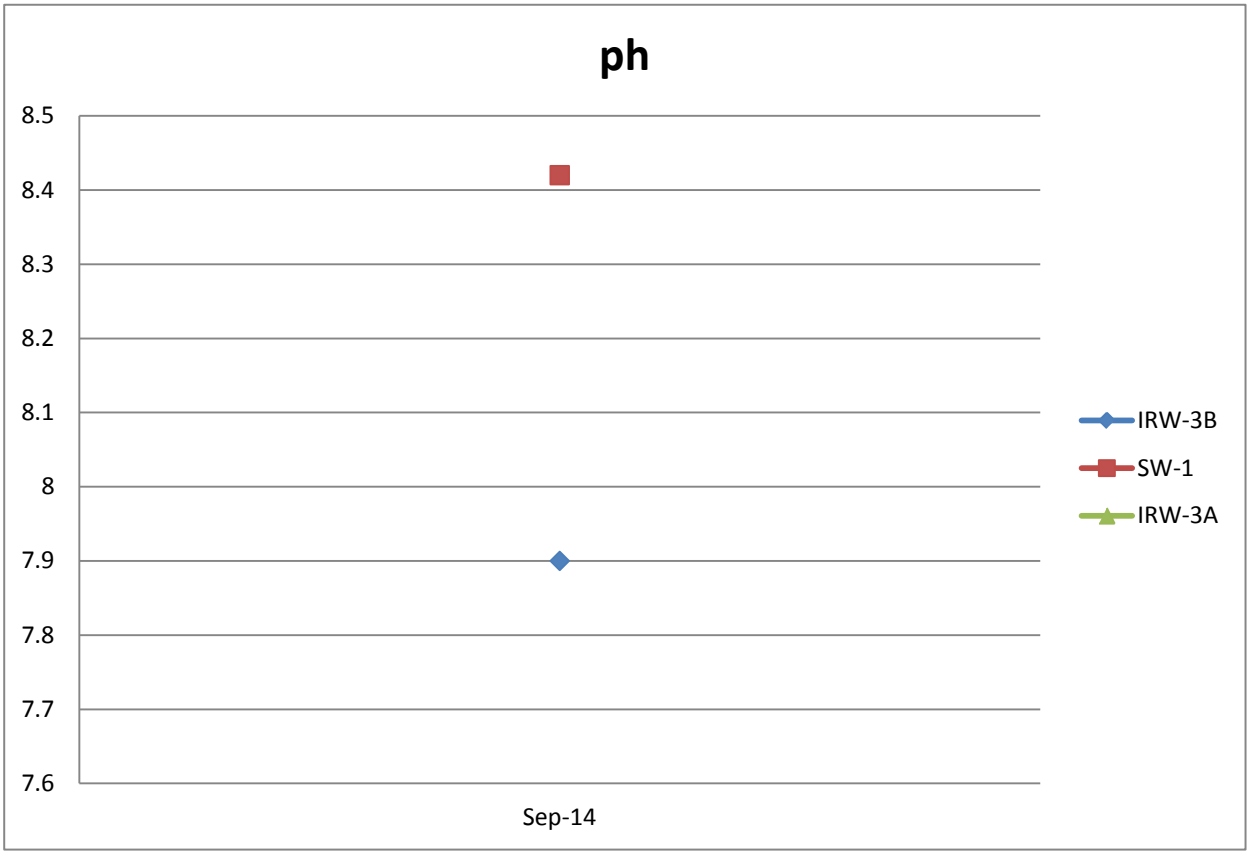
## 2014 Graphical Summaries



## 2014 Graphical Summaries



# APPENDIX E

# LANDFILL WASTE DISPOSAL

135 S. State College Blvd. Suite 400 Brea, CA 92821 (714) 578-9600

October 9, 2014

California Regional
Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Information Technology Unit

Subject: Waste Discharge Requirements- United Rock Pit 3
1137 Meridian Street
Irwindale, CA 91706
File No. 72-124, Order No.01-131, CI 5801

Pursuant to the General Provisions for Reporting (Section A) of the Monitoring and Reporting Program (File CI 5801) and Section III of the Reporting Conditions, we are respectively submitting our quarterly report.

Please be advised that there was no discharge placed in Pit #3 during the 3rd Quarter of calendar year 2014.

The estimated life of the site is 84 years 0 months.

No purged ground water from monitoring wells is used at the site.

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the 9th day of October, 2014 in Irwindale, California.

Very truly yours,

Ken Barker
Environmental Manager

Cc: Kathy Hubbard, Alta Environmental
William Tam, City of Irwindale Engineer

135 S. State College Blvd. Suite 400 Brea, CA 92821 (714) 578-9600

January 7, 2015

California Regional
Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Information Technology Unit

Subject: Waste Discharge Requirements- United Rock Pit 3
1137 Meridian Street
Irwindale, CA 91706
File No. 72-124, Order No.01-131, CI 5801

Pursuant to the General Provisions for Reporting (Section A) of the Monitoring and Reporting Program (File CI 5801) and Section III of the Reporting Conditions, we are respectively submitting our quarterly report.

Please be advised that there was no discharge placed in Pit #3 during the 4th Quarter of calendar year 2014.

The estimated life of the site is 83 years 9 months.

No purged ground water from monitoring wells is used at the site.

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the 7th day of January in Brea, California.

Very truly yours,

Ken Barker
Environmental Manager

Cc: Kathy Hubbard, Alta Environmental
William Tam, City of Irwindale Engineer

Agency:

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**
**LOS ANGELES REGION**

320 West 4th Street, Suite 200
Los Angeles, CA 90013-2343

# Waste Disposal And Groundwater Monitoring Report

## Fourth Quarter 2014

United Rock Products – Pit #3
Irwindale, California
RWQCB File No. 72-124
Under Monitoring & Reporting Program No. CI 5801

**Prepared For:**

United Rock Products Corporation
1137 Meridian Street
Irwindale, CA 91706

Date: January 15, 2015

3777 Long Beach, Blvd
Long Beach, CA 90807
(562) 495-5777 Fax: (562) 495-5877

CONTACT: Kathy Hubbard

Reference: URPC-14-4746

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Appendix A Groundwater Sampling Protocol
Appendix B Associated Laboratories Analytical Results/Chambers Environmental Field Logs and Chain-of-Custody Forms
Appendix C Groundwater Database
Appendix D Graphical Summaries 2014
Appendix E Landfill Waste Disposal

## 1.0 INTRODUCTION

Alta Environmental (Alta – formerly Justice & Associates [J&A]) was retained by United Rock Products Corporation (URP) to conduct groundwater monitoring and reporting for URP's Pit #3. The purpose of this report is to provide an evaluation of the groundwater monitoring and the estimated average monthly quantities (in cubic yards) and types of materials deposited. Average monthly quantities and types of materials deposited are reported by URP in Appendix F.

## 2.0 FACILITY DESCRIPTION

URP (Discharger) owns and operates URP's Pit #3 (the Site), a construction aggregate mining pit at 1137 Meridian Street, in Irwindale, California. The site is bounded on the north by the Buena Vista Channel, on the south by Arrow Highway and on the east by Buena Vista Street (Figure 1). The center of the site is located at approximately 34°06'56" N and 117°59'23"W.

The Site includes approximately 110 acres of land and has been mined for sand and gravel by the Discharger and its predecessors since the early 1900s. Ground surface elevation around the pit varies from 406 feet above mean sea level (amsl) at the west edge of the pit to 431 feet amsl at the east edge of the pit.

The majority of the pit bottom has exposed groundwater resulting from the mining operation. The City of Irwindale approved conditional use permit CUP 6-04 in 2004. The CUP permits URP to mine the pit to a maximum depth of 440 feet bgs or until December 31, 2037, whichever comes first. The Site also has a reclamation plan approved in 2004 that states the excavation will be used as a groundwater recharge basin once the material has been depleted. Alternatively, the reclamation plan calls for the pit to be filled or partially filled.

The proposed discharge methods to the pit include backfilling the waste material from the Rock Plant to Pit #3 by means of sluicing and trucking. The sluicing process involves mixing the waste materials (primarily clay and silt) with groundwater that has been used in the mining process and pumping the mixture to various locations at the pit. Water is used in the mining process to wash fine material (clay and silt) off the coarse material (gravel and sand). No chemicals are added in either the mining or the sluicing processes.

Order No. 01-131 is the waste discharge requirements for the disposal of inert wastes into the Site during mine reclamation.

## 3.0 CURRENT MONITORING REQUIREMENTS

The monitoring is done to satisfy the Monitoring and Reporting Program (MRP) requirements of Order 01-131, File 72-124 and CI 5801, which was adopted by the Regional Water Quality Control Board (RWQCB) on September 21, 2001. The MRP requires quarterly groundwater and waste disposal reporting during the first year and semi-annually thereafter. In the event sampling is not performed during those months, substitute sampling shall occur as soon as possible after, and the reason for delay shall be given. The sampling schedule will continue to be semi-annual regardless of the substitute sampling. In addition, each monitoring report submitted to the Regional Board shall include a tabular list of the estimated average quantities of materials deposited at the site each month and the methods of disposal. This report contains the summary of both requirements.

### 3.1. Chronology of Order 01-131, File 72-124 and CI 5801

URP and its predecessors have excavated and processed aggregate from this site since as early as 1910. The majority of the pit has groundwater exposed by mining operations. URP purchased the property and operation in 1988.

The LARWQB adopted WDRs in 1973 for the previous owner, Livingston-Graham, to discharge inert materials to Pit #3. In 1988 the pit was purchased by United Rock Products and the pit is now known as URP Pit #3. New WDR's were adopted in 2001 and the previous order from 1973 was rescinded.

In May 2002 Justice & Associates submitted a Technical Report on behalf of United Rock Products to meet the 2001 WDR monitoring requirement. The technical report was approved in July 2002. A Revised Technical Report dated July 2014 was prepared to amend the 2002 report. Changes in the 2014 revised technical report included; revised sampling protocols for down-gradient wells, increasing the depth of up-gradient and down-gradient wells; and a modification to up-gradient and down-gradient monitoring well design.

## 4.0 GROUNDWATER MONITORING

### 4.1. Fourth Quarter 2014

Pursuant to the WDR for Pit #3 (Order 01-131, File 72-124 and CI 5801), water level measurements should be collected from monitoring wells IRW-1 located at the Rock Plant and IRW-1A and IRW-1B located at Pit #1 in addition to monitoring wells IRW-3A and IRW-3B located at Pit #3. This well network should be used to estimate gradient in the vicinity of Pit #3.

Fourth Quarter measurements for 2014 from IRW-1, IRW-1A, IRW-1B, and IRW-3B were collected on October 29, 2014. During well gauging, it was observed that well IRW-3A was dry. The groundwater gradient and velocity in the vicinity of Pit #3 was calculated from the measurements of wells IRW-1, IRW-1A, and IRW-3B. The calculation uses Darcy's Law, estimates of soil hydraulic conductivity and soil effective porosity. Table 1 presents 2014 water level data.

**Table 1**
**Groundwater Monitoring Program for Fourth Quarter 2014**

| Well # | General Well Location from Landfill | Date Measured | Depth to Groundwater (feet) | Total Well Depth (feet bgs) | Groundwater Elevation (feet relative to MSL) | Reference Point Elevation (feet above MSL) |
|---|---|---|---|---|---|---|
| IRW-1 | Cross-Gradient | 10/29/14 | 235.20 | 300 | 170.40 | 405.60 |
| IRW-1A | Up-gradient | 10/29/14 | 195.61 | 196.6 | 185.33 | 380.94 |
| IRW-1B | Cross-Gradient | 10/29/14 | 194.60 | 195.3 | 185.43* | 380.03 |
| IRW-3A | Up-gradient | 10/29/14 | DRY | 249.60 | DRY | 437.27 |
| IRW-3B | Down-gradient | 10/29/14 | 225.83 | 250.1 | 180.92 | 406.75 |

*Groundwater elevation not used in the interpretation of groundwater contours and gradient.

Note that due to the lowering of the water table (resulting from drought conditions in Southern California), the depths to groundwater in wells IRW-1A and IRW-1B were measured at only one foot or less above the bottom of the wells. This water may be residual water left at the bottom of the wells from the lowering of the water table, and may not be representative of the true water table elevation. As indicated in Table 1, the groundwater elevations in IRW-1A and IRW-1B are very similar (185.33 and 185.43 feet above mean sea level [msl]). During historical groundwater monitoring events, the groundwater elevation in well IRW-1B has consistently been significantly lower than the elevation in IRW-

1A. Therefore, it appears that the groundwater elevation in IRW-1B is not reflective of the actual groundwater level. The groundwater elevation in IRW-1B was therefore not used in the interpretation of groundwater contours and gradient shown on Figure 2. The groundwater contours, gradient, and velocity in the vicinity of Pit #3 was calculated from the measurements of wells IRW-1, IRW-1A, and IRW-3B (Figure 2) for the current sampling event.

4.2. Groundwater Velocity and Direction

The groundwater contours for the fourth quarter 2014 (Figure 2), using wells IRW-1A, IRW-1, and IRW-3B, show that the groundwater flow direction is to the east-northeast. Based on an average transmissitivity of 155,000 $ft^2$/day and an average aquifer thickness of 300 feet, the hydraulic conductivity (K) is 517 ft/day as calculated below:

Average Transmissitivity = $155 \times 10^3$ $ft^2$/day (L&S, 2001)
Average Aquifer Thickness = 300 ft (L&S, 2001)

$$\text{Hydraulic Conductivity (K)} \quad \frac{\text{Average Transmissitivity}}{\text{Average Aquifer Thickness}} = 517\ ft/day$$

Using an effective porosity of 40%, a groundwater gradient of 0.0169 (Figure 2), and a hydraulic conductivity of 517 ft/day, the average groundwater flow velocity (average linear velocity) for the fourth quarter 2014 monitoring event is estimated at 21.84 ft/day. The calculations are provided below:

Porosity = 0.4 (Technical Guidance Manual 1995)

$$\text{Groundwater Gradient} = \frac{dh}{dl} = \frac{185-170}{890} = 0.0169$$

Where:

$$\frac{(K)dh/dl}{Eff.Porosity} = \frac{517\ ft/day(0.0169)}{0.4} = 21.84\ ft/day$$

4.3. Monitoring Methods

The monitoring stations for the quarterly report consist of wells IRW-1, IRW-1A, IRW-1B, IRW-3A and IRW-3B as defined in the Revised Technical Report. Based on the reported groundwater gradient in the upper San Gabriel Basin, it has been determined that these wells will provide required information for compliance with MRP CI-5801.

Chambers Environmental performed the measurements for IRW-1, IRW-1A, IRW-1B, IRW-3A, and IRW-3B. The Monitoring methods used were

in accordance with EPA guidelines set forth in the Groundwater Sampling Protocol (Refer to Appendix A). Prior to conducting field measurements, the groundwater level probe was calibrated to ensure accuracy of measurements and cleaned prior to and after each measurement to minimize cross-contamination.

## 5.0 GROUNDWATER SAMPLING

The 2014 Revised Technical Report requires that samples be collected from IRW-3A, the up-gradient well at the Northeast corner of Pit #3. However, because no water was detected in the well, no water samples were collected from IRW-3A. Samples should also be collected from IRW-3B at the Southwest corner of Pit #3. Based on the general easterly flow direction of the groundwater in the vicinity of the subject site and the condition that only native geological material washed with local water will be sluiced back into Pit #3, the approved sampling network for Pit #3 also includes groundwater samples from the standing water in the south end of the pit. For each monitoring period, one grab groundwater sample should be collected from both wells and the standing water in the pit. The standing water monitoring will occur as long as there is standing water in the pit. Grab samples of the standing water in the pit will be collected using a stainless steel bailer from a depth of 10 to 15 feet below water surface. Groundwater samples from IRW-3A and IRW-3B will be collected using a submersible pump or passive sampling methods. The first round of samples should also be analyzed for the monitoring parameters listed on US EPA Appendix I and II Constituents. However, since these parameters were not analyzed during the first round of sampling, they have been included in this report. The Cyanide analysis was not performed by the lab due to insufficient sample.

Associated Laboratories is a State of California Department of Health Services accredited laboratory. This laboratory performed the chemical analyses in accordance with the current EPA guidelines and procedures. Appendix B contains the analytical results and chain-of-custody record for this quarterly report.

### 5.1. Groundwater Evaluation

A groundwater database presenting all analytical results is located in Appendix C. Table 2 represents a comparative analysis between the analytical results and the water protection standards established for URP Pit #3 as identified in the WDRs.

**Table 2**
**Water Quality Data Summary**
**Fourth Quarter 2014 Sampling Event**

| Constituent | Water Quality Protection Standards | Monitoring Station | | |
|---|---|---|---|---|
| | | IRW-SW1 | IRW-3A | IRW-3B |
| Date Sampled | | 09/03/2014 | 09/03/2014 | 09/03/2014 |
| Total Dissolved Solids (TDS) | 450 mg/l | 148 | - | 210 |
| Chloride (Cl) | 100 mg/l | 15.0 | - | 15.9 |
| Sulfate ($SO_4$) | 100 mg/l | 64.5 | - | 41.6 |
| Nitrate (as ($NO_3$) | 45 mg/l | <1 | - | 0.85 |
| Boron | 0.5 mg/l | 0.147 | - | 0.204 |
| pH | 6.5 – 8.5 | 8.42 | - | 7.92 |
| | | Pit 3-1 | Pit 3-2 | IRW-3B |
| Date Sampled | | 10/29/2014 | 10/29/2014 | 10/29/2014 |
| Total Dissolved Solids (TDS) | 450 mg/l | 184 | 258 | 200 |
| Chloride (Cl) | 100 mg/l | 16.0 | 15.9 | 15.8 |
| Sulfate ($SO_4$) | 100 mg/l | 63.8 | 63.6 | 39.3 |
| Nitrate (as ($NO_3$) | 45 mg/l | 0.88 | 0.74 | 1.61 |
| Boron | 0.5 mg/l | 0.110 | 0.098 | 0.082 |
| pH | 6.5 – 8.5 | 8.08 | 7.88 | 8.42 |

The sample results for samples collected in October 2014 indicate that standing groundwater in Pit #3 and groundwater collected from the down-gradient well IRW-3B currently meets Water Quality Protection Standards for all constituents. The standards are established for this facility by Order No. 01-013 and are based on the water quality objectives for the western area of the main San Gabriel Basin contained in the Basin Plan.

There was an insufficient amount of groundwater in IRW-3A to collect samples for analysis. The low aquifer is likely an effect of the significant drought conditions in Southern California. Therefore, two water column samples were collected from the standing exposed groundwater in the pit. Samples Pit 3-1 and Pit 3-2 have been included within this report to assess compliance with Water Quality Protection Standards.

If there is sufficient groundwater, samples shall be collected from the monitoring wells for the next Quarterly report. In the event that the well remains dry, alternative sampling options shall be discussed with the LARWQCB.

5.2. Purged Groundwater

Purged groundwater from the monitoring well is used at the Site for dust suppression (within 20-foot radius of each well). 4100 ml of purged water

was generated during the October 29, 2014 sampling event (Refer to Appendix B).

5.3. Sluice Material and Waste Disposal

During October through December 2014 reporting period, no material was placed in Pit #3.

The landfill waste disposal information is included in Appendix G.

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

Alta conducted a review of the groundwater analytical data for the fourth quarter 2014 report. Based on field observations and analytical results, it appears that deposited waste and current waste disposal practices are not adversely impacting local groundwater quality.

Based on the data collected as required by the sampling and monitoring plan detailed in the Waste Discharge Requirements Order, none of the water quality protection standards listed in Table 2 are elevated above the limits listed in the Order. However, monitoring well IRW-3A was gauged dry and therefore not sampled. In addition, Wells IRW-1, IRW-1A, and IRW-3B were used to determine groundwater gradient and velocity. Providing sufficient water is available in the wells, during the next sampling quarter, the depth to water in all five wells will be measured, and wells IRW-3A and IRW-3B will be sampled. EPA Appendix I and II constituents results are included with certificates of analysis in Appendix B.

We appreciate the opportunity to provide groundwater monitoring and reporting services. If you have any questions or comments concerning this report, please feel free to contact me at (562) 495-5777.

# 7.0 CERTIFICATION

## 7.1. Professional Certifications

The hydrogeologic information, results of groundwater testing, conclusions and recommendations in this report have been reviewed by of a California-registered professional engineer. This certification of conditions comprises a declaration of his professional judgment. It does not constitute a warranty or guarantee.




Steven R. Ridenour
PG
Senior Project Manager/Senior Geologist III
Alta Environmental

## 8.0 REFERENCES

Justice & Associates, Sully-Miller Irwindale Facility Phase I Environmental Site Assessment, 9-97

Justice & Associates, United Rock Products, Pit #3 & #3 Final Dredge Operation

Spill Prevention Control and Countermeasure Plan, 5-98

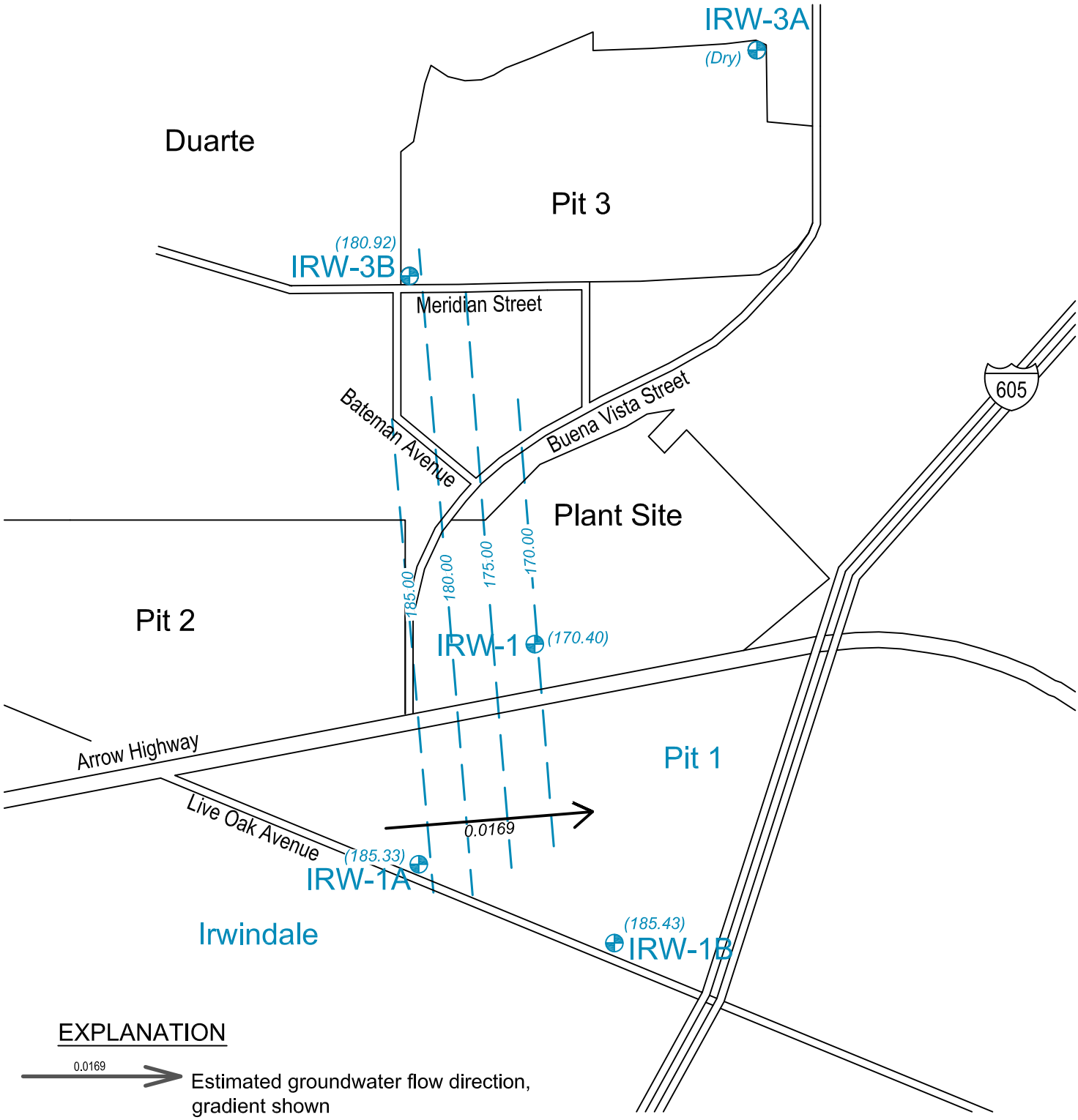
Luhdorff & Scalmanini, Supplemental Groundwater Investigation and Mitigation Monitoring Program, July 2001

Waste Discharge Requirements – United Rock Products – Pit #3 Irwindale, CA (File No. 72-124; Order No. 01-131, CI 5801)

Surface Waters-Field Operations Manual for Lakes USEPA Office of Research and Development EPA/620/R-97/001/June 1997

Technical Guidance Manual for Hydrogeologic Investigations and Groundwater Monitoring, State of Ohio EPA, 1995

# FIGURES




## EXPLANATION

0.0169 — Estimated groundwater flow direction, gradient shown

Groundwater monitoring well with groundwater elevation (ft. msl)

185 — Groundwater elevation contour line (ft. msl)

0 1000 2000

# FIGURE 2

| | |
|---|---|
| CLIENT: | United Rock Products |
| PROJECT: | Groundwater Elevation Contour Map<br>Fourth Quarter, 2014 |
| SITE: | 1137 Meridian Street<br>Irwindale, California 91706 |

| JOB NUMBER: | DATE: | SCALE: |
|---|---|---|
| URPC-14-4746 | January, 2015 | 1" = 1,000' |

ALTA ENVIRONMENTAL
3777 Long Beach Blvd.
Annex Bldg.
Long Beach, CA 90807
(562) 495-5777

W:\Clients T-Z\United Rock Products (URPC)\URPC-14-4746 Pit #3 annual reporting\Photos - Drawings\GW Contour Map 2014_011215.dwg

# APPENDIX A

# GROUNDWATER SAMPLING PROTOCOL

# STANDARD FIELD PROCEDURES FOR MONITORING AND SAMPLING GROUNDWATER MONITORING WELLS AT URP Pit #3

## SEALED WELLS

One or more wells at the site are sealed and have down-hole pumps for discharging groundwater. Down-hole monitoring and sampling equipment cannot be used in those wells. Sealed wells must be monitored, purged and sampled using the down-hole pumps. Purge volume is estimated using historical depth-to-water and depth-to-bottom information. Once water is obtained from the discharge of the down-hole pumps, the procedures for recording water quality readings and for packaging groundwater samples for laboratory analysis are the same as for open wells, below.

## OPEN WELLS

The following standard operating procedures apply to wells that are accessible using down-hole monitoring and sampling equipment.

## DECONTAMINATION OF MONITORING AND SAMPLING EQUIPMENT

All down-hole monitoring and sampling equipment is decontaminated using a non-phosphate detergent solution prior to placing equipment into each well. A triple-rinse procedure is used to clean the equipment. The general triple-rinse decontamination procedure is as follows:

- Wash equipment in the first rinse containing detergent and clean tap water;
- Rinse thoroughly in the third rinse containing clean tap water;
- Rinse in the third rinse containing distilled or deionized water; and
- Allow equipment to air dry prior to next use.

## WELL GAUGING

All wells are gauged using an electronic measuring tape capable of recording depth-to-water to the nearest 0.01 foot. Depth-to-water is measured to a survey mark on the top of each well casing. In the absence of a survey mark, the well is gauged from the north side of the top-of-casing. Each depth-to-water measurement is performed twice to assure accuracy. After measuring the depth-to-water, either the electronic tape or a clean non-electronic tape is lowered to the bottom of the well to obtain a depth-to-bottom reading for each well. All measurements are recorded on standard field forms.

## PRE-PURGE WATER QUALITY MEASUREMENTS

Prior to purging, a small volume of groundwater is purged from each well using a clean PVC or stainless-steel bailer. That water is used to perform field tests for $CO_2$ and alkalinity. A Hatch Digital Titrator Model 16900 or similar field instrument capable of measuring the required parameters is used to obtain field readings. All field readings are recorded on standard field forms.

## WELL PURGING

One casing volume of water is calculated for each well using the depth-to-water and depth-to-bottom field readings and the diameter of the well casing. Using a clean PVC or stainless steel bailer with new string attached, each well is purged of three to five casing volumes of water prior to collecting water samples for laboratory analysis. Water volumes removed from each well are recorded on standard field forms. After each casing volume of water is removed from the well, field water quality parameters are recorded (see below). Upon completion of purging, the water level is allowed to recover to at least 80% of its pre-purge volume prior to sampling. For slow-recharging wells, water samples are collected after two hours if 80% recovery is not achieved.

If prior groundwater analytical results show that the groundwater in a specific well is sufficiently clean, purged groundwater from the well is spread on the ground in the vicinity of the well. If the groundwater is known to contain contaminants above State action levels, the purged water is placed into DOT-approved steel 55-gallon drums.

Drums containing purge water are sealed, appropriately labeled and temporarily stored on site until a licensed hauler is contracted to remove the drums. All drummed purge water is disposed of at a State-licensed water recycling facility.

## WATER QUALITY MEASUREMENTS DURING PURGING

After purging each casing volume of water from each well, field readings are taken of water quality parameters. A Beta Technologies, Inc. Hydac Water Quality Meter or similar instrument is used to record the temperature, electrical conductivity and pH of the groundwater. At least two out of three of those parameters must stabilize to within 10% between the last two readings before a water sample is collected. A minimum of three casing volumes are removed prior to sampling if water quality parameters stabilize. If water quality parameters do not stabilize, groundwater samples are collected after purging a maximum of five casing volumes. All field readings are recorded on standard field forms.

## WATER SAMPLE COLLECTION

A new polypropylene disposable bailer is used to collect the laboratory water samples from each well. Each disposable bailer is discarded after use in one well. Water from the bailer is placed into laboratory-supplied sample containers containing appropriate preservatives for the requested analytic. The bottles are filled, capped and placed in a cooler on ice. All samples collected for laboratory analysis are transported in the chilled cooler to a State-certified laboratory following standard chain-of-custody procedures.

## EXPOSED GROUNDWATER GRAB SAMPLES

A Discrete grab samples shall be collected from the exposed groundwater in the pit, using a stainless steel bailer from the surface. During the life of the WDRs, the shape and size of the lake will change. Consequently, we are not recommending specific points, but will keep the points near the southwest shoreline far enough away from the shore to test the full water column and as far away from each separate point as possible.

# APPENDIX B

# ASSOCIATED LABORATORIES ANALYTICAL RESULTS / CHAMBERS ENVIRONMENTAL FIELD LOGS AND CHAIN-OF-CUSTODY FORMS

ALTA ENVIRONMENTAL

**Associated Laboratories**
*806 N. Batavia - Orange, CA 92868*
*Tel (714)771-6900 Fax (714)538-1209*
*www.associatedlabs.com*
*Info@associatedlabs.com*

ACCREDITED IN ACCORDANCE WITH nelac 04232CA

Client: United Rock Products
Address: 135 S. State College Blvd.
Suite #400
Brea, CA 92821
Attn: Ken Barker

Lab Request: 348162
Report Date: 12/18/2014
Date Received: 10/29/2014
Client ID: 12535

Comments: United Rock Products

2,3,7,8-TCDD was analyzed by Ceres Analytical. See attached report.

** No sample received for Cyanide analysis.

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 348162-001 | IRW-B |
| 348162-002 | Pit 3-1 |
| 348162-003 | Pit 3-2 |
| 348162-004 | Yard Well |
| 348162-005 | Pit 2-1 |
| 348162-006 | Pit 2-2 |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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*TESTING & CONSULTING*
*Chemical*
*Microbiological*
*Environmental*

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 10/29/2014 09:18 **Site:**
**Sample #:** 348162-001 **Client Sample #:** IRW-B **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 1613B | **Prep Method:** Method | | | | | **QCBatchID:** | |
| **2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)** | **See Attached** | 1 | | | | | |
| **Method:** EPA 300.0 | **Prep Method:** Method | | | | | **QCBatchID:** | QC1150524 |
| **Chloride** | **15.8** | 1 | 1 | mg/L | 10/30/14 | wyu | |
| **Sulfate** | **39.3** | 1 | 1 | mg/L | 10/30/14 | wyu | |
| **Nitrate, as NO3** | **1.61** | 1 | 0.44 | mg/L | 10/30/14 | wyu | |
| **Method:** EPA 335.4 | **Prep Method:** Method | | | | | **QCBatchID:** | |
| **Cyanide** | ** | 1 | 0.01 | mg/L | | | |
| **Method:** EPA 6010B *NELAC* | **Prep Method:** EPA 3010A | | | | | **QCBatchID:** | QC1150531 |
| Antimony | ND | 1 | 0.02 | mg/L | 11/03/14 | kedy | |
| Arsenic | ND | 1 | 0.01 | mg/L | 11/03/14 | kedy | |
| **Barium** | **0.071** | 1 | 0.01 | mg/L | 11/03/14 | kedy | |
| Beryllium | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| **Boron** | **0.082** | 1 | 0.02 | mg/L | 11/03/14 | kedy | |
| Cadmium | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Chromium | ND | 1 | 0.01 | mg/L | 11/03/14 | kedy | |
| Cobalt | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Copper | ND | 1 | 0.01 | mg/L | 11/03/14 | kedy | |
| **Lead** | **0.006** | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Nickel | ND | 1 | 0.02 | mg/L | 11/03/14 | kedy | |
| Selenium | ND | 1 | 0.01 | mg/L | 11/03/14 | kedy | |
| Silver | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Thallium | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Tin | ND | 1 | 0.05 | mg/L | 11/03/14 | kedy | |
| Vanadium | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| **Zinc** | **0.022** | 1 | 0.02 | mg/L | 11/03/14 | kedy | |
| **Method:** EPA 6010B *NELAC* | **Prep Method:** EPA 3010A/Filtered | | | | | **QCBatchID:** | QC1150531 |
| Cadmium | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Chromium | ND | 1 | 0.01 | mg/L | 11/03/14 | kedy | |
| Lead | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Nickel | ND | 1 | 0.02 | mg/L | 11/03/14 | kedy | |
| **Method:** EPA 7470A *NELAC* | **Prep Method:** Method | | | | | **QCBatchID:** | QC1150564 |
| Mercury | ND | 1 | 0.4 | ug/L | 11/01/14 | wei | |
| **Method:** EPA 8015B *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1150568 |
| TPH Diesel | ND | 1 | 0.1 | mg/L | 10/31/14 | lyt | |
| *Surrogate* | *% Recovery* | | *Limits* | *Notes* | | | |
| *Triacontane (SUR)* | *110* | | *60-140* | | | | |
| **Method:** EPA 8081A *NELAC* | **Prep Method:** EPA 3510C | | | | | **QCBatchID:** | QC1150629 |
| 4,4'-DDD | ND | 1 | 0.06 | ug/L | 11/04/14 | sdonovan | |
| 4,4'-DDE | ND | 1 | 0.05 | ug/L | 11/04/14 | sdonovan | |
| 4,4'-DDT | ND | 1 | 0.06 | ug/L | 11/04/14 | sdonovan | |
| a-BHC | ND | 1 | 0.04 | ug/L | 11/04/14 | sdonovan | |
| Aldrin | ND | 1 | 0.11 | ug/L | 11/04/14 | sdonovan | |
| b-BHC | ND | 1 | 0.03 | ug/L | 11/04/14 | sdonovan | |
| Chlordane (technical) | ND | 1 | 0.25 | ug/L | 11/04/14 | sdonovan | |
| d-BHC | ND | 1 | 0.03 | ug/L | 11/04/14 | sdonovan | |
| Dieldrin | ND | 1 | 0.06 | ug/L | 11/04/14 | sdonovan | |
| Endosulfan I | ND | 1 | 0.03 | ug/L | 11/04/14 | sdonovan | |

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 10/29/2014 09:18 **Site:**
**Sample #:** 348162-001 **Client Sample #:** IRW-B **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Endosulfan II | ND | 1 | 0.06 | ug/L | 11/04/14 | sdonovan | |
| Endosulfan sulfate | ND | 1 | 0.06 | ug/L | 11/04/14 | sdonovan | |
| Endrin | ND | 1 | 0.06 | ug/L | 11/04/14 | sdonovan | |
| Endrin aldehyde | ND | 1 | 0.13 | ug/L | 11/04/14 | sdonovan | |
| Heptachlor | ND | 1 | 0.08 | ug/L | 11/04/14 | sdonovan | |
| Heptachlor epoxide | ND | 1 | 0.05 | ug/L | 11/04/14 | sdonovan | |
| Lindane (Gamma-BHC) | ND | 1 | 0.03 | ug/L | 11/04/14 | sdonovan | |
| Methoxychlor | ND | 1 | 0.57 | ug/L | 11/04/14 | sdonovan | |
| Toxaphene | ND | 1 | 3.1 | ug/L | 11/04/14 | sdonovan | |

| Surrogate | % Recovery | Limits | Notes |
|---|---|---|---|
| *Decachlorobiphenyl DCB (SUR)* | *128* | *37-166* | |
| *Tetrachloro-m-xylene TCMX (SUR)* | *78* | *37-144* | |

**Method:** EPA 8082 *NELAC* **Prep Method:** EPA 3510C **QCBatchID:** QC1150652

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PCB-1221 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |
| PCB-1016 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |
| PCB-1232 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |
| PCB-1242 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |
| PCB-1248 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |
| PCB-1254 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |
| PCB-1260 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |
| PCB-1262 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |
| PCB-1268 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |

| Surrogate | % Recovery | Limits | Notes |
|---|---|---|---|
| *Decachlorobiphenyl DCB (SUR)* | *72* | *23-160* | |

**Method:** EPA 8151A *NELAC* **Prep Method:** EPA 3510C **QCBatchID:** QC1150638

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | 1 | 2 | ug/L | 11/04/14 | qnguyen | |
| 2,4,5-TP (Silvex) | ND | 1 | 2 | ug/L | 11/04/14 | qnguyen | |
| 2,4-D | ND | 1 | 10 | ug/L | 11/04/14 | qnguyen | |
| Dinoseb | ND | 1 | 0.7 | ug/L | 11/04/14 | qnguyen | |

| Surrogate | % Recovery | Limits | Notes |
|---|---|---|---|
| *Dichloroacetic Acid (DCAA)* | *125* | *50-125* | |

**Method:** EPA 8260B *NELAC* **Prep Method:** EPA 5030B **QCBatchID:** QC1150578

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1,1-Trichloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1,2,2-Tetrachloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1,2-Trichloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1-Dichloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1-Dichloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1-Dichloropropene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2,3-Trichloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2,4-Trichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dibromo-3-chloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dibromoethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dichloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dichloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,3-Dichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,3-Dichloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,4-Dichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 2,2-Dichloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 10/29/2014 09:18 **Site:**
**Sample #:** 348162-001 **Client Sample #:** IRW-B **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| 2-Butanone (MEK) | ND | 1 | 100 | ug/L | 10/31/14 | liaoyuanz | |
| 2-Hexanone | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 4-Methyl-2-pentanone (MIBK) | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Acetone | ND | 1 | 100 | ug/L | 10/31/14 | liaoyuanz | |
| Acetonitrile | ND | 1 | 50 | ug/L | 10/31/14 | liaoyuanz | |
| Acrolein | ND | 1 | 200 | ug/L | 10/31/14 | liaoyuanz | |
| Acrylonitrile | ND | 1 | 10 | ug/L | 10/31/14 | liaoyuanz | |
| Allyl Chloride | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Benzene | ND | 1 | 1 | ug/L | 10/31/14 | liaoyuanz | |
| Bromochloromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Bromodichloromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Bromoform | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Bromomethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Carbon Disulfide | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Carbon Tetrachloride | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chloroform | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chloromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chloroprene | ND | 1 | 200 | ug/L | 10/31/14 | liaoyuanz | |
| cis-1,2-Dichloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| cis-1,3-dichloropropene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Dibromochloromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Dibromomethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Dichlorodifluoromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Ethyl Methacrylate | ND | 1 | 50 | ug/L | 10/31/14 | liaoyuanz | |
| Ethylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Iodomethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Isobutyl Alcohol | ND | 1 | 250 | ug/L | 10/31/14 | liaoyuanz | |
| Methylene chloride | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Methyl-t-butyl Ether (MTBE) | ND | 1 | 1 | ug/L | 10/31/14 | liaoyuanz | |
| Naphthalene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Styrene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Tetrachloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Toluene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| trans-1,2-dichloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| trans-1,3-dichloropropene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| trans-1,4-dichloro-2-butene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Trichloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Trichlorofluoromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Vinyl acetate | ND | 1 | 50 | ug/L | 10/31/14 | liaoyuanz | |
| Vinyl Chloride | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Xylenes (Total) | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |

| *Surrogate* | *% Recovery* | *Limits* | *Notes* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (SUR)* | *94* | *70-145* | |
| *4-Bromofluorobenzene (SUR)* | *100* | *70-145* | |
| *Dibromodifluoromethane (SUR)* | *110* | *70-145* | |
| *Toluene-d8 (SUR)* | *101* | *70-145* | |

**Method:** EPA 8270C *NELAC* **Prep Method:** epa 3510C **QCBatchID:** QC1150583

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0,0,0-Triethyl phosphorothioate | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| 1,2,4,5-Tetrachlorobenzene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 1,3,5-Trinitrobenzene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |

| | | | | | |
|---|---|---|---|---|---|
| **Matrix:** Water | **Client:** United Rock Products | | | **Collector:** Client | |
| **Sampled:** 10/29/2014 09:18 | **Site:** | | | | |
| **Sample #:** 348162-001 | **Client Sample #:** IRW-B | | | **Sample Type:** | |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| 1,4-Naphthoquinone | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 1-Naphthylamine | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,3,4,6-Tetrachlorophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,4,5-Trichlorophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,4,6-Trichlorophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,4-Dichlorophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,4-Dimethylphenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,4-Dinitrophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,4-Dinitrotoluene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,6-Dichlorophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,6-Dinitrotoluene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2-Acetylaminofluorene | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| 2-Chloronaphthalene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2-Chlorophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2-Methylnaphthalene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2-Methylphenol (o-Cresol) | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2-Naphthylamine | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2-Nitroaniline | ND | 1 | 50 | ug/L | 10/31/14 | qnguyen | |
| 2-Nitrophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 3,3'-Dichlorobenzidine | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 3,3'-Dimethylbenzidine | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 3-Methylcholanthrene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 3-Methylphenol (m-Cresol) | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 3-Nitroaniline | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 4,6-Dinitro-2-methylphenol | ND | 1 | 50 | ug/L | 10/31/14 | qnguyen | |
| 4-Aminobiphenyl | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| 4-Bromophenyl phenyl ether | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 4-Chloro-3-methylphenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 4-Chlorophenyl phenyl ether | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 4-Methylphenol (p-Cresol) | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 4-Nitroaniline | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 4-Nitrophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 5-Nitro-o-toluidine | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Acenaphthene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Acenaphthylene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Acetophenone | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Anthracene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Benz(a)anthracene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Benzo(a)pyrene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Benzo(b)fluoranthene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Benzo(g,h,i)perylene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Benzo(k)fluoranthene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Benzyl alcohol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Bis(2-chloroethoxy)methane | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Bis(2-chloroethyl) Ether | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Bis(2-ethylhexyl) phthalate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Butylbenzyl Phthalate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Chlorobenzilate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Chrysene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Diallate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Dibenz(a,h)anthracene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Dibenzofuran | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |

| | | | | | |
|---|---|---|---|---|---|
| **Matrix:** Water | **Client:** United Rock Products | | | **Collector:** Client | |
| **Sampled:** 10/29/2014 09:18 | **Site:** | | | | |
| **Sample #:** 348162-001 | **Client Sample #:** IRW-B | | | **Sample Type:** | |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Diethyl phthalate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Dimethoate (Cygon) | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| Dimethyl phthalate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Di-n-butyl phthalate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Di-n-octyl phthalate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Diphenylamine | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| Disulfoton | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Ethyl Methanesulfonate | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| Famphur | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Fluoranthene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Fluorene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Hexachlorobenzene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Hexachlorobutadiene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Hexachlorocyclopentadiene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Hexachloroethane | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Hexachloropropene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Indeno(1,2,3-cd)pyrene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Isodrin | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| Isophorone | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Isosafrole | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Kepone | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| m-Dinitrobenzene | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| Methapyrilene | ND | 1 | 100 | ug/L | 10/31/14 | qnguyen | |
| Methyl Methanesulfonate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Methyl parathion | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Nitrobenzene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| N-nitrosodiethylamine (NDEA) | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| N-Nitrosodimethylamine (NDMA) | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| N-Nitrosodi-n-butylamine (NDBA) | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| N-Nitrosodi-n-propylamine (NDPA) | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| N-Nitrosodiphenylamine | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| N-nitrosomethylethylamine (NMEA) | ND | 1 | 30 | ug/L | 10/31/14 | qnguyen | |
| N-Nitrosopiperidine (NPIP) | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| N-nitrosopyrrolidine (NPYR) | ND | 1 | 40 | ug/L | 10/31/14 | qnguyen | |
| o-Toluidine | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| p-(Dimethylamino)azobenzene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Parathion | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| p-Chloroaniline | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| Pentachlorobenzene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Pentachloronitrobenzene (PCNB) | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| Pentachlorophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Phenacetin | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| Phenanthrene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Phenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Phorate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| p-Phenylenediamine | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Pronamide | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Pyrene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Safrole | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Thionazin (Zinophos) | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |

| | | | | | |
|---|---|---|---|---|---|
| **Matrix:** Water | **Client:** United Rock Products | | | **Collector:** Client | |
| **Sampled:** 10/29/2014 09:18 | **Site:** | | | | |
| **Sample #:** 348162-001 | **Client Sample #:** IRW-B | | | **Sample Type:** | |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| *Surrogate* | *% Recovery* | | *Limits* | *Notes* | | | |
| *2,4,6-Tribromophenol (SUR)* | *114* | | *20-190* | | | | |
| *2-Fluorobiphenyl (SUR)* | *87* | | *31-114* | | | | |
| *2-Fluorophenol (SUR)* | *75* | | *11-127* | | | | |
| *Nitrobenzene-d5 (SUR)* | *85* | | *11-138* | | | | |
| *p-Terphenyl (SUR)* | *122* | | *16-169* | | | | |
| *Phenol-d5 (SUR)* | *54* | | *10-151* | | | | |
| **Method:** SM 2320-B **Prep Method:** Method | | | | | | **QCBatchID:** | QC1150864 |
| **Bicarbonate (HCO3)** | **152** | 1 | 5 | mg/L | 11/11/14 | dung | |
| Carbonate (CO3) | ND | 1 | 5 | mg/L | 11/11/14 | dung | |
| Hydroxide (OH) | ND | 1 | 5 | mg/L | 11/11/14 | dung | |
| **Total Alkalinity (as CaCO3)** | **125** | 1 | 5 | mg/L | 11/11/14 | dung | |
| **Method:** SM 2340-B **Prep Method:** None | | | | | | **QCBatchID:** | QC1150531 |
| **Total Hardness** | **174** | 1 | 0.5 | mg/L | 11/21/14 | kedy | |
| **Method:** SM 2510-B **Prep Method:** Method | | | | | | **QCBatchID:** | |
| **Specific Conductance** | **380** | 1 | | umhos/cm | 10/30/14 | nina | |
| **Method:** SM 2540-C **Prep Method:** Method | | | | | | **QCBatchID:** | QC1150690 |
| **Total Dissolved Solids** | **200** | 1 | 10 | mg/L | 11/05/14 | soheir | |
| **Method:** SM 4500-CO2-C **Prep Method:** Method | | | | | | **QCBatchID:** | |
| **Carbon Dioxide, Free** | **44.0** | 1 | 1 | mg/L | 10/31/14 | dung | |
| **Method:** SM 5220-D **Prep Method:** Method | | | | | | **QCBatchID:** | QC1150679 |
| Chemical Oxygen Demand (COD) | ND | 1 | 4 | mg/L | 11/05/14 | hanhkhong | |

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 10/29/2014 10:45 **Site:**
**Sample #:** 348162-002 **Client Sample #:** Pit 3-1 **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 1613B | **Prep Method:** Method | | | | | **QCBatchID:** | |
| **2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)** | **See Attached** | 1 | | | | | |
| **Method:** EPA 300.0 | **Prep Method:** Method | | | | | **QCBatchID:** | QC1150524 |
| **Chloride** | **16.0** | 1 | 1 | mg/L | 10/30/14 | wyu | |
| **Sulfate** | **63.8** | 1 | 1 | mg/L | 10/30/14 | wyu | |
| **Nitrate, as NO3** | **0.88** | 1 | 0.44 | mg/L | 10/30/14 | wyu | |
| **Method:** EPA 335.4 | **Prep Method:** Method | | | | | **QCBatchID:** | |
| **Cyanide** | ** | 1 | 0.01 | mg/L | | | |
| **Method:** EPA 6010B *NELAC* | **Prep Method:** EPA 3010A | | | | | **QCBatchID:** | QC1150531 |
| Antimony | ND | 1 | 0.02 | mg/L | 11/03/14 | kedy | |
| **Arsenic** | **0.011** | 1 | 0.01 | mg/L | 11/03/14 | kedy | |
| **Barium** | **0.083** | 1 | 0.01 | mg/L | 11/03/14 | kedy | |
| Beryllium | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| **Boron** | **0.110** | 1 | 0.02 | mg/L | 11/03/14 | kedy | |
| Cadmium | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Chromium | ND | 1 | 0.01 | mg/L | 11/03/14 | kedy | |
| Cobalt | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Copper | ND | 1 | 0.01 | mg/L | 11/03/14 | kedy | |
| **Lead** | **0.007** | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Nickel | ND | 1 | 0.02 | mg/L | 11/03/14 | kedy | |
| Selenium | ND | 1 | 0.01 | mg/L | 11/03/14 | kedy | |
| Silver | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Thallium | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Tin | ND | 1 | 0.05 | mg/L | 11/03/14 | kedy | |
| Vanadium | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Zinc | ND | 1 | 0.02 | mg/L | 11/03/14 | kedy | |
| **Method:** EPA 6010B *NELAC* | **Prep Method:** EPA 3010A/Filtered | | | | | **QCBatchID:** | QC1150531 |
| Cadmium | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Chromium | ND | 1 | 0.01 | mg/L | 11/03/14 | kedy | |
| Lead | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Nickel | ND | 1 | 0.02 | mg/L | 11/03/14 | kedy | |
| **Method:** EPA 7470A *NELAC* | **Prep Method:** Method | | | | | **QCBatchID:** | QC1150564 |
| Mercury | ND | 1 | 0.4 | ug/L | 11/01/14 | wei | |
| **Method:** EPA 8015B *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1150568 |
| TPH Diesel | ND | 1 | 0.1 | mg/L | 10/31/14 | lyt | |
| *Surrogate* | *% Recovery* | | *Limits* | | *Notes* | | |
| *Triacontane (SUR)* | *135* | | *60-140* | | | | |
| **Method:** EPA 8081A *NELAC* | **Prep Method:** EPA 3510C | | | | | **QCBatchID:** | QC1150629 |
| 4,4'-DDD | ND | 1 | 0.06 | ug/L | 11/04/14 | sdonovan | |
| 4,4'-DDE | ND | 1 | 0.05 | ug/L | 11/04/14 | sdonovan | |
| 4,4'-DDT | ND | 1 | 0.06 | ug/L | 11/04/14 | sdonovan | |
| a-BHC | ND | 1 | 0.04 | ug/L | 11/04/14 | sdonovan | |
| Aldrin | ND | 1 | 0.11 | ug/L | 11/04/14 | sdonovan | |
| b-BHC | ND | 1 | 0.03 | ug/L | 11/04/14 | sdonovan | |
| Chlordane (technical) | ND | 1 | 0.25 | ug/L | 11/04/14 | sdonovan | |
| d-BHC | ND | 1 | 0.03 | ug/L | 11/04/14 | sdonovan | |
| Dieldrin | ND | 1 | 0.06 | ug/L | 11/04/14 | sdonovan | |
| Endosulfan I | ND | 1 | 0.03 | ug/L | 11/04/14 | sdonovan | |

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 10/29/2014 10:45 **Site:**
**Sample #:** 348162-002 **Client Sample #:** Pit 3-1 **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Endosulfan II | ND | 1 | 0.06 | ug/L | 11/04/14 | sdonovan | |
| Endosulfan sulfate | ND | 1 | 0.06 | ug/L | 11/04/14 | sdonovan | |
| Endrin | ND | 1 | 0.06 | ug/L | 11/04/14 | sdonovan | |
| Endrin aldehyde | ND | 1 | 0.13 | ug/L | 11/04/14 | sdonovan | |
| Heptachlor | ND | 1 | 0.08 | ug/L | 11/04/14 | sdonovan | |
| Heptachlor epoxide | ND | 1 | 0.05 | ug/L | 11/04/14 | sdonovan | |
| Lindane (Gamma-BHC) | ND | 1 | 0.03 | ug/L | 11/04/14 | sdonovan | |
| Methoxychlor | ND | 1 | 0.57 | ug/L | 11/04/14 | sdonovan | |
| Toxaphene | ND | 1 | 3.1 | ug/L | 11/04/14 | sdonovan | |

| *Surrogate* | *% Recovery* | *Limits* | *Notes* |
|---|---|---|---|
| *Decachlorobiphenyl DCB (SUR)* | *124* | *37-166* | |
| *Tetrachloro-m-xylene TCMX (SUR)* | *81* | *37-144* | |

**Method:** EPA 8082 *NELAC* **Prep Method:** EPA 3510C **QCBatchID:** QC1150652

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PCB-1221 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |
| PCB-1016 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |
| PCB-1232 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |
| PCB-1242 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |
| PCB-1248 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |
| PCB-1254 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |
| PCB-1260 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |
| PCB-1262 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |
| PCB-1268 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |

| *Surrogate* | *% Recovery* | *Limits* | *Notes* |
|---|---|---|---|
| *Decachlorobiphenyl DCB (SUR)* | *82* | *23-160* | |

**Method:** EPA 8151A *NELAC* **Prep Method:** EPA 3510C **QCBatchID:** QC1150638

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | 1 | 2 | ug/L | 11/04/14 | qnguyen | |
| 2,4,5-TP (Silvex) | ND | 1 | 2 | ug/L | 11/04/14 | qnguyen | |
| 2,4-D | ND | 1 | 10 | ug/L | 11/04/14 | qnguyen | |
| Dinoseb | ND | 1 | 0.7 | ug/L | 11/04/14 | qnguyen | |

| *Surrogate* | *% Recovery* | *Limits* | *Notes* | |
|---|---|---|---|---|
| *Dichloroacetic Acid (DCAA)* | *135* | *50-125* | *S* | *Bialy high due matrix interference; not affe* |

**Method:** EPA 8260B *NELAC* **Prep Method:** EPA 5030B **QCBatchID:** QC1150578

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1,1-Trichloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1,2,2-Tetrachloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1,2-Trichloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1-Dichloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1-Dichloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1-Dichloropropene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2,3-Trichloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2,4-Trichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dibromo-3-chloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dibromoethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dichloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dichloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,3-Dichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,3-Dichloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,4-Dichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 2,2-Dichloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 10/29/2014 10:45 **Site:**
**Sample #:** 348162-002 **Client Sample #:** Pit 3-1 **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| 2-Butanone (MEK) | ND | 1 | 100 | ug/L | 10/31/14 | liaoyuanz | |
| 2-Hexanone | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 4-Methyl-2-pentanone (MIBK) | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Acetone | ND | 1 | 100 | ug/L | 10/31/14 | liaoyuanz | |
| Acetonitrile | ND | 1 | 50 | ug/L | 10/31/14 | liaoyuanz | |
| Acrolein | ND | 1 | 200 | ug/L | 10/31/14 | liaoyuanz | |
| Acrylonitrile | ND | 1 | 10 | ug/L | 10/31/14 | liaoyuanz | |
| Allyl Chloride | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Benzene | ND | 1 | 1 | ug/L | 10/31/14 | liaoyuanz | |
| Bromochloromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Bromodichloromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Bromoform | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Bromomethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Carbon Disulfide | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Carbon Tetrachloride | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chloroform | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chloromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chloroprene | ND | 1 | 200 | ug/L | 10/31/14 | liaoyuanz | |
| cis-1,2-Dichloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| cis-1,3-dichloropropene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Dibromochloromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Dibromomethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Dichlorodifluoromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Ethyl Methacrylate | ND | 1 | 50 | ug/L | 10/31/14 | liaoyuanz | |
| Ethylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Iodomethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Isobutyl Alcohol | ND | 1 | 250 | ug/L | 10/31/14 | liaoyuanz | |
| Methylene chloride | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Methyl-t-butyl Ether (MTBE) | ND | 1 | 1 | ug/L | 10/31/14 | liaoyuanz | |
| Naphthalene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Styrene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Tetrachloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Toluene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| trans-1,2-dichloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| trans-1,3-dichloropropene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| trans-1,4-dichloro-2-butene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Trichloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Trichlorofluoromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Vinyl acetate | ND | 1 | 50 | ug/L | 10/31/14 | liaoyuanz | |
| Vinyl Chloride | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Xylenes (Total) | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |

| *Surrogate* | *% Recovery* | *Limits* | *Notes* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (SUR)* | *98* | *70-145* | |
| *4-Bromofluorobenzene (SUR)* | *113* | *70-145* | |
| *Dibromodifluoromethane (SUR)* | *104* | *70-145* | |
| *Toluene-d8 (SUR)* | *98* | *70-145* | |

**Method:** EPA 8270C *NELAC* **Prep Method:** epa 3510C **QCBatchID:** QC1150583

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0,0,0-Triethyl phosphorothioate | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| 1,2,4,5-Tetrachlorobenzene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 1,3,5-Trinitrobenzene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |

| | | | | | |
|---|---|---|---|---|---|
| **Matrix:** Water | **Client:** United Rock Products | | | **Collector:** Client | |
| **Sampled:** 10/29/2014 10:45 | **Site:** | | | | |
| **Sample #:** 348162-002 | **Client Sample #:** Pit 3-1 | | | **Sample Type:** | |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| 1,4-Naphthoquinone | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 1-Naphthylamine | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,3,4,6-Tetrachlorophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,4,5-Trichlorophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,4,6-Trichlorophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,4-Dichlorophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,4-Dimethylphenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,4-Dinitrophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,4-Dinitrotoluene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,6-Dichlorophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,6-Dinitrotoluene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2-Acetylaminofluorene | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| 2-Chloronaphthalene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2-Chlorophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2-Methylnaphthalene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2-Methylphenol (o-Cresol) | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2-Naphthylamine | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2-Nitroaniline | ND | 1 | 50 | ug/L | 10/31/14 | qnguyen | |
| 2-Nitrophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 3,3'-Dichlorobenzidine | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 3,3'-Dimethylbenzidine | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 3-Methylcholanthrene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 3-Methylphenol (m-Cresol) | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 3-Nitroaniline | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 4,6-Dinitro-2-methylphenol | ND | 1 | 50 | ug/L | 10/31/14 | qnguyen | |
| 4-Aminobiphenyl | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| 4-Bromophenyl phenyl ether | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 4-Chloro-3-methylphenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 4-Chlorophenyl phenyl ether | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 4-Methylphenol (p-Cresol) | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 4-Nitroaniline | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 4-Nitrophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 5-Nitro-o-toluidine | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Acenaphthene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Acenaphthylene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Acetophenone | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Anthracene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Benz(a)anthracene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Benzo(a)pyrene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Benzo(b)fluoranthene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Benzo(g,h,i)perylene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Benzo(k)fluoranthene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Benzyl alcohol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Bis(2-chloroethoxy)methane | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Bis(2-chloroethyl) Ether | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Bis(2-ethylhexyl) phthalate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Butylbenzyl Phthalate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Chlorobenzilate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Chrysene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Diallate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Dibenz(a,h)anthracene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Dibenzofuran | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |

| | | | | | |
|---|---|---|---|---|---|
| **Matrix:** Water | **Client:** United Rock Products | | | **Collector:** Client | |
| **Sampled:** 10/29/2014 10:45 | **Site:** | | | | |
| **Sample #:** 348162-002 | **Client Sample #:** Pit 3-1 | | | **Sample Type:** | |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Diethyl phthalate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Dimethoate (Cygon) | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| Dimethyl phthalate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Di-n-butyl phthalate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Di-n-octyl phthalate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Diphenylamine | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| Disulfoton | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Ethyl Methanesulfonate | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| Famphur | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Fluoranthene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Fluorene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Hexachlorobenzene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Hexachlorobutadiene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Hexachlorocyclopentadiene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Hexachloroethane | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Hexachloropropene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Indeno(1,2,3-cd)pyrene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Isodrin | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| Isophorone | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Isosafrole | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Kepone | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| m-Dinitrobenzene | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| Methapyrilene | ND | 1 | 100 | ug/L | 10/31/14 | qnguyen | |
| Methyl Methanesulfonate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Methyl parathion | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Nitrobenzene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| N-nitrosodiethylamine (NDEA) | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| N-Nitrosodimethylamine (NDMA) | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| N-Nitrosodi-n-butylamine (NDBA) | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| N-Nitrosodi-n-propylamine (NDPA) | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| N-Nitrosodiphenylamine | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| N-nitrosomethylethylamine (NMEA) | ND | 1 | 30 | ug/L | 10/31/14 | qnguyen | |
| N-Nitrosopiperidine (NPIP) | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| N-nitrosopyrrolidine (NPYR) | ND | 1 | 40 | ug/L | 10/31/14 | qnguyen | |
| o-Toluidine | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| p-(Dimethylamino)azobenzene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Parathion | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| p-Chloroaniline | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| Pentachlorobenzene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Pentachloronitrobenzene (PCNB) | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| Pentachlorophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Phenacetin | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| Phenanthrene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Phenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Phorate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| p-Phenylenediamine | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Pronamide | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Pyrene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Safrole | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Thionazin (Zinophos) | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 10/29/2014 10:45 **Site:**
**Sample #:** 348162-002 **Client Sample #:** Pit 3-1 **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| *Surrogate* | *% Recovery* | | *Limits* | *Notes* | | | |
| *2,4,6-Tribromophenol (SUR)* | *111* | | *20-190* | | | | |
| *2-Fluorobiphenyl (SUR)* | *85* | | *31-114* | | | | |
| *2-Fluorophenol (SUR)* | *75* | | *11-127* | | | | |
| *Nitrobenzene-d5 (SUR)* | *73* | | *11-138* | | | | |
| *p-Terphenyl (SUR)* | *122* | | *16-169* | | | | |
| *Phenol-d5 (SUR)* | *51* | | *10-151* | | | | |
| **Method:** SM 2320-B **Prep Method:** Method | | | | | | **QCBatchID:** | QC1150864 |
| **Bicarbonate (HCO3)** | **125** | 1 | 5 | mg/L | 11/11/14 | dung | |
| Carbonate (CO3) | ND | 1 | 5 | mg/L | 11/11/14 | dung | |
| Hydroxide (OH) | ND | 1 | 5 | mg/L | 11/11/14 | dung | |
| **Total Alkalinity (as CaCO3)** | **102** | 1 | 5 | mg/L | 11/11/14 | dung | |
| **Method:** SM 2340-B **Prep Method:** None | | | | | | **QCBatchID:** | QC1150531 |
| **Total Hardness** | **163** | 1 | 0.5 | mg/L | 11/21/14 | kedy | |
| **Method:** SM 2510-B **Prep Method:** Method | | | | | | **QCBatchID:** | |
| **Specific Conductance** | **388** | 1 | | umhos/cm | 10/30/14 | nina | |
| **Method:** SM 2540-C **Prep Method:** Method | | | | | | **QCBatchID:** | QC1150690 |
| **Total Dissolved Solids** | **184** | 1 | 10 | mg/L | 11/05/14 | soheir | |
| **Method:** SM 4500-CO2-C **Prep Method:** Method | | | | | | **QCBatchID:** | |
| Carbon Dioxide, Free | ND | 1 | 1 | mg/L | 10/31/14 | dung | |
| **Method:** SM 5220-D **Prep Method:** Method | | | | | | **QCBatchID:** | QC1150679 |
| Chemical Oxygen Demand (COD) | ND | 1 | 4 | mg/L | 11/05/14 | hanhkhong | |

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 10/29/2014 11:10 **Site:**
**Sample #:** 348162-003 **Client Sample #:** Pit 3-2 **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 1613B | **Prep Method:** Method | | | | | **QCBatchID:** | |
| **2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)** | **See Attached** | 1 | | | | | |
| **Method:** EPA 300.0 | **Prep Method:** Method | | | | | **QCBatchID:** | QC1150524 |
| **Chloride** | **15.9** | 1 | 1 | mg/L | 10/30/14 | wyu | |
| **Sulfate** | **63.6** | 1 | 1 | mg/L | 10/30/14 | wyu | |
| **Nitrate, as NO3** | **0.74** | 1 | 0.44 | mg/L | 10/30/14 | wyu | |
| **Method:** EPA 335.4 | **Prep Method:** Method | | | | | **QCBatchID:** | |
| **Cyanide** | ** | 1 | 0.01 | mg/L | | | |
| **Method:** EPA 6010B *NELAC* | **Prep Method:** EPA 3010A | | | | | **QCBatchID:** | QC1150531 |
| Antimony | ND | 1 | 0.02 | mg/L | 11/03/14 | kedy | |
| Arsenic | ND | 1 | 0.01 | mg/L | 11/03/14 | kedy | |
| **Barium** | **0.079** | 1 | 0.01 | mg/L | 11/03/14 | kedy | |
| Beryllium | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| **Boron** | **0.098** | 1 | 0.02 | mg/L | 11/03/14 | kedy | |
| Cadmium | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Chromium | ND | 1 | 0.01 | mg/L | 11/03/14 | kedy | |
| Cobalt | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Copper | ND | 1 | 0.01 | mg/L | 11/03/14 | kedy | |
| Lead | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Nickel | ND | 1 | 0.02 | mg/L | 11/03/14 | kedy | |
| Selenium | ND | 1 | 0.01 | mg/L | 11/03/14 | kedy | |
| Silver | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Thallium | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Tin | ND | 1 | 0.05 | mg/L | 11/03/14 | kedy | |
| Vanadium | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Zinc | ND | 1 | 0.02 | mg/L | 11/03/14 | kedy | |
| **Method:** EPA 6010B *NELAC* | **Prep Method:** EPA 3010A/Filtered | | | | | **QCBatchID:** | QC1150531 |
| Cadmium | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Chromium | ND | 1 | 0.01 | mg/L | 11/03/14 | kedy | |
| Lead | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Nickel | ND | 1 | 0.02 | mg/L | 11/03/14 | kedy | |
| **Method:** EPA 7470A *NELAC* | **Prep Method:** Method | | | | | **QCBatchID:** | QC1150564 |
| Mercury | ND | 1 | 0.4 | ug/L | 11/01/14 | wei | |
| **Method:** EPA 8015B *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1150568 |
| TPH Diesel | ND | 1 | 0.1 | mg/L | 10/31/14 | lyt | |
| *Surrogate* | *% Recovery* | | *Limits* | *Notes* | | | |
| *Triacontane (SUR)* | *140* | | *60-140* | | | | |
| **Method:** EPA 8081A *NELAC* | **Prep Method:** EPA 3510C | | | | | **QCBatchID:** | QC1150629 |
| 4,4'-DDD | ND | 1 | 0.06 | ug/L | 11/04/14 | sdonovan | |
| 4,4'-DDE | ND | 1 | 0.05 | ug/L | 11/04/14 | sdonovan | |
| 4,4'-DDT | ND | 1 | 0.06 | ug/L | 11/04/14 | sdonovan | |
| a-BHC | ND | 1 | 0.04 | ug/L | 11/04/14 | sdonovan | |
| Aldrin | ND | 1 | 0.11 | ug/L | 11/04/14 | sdonovan | |
| b-BHC | ND | 1 | 0.03 | ug/L | 11/04/14 | sdonovan | |
| Chlordane (technical) | ND | 1 | 0.25 | ug/L | 11/04/14 | sdonovan | |
| d-BHC | ND | 1 | 0.03 | ug/L | 11/04/14 | sdonovan | |
| Dieldrin | ND | 1 | 0.06 | ug/L | 11/04/14 | sdonovan | |
| Endosulfan I | ND | 1 | 0.03 | ug/L | 11/04/14 | sdonovan | |

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 10/29/2014 11:10 **Site:**
**Sample #:** 348162-003 **Client Sample #:** Pit 3-2 **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Endosulfan II | ND | 1 | 0.06 | ug/L | 11/04/14 | sdonovan | |
| Endosulfan sulfate | ND | 1 | 0.06 | ug/L | 11/04/14 | sdonovan | |
| Endrin | ND | 1 | 0.06 | ug/L | 11/04/14 | sdonovan | |
| Endrin aldehyde | ND | 1 | 0.13 | ug/L | 11/04/14 | sdonovan | |
| Heptachlor | ND | 1 | 0.08 | ug/L | 11/04/14 | sdonovan | |
| Heptachlor epoxide | ND | 1 | 0.05 | ug/L | 11/04/14 | sdonovan | |
| Lindane (Gamma-BHC) | ND | 1 | 0.03 | ug/L | 11/04/14 | sdonovan | |
| Methoxychlor | ND | 1 | 0.57 | ug/L | 11/04/14 | sdonovan | |
| Toxaphene | ND | 1 | 3.1 | ug/L | 11/04/14 | sdonovan | |

| Surrogate | % Recovery | Limits | Notes |
|---|---|---|---|
| *Decachlorobiphenyl DCB (SUR)* | *107* | *37-166* | |
| *Tetrachloro-m-xylene TCMX (SUR)* | *61* | *37-144* | |

**Method:** EPA 8082 *NELAC* **Prep Method:** EPA 3510C **QCBatchID:** QC1150652

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PCB-1221 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |
| PCB-1016 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |
| PCB-1232 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |
| PCB-1242 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |
| PCB-1248 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |
| PCB-1254 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |
| PCB-1260 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |
| PCB-1262 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |
| PCB-1268 | ND | 1 | 0.5 | ug/L | 11/04/14 | sdonovan | |

| Surrogate | % Recovery | Limits | Notes |
|---|---|---|---|
| *Decachlorobiphenyl DCB (SUR)* | *80* | *23-160* | |

**Method:** EPA 8151A *NELAC* **Prep Method:** EPA 3510C **QCBatchID:** QC1150638

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2,4,5-T | ND | 1 | 2 | ug/L | 11/04/14 | qnguyen | |
| 2,4,5-TP (Silvex) | ND | 1 | 2 | ug/L | 11/04/14 | qnguyen | |
| 2,4-D | ND | 1 | 10 | ug/L | 11/04/14 | qnguyen | |
| Dinoseb | ND | 1 | 0.7 | ug/L | 11/04/14 | qnguyen | |

| Surrogate | % Recovery | Limits | Notes |
|---|---|---|---|
| *Dichloroacetic Acid (DCAA)* | *120* | *50-125* | |

**Method:** EPA 8260B *NELAC* **Prep Method:** EPA 5030B **QCBatchID:** QC1150578

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1,1-Trichloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1,2,2-Tetrachloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1,2-Trichloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1-Dichloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1-Dichloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1-Dichloropropene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2,3-Trichloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2,4-Trichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dibromo-3-chloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dibromoethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dichloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dichloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,3-Dichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,3-Dichloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,4-Dichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 2,2-Dichloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 10/29/2014 11:10 **Site:**
**Sample #:** 348162-003 **Client Sample #:** Pit 3-2 **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| 2-Butanone (MEK) | ND | 1 | 100 | ug/L | 10/31/14 | liaoyuanz | |
| 2-Hexanone | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 4-Methyl-2-pentanone (MIBK) | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Acetone | ND | 1 | 100 | ug/L | 10/31/14 | liaoyuanz | |
| Acetonitrile | ND | 1 | 50 | ug/L | 10/31/14 | liaoyuanz | |
| Acrolein | ND | 1 | 200 | ug/L | 10/31/14 | liaoyuanz | |
| Acrylonitrile | ND | 1 | 10 | ug/L | 10/31/14 | liaoyuanz | |
| Allyl Chloride | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Benzene | ND | 1 | 1 | ug/L | 10/31/14 | liaoyuanz | |
| Bromochloromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Bromodichloromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Bromoform | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Bromomethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Carbon Disulfide | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Carbon Tetrachloride | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chloroform | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chloromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chloroprene | ND | 1 | 200 | ug/L | 10/31/14 | liaoyuanz | |
| cis-1,2-Dichloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| cis-1,3-dichloropropene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Dibromochloromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Dibromomethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Dichlorodifluoromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Ethyl Methacrylate | ND | 1 | 50 | ug/L | 10/31/14 | liaoyuanz | |
| Ethylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Iodomethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Isobutyl Alcohol | ND | 1 | 250 | ug/L | 10/31/14 | liaoyuanz | |
| Methylene chloride | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Methyl-t-butyl Ether (MTBE) | ND | 1 | 1 | ug/L | 10/31/14 | liaoyuanz | |
| Naphthalene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Styrene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Tetrachloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Toluene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| trans-1,2-dichloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| trans-1,3-dichloropropene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| trans-1,4-dichloro-2-butene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Trichloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Trichlorofluoromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Vinyl acetate | ND | 1 | 50 | ug/L | 10/31/14 | liaoyuanz | |
| Vinyl Chloride | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Xylenes (Total) | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |

| *Surrogate* | *% Recovery* | *Limits* | *Notes* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (SUR)* | *107* | *70-145* | |
| *4-Bromofluorobenzene (SUR)* | *110* | *70-145* | |
| *Dibromodifluoromethane (SUR)* | *110* | *70-145* | |
| *Toluene-d8 (SUR)* | *101* | *70-145* | |

**Method:** EPA 8270C *NELAC* **Prep Method:** epa 3510C **QCBatchID:** QC1150583

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0,0,0-Triethyl phosphorothioate | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| 1,2,4,5-Tetrachlorobenzene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 1,3,5-Trinitrobenzene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |

| | | | | | |
|---|---|---|---|---|---|
| **Matrix:** Water | **Client:** United Rock Products | | | **Collector:** Client | |
| **Sampled:** 10/29/2014 11:10 | **Site:** | | | | |
| **Sample #:** 348162-003 | **Client Sample #:** Pit 3-2 | | | **Sample Type:** | |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| 1,4-Naphthoquinone | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 1-Naphthylamine | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,3,4,6-Tetrachlorophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,4,5-Trichlorophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,4,6-Trichlorophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,4-Dichlorophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,4-Dimethylphenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,4-Dinitrophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,4-Dinitrotoluene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,6-Dichlorophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2,6-Dinitrotoluene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2-Acetylaminofluorene | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| 2-Chloronaphthalene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2-Chlorophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2-Methylnaphthalene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2-Methylphenol (o-Cresol) | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2-Naphthylamine | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 2-Nitroaniline | ND | 1 | 50 | ug/L | 10/31/14 | qnguyen | |
| 2-Nitrophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 3,3'-Dichlorobenzidine | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 3,3'-Dimethylbenzidine | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 3-Methylcholanthrene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 3-Methylphenol (m-Cresol) | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 3-Nitroaniline | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 4,6-Dinitro-2-methylphenol | ND | 1 | 50 | ug/L | 10/31/14 | qnguyen | |
| 4-Aminobiphenyl | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| 4-Bromophenyl phenyl ether | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 4-Chloro-3-methylphenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 4-Chlorophenyl phenyl ether | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 4-Methylphenol (p-Cresol) | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 4-Nitroaniline | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 4-Nitrophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| 5-Nitro-o-toluidine | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Acenaphthene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Acenaphthylene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Acetophenone | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Anthracene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Benz(a)anthracene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Benzo(a)pyrene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Benzo(b)fluoranthene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Benzo(g,h,i)perylene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Benzo(k)fluoranthene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Benzyl alcohol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Bis(2-chloroethoxy)methane | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Bis(2-chloroethyl) Ether | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Bis(2-ethylhexyl) phthalate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Butylbenzyl Phthalate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Chlorobenzilate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Chrysene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Diallate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Dibenz(a,h)anthracene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Dibenzofuran | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |

| | | | | | |
|---|---|---|---|---|---|
| **Matrix:** Water | **Client:** United Rock Products | | | **Collector:** Client | |
| **Sampled:** 10/29/2014 11:10 | **Site:** | | | | |
| **Sample #:** 348162-003 | **Client Sample #:** Pit 3-2 | | | **Sample Type:** | |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Diethyl phthalate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Dimethoate (Cygon) | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| Dimethyl phthalate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Di-n-butyl phthalate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Di-n-octyl phthalate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Diphenylamine | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| Disulfoton | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Ethyl Methanesulfonate | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| Famphur | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Fluoranthene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Fluorene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Hexachlorobenzene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Hexachlorobutadiene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Hexachlorocyclopentadiene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Hexachloroethane | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Hexachloropropene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Indeno(1,2,3-cd)pyrene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Isodrin | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| Isophorone | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Isosafrole | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Kepone | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| m-Dinitrobenzene | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| Methapyrilene | ND | 1 | 100 | ug/L | 10/31/14 | qnguyen | |
| Methyl Methanesulfonate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Methyl parathion | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Nitrobenzene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| N-nitrosodiethylamine (NDEA) | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| N-Nitrosodimethylamine (NDMA) | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| N-Nitrosodi-n-butylamine (NDBA) | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| N-Nitrosodi-n-propylamine (NDPA) | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| N-Nitrosodiphenylamine | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| N-nitrosomethylethylamine (NMEA) | ND | 1 | 30 | ug/L | 10/31/14 | qnguyen | |
| N-Nitrosopiperidine (NPIP) | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| N-nitrosopyrrolidine (NPYR) | ND | 1 | 40 | ug/L | 10/31/14 | qnguyen | |
| o-Toluidine | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| p-(Dimethylamino)azobenzene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Parathion | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| p-Chloroaniline | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| Pentachlorobenzene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Pentachloronitrobenzene (PCNB) | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| Pentachlorophenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Phenacetin | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |
| Phenanthrene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Phenol | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Phorate | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| p-Phenylenediamine | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Pronamide | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Pyrene | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Safrole | ND | 1 | 10 | ug/L | 10/31/14 | qnguyen | |
| Thionazin (Zinophos) | ND | 1 | 20 | ug/L | 10/31/14 | qnguyen | |

| | | | | | |
|---|---|---|---|---|---|
| **Matrix:** Water | **Client:** United Rock Products | | | **Collector:** Client | |
| **Sampled:** 10/29/2014 11:10 | **Site:** | | | | |
| **Sample #:** 348162-003 | **Client Sample #:** Pit 3-2 | | | **Sample Type:** | |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| *Surrogate* | *% Recovery* | *Limits* | *Notes* | | | | |
| *2,4,6-Tribromophenol (SUR)* | *99* | *20-190* | | | | | |
| *2-Fluorobiphenyl (SUR)* | *79* | *31-114* | | | | | |
| *2-Fluorophenol (SUR)* | *76* | *11-127* | | | | | |
| *Nitrobenzene-d5 (SUR)* | *70* | *11-138* | | | | | |
| *p-Terphenyl (SUR)* | *105* | *16-169* | | | | | |
| *Phenol-d5 (SUR)* | *53* | *10-151* | | | | | |
| **Method:** SM 2320-B **Prep Method:** Method | | | | | | **QCBatchID:** QC1150864 | |
| **Bicarbonate (HCO3)** | **125** | 1 | 5 | mg/L | 11/11/14 | dung | |
| Carbonate (CO3) | ND | 1 | 5 | mg/L | 11/11/14 | dung | |
| Hydroxide (OH) | ND | 1 | 5 | mg/L | 11/11/14 | dung | |
| **Total Alkalinity (as CaCO3)** | **102** | 1 | 5 | mg/L | 11/11/14 | dung | |
| **Method:** SM 2340-B **Prep Method:** None | | | | | | **QCBatchID:** QC1150531 | |
| **Total Hardness** | **159** | 1 | 0.5 | mg/L | 11/21/14 | kedy | |
| **Method:** SM 2510-B **Prep Method:** Method | | | | | | **QCBatchID:** | |
| **Specific Conductance** | **391** | 1 | | umhos/cm | 10/30/14 | nina | |
| **Method:** SM 2540-C **Prep Method:** Method | | | | | | **QCBatchID:** QC1150690 | |
| **Total Dissolved Solids** | **258** | 1 | 10 | mg/L | 11/05/14 | soheir | |
| **Method:** SM 4500-CO2-C **Prep Method:** Method | | | | | | **QCBatchID:** | |
| Carbon Dioxide, Free | ND | 1 | 1 | mg/L | 10/31/14 | dung | |
| **Method:** SM 5220-D **Prep Method:** Method | | | | | | **QCBatchID:** QC1150679 | |
| Chemical Oxygen Demand (COD) | ND | 1 | 4 | mg/L | 11/05/14 | hanhkhong | |

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 10/29/2014 12:30 **Site:**
**Sample #:** 348162-004 **Client Sample #:** Yard Well **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 300.0 | **Prep Method:** Method | | | | | **QCBatchID:** | QC1150524 |
| **Chloride** | **7.04** | 1 | 1 | mg/L | 10/30/14 | wyu | |
| **Sulfate** | **15.8** | 1 | 1 | mg/L | 10/30/14 | wyu | |
| **Nitrate, as NO3** | **5.25** | 1 | 0.44 | mg/L | 10/30/14 | wyu | |
| **Method:** EPA 6010B *NELAC* | **Prep Method:** EPA 3010A | | | | | **QCBatchID:** | QC1150531 |
| **Boron** | **0.064** | 1 | 0.02 | mg/L | 11/03/14 | kedy | |
| **Method:** EPA 6010B *NELAC* | **Prep Method:** EPA 3010A/Filtered | | | | | **QCBatchID:** | QC1150531 |
| Cadmium | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Chromium | ND | 1 | 0.01 | mg/L | 11/03/14 | kedy | |
| Lead | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Nickel | ND | 1 | 0.02 | mg/L | 11/03/14 | kedy | |
| **Method:** EPA 8015B *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1150568 |
| TPH Diesel | ND | 1 | 0.1 | mg/L | 10/31/14 | lyt | |
| *Surrogate* | *% Recovery* | | *Limits* | | *Notes* | | |
| *Triacontane (SUR)* | *100* | | *60-140* | | | | |
| **Method:** EPA 8260B *NELAC* | **Prep Method:** EPA 5030B | | | | | **QCBatchID:** | QC1150578 |
| 1,1,1,2-Tetrachloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1,1-Trichloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1,2,2-Tetrachloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1,2-Trichloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1,2-Trichlorotrifluoroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1-Dichloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1-Dichloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1-Dichloropropene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2,3-Trichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2,3-Trichloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2,4-Trichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2,4-Trimethylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dibromo-3-chloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dibromoethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dichloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dichloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,3,5-Trimethylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,3-Dichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,3-Dichloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,4-Dichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 2,2-Dichloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 2-Butanone (MEK) | ND | 1 | 100 | ug/L | 10/31/14 | liaoyuanz | |
| 2-Chloroethyl Vinyl Ether | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 2-Chlorotoluene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 4-Chlorotoluene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 4-Isopropyltoluene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 4-Methyl-2-pentanone (MIBK) | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Acetone | ND | 1 | 100 | ug/L | 10/31/14 | liaoyuanz | |
| Acrolein | ND | 1 | 200 | ug/L | 10/31/14 | liaoyuanz | |
| Acrylonitrile | ND | 1 | 10 | ug/L | 10/31/14 | liaoyuanz | |
| Allyl Chloride | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Benzene | ND | 1 | 1 | ug/L | 10/31/14 | liaoyuanz | |
| Bromobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 10/29/2014 12:30 **Site:**
**Sample #:** 348162-004 **Client Sample #:** Yard Well **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Bromochloromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Bromodichloromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Bromoform | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Bromomethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Carbon Tetrachloride | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chlorodibromomethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chloroform | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chloromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| cis-1,2-Dichloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| cis-1,3-dichloropropene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| cis-1,4-dichloro-2-butene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Dibromomethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Dichlorodifluoromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Ethylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Hexachlorobutadiene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Isopropylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| m and p-Xylene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Methylene chloride | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Methyl-t-butyl Ether (MTBE) | ND | 1 | 1 | ug/L | 10/31/14 | liaoyuanz | |
| Naphthalene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| N-butylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| N-propylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| o-Xylene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Sec-butylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Styrene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Tert-butylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Tetrachloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Toluene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| trans-1,2-dichloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| trans-1,3-dichloropropene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| trans-1,4-dichloro-2-butene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Trichloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Trichlorofluoromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Vinyl Chloride | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Xylenes (Total) | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |

| *Surrogate* | *% Recovery* | *Limits* | *Notes* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (SUR)* | *98* | *70-145* | |
| *4-Bromofluorobenzene (SUR)* | *111* | *70-145* | |
| *Dibromodifluoromethane (SUR)* | *106* | *70-145* | |
| *Toluene-d8 (SUR)* | *103* | *70-145* | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Method:** SM 2510-B | **Prep Method:** Method | | | | | | **QCBatchID:** |
| **Specific Conductance** | | **339** | 1 | | umhos/cm | 10/30/14 | nina |
| **Method:** SM 2540-C | **Prep Method:** Method | | | | | | **QCBatchID:** QC1150690 |
| **Total Dissolved Solids** | | **174** | 1 | 10 | mg/L | 11/05/14 | soheir |
| **Method:** SM 5220-D | **Prep Method:** Method | | | | | | **QCBatchID:** QC1150679 |
| Chemical Oxygen Demand (COD) | | ND | 1 | 4 | mg/L | 11/05/14 | hanhkhong |

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 10/29/2014 13:20 **Site:**
**Sample #:** 348162-005 **Client Sample #:** Pit 2-1 **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 300.0 | **Prep Method:** Method | | | | | **QCBatchID:** | QC1150524 |
| **Chloride** | **16.0** | 1 | 1 | mg/L | 10/30/14 | wyu | |
| **Sulfate** | **31.7** | 1 | 1 | mg/L | 10/30/14 | wyu | |
| Nitrate, as NO3 | ND | 1 | 0.44 | mg/L | 10/30/14 | wyu | |
| **Method:** EPA 6010B *NELAC* | **Prep Method:** EPA 3010A | | | | | **QCBatchID:** | QC1150531 |
| **Boron** | **0.085** | 1 | 0.02 | mg/L | 11/03/14 | kedy | |
| **Method:** EPA 6010B *NELAC* | **Prep Method:** EPA 3010A/Filtered | | | | | **QCBatchID:** | QC1150531 |
| Cadmium | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Chromium | ND | 1 | 0.01 | mg/L | 11/03/14 | kedy | |
| Lead | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Nickel | ND | 1 | 0.02 | mg/L | 11/03/14 | kedy | |
| **Method:** EPA 8015B *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1150568 |
| TPH Diesel | ND | 1 | 0.1 | mg/L | 10/31/14 | lyt | |
| *Surrogate* | *% Recovery* | | *Limits* | | *Notes* | | |
| *Triacontane (SUR)* | *110* | | *60-140* | | | | |
| **Method:** EPA 8260B *NELAC* | **Prep Method:** EPA 5030B | | | | | **QCBatchID:** | QC1150578 |
| 1,1,1,2-Tetrachloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1,1-Trichloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1,2,2-Tetrachloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1,2-Trichloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1,2-Trichlorotrifluoroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1-Dichloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1-Dichloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1-Dichloropropene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2,3-Trichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2,3-Trichloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2,4-Trichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2,4-Trimethylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dibromo-3-chloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dibromoethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dichloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dichloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,3,5-Trimethylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,3-Dichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,3-Dichloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,4-Dichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 2,2-Dichloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 2-Butanone (MEK) | ND | 1 | 100 | ug/L | 10/31/14 | liaoyuanz | |
| 2-Chloroethyl Vinyl Ether | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 2-Chlorotoluene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 4-Chlorotoluene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 4-Isopropyltoluene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 4-Methyl-2-pentanone (MIBK) | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Acetone | ND | 1 | 100 | ug/L | 10/31/14 | liaoyuanz | |
| Acrolein | ND | 1 | 200 | ug/L | 10/31/14 | liaoyuanz | |
| Acrylonitrile | ND | 1 | 10 | ug/L | 10/31/14 | liaoyuanz | |
| Allyl Chloride | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Benzene | ND | 1 | 1 | ug/L | 10/31/14 | liaoyuanz | |
| Bromobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 10/29/2014 13:20 **Site:**
**Sample #:** 348162-005 **Client Sample #:** Pit 2-1 **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Bromochloromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Bromodichloromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Bromoform | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Bromomethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Carbon Tetrachloride | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chlorodibromomethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chloroform | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chloromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| cis-1,2-Dichloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| cis-1,3-dichloropropene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| cis-1,4-dichloro-2-butene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Dibromomethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Dichlorodifluoromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Ethylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Hexachlorobutadiene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Isopropylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| m and p-Xylene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Methylene chloride | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Methyl-t-butyl Ether (MTBE) | ND | 1 | 1 | ug/L | 10/31/14 | liaoyuanz | |
| Naphthalene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| N-butylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| N-propylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| o-Xylene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Sec-butylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Styrene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Tert-butylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Tetrachloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Toluene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| trans-1,2-dichloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| trans-1,3-dichloropropene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| trans-1,4-dichloro-2-butene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Trichloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Trichlorofluoromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Vinyl Chloride | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Xylenes (Total) | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |

| *Surrogate* | *% Recovery* | *Limits* | *Notes* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (SUR)* | *99* | *70-145* | |
| *4-Bromofluorobenzene (SUR)* | *110* | *70-145* | |
| *Dibromodifluoromethane (SUR)* | *102* | *70-145* | |
| *Toluene-d8 (SUR)* | *106* | *70-145* | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Method:** SM 2510-B | **Prep Method:** Method | | | | | | **QCBatchID:** |
| **Specific Conductance** | | **271** | 1 | | umhos/cm | 10/30/14 | nina |
| **Method:** SM 2540-C | **Prep Method:** Method | | | | | | **QCBatchID:** QC1150690 |
| **Total Dissolved Solids** | | **132** | 1 | 10 | mg/L | 11/05/14 | soheir |
| **Method:** SM 5220-D | **Prep Method:** Method | | | | | | **QCBatchID:** QC1150679 |
| Chemical Oxygen Demand (COD) | | ND | 1 | 4 | mg/L | 11/05/14 | hanhkhong |

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 10/29/2014 13:45 **Site:**
**Sample #:** 348162-006 **Client Sample #:** Pit 2-2 **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 300.0 | **Prep Method:** Method | | | | | **QCBatchID:** | QC1150524 |
| **Chloride** | **16.1** | 1 | 1 | mg/L | 10/30/14 | wyu | |
| **Sulfate** | **31.7** | 1 | 1 | mg/L | 10/30/14 | wyu | |
| Nitrate, as NO3 | ND | 1 | 0.44 | mg/L | 10/30/14 | wyu | |
| **Method:** EPA 6010B *NELAC* | **Prep Method:** EPA 3010A | | | | | **QCBatchID:** | QC1150531 |
| **Boron** | **0.087** | 1 | 0.02 | mg/L | 11/03/14 | kedy | |
| **Method:** EPA 6010B *NELAC* | **Prep Method:** EPA 3010A/Filtered | | | | | **QCBatchID:** | QC1150531 |
| Cadmium | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Chromium | ND | 1 | 0.01 | mg/L | 11/03/14 | kedy | |
| Lead | ND | 1 | 0.005 | mg/L | 11/03/14 | kedy | |
| Nickel | ND | 1 | 0.02 | mg/L | 11/03/14 | kedy | |
| **Method:** EPA 8015B *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1150568 |
| TPH Diesel | ND | 1 | 0.1 | mg/L | 10/31/14 | lyt | |
| *Surrogate* | *% Recovery* | | *Limits* | | *Notes* | | |
| *Triacontane (SUR)* | *140* | | *60-140* | | | | |
| **Method:** EPA 8260B *NELAC* | **Prep Method:** EPA 5030B | | | | | **QCBatchID:** | QC1150578 |
| 1,1,1,2-Tetrachloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1,1-Trichloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1,2,2-Tetrachloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1,2-Trichloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1,2-Trichlorotrifluoroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1-Dichloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1-Dichloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,1-Dichloropropene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2,3-Trichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2,3-Trichloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2,4-Trichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2,4-Trimethylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dibromo-3-chloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dibromoethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dichloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,2-Dichloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,3,5-Trimethylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,3-Dichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,3-Dichloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 1,4-Dichlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 2,2-Dichloropropane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 2-Butanone (MEK) | ND | 1 | 100 | ug/L | 10/31/14 | liaoyuanz | |
| 2-Chloroethyl Vinyl Ether | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 2-Chlorotoluene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 4-Chlorotoluene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 4-Isopropyltoluene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| 4-Methyl-2-pentanone (MIBK) | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Acetone | ND | 1 | 100 | ug/L | 10/31/14 | liaoyuanz | |
| Acrolein | ND | 1 | 200 | ug/L | 10/31/14 | liaoyuanz | |
| Acrylonitrile | ND | 1 | 10 | ug/L | 10/31/14 | liaoyuanz | |
| Allyl Chloride | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Benzene | ND | 1 | 1 | ug/L | 10/31/14 | liaoyuanz | |
| Bromobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |

| | | | | | |
|---|---|---|---|---|---|
| **Matrix:** Water | **Client:** United Rock Products | | | **Collector:** Client | |
| **Sampled:** 10/29/2014 13:45 | **Site:** | | | | |
| **Sample #:** 348162-006 | **Client Sample #:** Pit 2-2 | | | **Sample Type:** | |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Bromochloromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Bromodichloromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Bromoform | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Bromomethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Carbon Tetrachloride | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chlorobenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chlorodibromomethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chloroethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chloroform | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Chloromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| cis-1,2-Dichloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| cis-1,3-dichloropropene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| cis-1,4-dichloro-2-butene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Dibromomethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Dichlorodifluoromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Ethylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Hexachlorobutadiene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Isopropylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| m and p-Xylene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Methylene chloride | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Methyl-t-butyl Ether (MTBE) | ND | 1 | 1 | ug/L | 10/31/14 | liaoyuanz | |
| Naphthalene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| N-butylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| N-propylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| o-Xylene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Sec-butylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Styrene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Tert-butylbenzene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Tetrachloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Toluene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| trans-1,2-dichloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| trans-1,3-dichloropropene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| trans-1,4-dichloro-2-butene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Trichloroethene | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Trichlorofluoromethane | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Vinyl Chloride | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |
| Xylenes (Total) | ND | 1 | 5 | ug/L | 10/31/14 | liaoyuanz | |

| *Surrogate* | *% Recovery* | *Limits* | *Notes* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (SUR)* | *96* | *70-145* | |
| *4-Bromofluorobenzene (SUR)* | *117* | *70-145* | |
| *Dibromodifluoromethane (SUR)* | *99* | *70-145* | |
| *Toluene-d8 (SUR)* | *106* | *70-145* | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Method:** SM 2510-B | **Prep Method:** Method | | | | | | **QCBatchID:** |
| **Specific Conductance** | | **272** | 1 | | umhos/cm | 10/30/14 | nina |
| **Method:** SM 2540-C | **Prep Method:** Method | | | | | | **QCBatchID:** QC1150690 |
| **Total Dissolved Solids** | | **158** | 1 | 10 | mg/L | 11/05/14 | soheir |
| **Method:** SM 5220-D | **Prep Method:** Method | | | | | | **QCBatchID:** QC1150679 |
| Chemical Oxygen Demand (COD) | | ND | 1 | 4 | mg/L | 11/05/14 | hanhkhong |

| QCBatchID: QC1150524 | Analyst: wyu | Method: EPA 300.0 |
|---|---|---|
| Matrix: Water | Analyzed: 10/30/2014 | Instrument: CHEM (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes | |
|---|---|---|---|---|---|---|
| **QC1150524MB1** | | | | | | |
| Chloride | ND | mg/L | | 1 | | |
| Nitrate, as Nitrogen | ND | mg/L | | 0.1 | | |
| Nitrate, as NO3 | ND | mg/L | | 0.44 | | |
| Nitrite, as Nitrogen | ND | mg/L | | 0.1 | | |
| Sulfate | ND | mg/L | | 1 | | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | | LCS | LCSD | | %Rec | RPD | |
| **QC1150524LCS1** | | | | | | | | | | | |
| Chloride | 50 | | 47.6 | | mg/L | 95 | | | 90-110 | | |
| Nitrate, as Nitrogen | 5 | | 5.05 | | mg/L | 101 | | | 90-110 | | |
| Nitrate, as NO3 | 22.15 | | 22.4 | | mg/L | 101 | | | 90-110 | | |
| Nitrite, as Nitrogen | 5 | | 5.16 | | mg/L | 103 | | | 90-110 | | |
| Sulfate | 50 | | 47.2 | | mg/L | 94 | | | 90-110 | | |

## Matrix Spike/Matrix Spike Duplicate Summary

| Analyte | Sample Amount | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MS | MSD | MS | MSD | | MS | MSD | | %Rec | RPD | |
| **QC1150524MS1, QC1150524MSD1** | | | | | | | | | | | | **Source: 348162-001** |
| Chloride | 15.8 | 50 | 50 | 62.4 | 62.3 | mg/L | 93 | 93 | 0.2 | 75-125 | 20 | |
| Nitrate, as Nitrogen | 0.36 | 5.643 | 5.643 | 5.97 | 5.98 | mg/L | 99 | 100 | 0.2 | 75-125 | 20 | |
| Nitrate, as NO3 | 1.61 | 25 | 25 | 26.4 | 26.5 | mg/L | 99 | 100 | 0.4 | 75-125 | 20 | |
| Nitrite, as Nitrogen | ND | 7.622 | 7.622 | 8.30 | 8.29 | mg/L | 109 | 109 | 0.1 | 75-125 | 20 | |
| Sulfate | 39.3 | 50 | 50 | 84.9 | 84.9 | mg/L | 91 | 91 | 0.0 | 75-125 | 20 | |

| QCBatchID: QC1150531 | Analyst: MAlam | Method: SM 2340-B |
|---|---|---|
| Matrix: Water | Analyzed: 10/31/2014 | Instrument: AAICP (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1150531MB1** | | | | | |
| Antimony | ND | mg/L | | 0.02 | |
| Arsenic | ND | mg/L | | 0.01 | |
| Barium | ND | mg/L | | 0.01 | |
| Beryllium | ND | mg/L | | 0.005 | |
| Boron | ND | mg/L | | 0.02 | |
| Cadmium | ND | mg/L | | 0.005 | |
| Chromium | ND | mg/L | | 0.01 | |
| Cobalt | ND | mg/L | | 0.005 | |
| Copper | ND | mg/L | | 0.01 | |
| Lead | ND | mg/L | | 0.005 | |
| Nickel | ND | mg/L | | 0.02 | |
| Selenium | ND | mg/L | | 0.01 | |
| Silver | ND | mg/L | | 0.005 | |
| Thallium | ND | mg/L | | 0.005 | |
| Tin | ND | mg/L | | 0.05 | |
| Vanadium | ND | mg/L | | 0.005 | |
| Zinc | ND | mg/L | | 0.02 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount LCS | Spike Amount LCSD | Spike Result LCS | Spike Result LCSD | Units | Recoveries LCS | Recoveries LCSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1150531LCS1** | | | | | | | | | | | |
| Antimony | 2 | | 2.04 | | mg/L | 102 | | | 80-120 | | |
| Arsenic | 2 | | 2.16 | | mg/L | 108 | | | 80-120 | | |
| Barium | 2 | | 2.05 | | mg/L | 103 | | | 80-120 | | |
| Beryllium | 2 | | 2.17 | | mg/L | 109 | | | 80-120 | | |
| Cadmium | 2 | | 2.09 | | mg/L | 105 | | | 80-120 | | |
| Chromium | 2 | | 2.02 | | mg/L | 101 | | | 80-120 | | |
| Cobalt | 2 | | 2.06 | | mg/L | 103 | | | 80-120 | | |
| Copper | 2 | | 2.13 | | mg/L | 107 | | | 80-120 | | |
| Lead | 2 | | 2.07 | | mg/L | 104 | | | 80-120 | | |
| Nickel | 2 | | 2.03 | | mg/L | 102 | | | 80-120 | | |
| Selenium | 2 | | 2.07 | | mg/L | 104 | | | 80-120 | | |
| Silver | 1 | | 0.908 | | mg/L | 91 | | | 80-120 | | |
| Thallium | 2 | | 2.17 | | mg/L | 109 | | | 80-120 | | |
| Vanadium | 2 | | 2.26 | | mg/L | 113 | | | 80-120 | | |
| Zinc | 2 | | 2.01 | | mg/L | 101 | | | 80-120 | | |

## Matrix Spike/Matrix Spike Duplicate Summary

| Analyte | Sample Amount | Spike Amount MS | Spike Amount MSD | Spike Result MS | Spike Result MSD | Units | Recoveries MS | Recoveries MSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1150531MS1, QC1150531MSD1** | | | | | | | | | | | | **Source: 348162-001** |
| Antimony | ND | 1 | 1 | 1.04 | 0.830 | mg/L | 104 | 83 | 22.5 | 75-125 | 20 | M |
| Arsenic | 0.005 | 1 | 1 | 1.13 | 1.14 | mg/L | 113 | 114 | 0.9 | 75-125 | 20 | |
| Barium | 0.071 | 1 | 1 | 1.18 | 1.10 | mg/L | 111 | 103 | 7.0 | 75-125 | 20 | |
| Beryllium | ND | 1 | 1 | 1.07 | 1.05 | mg/L | 107 | 105 | 1.9 | 75-125 | 20 | |
| Cadmium | ND | 1 | 1 | 1.14 | 1.10 | mg/L | 114 | 110 | 3.6 | 75-125 | 20 | |
| Chromium | 0.003 | 1 | 1 | 1.11 | 1.01 | mg/L | 111 | 101 | 9.4 | 75-125 | 20 | |
| Cobalt | ND | 1 | 1 | 1.04 | 1.04 | mg/L | 104 | 104 | 0.0 | 75-125 | 20 | |
| Copper | 0.006 | 1 | 1 | 1.07 | 0.990 | mg/L | 106 | 98 | 7.8 | 75-125 | 20 | |

| QCBatchID: QC1150531 | Analyst: MAlam | Method: SM 2340-B |
|---|---|---|
| Matrix: Water | Analyzed: 10/31/2014 | Instrument: AAICP (group) |

| Analyte | Sample Amount | Spike Amount MS | Spike Amount MSD | Spike Result MS | Spike Result MSD | Units | Recoveries MS | Recoveries MSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1150531MS1, QC1150531MSD1** | | | | | | | | | | | | **Source: 348162-001** |
| Lead | 0.006 | 1 | 1 | 1.05 | 1.03 | mg/L | 104 | 102 | 1.9 | 75-125 | 20 | |
| Nickel | ND | 1 | 1 | 1.10 | 1.03 | mg/L | 110 | 103 | 6.6 | 75-125 | 20 | |
| Selenium | ND | 1 | 1 | 1.04 | 1.08 | mg/L | 104 | 108 | 3.8 | 75-125 | 20 | |
| Silver | ND | 0.5 | 0.5 | 0.495 | 0.490 | mg/L | 99 | 98 | 1.0 | 75-125 | 20 | |
| Thallium | ND | 1 | 1 | 1.08 | 1.08 | mg/L | 108 | 108 | 0.0 | 75-125 | 20 | |
| Vanadium | ND | 1 | 1 | 1.16 | 1.08 | mg/L | 116 | 108 | 7.1 | 75-125 | 20 | |
| Zinc | 0.022 | 1 | 1 | 1.11 | 1.08 | mg/L | 109 | 106 | 2.7 | 75-125 | 20 | |

| QCBatchID: QC1150545 | Analyst: ame | Method: SM 2540-D |
|---|---|---|
| Matrix: Water | Analyzed: 10/30/2014 | Instrument: CHEM (group) |

## *Blank Summary*

| Analyte | Blank Result | Units | | RDL | Notes | |
|---|---|---|---|---|---|---|
| **QC1150545MB1** | | | | | | |
| Total Suspended Solids | ND | mg/L | | 5 | | |

## *Duplicate Summary*

| Analyte | Sample Amount | Duplicate Amount | Units | RPD | Limits RPD | Notes |
|---|---|---|---|---|---|---|
| **QC1150545DUP1** | | | | | | **Source: 348136-001** |
| Total Suspended Solids | 187 | 191 | mg/L | 2.1 | 5 | |

| QCBatchID: QC1150564 | Analyst: wei | Method: EPA 7470A |
|---|---|---|
| Matrix: Water | Analyzed: 11/01/2014 | Instrument: AAICP-HG1 |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes | |
|---|---|---|---|---|---|---|
| **QC1150564MB1** | | | | | | |
| Mercury | ND | ug/L | | 0.4 | | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount LCS | Spike Amount LCSD | Spike Result LCS | Spike Result LCSD | Units | Recoveries LCS | Recoveries LCSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1150564LCS1** | | | | | | | | | | | |
| Mercury | 5 | | 4.45 | | ug/L | 89 | | | 80-120 | | |

## Matrix Spike/Matrix Spike Duplicate Summary

| Analyte | Sample Amount | Spike Amount MS | Spike Amount MSD | Spike Result MS | Spike Result MSD | Units | Recoveries MS | Recoveries MSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1150564MS1, QC1150564MSD1** | | | | | | | | | | | | **Source: 348162-001** |
| Mercury | ND | 5 | 5 | 3.44 | 3.21 | ug/L | 69 | 64 | 6.9 | 75-125 | 20 | M |

| QCBatchID: QC1150568 | Analyst: lytagas | Method: EPA 8015B |
|---|---|---|
| Matrix: Water | Analyzed: 10/31/2014 | Instrument: SVOA-GC (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes | |
|---|---|---|---|---|---|---|
| **QC1150568MB1** | | | | | | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | | |
| TPH Diesel | ND | mg/L | | 0.1 | | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | | LCS | LCSD | | %Rec | RPD | |
| **QC1150568LCS1, QC1150568LCSD1** | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 0.77 | 0.69 | mg/L | 77 | 69 | 11 | 57-122 | 30 | |

| QCBatchID: QC1150578 | Analyst: lucy | Method: EPA 8260B |
|---|---|---|
| Matrix: Water | Analyzed: 10/31/2014 | Instrument: VOA-MS (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1150578MB1** | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | | 5 | |
| 1,1,1-Trichloroethane | ND | ug/L | | 5 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | | 5 | |
| 1,1,2-Trichloroethane | ND | ug/L | | 5 | |
| 1,1,2-Trichlorotrifluoroethane | ND | ug/L | | 5 | |
| 1,1-Dichloroethane | ND | ug/L | | 5 | |
| 1,1-Dichloroethene | ND | ug/L | | 5 | |
| 1,1-Dichloropropene | ND | ug/L | | 5 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | | 5 | |
| 1,2,3-Trichloropropane | ND | ug/L | | 5 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | | 5 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | | 5 | |
| 1,2-Dibromo-3-chloropropane | ND | ug/L | | 5 | |
| 1,2-Dibromoethane | ND | ug/L | | 5 | |
| 1,2-Dichlorobenzene | ND | ug/L | | 5 | |
| 1,2-Dichloroethane | ND | ug/L | | 5 | |
| 1,2-Dichloropropane | ND | ug/L | | 5 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | | 5 | |
| 1,3-Dichlorobenzene | ND | ug/L | | 5 | |
| 1,3-Dichloropropane | ND | ug/L | | 5 | |
| 1,4-Dichlorobenzene | ND | ug/L | | 5 | |
| 2,2-Dichloropropane | ND | ug/L | | 5 | |
| 2-Butanone (MEK) | ND | ug/L | | 100 | |
| 2-Chloroethyl Vinyl Ether | ND | ug/L | | 5 | |
| 2-Chlorotoluene | ND | ug/L | | 5 | |
| 4-Chlorotoluene | ND | ug/L | | 5 | |
| 4-Isopropyltoluene | ND | ug/L | | 5 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | | 5 | |
| Acetone | ND | ug/L | | 100 | |
| Allyl Chloride | ND | ug/L | | 5 | |
| Benzene | ND | ug/L | | 1 | |
| Bromobenzene | ND | ug/L | | 5 | |
| Bromochloromethane | ND | ug/L | | 5 | |
| Bromodichloromethane | ND | ug/L | | 5 | |
| Bromoform | ND | ug/L | | 5 | |
| Bromomethane | ND | ug/L | | 5 | |
| Carbon Tetrachloride | ND | ug/L | | 5 | |
| Chlorobenzene | ND | ug/L | | 5 | |
| Chlorodibromomethane | ND | ug/L | | 5 | |
| Chloroethane | ND | ug/L | | 5 | |
| Chloroform | ND | ug/L | | 5 | |
| Chloromethane | ND | ug/L | | 5 | |
| cis-1,2-Dichloroethene | ND | ug/L | | 5 | |
| cis-1,3-dichloropropene | ND | ug/L | | 5 | |
| cis-1,4-dichloro-2-butene | ND | ug/L | | 5 | |
| Dibromomethane | ND | ug/L | | 5 | |
| Dichlorodifluoromethane | ND | ug/L | | 5 | |
| Di-isopropyl ether (DIPE) | ND | ug/L | | 1 | |
| Ethylbenzene | ND | ug/L | | 5 | |
| Ethyl-tertbutylether (ETBE) | ND | ug/L | | 1 | |

| QCBatchID: QC1150578 | Analyst: lucy | Method: EPA 8260B |
|---|---|---|
| Matrix: Water | Analyzed: 10/31/2014 | Instrument: VOA-MS (group) |

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1150578MB1** | | | | | |
| Hexachlorobutadiene | ND | ug/L | | 5 | |
| Isopropylbenzene | ND | ug/L | | 5 | |
| m and p-Xylene | ND | ug/L | | 5 | |
| Methylene chloride | ND | ug/L | | 5 | |
| Methyl-t-butyl Ether (MTBE) | ND | ug/L | | 1 | |
| Naphthalene | ND | ug/L | | 5 | |
| N-butylbenzene | ND | ug/L | | 5 | |
| N-propylbenzene | ND | ug/L | | 5 | |
| o-Xylene | ND | ug/L | | 5 | |
| Sec-butylbenzene | ND | ug/L | | 5 | |
| Styrene | ND | ug/L | | 5 | |
| t-Butyl alcohol (TBA) | ND | ug/L | | 10 | |
| Tert-amylmethylether (TAME) | ND | ug/L | | 1 | |
| Tert-butylbenzene | ND | ug/L | | 5 | |
| Tetrachloroethene | ND | ug/L | | 5 | |
| Toluene | ND | ug/L | | 5 | |
| trans-1,2-dichloroethene | ND | ug/L | | 5 | |
| trans-1,3-dichloropropene | ND | ug/L | | 5 | |
| trans-1,4-dichloro-2-butene | ND | ug/L | | 5 | |
| Trichloroethene | ND | ug/L | | 5 | |
| Trichlorofluoromethane | ND | ug/L | | 5 | |
| Vinyl Chloride | ND | ug/L | | 5 | |
| Xylenes (Total) | ND | ug/L | | 5 | |

## *Lab Control Spike/ Lab Control Spike Duplicate Summary*

| Analyte | Spike Amount LCS | Spike Amount LCSD | Spike Result LCS | Spike Result LCSD | Units | Recoveries LCS | Recoveries LCSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1150578LCS1** | | | | | | | | | | | |
| 1,1-Dichloroethene | 50 | | 51 | | ug/L | 102 | | | 59-172 | | |
| Benzene | 50 | | 48 | | ug/L | 96 | | | 62-137 | | |
| Chlorobenzene | 50 | | 52 | | ug/L | 104 | | | 60-133 | | |
| Methyl-t-butyl Ether (MTBE) | 50 | | 50 | | ug/L | 100 | | | 62-137 | | |
| Toluene | 50 | | 54 | | ug/L | 108 | | | 59-139 | | |
| Trichloroethene | 50 | | 56 | | ug/L | 112 | | | 66-142 | | |

## *Matrix Spike/Matrix Spike Duplicate Summary*

| Analyte | Sample Amount | Spike Amount MS | Spike Amount MSD | Spike Result MS | Spike Result MSD | Units | Recoveries MS | Recoveries MSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1150578MS1, QC1150578MSD1** | | | | | | | | | | | | **Source: 348195-001** |
| 1,1-Dichloroethene | ND | 50 | 50 | 54 | 55 | ug/L | 108 | 110 | 1.8 | 59-172 | 22 | |
| Benzene | ND | 50 | 50 | 51 | 53 | ug/L | 102 | 106 | 3.8 | 62-137 | 24 | |
| Chlorobenzene | ND | 50 | 50 | 50 | 49 | ug/L | 100 | 98 | 2.0 | 60-133 | 24 | |
| Methyl-t-butyl Ether (MTBE) | ND | 50 | 50 | 48 | 52 | ug/L | 96 | 104 | 8.0 | 62-137 | 21 | |
| Toluene | ND | 50 | 50 | 49 | 48 | ug/L | 98 | 96 | 2.1 | 59-139 | 21 | |
| Trichloroethene | ND | 50 | 50 | 45 | 50 | ug/L | 90 | 100 | 10.5 | 66-142 | 21 | |

| QCBatchID: QC1150583 | Analyst: qnguyen | Method: EPA 8270C |
|---|---|---|
| Matrix: Water | Analyzed: 10/30/2014 | Instrument: SVOA-MS (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1150583MB1** | | | | | |
| 1,2,4-Trichlorobenzene | ND | ug/L | | 10 | |
| 1,2-Dichlorobenzene | ND | ug/L | | 10 | |
| 1,2-Diphenylhydrazine | ND | ug/L | | 10 | |
| 1,3-Dichlorobenzene | ND | ug/L | | 10 | |
| 1,4-Dichlorobenzene | ND | ug/L | | 10 | |
| 2,4,5-Trichlorophenol | ND | ug/L | | 10 | |
| 2,4,6-Trichlorophenol | ND | ug/L | | 10 | |
| 2,4-Dichlorophenol | ND | ug/L | | 10 | |
| 2,4-Dimethylphenol | ND | ug/L | | 10 | |
| 2,4-Dinitrophenol | ND | ug/L | | 10 | |
| 2,4-Dinitrotoluene | ND | ug/L | | 10 | |
| 2,6-Dinitrotoluene | ND | ug/L | | 10 | |
| 2-Chloronaphthalene | ND | ug/L | | 10 | |
| 2-Chlorophenol | ND | ug/L | | 10 | |
| 2-Methyl-4,6-dinitrophenol | ND | ug/L | | 10 | |
| 2-Methylnaphthalene | ND | ug/L | | 10 | |
| 2-Methylphenol (o-Cresol) | ND | ug/L | | 10 | |
| 2-Nitroaniline | ND | ug/L | | 50 | |
| 2-Nitrophenol | ND | ug/L | | 10 | |
| 3,3'-Dichlorobenzidine | ND | ug/L | | 10 | |
| 3-Nitroaniline | ND | ug/L | | 10 | |
| 4-Bromophenyl phenyl ether | ND | ug/L | | 10 | |
| 4-Chloro-3-methylphenol | ND | ug/L | | 10 | |
| 4-Chloroaniline | ND | ug/L | | 10 | |
| 4-Chlorophenyl phenyl ether | ND | ug/L | | 10 | |
| 4-Methylphenol (p-Cresol) | ND | ug/L | | 10 | |
| 4-Nitroaniline | ND | ug/L | | 10 | |
| 4-Nitrophenol | ND | ug/L | | 10 | |
| Acenaphthene | ND | ug/L | | 10 | |
| Acenaphthylene | ND | ug/L | | 10 | |
| Anthracene | ND | ug/L | | 10 | |
| Benz(a)anthracene | ND | ug/L | | 10 | |
| Benzidine | ND | ug/L | | 10 | |
| Benzo(a)pyrene | ND | ug/L | | 10 | |
| Benzo(b)fluoranthene | ND | ug/L | | 10 | |
| Benzo(g,h,i)perylene | ND | ug/L | | 10 | |
| Benzo(k)fluoranthene | ND | ug/L | | 10 | |
| Benzoic acid | ND | ug/L | | 10 | |
| Benzyl alcohol | ND | ug/L | | 10 | |
| Bis(2-chloroethoxy)methane | ND | ug/L | | 10 | |
| Bis(2-chloroethyl) Ether | ND | ug/L | | 10 | |
| Bis(2-chloroisopropyl) Ether | ND | ug/L | | 10 | |
| Bis(2-ethylhexyl) phthalate | ND | ug/L | | 10 | |
| Butylbenzyl Phthalate | ND | ug/L | | 10 | |
| Carbazole | ND | ug/L | | 10 | |
| Chrysene | ND | ug/L | | 10 | |
| Dibenz(a,h)anthracene | ND | ug/L | | 10 | |
| Dibenzofuran | ND | ug/L | | 10 | |
| Diethyl phthalate | ND | ug/L | | 10 | |
| Dimethyl phthalate | ND | ug/L | | 10 | |

**QCBatchID:** QC1150583 **Analyst:** qnguyen **Method:** EPA 8270C

**Matrix:** Water **Analyzed:** 10/30/2014 **Instrument:** SVOA-MS (group)

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1150583MB1** | | | | | |
| Di-n-butyl phthalate | ND | ug/L | | 10 | |
| Di-n-octyl phthalate | ND | ug/L | | 10 | |
| Fluoranthene | ND | ug/L | | 10 | |
| Fluorene | ND | ug/L | | 10 | |
| Hexachlorobenzene | ND | ug/L | | 10 | |
| Hexachlorobutadiene | ND | ug/L | | 10 | |
| Hexachlorocyclopentadiene | ND | ug/L | | 10 | |
| Hexachloroethane | ND | ug/L | | 10 | |
| Indeno(1,2,3-cd)pyrene | ND | ug/L | | 10 | |
| Isophorone | ND | ug/L | | 10 | |
| Naphthalene | ND | ug/L | | 10 | |
| n-Decane | ND | ug/L | | 10 | |
| Nitrobenzene | ND | ug/L | | 10 | |
| N-Nitrosodimethylamine (NDMA) | ND | ug/L | | 10 | |
| N-Nitrosodi-n-propylamine (NDPA) | ND | ug/L | | 10 | |
| N-Nitrosodiphenylamine | ND | ug/L | | 10 | |
| n-Octadecane | ND | ug/L | | 10 | |
| Pentachlorophenol | ND | ug/L | | 10 | |
| Phenanthrene | ND | ug/L | | 10 | |
| Phenol | ND | ug/L | | 10 | |
| Pyrene | ND | ug/L | | 10 | |

***Lab Control Spike/ Lab Control Spike Duplicate Summary***

| Analyte | Spike Amount LCS | Spike Amount LCSD | Spike Result LCS | Spike Result LCSD | Units | Recoveries LCS | Recoveries LCSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1150583LCS1, QC1150583LCSD1** | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 50 | 50 | 40 | 41 | ug/L | 80 | 82 | 2 | 20-110 | 25 | |
| 1,4-Dichlorobenzene | 50 | 50 | 38 | 38 | ug/L | 76 | 76 | 0 | 25-120 | 25 | |
| 2,4,5-Trichlorophenol | 50 | 50 | 48 | 49 | ug/L | 96 | 98 | 2 | 49-119 | 25 | |
| 2,4-Dimethylphenol | 50 | 50 | 35 | 37 | ug/L | 70 | 74 | 6 | 25-120 | 46 | |
| 2,4-Dinitrotoluene | 50 | 50 | 46 | 48 | ug/L | 92 | 96 | 4 | 45-110 | 25 | |
| 2-Chlorophenol | 50 | 50 | 40 | 41 | ug/L | 80 | 82 | 2 | 25-120 | 25 | |
| 4-Chloro-3-methylphenol | 50 | 50 | 51 | 53 | ug/L | 102 | 106 | 4 | 43-123 | 25 | |
| 4-Methylphenol (p-Cresol) | 50 | 50 | 29 | 30 | ug/L | 58 | 60 | 3 | 25-120 | 25 | |
| 4-Nitrophenol | 50 | 50 | 25 | 28 | ug/L | 50 | 56 | 11 | 25-108 | 25 | |
| Acenaphthene | 50 | 50 | 44 | 44 | ug/L | 88 | 88 | 0 | 30-110 | 25 | |
| Benzo(b)fluoranthene | 50 | 50 | 48 | 51 | ug/L | 96 | 102 | 6 | 60-140 | 25 | |
| Chrysene | 50 | 50 | 47 | 50 | ug/L | 94 | 100 | 6 | 60-140 | 25 | |
| N-Nitrosodi-n-propylamine (NDPA) | 50 | 50 | 33 | 33 | ug/L | 66 | 66 | 0 | 24-131 | 25 | |
| Pentachlorophenol | 50 | 50 | 52 | 58 | ug/L | 104 | 116 | 11 | 36-134 | 25 | |
| Phenol | 50 | 50 | 24 | 25 | ug/L | 48 | 50 | 4 | 25-120 | 25 | |
| Pyrene | 50 | 50 | 48 | 49 | ug/L | 96 | 98 | 2 | 60-140 | 33 | |

| QCBatchID: QC1150629 | Analyst: sdonovan | Method: EPA 8081A |
|---|---|---|
| Matrix: Water | Analyzed: 11/04/2014 | Instrument: SVOA-GC (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1150629MB1** | | | | | |
| 4,4'-DDD | ND | ug/L | | 0.06 | |
| 4,4'-DDE | ND | ug/L | | 0.05 | |
| 4,4'-DDT | ND | ug/L | | 0.06 | |
| a-BHC | ND | ug/L | | 0.11 | |
| Aldrin | ND | ug/L | | 0.04 | |
| b-BHC | ND | ug/L | | 0.03 | |
| Chlordane (technical) | ND | ug/L | | 0.25 | |
| d-BHC | ND | ug/L | | 0.03 | |
| Dieldrin | ND | ug/L | | 0.06 | |
| Endosulfan I | ND | ug/L | | 0.03 | |
| Endosulfan II | ND | ug/L | | 0.06 | |
| Endosulfan sulfate | ND | ug/L | | 0.06 | |
| Endrin | ND | ug/L | | 0.06 | |
| Endrin aldehyde | ND | ug/L | | 0.13 | |
| Endrin Ketone | ND | ug/L | | 0.061 | |
| Heptachlor | ND | ug/L | | 0.08 | |
| Heptachlor epoxide | ND | ug/L | | 0.05 | |
| Lindane (Gamma-BHC) | ND | ug/L | | 0.03 | |
| Methoxychlor | ND | ug/L | | 0.57 | |
| PCB-1016 | ND | ug/L | | 0.5 | |
| PCB-1221 | ND | ug/L | | 0.5 | |
| PCB-1232 | ND | ug/L | | 0.5 | |
| PCB-1242 | ND | ug/L | | 0.5 | |
| PCB-1248 | ND | ug/L | | 0.5 | |
| PCB-1254 | ND | ug/L | | 0.5 | |
| PCB-1260 | ND | ug/L | | 0.5 | |
| Toxaphene | ND | ug/L | | 3.1 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | | LCS | LCSD | | %Rec | RPD | |
| **QC1150629LCS1, QC1150629LCSD1** | | | | | | | | | | | |
| 4,4'-DDE | 0.5 | 0.5 | 0.43 | 0.43 | ug/L | 86 | 86 | 0 | 62-142 | 25 | |
| 4,4'-DDT | 0.5 | 0.5 | 0.50 | 0.50 | ug/L | 100 | 100 | 0 | 73-138 | 25 | |
| a-BHC | 0.5 | 0.5 | 0.41 | 0.42 | ug/L | 82 | 84 | 2 | 4-174 | 25 | |
| Aldrin | 0.5 | 0.5 | 0.36 | 0.36 | ug/L | 72 | 72 | 0 | 36-107 | 25 | |
| b-BHC | 0.5 | 0.5 | 0.48 | 0.50 | ug/L | 96 | 100 | 4 | 50-148 | 25 | |
| d-BHC | 0.5 | 0.5 | 0.53 | 0.60 | ug/L | 106 | 120 | 12 | 50-141 | 25 | |
| Dieldrin | 0.5 | 0.5 | 0.49 | 0.48 | ug/L | 98 | 96 | 2 | 62-146 | 25 | |
| Endosulfan I | 0.5 | 0.5 | 0.50 | 0.50 | ug/L | 100 | 100 | 0 | 49-132 | 25 | |
| Endosulfan II | 0.5 | 0.5 | 0.48 | 0.49 | ug/L | 96 | 98 | 2 | 68-145 | 25 | |
| Endosulfan sulfate | 0.5 | 0.5 | 0.48 | 0.47 | ug/L | 96 | 94 | 2 | 66-148 | 25 | |
| Endrin | 0.5 | 0.5 | 0.43 | 0.43 | ug/L | 86 | 86 | 0 | 64-138 | 25 | |
| Endrin aldehyde | 0.5 | 0.5 | 0.48 | 0.49 | ug/L | 96 | 98 | 2 | 53-198 | 25 | |
| Heptachlor | 0.5 | 0.5 | 0.40 | 0.40 | ug/L | 80 | 80 | 0 | 53-122 | 25 | |
| Heptachlor epoxide | 0.5 | 0.5 | 0.47 | 0.47 | ug/L | 94 | 94 | 0 | 46-129 | 25 | |
| Lindane (Gamma-BHC) | 0.5 | 0.5 | 0.41 | 0.42 | ug/L | 82 | 84 | 2 | 48-126 | 25 | |
| Methoxychlor | 0.5 | 0.5 | 0.52 | 0.56 | ug/L | 104 | 112 | 7 | 54-146 | 25 | |

| QCBatchID: QC1150638 | Analyst: qnguyen | Method: EPA 8151A |
|---|---|---|
| Matrix: Water | Analyzed: 11/03/2014 | Instrument: SVOA-GC (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1150638MB1** | | | | | |
| 2,4,5-T | ND | ug/L | | 2 | |
| 2,4,5-TP (Silvex) | ND | ug/L | | 2 | |
| 2,4-D | ND | ug/L | | 10 | |
| 2,4-DB | ND | ug/L | | 10 | |
| Dalapon | ND | ug/L | | 50 | |
| Dicamba | ND | ug/L | | 3 | |
| Dichlorprop | ND | ug/L | | 7 | |
| Dinoseb | ND | ug/L | | 0.7 | |
| MCPA | ND | ug/L | | 2500 | |
| MCPP | ND | ug/L | | 2000 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | | LCS | LCSD | | %Rec | RPD | |
| **QC1150638LCS1, QC1150638LCSD1** | | | | | | | | | | | |
| 2,4,5-T | 2 | 2 | 1.71 | 1.69 | ug/L | 86 | 85 | 1 | 37-108 | 25 | |
| 2,4,5-TP (Silvex) | 2 | 2 | 1.58 | 1.61 | ug/L | 79 | 81 | 2 | 24-118 | 25 | |
| 2,4-D | 2 | 2 | 2.15 | 1.98 | ug/L | 108 | 99 | 8 | 17-160 | 25 | |
| 2,4-DB | 2 | 2 | 2.02 | 1.47 | ug/L | 101 | 74 | 32 | 0-110 | 25 | |
| Dicamba | 2 | 2 | 1.91 | 1.91 | ug/L | 96 | 96 | 0 | 47-123 | 25 | |
| Dichlorprop | 2 | 2 | 1.99 | 1.79 | ug/L | 100 | 90 | 11 | 17-150 | 25 | |
| Dinoseb | 2 | 2 | 1.49 | 1.48 | ug/L | 75 | 74 | 1 | 24-116 | 25 | |
| MCPA | 200 | 200 | 190 | 200 | ug/L | 95 | 100 | 5 | 57-126 | 25 | |
| MCPP | 200 | 200 | 200 | 200 | ug/L | 100 | 100 | 0 | 24-183 | 25 | |

| QCBatchID: QC1150652 | Analyst: sdonovan | Method: EPA 8082 |
|---|---|---|
| Matrix: Water | Analyzed: 11/05/2014 | Instrument: SVOA-GC (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes | |
|---|---|---|---|---|---|---|
| **QC1150652MB1** | | | | | | |
| PCB-1016 | ND | ug/L | | 0.5 | | |
| PCB-1221 | ND | ug/L | | 0.5 | | |
| PCB-1232 | ND | ug/L | | 0.5 | | |
| PCB-1242 | ND | ug/L | | 0.5 | | |
| PCB-1248 | ND | ug/L | | 0.5 | | |
| PCB-1254 | ND | ug/L | | 0.5 | | |
| PCB-1260 | ND | ug/L | | 0.5 | | |
| PCB-1262 | ND | ug/L | | 0.5 | | |
| PCB-1268 | ND | ug/L | | 0.5 | | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount LCS | Spike Amount LCSD | Spike Result LCS | Spike Result LCSD | Units | Recoveries LCS | Recoveries LCSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1150652LCS1, QC1150652LCSD1** | | | | | | | | | | | |
| PCB-1260 | 2.5 | 2.5 | 2.0 | 2.1 | ug/L | 80 | 84 | 5 | 50-125 | 20 | |

| QCBatchID: QC1150679 | Analyst: hanhkhong | Method: SM 5220-D |
|---|---|---|
| Matrix: Water | Analyzed: 11/06/2014 | Instrument: CHEM (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes | |
|---|---|---|---|---|---|---|
| **QC1150679MB1** | | | | | | |
| Chemical Oxygen Demand (COD) | ND | mg/L | | 4 | | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount LCS | Spike Amount LCSD | Spike Result LCS | Spike Result LCSD | Units | Recoveries LCS | Recoveries LCSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1150679LCS1** | | | | | | | | | | | |
| Chemical Oxygen Demand (COD) | 100 | | 105 | | mg/L | 105 | | | 80-120 | | |

## Matrix Spike/Matrix Spike Duplicate Summary

| Analyte | Sample Amount | Spike Amount MS | Spike Amount MSD | Spike Result MS | Spike Result MSD | Units | Recoveries MS | Recoveries MSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1150679MS1, QC1150679MSD1** | | | | | | | | | | | | **Source: 348162-001** |
| Chemical Oxygen Demand (COD) | ND | 100 | 100 | 100 | 108 | mg/L | 100 | 108 | 7.7 | 75-125 | 20 | |

| QCBatchID: QC1150690 | Analyst: mmegaly | Method: SM 2540-C |
|---|---|---|
| Matrix: Water | Analyzed: 11/05/2014 | Instrument: CHEM (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes | |
|---|---|---|---|---|---|---|
| **QC1150690MB1** | | | | | | |
| Total Dissolved Solids | ND | mg/L | | 10 | | |
| **QC1150690MB2** | | | | | | |
| Total Dissolved Solids | ND | mg/L | | 10 | | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount LCS | Spike Amount LCSD | Spike Result LCS | Spike Result LCSD | Units | Recoveries LCS | Recoveries LCSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1150690LCS1** | | | | | | | | | | | |
| Total Dissolved Solids | 293 | | 280 | | mg/L | 96 | | | 90-110 | | |
| **QC1150690LCS2** | | | | | | | | | | | |
| Total Dissolved Solids | 293 | | 285 | | mg/L | 97 | | | 90-110 | | |

## Duplicate Summary

| Analyte | Sample Amount | Duplicate Amount | Units | RPD | Limits RPD | Notes |
|---|---|---|---|---|---|---|
| **QC1150690DUP1** | | | | | | **Source: 348428-001** |
| Total Dissolved Solids | 5780 | 5710 | mg/L | 1.2 | 5 | |
| **QC1150690DUP2** | | | | | | **Source: 348422-001** |
| Total Dissolved Solids | 6520 | 6510 | mg/L | 0.2 | 5 | |
| **QC1150690DUP3** | | | | | | **Source: 348162-001** |
| Total Dissolved Solids | 200 | 196 | mg/L | 2.0 | 5 | |

| | | | |
|---|---|---|---|
| **QCBatchID:** QC1150864 | **Analyst:** hanhkhong | **Method:** SM 2320-B | |
| **Matrix:** Water | **Analyzed:** 11/12/2014 | **Instrument:** CHEM (group) | |

## *Duplicate Summary*

| Analyte | Sample Amount | Duplicate Amount | Units | RPD | Limits RPD | Notes |
|---|---|---|---|---|---|---|
| **QC1150864DUP1** | | | | | | **Source: 348162-001** |
| Bicarbonate (HCO3) | 152 | 149 | mg/L | 2.0 | 20 | |
| Carbonate (CO3) | ND | ND | mg/L | 0.0 | 20 | |
| Hydroxide (OH) | ND | ND | mg/L | 0.0 | 20 | |
| Total Alkalinity (as CaCO3) | 125 | 122 | mg/L | 2.4 | 20 | |

# Data Qualifiers and Definitions

## Qualifiers

| | |
|---|---|
| **B** | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| **B1** | Analyte was present in an sample and associated method blank greater than MDL but less than DRL. Associated sample data was reported with qualifier. |
| **BQ1** | No valid test replicates. Result may be greater. Best result was reported with qualifier. Sample toxicity possible. |
| **BQ2** | No valid test replicates. |
| **BQ3** | Minimum DO is less than 1.0 mg/L. Result may be greater and reported with qualifier. |
| **C** | Laboratory Contamination. |
| **D** | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| **D1** | Lesser amount of sample was used due to insufficient amount of sample supplied |
| **DW** | Sample result is calculated on a dry weigh basis |
| **J** | Reported value is estimated |
| **L** | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| **M** | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| **NC** | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| **P** | Sample was received without proper preservation according to EPA guidelines. |
| **Q1** | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| **Q2** | Analyte calibration was not verified and the result was estimated and reported with qualifier. |
| **Q3** | Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier. |
| **Q4** | Analyte result out of calibration range and was reported with qualifier |
| **S** | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| **T** | Sample was extracted/analyzed past the holding time. |
| **T1** | Reanalysis was reported past hold time due to failing replicates in the original analysis (BOD only). |
| **T2** | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |
| **T3** | Sample received and analyzed out of hold time per client's request |
| **T4** | Sample was analyzed out of hold time per client's request |
| **T5** | Reanalysis was reported past hold time. The original analysis was within hold time, but not reportable. |
| **TIC** | Tentatively Identified Compounds |

## Definitions

| | |
|---|---|
| **DF** | Dilution Factor |
| **MDL** | Method Detection Limit |
| **ND** | Analyte was not detected or was less than the detection limit. |
| **RDL** | Reporting Detection Limit |

Date: 12/17/2014

United Rock Products

Lab # 348162

## Tentatively Identified Compounds (TIC)

- Bis(2-Chloro-1-Methylethyl)Ether
- alpha,alpha-Dimethylphenethylamine
- Methacrylonitrile
- Methyl Methacrylate
- Propionitrile

For the above compounds, if they are extracted by EPA 625, the results were Non Detect with a TIC scan. The DLR is at 50 ug/L assumedly, which is a level that most organic compounds would be seen on our GCMS system.

Quan Nguyen

*Ceres Analytical Laboratory, Inc.*
*4919 Windplay Dr., Suite 1*
*El Dorado Hills, CA 95762*

November 13, 2014 Ceres ID: 10513

Associated Laboratories
Ms. Kristen Walker
806 North Batavia
Orange, CA 92868

Ms. Walker,

Enclosed please find the results for the three aqueous samples received on November 5, 2014. These samples were analyzed for 2,3,7,8-TCDD by EPA method 1613B. Routine turn-around time was provided for this work.

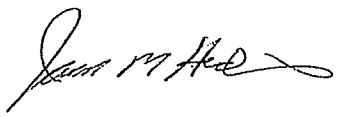
This work was authorized under Associated Laboratories' P.O. # 923530.

The report consists of a Cover Letter, Sample Inventory (Section I), Data Summary (Section II), Sample Tracking (Section VI), and Qualifiers/Abbreviations (Section VII). Raw Data (Section III), Continuing Calibration (Section IV), and Initial Calibration (Section V) are available in a full report (.pdf format) upon request.

The Sample Tracking Section includes all external and internal chain of custodies, laboratory bench sheets, and any special instructions received.

If you have any questions regarding this report, please feel free to contact me at (916)932-5011.

Sincerely,



James M. Hedin
Director of Operations/CEO
jhedin@ceres-lab.com

# Section I: Sample Inventory

| Ceres Sample ID: | Sample ID | Date Received | Collection Date &Time |
|---|---|---|---|
| 10513-001 | 348162-001 | 11/5/2014 | 10/29/2014 9:18 |
| 10513-002 | 348162-002 | 11/5/2014 | 10/29/2014 10:45 |
| 10513-003 | 348162-003 | 11/5/2014 | 10/29/2014 11:10 |

# Section II: Data Summary

# EPA Method 1613B

*Ceres Analytical Laboratory*

**Sample ID:** Method Blank

| Client Data | | Sample Data | | Laboratory Data | | | |
|---|---|---|---|---|---|---|---|
| Name: | Associated Laboratories | Matrix: | Aqueous | Lab Sample ID: | 0-MB001 | Date Received: | NA |
| Project: | 348162 | Sample Size: | 1.000 L | QC Batch #: | 1266 | Date Extracted: | 10-Nov-14 |
| | | | | ZB-5 MS Analysis Date: | 11-Nov-14 | | |

| Analyte | Conc. (pg/L) | DL [a] | EMPC [b] | Qualifiers |
|---|---|---|---|---|
| 2,3,7,8-TCDD | ND | 1.25 | | |

| | Labeled Standards | % R | LCL-UCL [c] | Qualifiers |
|---|---|---|---|---|
| IS | $^{13}$C-2,3,7,8-TCDD | 96.8 | 31 - 137 | |
| CRS | $^{37}Cl_4$-2,3,7,8-TCDD | 97.5 | 42 - 164 | |

*a.* Sample specific estimated detection limit.
*b.* Estimated maximum possible concentration.
*c.* Lower control limit - upper control limit.

Analyst: JMH

Reviewed by: BS

# EPA Method 1613B

*Ceres Analytical Laboratory*

**Sample ID:** Ongoing Precision and Recovery

**Client Data**

Name: Associated Laboratories
Project: 348162

**Sample Data**

Matrix: Aqueous
Sample Size: 1.000 L

**Laboratory Data**

Lab Sample ID: 0-OPR001
QC Batch #: 1266
ZB-5 MS Analysis Date: 11-Nov-14
Date Received: NA
Date Extracted: 10-Nov-14

| Analyte | Conc. (ng/ml) | Limits [a] | Qualifiers |
|---|---|---|---|
| 2,3,7,8-TCDD | 8.99 | 7.3-14.6 | |

| | Labeled Standards | Conc. | Limits [a] | Qualifiers |
|---|---|---|---|---|
| IS | $^{13}$C-2,3,7,8-TCDD | 101 | 25-141 | |
| CRS | $^{37}Cl_4$-2,3,7,8-TCDD | 10.1 | 3.7-15.8 | |

*a. Method acceptance criteria .*

Analyst: JMH

Reviewed by: BS

# EPA Method 1613B

*Ceres Analytical Laboratory*

**Sample ID:** 348162-001

| Client Data | | Sample Data | | Laboratory Data | | | |
|---|---|---|---|---|---|---|---|
| Name: | Associated Laboratories | Matrix: | Aqueous | Lab Sample ID: | 10513-001 | Date Received: | 4-Nov-14 |
| Project: | 348162 | Sample Size: | 0.857 L | QC Batch #: | 1266 | Date Extracted: | 10-Nov-14 |
| Date Collected: | 29-Oct-14 | | | ZB-5 MS Analysis Date: | 11-Nov-14 | | |
| Time Collected: | 9:18 | | | | | | |

| Analyte | Conc. (pg/L) | DL [a] | EMPC [b] | Qualifiers |
|---|---|---|---|---|
| 2,3,7,8-TCDD | ND | 1.11 | | |

| | Labeled Standards | % R | LCL-UCL [c] | Qualifiers |
|---|---|---|---|---|
| IS | $^{13}$C-2,3,7,8-TCDD | 101 | 31 - 137 | |
| CRS | $^{37}Cl_4$-2,3,7,8-TCDD | 93.3 | 42 - 164 | |

*a.* Sample specific estimated detection limit.
*b.* Estimated maximum possible concentration.
*c.* Lower control limit - upper control limit.

Analyst: JMH

Reviewed by: BS

**EPA Method 1613B** *Ceres Analytical Laboratory*

| Sample ID: | 348162-002 | | | | |
|---|---|---|---|---|---|
| **Client Data** | | **Sample Data** | | **Laboratory Data** | |
| Name: | Associated Laboratories | Matrix: | Aqueous | Lab Sample ID: | 10513-002 |
| Project: | 348162 | Sample Size: | 0.889 L | QC Batch #: | 1266 |
| Date Collected: | 29-Oct-14 | | | ZB-5 MS Analysis Date: | 11-Nov-14 |
| Time Collected: | 10:45 | | | | |

| Date Received: | 4-Nov-14 |
|---|---|
| Date Extracted: | 10-Nov-14 |

| Analyte | Conc. (pg/L) | DL [a] | EMPC [b] | Qualifiers |
|---|---|---|---|---|
| 2,3,7,8-TCDD | ND | 1.49 | | |

| | Labeled Standards | % R | LCL-UCL [c] | Qualifiers |
|---|---|---|---|---|
| IS | $^{13}$C-2,3,7,8-TCDD | 93.9 | 31 - 137 | |
| CRS | $^{37}Cl_4$-2,3,7,8-TCDD | 101 | 42 - 164 | |

*a.* Sample specific estimated detection limit.
*b.* Estimated maximum possible concentration.
*c.* Lower control limit - upper control limit.

Analyst: JMH

Reviewed by: BS

**EPA Method 1613B** *Ceres Analytical Laboratory*

| Sample ID: | 348162-003 | | | | |
|---|---|---|---|---|---|
| **Client Data** | | **Sample Data** | | **Laboratory Data** | |
| Name: | Associated Laboratories | Matrix: | Aqueous | Lab Sample ID: | 10513-003 |
| Project: | 348162 | Sample Size: | 0.870 L | QC Batch #: | 1266 |
| Date Collected: | 29-Oct-14 | | | ZB-5 MS Analysis Date: | 11-Nov-14 |
| Time Collected: | 11:10 | | | | |

| Date Received: | 4-Nov-14 |
|---|---|
| Date Extracted: | 10-Nov-14 |

| Analyte | Conc. (pg/L) | DL [a] | EMPC [b] | Qualifiers |
|---|---|---|---|---|
| 2,3,7,8-TCDD | ND | 1.05 | | |

| | Labeled Standards | % R | LCL-UCL [c] | Qualifiers |
|---|---|---|---|---|
| IS | $^{13}$C-2,3,7,8-TCDD | 99.1 | 31 - 137 | |
| CRS | $^{37}Cl_4$-2,3,7,8-TCDD | 83.3 | 42 - 164 | |

*a.* Sample specific estimated detection limit.
*b.* Estimated maximum possible concentration.
*c.* Lower control limit - upper control limit.

Analyst: JMH

Reviewed by: BS

# Section VI: Sample Tracking

# Ceres Analytical Laboratory, Inc.

4919 Windplay Dr. Suite 1
El Dorado Hills, CA 95762
Tel: (916)932-5011

# Chain of Custody

Please Print in Pen

Ceres Use Only
Ceres Project ID:
Temperature: °C

Pg. 1 of 1

*Reports and invoices will be delivered by email in .pdf format*

| Client Information | Invoice Information (if different from Client Info) | Project Information |
|---|---|---|
| Company Name: ASSOCIATED LABORATORIES | Company Name: MONTROSE ENV. GROUP | Ceres Quote #: |
| Contact Name: KRISTEN WALKER | Contact Name: ACCOUNTS PAYABLE | P.O. # 923530 |
| Address: 806 N. BATAVIA, ORANGE CA 92868 | Address: | Project ID: 348162 |
| Ph: 714-771-6900 Fx: | Ph: Fx: | TAT (business days) STND. |
| Em: kwalker@associatedlabs.com | Email: ACCOUNTSPAYABLE@MONTROSE-ENV.COM | Std 15 days; Rush TAT available please call |

A: Aqueous S: Soil AS: Ash DW: Drinking Water
E: Effluent SD: Sediment C: Clay SO: Solid
I: Influent SL: Sludge CS: Clay Slurry O: Other (please comment)

| | Sample ID | Sample Collection Date | Time | Matrix | # of containers | EPA 1613 | EPA 8290 | NCASI 551 | EPA 8280 | EPA 613 | Other | TEF: ☐ 1998 WHO ☐ 2005 WHO ☐ Other | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 348162-001 | 10/29/14 | 0918 | A | 1 | X | | | | | | | 2378-TCDD |
| 2 | 348162-002 | ↓ | 0945 | ↓ | ↓ | X | | | | | | | ↓ |
| 3 | 348162-003 | ↓ | 1110 | ↓ | ↓ | X | | | | | | | |
| 4 | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | |

*Samples will be disposed of 45 days after submission of report, unless other provisions have been made and agreed upon in writing.*

| Relinquished by: (Signature and Printed Name) | Date | Time | Received by: (Signature and Printed Name) | Date | Time |
|---|---|---|---|---|---|
| Kristen Walker KRISTEN WALKER | 11/4/14 | 1600 | [illegible] | 11/5/14 | 10:24 |
| | | | | | |

Client understands that all terms desribed in the proposals, quotations, and/or the general terms and conditions of Ceres Analytical Laboratory will be followed.

Ceres Analytical Laboratory reserves the right to terminate its service or withhold delivery of reports, if in Ceres' discretion the terms of the project have been broken.

# Sample Receipt Check List

| | |
|---|---|
| Ceres ID: 10513 | Date/Time: 11/5/14 10:25 |
| Client Project ID: (223538) 348162 | Received Temperature: 11.4<br>Acceptable: (Y) / N |
| Chain of Custody Relinquished by signed? | (Y) / N |
| Custody Seals? Present? | Y / N |
| Intact? | Y / N |
| NA: | (NA) |
| Unlabeled / Illegible Samples | Y / (N) |
| Proper Containers: Poly Bottles | Y / (N) |
| Preservation Acceptable (Chemical or Temperature)? | (Y) / N |
| Drinking Water, Sodium Thiosulfate present? | Y / N / (NA) |
| List COC discrepancies: Noted 11/5/14 | |
| List Damaged Samples: Noted 11/5/14 | |

Ceres Analytical Laboratory

Process Request

Ceres ID: 10513 PB: 1266 Sample #s: 1-3 Due Date: 11/19/14

Matrix (circle one): Drinking Water (Aqueous) Effluent Influent Ash

Solid Soil Sediment Sludge Clay/Clay Slurry Other: _____

Method (check one): (□ 1613 2,3,7,8-TCDD)

□ 8290 2,3,7,8-TCDD

□ 1613 2,3,7,8-TCDD/F

□ 8290 2,3,7,8-TCDD/F

□1613 $Cl_4$-$Cl_8$

□ 8290 $Cl_4$-$Cl_8$

Instructions:

# Sample Volume Calculation

Instructions:
1. Calibrate balance
2. Tare balance
3. Place Full sample bottle with cap on balance. Record weight as Sample+Bottle Wt.
4. Weigh empty bottle and cap. Record as Bottle Wt.
5. Calculate sample Volume (assuming 1g = 1ml) as follows:

$$Sample\ Volume = (Sample + Bottle\ Wt) - Empty\ Bottle\ Wt.$$

| Ceres ID | Sample +Bottle Wt. | Empty Bottle Wt. | Sample Volume |
|---|---|---|---|
| 10513-1 | 1232.41g | 375.76g | 856.65g |
| -2 | 1257.70g | 368.82g | 888.88g |
| -3 | 1237.27g | 367.70g | 869.57g |
| | | | |
| | | | |
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| | | | |
| | | | |

Chemist: _____ Date: 11/10/14

Method: 1613B
SOP #: 3010

# Ceres Analytical Laboratory

## Sample Prep Bench Sheet

| | | | | ISS/PAR | CSS | | | | RSS |
|---|---|---|---|---|---|---|---|---|---|
| Ceres ID | Client ID | Ver. | wt/vol | chem/date/witness | chem/date/witness | AP | AB/AC | FC | chem/date/witness |
| 0-1266-MB001 | Method Blank | | 1.000L | [illegible] 11/10/14 | [illegible] 11/10/14 | NA | [illegible] 11/10/14 | NA | [illegible] 11/10/14 |
| 0-1266-OPR001 | OPR | | 1.000L | (A) | | | | | |
| 10513-1266-001 | 348162-001 | ✓ | 0.857L | | | | | | |
| 10513-1266-002 | 348162-002 | ✓ | 0.885L | | | | | | |
| 10513-1266-003 | 348162-003 | ✓ | 0.870L | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

*Comments :* (A) OPR spiked with NSS.

Soxhlet Start: 15:00 11/10/14

Soxhlet Stop: 07:20 11/11/14

Samples Logged out by: [illegible] 11/10/14 07:38

Samples Returned by: NA

Note samples Depleted: 1-3

Sample Extracts Storage Location: Box 13

Extracts to Instrument: 11:40 11/11/14

Extracts returned to Storage Location: 07:30 11/12/14





Chemist: [illegible]

Method: 1613B
SOP #: 301.1

Ceres Analytical Laboratory
Sample Prep Bench Sheet

| Standard | Standard ID | Vol. | Expiration Date |
|---|---|---|---|
| ISS | S034212A | 10µl | 3/12/17 |
| NSS | B | 〃 | 〃 |
| CSS | C | 〃 | 〃 |
| RSS | D | 20µl | 〃 |

## Solvents/Solutions/Packing Materials

| Name | Amount | Lot # | Exp. Date |
|---|---|---|---|
| Toluene | 450ml | 142923 | 4/24/15 |
| Hexane | 10, 30, 100, 20 | 143512 | 3/31/15 |
| Sigel | 4g | P102014A | 4/20/15 |
| Basic gel | 4g | P111014A | 5/10/15 |
| Acidgel | 8g | P111014B | 5/10/15 |
| Na2SO4 | 1.5g | P080714A | 2/7/15 |
| Acid Al | 6g | P100614A | 4/6/15 |
| 20% DcmiHex | 30ml | L102714A | 4/27/15 |





*Chemist :* _____

## Section VII: Qualifiers/Abbreviations

| | |
|---|---|
| **J** | Concentration found below the lower quantitation limit but greater than zero. |
| **B** | Analyte present in the associated Method Blank. |
| **E** | Concentration found exceeds the Calibration range of the HRGC/HRMS. |
| **D** | This analyte concentration was calculated from a dilution. |
| **X** | The concentration found is the estimated maximum possible concentration due to chlorinated diphenyl ethers present in the sample. |
| **H** | Recovery limits exceeded. See cover letter. |
| * | Results taken from dilution. |
| **I** | Interference. See cover letter. |
| **Conc.** | Concentration Found |
| **DL** | Calculated Detection Limit |
| **ND** | Non-Detect |
| **% Rec.** | Percent Recovery |

MONTROSE ENVIRONMENTAL

Associated Laboratories
Environmental Analytical Services

# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**

Client: Chambers

Project: _____

Date Received: 10-29-14

Sampler's Signature Present: (Yes) No

Sample temperature: _____

Sample(s) received in cooler: Yes No (Skip Section 2)

Shipping Information: _____

**Section 2**

Was the cooler packed with: ✓ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam

____ Paper ____None ___ Other_____

Cooler Temperature: 5.0C *(Acceptance range is 0 to 6 Deg. C. or arrival on ice;*

*For Microbiology sample ≤ 10 Deg. C or arrival on ice )*

| Section 3 | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Were IDs present? | ✓ | | |
| Were sampling dates & times present? | ✓ | | |
| Was a signature present? | ✓ | | |
| Were tests clearly indicated? | ✓ | | |
| Were custody seals present? | | ✓ | |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | ✓ | | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ✓ | | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | ✓ | |
| Were the containers labeled with correct preservatives? | ✓ | | |
| Was total residual chlorine measured (Fish Bioassay samples only)? * **If the answer is no, please inform Fish Bioassay Dept. immediately.* | | | ✓ |

**Section 4**

Explanations/Comments

**Section 5**

Was Project Manager notified of discrepancies: Y / N N/A

Project Manager's response: _____

Completed By: M. Elliott Date: 10/29/14

# Code of Federal Regulations

## Title 40 - Protection of Environment

Volume: 26
Date: 2012-07-01
Original Date: 2011-07-01
Title: Appendix I to Part 258 - Constituents for Detection Monitoring
Context: Title 40 - Protection of Environment. CHAPTER I - ENVIRONMENTAL PROTECTION AGENCY (CONTINUED). SUBCHAPTER I - SOLID WASTES. PART 258 - CRITERIA FOR MUNICIPAL SOLID WASTE LANDFILLS.

Pt. 258, App. I

### Appendix I to Part 258—Constituents for Detection Monitoring

| Common name 1 | CAS RN 2 |
|---|---|
| *Inorganic Constituents:* | |
| (1) Antimony | (Total) |
| (2) Arsenic | (Total) |
| (3) Barium | (Total) |
| (4) Beryllium | (Total) |
| (5) Cadmium | (Total) |
| (6) Chromium | (Total) |
| (7) Cobalt | (Total) |
| (8) Copper | (Total) |
| (9) Lead | (Total) |
| (10) Nickel | (Total) |
| (11) Selenium | (Total) |
| (12) Silver | (Total) |
| (13) Thallium | (Total) |
| (14) Vanadium | (Total) |
| (15) Zinc | (Total) |
| *Organic Constituents:* | |
| (16) Acetone | 67-64-1 |
| (17) Acrylonitrile | 107-13-1 |
| (18) Benzene | 71-43-2 |
| (19) Bromochloromethane | 74-97-5 |
| (20) Bromodichloromethane | 75-27-4 |
| (21) Bromoform; Tribromomethane | 75-25-2 |
| (22) Carbon disulfide | 75-15-0 |
| (23) Carbon tetrachloride | 56-23-5 |
| (24) Chlorobenzene | 108-90-7 |
| (25) Chloroethane; Ethyl chloride | 75-00-3 |
| (26) Chloroform; Trichloromethane | 67-66-3 |
| (27) Dibromochloromethane; Chlorodibromomethane | 124-48-1 |
| (28) 1,2-Dibromo-3-chloropropane; DBCP | 96-12-8 |

| | |
|---|---|
| (29) 1,2-Dibromoethane; Ethylene dibromide; EDB | 106-93-4 |
| (30) o-Dichlorobenzene; 1,2-Dichlorobenzene | 95-50-1 |
| (31) p-Dichlorobenzene; 1,4-Dichlorobenzene | 106-46-7 |
| (32) trans-1, 4-Dichloro-2-butene | 110-57-6 |
| (33) 1,1-Dichlorethane; Ethylidene chloride | 75-34-3 |
| (34) 1,2-Dichlorethane; Ethylene dichloride | 107-06-2 |
| (35) 1,1-Dichloroethylene; 1,1-Dichloroethene; Vinylidene chloride | 75-35-4 |
| (36) cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene | 156-59-2 |
| (37) trans-1, 2-Dichloroethylene; trans-1,2-Dichloroethene | 156-60-5 |
| (38) 1,2-Dichloropropane; Propylene dichloride | 78-87-5 |
| (39) cis-1,3-Dichloropropene | 10061-01-5 |
| (40) trans-1,3-Dichloropropene | 10061-02-6 |
| (41) Ethylbenzene | 100-41-4 |
| (42) 2-Hexanone; Methyl butyl ketone | 591-78-6 |
| (43) Methyl bromide; Bromomethane | 74-83-9 |
| (44) Methyl chloride; Chloromethane | 74-87-3 |
| (45) Methylene bromide; Dibromomethane | 74-95-3 |
| (46) Methylene chloride; Dichloromethane | 75-09-2 |
| (47) Methyl ethyl ketone; MEK; 2-Butanone | 78-93-3 |
| (48) Methyl iodide; Idomethane | 74-88-4 |
| (49) 4-Methyl-2-pentanone; Methyl isobutyl ketone | 108-10-1 |
| (50) Styrene | 100-42-5 |
| (51) 1,1,1,2-Tetrachloroethane | 630-20-6 |
| (52) 1,1,2,2-Tetrachloroethane | 79-34-5 |
| (53) Tetrachloroethylene; Tetrachloroethene; Perchloroethylene | 127-18-4 |
| (54) Toluene | 108-88-3 |
| (55) 1,1,1-Trichloroethane; Methylchloroform | 71-55-6 |
| (56) 1,1,2-Trichloroethane | 79-00-5 |
| (57) Trichloroethylene; Trichloroethene | 79-01-6 |
| (58) Trichlorofluoromethane; CFC-11 | 75-69-4 |
| (59) 1,2,3-Trichloropropane | 96-18-4 |
| (60) Vinyl acetate | 108-05-4 |
| (61) Vinyl chloride | 75-01-4 |
| (62) Xylenes | 1330-20-7 |

1 Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

2 Chemical Abstract Service registry number. Where "Total" is entered, all species in the ground water that contain this element are included.

[70 FR 34555, June 14, 2005; 70 FR 44150, Aug. 1, 2005]

# Code of Federal Regulations

## Title 40 - Protection of Environment

Volume: 26
Date: 2012-07-01
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Title: Appendix II to Part 258 - List of Hazardous Inorganic and Organic Constituents
Context: Title 40 - Protection of Environment. CHAPTER I - ENVIRONMENTAL PROTECTION AGENCY (CONTINUED). SUBCHAPTER I - SOLID WASTES. PART 258 - CRITERIA FOR MUNICIPAL SOLID WASTE LANDFILLS.

**Pt. 258, App. II**

### Appendix II to Part 258—List of Hazardous Inorganic and Organic Constituents

| Common name 1 | CAS RN 2 | Chemical abstracts service index name 3 |
|---|---|---|
| Acenaphthene | 83-32-9 | Acenaphthylene, 1,2-dihydro- |
| Acenaphthylene | 208-96-8 | Acenaphthylene |
| Acetone | 67-64-1 | 2-Propanone |
| Acetonitrile; Methyl cyanide | 75-05-8 | Acetonitrile |
| Acetophenone | 98-86-2 | Ethanone, 1-phenyl- |
| 2-Acetylaminofluorene; 2-AAF | 53-96-3 | Acetamide, N-9H-fluoren-2-yl- |
| Acrolein | 107-02-8 | 2-Propenal |
| Acrylonitrile | 107-13-1 | 2-Propenenitrile |
| Aldrin | 309-00-2 | 1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-(1,4,4a,5,8,8a)- |
| Allyl chloride | 107-05-1 | 1-Propene, 3-chloro- |
| 4-Aminobiphenyl | 92-67-1 | [1,1'-Biphenyl]-4-amine |
| Anthracene | 120-12-7 | Anthracene |
| Antimony | (Total) | Antimony |
| Arsenic | (Total) | Arsenic |
| Barium | (Total) | Barium |
| Benzene | 71-43-2 | Benzene |
| Benzo[a]anthracene; Benzanthracene | 56-55-3 | Benz[a]anthracene |
| Benzo[b]fluoranthene | 205-99-2 | Benz[e]acephenanthrylene |
| Benzo[k]fluoranthene | 207-08-9 | Benzo[k]fluoranthene |
| Benzo[ghi]perylene | 191-24-2 | Benzo[ghi]perylene |
| Benzo[a]pyrene | 50-32-8 | Benzo[a]pyrene |
| Benzyl alcohol | 100-51-6 | Benzenemethanol |
| Beryllium | (Total) | Beryllium |
| alpha-BHC | 319-84-6 | Cyclohexane, 1,2,3,4,5,6-hexachloro-,(1α,2α,3β,4α,5β,6β)- |

| | | |
|---|---|---|
| beta-BHC | 319-85-7 | Cyclohexane, 1,2,3,4,5,6-hexachloro-,(1α,2β,3α,4β,5α,6β)- |
| delta-BHC | 319-86-8 | Cyclohexane, 1,2,3,4,5,6-hexachloro-,(1α,2α,3α,4β,5α,6β)- |
| gamma-BHC; Lindane | 58-89-9 | Cyclohexane, 1,2,3,4,5,6- hexachloro-,(1α,2α, 3β, 4α,5α,6β)- |
| Bis(2-chloroethoxy)methane | 111-91-1 | Ethane, 1,1'-[methylenebis (oxy)]bis [2-chloro- |
| Bis(2-chloroethyl)ether; Dichloroethyl ether | 111-44-4 | Ethane, 1,1'-oxybis[2-chloro- |
| Bis(2-chloro-1-methylethyl) ether; 2,2' -Dichlorodiisopropyl ether; DCIP, See footnote 4 | 108-60-1 | Propane, 2,2'-oxybis[1-chloro- |
| Bis(2-ethylhexyl) phthalate | 117-81-7 | 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl)ester |
| Bromochloromethane; Chlorobromethane | 74-97-5 | Methane, bromochloro- |
| Bromodichloromethane; Dibromochloromethane | 75-27-4 | Methane, bromodichloro- |
| Bromoform; Tribromomethane | 75-25-2 | Methane, tribromo- |
| 4-Bromophenyl phenyl ether | 101-55-3 | Benzene, 1-bromo-4-phenoxy- |
| Butyl benzyl phthalate; Benzyl butyl phthalate | 85-68-7 | 1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester |
| Cadmium | (Total) | Cadmium |
| Carbon disulfide | 75-15-0 | Carbon disulfide |
| Carbon tetrachloride | 56-23-5 | Methane, tetrachloro- |
| Chlordane | See footnote 5 | 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro- |
| p-Chloroaniline | 106-47-8 | Benzenamine, 4-chloro- |
| Chlorobenzene | 108-90-7 | Benzene, chloro- |
| Chlorobenzilate | 510-15-6 | Benzeneacetic acid, 4-chloro--(4-chlorophenyl)- -hydroxy-, ethyl ester. |
| p-Chloro-m-cresol; 4-Chloro-3-methylphenol | 59-50-7 | Phenol, 4-chloro-3-methyl- |
| Chloroethane; Ethyl chloride | 75-00-3 | Ethane, chloro- |
| Chloroform; Trichloromethane | 67-66-3 | Methane, trichloro- |
| 2-Chloronaphthalene | 91-58-7 | Naphthalene, 2-chloro- |
| 2-Chlorophenol | 95-57-8 | Phenol, 2-chloro- |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | Benzene, 1-chloro-4-phenoxy- |
| Chloroprene | 126-99-8 | 1,3-Butadiene, 2-chloro- |
| Chromium | (Total) | Chromium |
| Chrysene | 218-01-9 | Chrysene |
| Cobalt | (Total) | Cobalt |
| Copper | (Total) | Copper |
| m-Cresol; 3-Methylphenol | 108-39-4 | Phenol, 3-methyl- |
| o-Cresol; 2-Methylphenol | 95-48-7 | Phenol, 2-methyl- |
| p-Cresol; 4-Methylphenol | 106-44-5 | Phenol, 4-methyl- |
| Cyanide | 57-12-5 | Cyanide |

| | | |
|---|---|---|
| 2,4-D; 2,4-Dichlorophenoxyacetic acid | 94-75-7 | Acetic acid, (2,4-dichlorophenoxy)- |
| 4,4'-DDD | 72-54-8 | Benzene 1,1'-(2,2-dichloroethylidene) bis[4-chloro- |
| 4,4'-DDE | 72-55-9 | Benzene, 1,1'-(dichloroethenylidene) bis[4-chloro- |
| 4,4'-DDT | 50-29-3 | Benzene, 1,1'-(2,2,2-trichloroethylidene) bis[4-chloro- |
| Diallate | 2303-16-4 | Carbamothioic acid, bis(1-methylethyl)-, S- (2,3-dichloro-2-propenyl) ester. |
| Dibenz[a,h]anthracene | 53-70-3 | Dibenz[a,h]anthracene |
| Dibenzofuran | 132-64-9 | Dibenzofuran |
| Dibromochloromethane; Chlorodibromomethane | 124-48-1 | Methane, dibromochloro- |
| 1,2-Dibromo-3-chloropropane; DBCP | 96-12-8 | Propane, 1,2-dibromo-3-chloro- |
| 1,2-Dibromoethane; Ethylene dibromide; EDB | 106-93-4 | Ethane, 1,2-dibromo- |
| Di-n-butyl phthalate | 84-74-2 | 1,2-Benzenedicarboxylic acid, dibutyl ester |
| o-Dichlorobenzene; 1,2-Dichlorobenzene | 95-50-1 | Benzene, 1,2-dichloro- |
| m-Dichlorobenzene; 1,3-Dichlorobenzene | 541-73-1 | Benzene, 1,3-dichloro- |
| p-Dichlorobenzene; 1,4-Dichlorobenzene | 106-46-7 | Benzene, 1,4-dichloro- |
| 3,3'-Dichlorobenzidine | 91-94-1 | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro- |
| trans-1,4-Dichloro-2-butene | 110-57-6 | 2-Butene, 1,4-dichloro-, (E)- |
| Dichlorodifluoromethane; CFC 12 | 75-71-8 | Methane, dichlorodifluoro- |
| 1,1-Dichloroethane; Ethyldidene chloride | 75-34-3 | Ethane, 1,1-dichloro- |
| 1,2-Dichloroethane; Ethylene dichloride | 107-06-2 | Ethane, 1,2-dichloro- |
| 1,1-Dichloroethylene; 1,1-Dichloroethene; | 75-35-4 | Ethene, 1,1-dichloro- |
| Vinylidene chloride cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene | 156-59-2 | Ethene, 1,2-dichloro-(Z)- |
| trans-1,2-Dichloroethylene; trans-1,2-Dichloroethene | 156-60-5 | Ethene, 1,2-dichloro-, (E)- |
| 2,4-Dichlorophenol | 120-83-2 | Phenol, 2,4-dichloro- |
| 2,6-Dichlorophenol | 87-65-0 | Phenol, 2,6-dichloro- |
| 1,2-Dichloropropane | 78-87-5 | Propane, 1,2-dichloro- |
| 1,3-Dichloropropane; Trimethylene dichloride | 142-28-9 | Propane, 1,3-dichloro- |
| 2,2-Dichloropropane; Isopropylidene chloride | 594-20-7 | Propane, 2,2-dichloro- |
| 1,1-Dichloropropene | 563-58-6 | 1-Propene, 1,1-dichloro- |
| cis-1,3-Dichloropropene | 10061-01-5 | 1-Propene, 1,3-dichloro-, (Z)- |
| trans-1,3-Dichloropropene | 10061-02-6 | 1-Propene, 1,3-dichloro-, (E)- |
| Dieldrin | 60-57-1 | 2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα,2β,2aα,3β,6β,6aα,7β,7aα)- |
| Diethyl phthalate | 84-66-2 | 1,2-Benzenedicarboxylic acid, diethyl ester |
| O,O-Diethyl O-2-pyrazinyl phosphorothioate; Thionazin | 297-97-2 | Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester. |
| Dimethoate | 60-51-5 | Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester |

| | | |
|---|---|---|
| p-(Dimethylamino)azobenzene | 60-11-7 | Benzenamine, N,N-dimethyl-4-(phenylazo)- |
| 7,12-Dimethylbenz[a]anthracene | 57-97-6 | Benz[a]anthracene, 7,12-dimethyl- |
| 3,3'-Dimethylbenzidine | 119-93-7 | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl- |
| alpha, alpha-Dimethylphenethylamine | 122-09-8 | Benzeneethanamine, α,α-dimethyl- |
| 2,4-Dimethylphenol; m-Xylenol | 105-67-9 | Phenol, 2,4-dimethyl- |
| Dimethyl phthalate | 131-11-3 | 1,2-Benzenedicarboxylic acid, dimethyl ester |
| m-Dinitrobenzene | 99-65-0 | Benzene, 1,3-dinitro- |
| 4,6-Dinitro-o-cresol; 4,6-Dinitro-2-methylphenol | 534-52-1 | Phenol, 2-methyl-4,6-dinitro- |
| 2,4-Dinitrophenol | 51-28-5 | Phenol, 2,4-dinitro- |
| 2,4-Dinitrotoluene | 121-14-2 | Benzene, 1-methyl-2,4-dinitro- |
| 2,6-Dinitrotoluene | 606-20-2 | Benzene, 2-methyl-1,3-dinitro- |
| Dinoseb; DNBP; 2-sec-Butyl-4,6-dinitrophenol | 88-85-7 | Phenol, 2-(1-methylpropyl)-4,6-dinitro- |
| Di-n-octyl phthalate | 117-84-0 | 1,2-Benzenedicarboxylic acid, dioctyl ester |
| Diphenylamine | 122-39-4 | Benzenamine, N-phenyl- |
| Disulfoton | 298-04-4 | Phosphorodithioic acid, O,O-diethyl S-[2- (ethylthio)ethyl] ester |
| Endosulfan I | 959-98-8 | 6,9-Methano-2,4,3-benzodiox-athiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide, |
| Endosulfan II | 33213-65-9 | 6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide, (3α,5aα,6β,9β, 9aα)- |
| Endosulfan sulfate | 1031-07-8 | 6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3,3-dioxide |
| Endrin | 72-20-8 | 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα, 2β,2aβ, 3α,6α,6aβ,7β,7aα)- |
| Endrin aldehyde | 7421-93-4 | 1,2,4-Methenocyclo-penta[cd]pentalene-5-carboxaldehyde,2,2a,3,3,4,7-hexachlorodecahydro-(1α,2β,2aβ,4β,4aβ,5β,6aβ,6bβ,7R*)- |
| Ethylbenzene | 100-41-4 | Benzene, ethyl- |
| Ethyl methacrylate | 97-63-2 | 2-Propenoic acid, 2-methyl-, ethyl ester |
| Ethyl methanesulfonate | 62-50-0 | Methanesulfonic acid, ethyl ester |
| Famphur | 52-85-7 | Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl]-O,O-dimethyl ester |
| Fluoranthene | 206-44-0 | Fluoranthene |
| Fluorene | 86-73-7 | 9H-Fluorene |
| Heptachlor | 76-44-8 | 4,7-Methano-1H-indene,1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- |
| Heptachlor epoxide | 1024-57-3 | 2,5-Methano-2H-indeno[1,2-b]oxirene,2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a,-hexahydro-,(1aα,1bβ,2α,5α,5aβ,6β,6aα) |
| Hexachlorobenzene | 118-74-1 | Benzene, hexachloro- |
| Hexachlorobutadiene | 87-68-3 | 1,3-Butadiene, 1,1,2,3,4,4-hexachloro- |
| Hexachlorocyclopentadiene | 77-47-4 | 1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro- |
| Hexachloroethane | 67-72-1 | Ethane, hexachloro- |

| | | |
|---|---|---|
| Hexachloropropene | 1888-71-7 | 1-Propene, 1,1,2,3,3,3-hexachloro- |
| 2-Hexanone; Methyl butyl ketone | 591-78-6 | 2-Hexanone |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | Indeno[1,2,3-cd]pyrene |
| Isobutyl alcohol | 78-83-1 | 1-Propanol, 2-methyl- |
| Isodrin | 465-73-6 | 1,4,5,8-Dimethanonaphthalene,1,2,3,4,1 0,10-hexachloro-1,4,4a,5,8,8a hexahydro-(1α, 4α, 4aβ,5β,8β,8aβ)- |
| Isophorone | 78-59-1 | 2-Cyclohexen-1-one, 3,5,5-trimethyl- |
| Isosafrole | 120-58-1 | 1,3-Benzodioxole, 5-(1-propenyl)- |
| Kepone | 143-50-0 | 1,3,4-Metheno-2H-cyclobuta-[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro- |
| Lead | (Total) | Lead |
| Mercury | (Total) | Mercury |
| Methacrylonitrile | 126-98-7 | 2-Propenenitrile, 2-methyl- |
| Methapyrilene | 91-80-5 | 1,2,Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)- |
| Methoxychlor | 72-43-5 | Benzene, 1,1'-(2,2,2,trichloroethylidene)bis [4-methoxy- |
| Methyl bromide; Bromomethane | 74-83-9 | Methane, bromo- |
| Methyl chloride; Chloromethane | 74-87-3 | Methane, chloro- |
| 3-Methylcholanthrene | 56-49-5 | Benz[j]aceanthrylene, 1,2-dihydro-3-methyl- |
| Methyl ethyl ketone; MEK; 2-Butanone | 78-93-3 | 2-Butanone |
| Methyl iodide; Iodomethane | 74-88-4 | Methane, iodo- |
| Methyl methacrylate | 80-62-6 | 2-Propenoic acid, 2-methyl-, methyl ester |
| Methyl methanesulfonate | 66-27-3 | Methanesulfonic acid, methyl ester |
| 2-Methylnaphthalene | 91-57-6 | Naphthalene, 2-methyl- |
| Methyl parathion; Parathion methyl | 298-00-0 | Phosphorothioic acid, O,O-dimethyl |
| 4-Methyl-2-pentanone; Methyl isobutyl ketone | 108-10-1 | 2-Pentanone, 4-methyl- |
| Methylene bromide; Dibromomethane | 74-95-3 | Methane, dibromo- |
| Methylene chloride; Dichloromethane | 75-09-2 | Methane, dichloro- |
| Naphthalene | 91-20-3 | Naphthalene |
| 1,4-Naphthoquinone | 130-15-4 | 1,4-Naphthalenedione |
| 1-Naphthylamine | 134-32-7 | 1-Naphthalenamine |
| 2-Naphthylamine | 91-59-8 | 2-Naphthalenamine |
| Nickel | (Total) | Nickel |
| o-Nitroaniline; 2-Nitroaniline | 88-74-4 | Benzenamine, 2-nitro- |
| m-Nitroaniline; 3-Nitroaniline | 99-09-2 | Benzenamine, 3-nitro- |
| p-Nitroaniline; 4-Nitroaniline | 100-01-6 | Benzenamine, 4-nitro- |
| Nitrobenzene | 98-95-3 | Benzene, nitro- |
| o-Nitrophenol; 2-Nitrophenol | 88-75-5 | Phenol, 2-nitro- |
| p-Nitrophenol; 4-Nitrophenol | 100-02-7 | Phenol, 4-nitro- |
| | | |

| | | |
|---|---|---|
| N-Nitrosodi-n-butylamine | 924-16-3 | 1-Butanamine, N-butyl-N-nitroso- |
| N-Nitrosodiethylamine | 55-18-5 | Ethanamine, N-ethyl-N-nitroso- |
| N-Nitrosodimethylamine | 62-75-9 | Methanamine, N-methyl-N-nitroso- |
| N-Nitrosodiphenylamine | 86-30-6 | Benzenamine, N-nitroso-N-phenyl- |
| N-Nitrosodipropylamine; N-Nitroso-N-dipropylamine; Di-n-propylnitrosamine | 621-64-7 | 1-Propanamine, N-nitroso-N-propyl- |
| N-Nitrosomethylethalamine | 10595-95-6 | Ethanamine, N-methyl-N-nitroso- |
| N-Nitrosopiperidine | 100-75-4 | Piperidine, 1-nitroso- |
| N-Nitrosopyrrolidine | 930-55-2 | Pyrrolidine, 1-nitroso- |
| 5-Nitro-o-toluidine | 99-55-8 | Benzenamine, 2-methyl-5-nitro- |
| Parathion | 56-38-2 | Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester |
| Pentachlorobenzene | 608-93-5 | Benzene, pentachloro- |
| Pentachloronitrobenzene | 82-68-8 | Benzene, pentachloronitro- |
| Pentachlorophenol | 87-86-5 | Phenol, pentachloro- |
| Phenacetin | 62-44-2 | Acetamide, N-(4-ethoxyphenyl) |
| Phenanthrene | 85-01-8 | Phenanthrene |
| Phenol | 108-95-2 | Phenol |
| p-Phenylenediamine | 106-50-3 | 1,4-Benzenediamine |
| Phorate | 298-02-2 | Phosphorodithioic acid, O,O-diethyl S- [(ethylthio)methyl] ester |
| Polychlorinated biphenyls; PCBs | See footnote 6 | 1,1′-Biphenyl, chloro derivatives |
| Pronamide | 23950-58-5 | Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)- |
| Propionitrile; Ethyl cyanide | 107-12-0 | Propanenitrile |
| Pyrene | 129-00-0 | Pyrene |
| Safrole | 94-59-7 | 1,3-Benzodioxole, 5-(2- propenyl)- |
| Selenium | (Total) | Selenium |
| Silver | (Total) | Silver |
| Silvex; 2,4,5-TP | 93-72-1 | Propanoic acid, 2-(2,4,5- trichlorophenoxy)- |
| Styrene | 100-42-5 | Benzene, ethenyl- |
| Sulfide | 18496-25-8 | Sulfide |
| 2,4,5-T; 2,4,5-Trichlorophenoxyacetic acid | 93-76-5 | Acetic acid, (2,4,5- trichlorophenoxy)- |
| 2,3,7,8-TCDD; 2,3,7,8-Tetrachlorodibenzo- p-dioxin | 1746-01-6 | Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro- |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | Benzene, 1,2,4,5-tetrachloro- |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | Ethane, 1,1,1,2-tetrachloro- |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | Ethane, 1,1,2,2-tetrachloro- |
| Tetrachloroethylene; Tetrachloroethene; Perchloroethylene | 127-18-4 | Ethene, tetrachloro- |

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|---|---|---|
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | Phenol, 2,3,4,6-tetrachloro- |
| Thallium | (Total) | Thallium |
| Tin | (Total) | Tin |
| Toluene | 108-88-3 | Benzene, methyl- |
| o-Toluidine | 95-53-4 | Benzenamine, 2-methyl- |
| Toxaphene | See footnote 7 | Toxaphene |
| 1,2,4-Trichlorobenzene | 120-82-1 | Benzene, 1,2,4-trichloro- |
| 1,1,1-Trichloroethane; Methylchloroform | 71-55-6 | Ethane, 1,1,1-trichloro- |
| 1,1,2-Trichloroethane | 79-00-5 | Ethane, 1,1,2-trichloro- |
| Trichloroethylene; Trichloroethene | 79-01-6 | Ethene, trichloro- |
| Trichlorofluoromethane; CFC-11 | 75-69-4 | Methane, trichlorofluoro- |
| 2,4,5-Trichlorophenol | 95-95-4 | Phenol, 2,4,5-trichloro- |
| 2,4,6-Trichlorophenol | 88-06-2 | Phenol, 2,4,6-trichloro- |
| 1,2,3-Trichloropropane | 96-18-4 | Propane, 1,2,3-trichloro- |
| O,O,O-Triethyl phosphorothioate | 126-68-1 | Phosphorothioic acid, O,O,O-triethyl ester |
| sym-Trinitrobenzene | 99-35-4 | Benzene, 1,3,5-trinitro- |
| Vanadium | (Total) | Vanadium |
| Vinyl acetate | 108-05-4 | Acetic acid, ethenyl ester |
| Vinyl chloride; Chloroethene | 75-01-4 | Ethene, chloro- |
| Xylene (total) | See footnote 8 | Benzene, dimethyl- |
| Zinc | (Total) | Zinc |

1 Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

2 Chemical Abstracts Service registry number. Where "Total" is entered, all species in the ground water that contain this element are included.

3 CAS index names are those used in the 9th Cumulative Index.

4 This substance is often called bis(2-chloroisopropyl) ether, the name Chemical Abstracts Service applies to its noncommercial isomer, propane, 2,2"-oxybis[2-chloro-(CAS RN 39638-32-9).

5 Chlordane: This entry includes alpha-chlordane (CAS RN 5103-71-9), beta-chlordane (CAS RN 5103-74-2), gamma-chlordane (CAS RN 5566-34-7), and constituents of chlordane (CAS RN 57-74-9 and CAS RN 12789-03-6).

6 Polychlorinated biphenyls (CAS RN 1336-36-3); this category contains congener chemicals, including constituents of Aroclor-1016 (CAS RN 12674-11-2), Aroclor-1221 (CAS RN 11104-28-2), Aroclor-1232 (CAS RN 11141-16-5), Aroclor-1242 (CAS RN 53469-21-9), Aroclor-1248 (CAS RN 12672-29-6), Aroclor-1254 (CAS RN 11097-69-1), and Aroclor-1260 (CAS RN 11096-82-5).

7 Toxaphene: This entry includes congener chemicals contained in technical toxaphene (CAS RN 8001-35-2), i.e., chlorinated camphene.

8 Xylene (total): This entry includes o-xylene (CAS RN 96-47-6), m-xylene (CAS RN 108-38-3), p-xylene (CAS RN 106-42-3), and unspecified xylenes (dimethylbenzenes) (CAS RN 1330-20-7).

[70 FR 34556, June 14, 2005; 70 FR 44150, Aug. 1, 2005]

# CHAIN OF CUSTODY RECORD

348162

**Chambers Environmental Services**

4510 Mt. Henry Ave, San Diego, CA 92117
858.297.3266-O 619.889.9331-C

Client Name/Consultant: Alta Environmental

Address: 3777 Long Beach Blvd., Annex Bldg

City/State/Zip: Long Beach, CA 90807

Project Manager: K. Hubbard

562-495-5777 Fax No.: 562-400-8336

Sampler Name: (Print) D. Chambers

Sampler Signature: D. Chambers

Lab: Associated Laboratories

Report To: K. Hubbard

Invoice To: Same

Project ID: United Rock Products

Project #:

| Sample ID / Description | Date Sampled | Time Sampled | No. of Containers | Grab | Composite | Field Filtered | Matrix: Groundwater | Wastewater | Drinking Water | Sludge | Soil | Other (specify): | Analyze For: VOC's 8260B | 1-4 Dioxane | BTEX MTBE | Oxygenates | TPH Extended Range | CCR Metals | T.D. Cd, T.D. Cr, T.D. Pb, T.D. Ni | COD, TDS | Nitrate, Sulfate, Boron | PCE, TCE, MTBE, BTEX | Carbonate, Bi-Carbonate | TPH-Diesel | Appendix I, II List | See Attached Sheets | High Concentrations | Sulfate, Chloride, E.C., pH | 24H 48H 7-day rush | Standard TAT | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| IRW-B | 10/29/14 | 9:18 | 16 | x | | N | x | | | | | | x | | | | | | x | x | x | | | x | X | X | | | | X | |
| Pit 3-1 | ↓ | 10:45 | ↓ | ↓ | | ↓ | ↓ | | | | | | ↓ | | | | | | ↓ | ↓ | ↓ | | | ↓ | X | X | | ↓ | | | |
| Pit 3-2 | | 11:10 | | | | | | | | | | | | | | | | | | | | | | | X | X | | | | | |
| Yard Well | | 12:30 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pit 2-1 | | 1:20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pit 2-2 | ↓ | 1:45 | ↓ | ↓ | | ↓ | ↓ | | | | | | ↓ | | | | | | ↓ | ↓ | ↓ | | | ↓ | | | | ↓ | | | |
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**Special Instructions:**

Call and confirm before analysis.

**Method of Shipment:** FEDEX, Courrier, Client drop

**Laboratory Comments:**
Temperature Upon Receipt:
VOCs Free of Headspace? Y N

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| D. Chambers | 10/29/14 | 3:57 | | 10/29/14 | 15:57 |
| Relinquished by: | Date | Time | Received by: | Date | Time |

# CHAIN OF CUSTODY RECORD

**Chambers Environmental Services**

4510 Mt. Henry Ave, San Diego, CA 92117
858.297.3266-O 619.889.9331-C

348162

Client Name/Consultant: Alta Environmental
Address: 3777 Long Beach Blvd., Annex Bldg
City/State/Zip: Long Beach, CA 90807
Project Manager: K. Hubbard
562-495-5777 Fax No.: 562-400-8336
Sampler Name: (Print) D. Chambers
Sampler Signature: D. Chambers

Lab: Associated Laboratories
Report To: K. Hubbard
Invoice To: Same
Project ID: United Rock Products
Project #:

| Sample ID / Description | Date Sampled | Time Sampled | No. of Containers | Grab | Composite | Field Filtered | Matrix: Groundwater | Wastewater | Drinking Water | Sludge | Soil | Other (specify): | Analyze For: VOC's 8260B | 1-4 Dioxane | BTEX | MTBE | Oxygenates | TPH Extended Range | CCR Metals | T.D. Cd, T.D. Cr, T.D. Pb, T.D. Ni | COD, TDS | Nitrate, Sulfate, Boron | PCE, TCE, MTBE, BTEX | Carbonate, Bi-Carbonate | TPH-Diesel | Appendix I, II List | See Attached Sheets | High Concentrations | Sulfate, Chloride, E.C., pH | 24H 48H 7-day rush | Standard TAT | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| IRW-B | 10/29/14 | 9:18 | 16 | x | | N | x | | | | | | x | | | | | | | x | x | x | x | x | x | x | x | | x | | x | Total Hardness |
| Pit 3-1 | | 10:45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Alkalinity |
| Pit 3-2 | | 11:10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Vinyl Chloride |
| Yard Well | | 12:30 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pit 2-1 | | 1:20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pit 2-2 | | 1:45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Special Instructions:

Call and confirm before analysis.

Method of Shipment: FEDEX, Courrier, Client drop

Laboratory Comments:
Temperature Upon Receipt:
VOCs Free of Headspace? Y N

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| D. Chambers | 10/29/14 | 3:57 | | 10/29/14 | 15:57 |
| Relinquished by: | Date | Time | Received by: | Date | Time |

# CHAIN OF CUSTODY RECORD

**Chambers Environmental Services**

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Client Name/Consultant: Alta Environmental

Address: 3777 Long Beach Blvd., Annex Bldg

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Project Manager: K. Hubbard

562-495-5777 Fax No.: 562-400-8336

Sampler Name: (Print) D. Chambers

Sampler Signature: D. Chambers

Lab: Associated Laboratories

Report To: K. Hubbard

Invoice To: Same

Project ID: United Rock Products

Project #:

| Sample ID / Description | Date Sampled | Time Sampled | No. of Containers | Grab | Composite | Field Filtered | Matrix: Groundwater | Wastewater | Drinking Water | Sludge | Soil | Other (specify): | Analyze For: VOC's 8260B | 1-4 Dioxane | BTEX MTBE | Oxygenates | TPH Extended Range | CCR Metals | T.D. Cd, T.D. Cr, T.D. Pb, T.D. Ni | COD, TDS | Nitrate, Sulfate, Boron | PCE, TCE, MTBE, BTEX | Carbonate, Bi-Carbonate | TPH-Diesel | Appendix I, II List | See Attached Sheets | High Concentrations | Sulfate, Chloride, E.C., pH | 24H 48H 7-day rush | Standard TAT | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| IRW-B | 10/29/14 | 9:18 | 16 | x | | N | x | | | | | | x | | | | | | x | x | x | | | x | X | X | | x | | X | |
| Pit 3-1 | | 10:45 | ↓ | ↓ | | ↓ | ↓ | | | | | | ↓ | | | | | | ↓ | ↓ | ↓ | | | ↓ | X | X | | ↓ | | | |
| Pit 3-2 | | 11:10 | ↓ | | | | | | | | | | | | | | | | | | | | | | X | X | | | | | |
| Yard Well | | 12:30 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pit 2-1 | | 1:20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pit 2-2 | ↓ | 1:45 | ↓ | ↓ | | ↓ | ↓ | | | | | | ↓ | | | | | | ↓ | ↓ | ↓ | | | ↓ | | | | ↓ | | | |
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**Special Instructions:**

Call and confirm before analysis.

**Method of Shipment:** FEDEX, Courier, Client drop

**Laboratory Comments:**

Temperature Upon Receipt:

VOCs Free of Headspace? Y N

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| D. Chambers | 10/29/14 | 3:57 | | 10/29/14 | 15:57 |
| Relinquished by: | Date | Time | Received by: | Date | Time |

# Code of Federal Regulations

## Title 40 - Protection of Environment

Volume: 26
Date: 2012-07-01
Original Date: 2011-07-01
Title: Appendix I to Part 258 - Constituents for Detection Monitoring
Context: Title 40 - Protection of Environment. CHAPTER I - ENVIRONMENTAL PROTECTION AGENCY (CONTINUED). SUBCHAPTER I - SOLID WASTES. PART 258 - CRITERIA FOR MUNICIPAL SOLID WASTE LANDFILLS.

**Pt. 258, App. I**

### Appendix I to Part 258—Constituents for Detection Monitoring

| Common name 1 | CAS RN 2 |
|---|---|
| *Inorganic Constituents:* | |
| (1) Antimony | (Total) |
| (2) Arsenic | (Total) |
| (3) Barium | (Total) |
| (4) Beryllium | (Total) |
| (5) Cadmium | (Total) |
| (6) Chromium | (Total) |
| (7) Cobalt | (Total) |
| (8) Copper | (Total) |
| (9) Lead | (Total) |
| (10) Nickel | (Total) |
| (11) Selenium | (Total) |
| (12) Silver | (Total) |
| (13) Thallium | (Total) |
| (14) Vanadium | (Total) |
| (15) Zinc | (Total) |
| *Organic Constituents:* | |
| (16) Acetone | 67-64-1 |
| (17) Acrylonitrile | 107-13-1 |
| (18) Benzene | 71-43-2 |
| (19) Bromochloromethane | 74-97-5 |
| (20) Bromodichloromethane | 75-27-4 |
| (21) Bromoform; Tribromomethane | 75-25-2 |
| (22) Carbon disulfide | 75-15-0 |
| (23) Carbon tetrachloride | 56-23-5 |
| (24) Chlorobenzene | 108-90-7 |
| (25) Chloroethane; Ethyl chloride | 75-00-3 |
| (26) Chloroform; Trichloromethane | 67-66-3 |
| (27) Dibromochloromethane; Chlorodibromomethane | 124-48-1 |
| (28) 1,2-Dibromo-3-chloropropane; DBCP | 96-12-8 |

| | |
|---|---|
| (29) 1,2-Dibromoethane; Ethylene dibromide; EDB | 106-93-4 |
| (30) o-Dichlorobenzene; 1,2-Dichlorobenzene | 95-50-1 |
| (31) p-Dichlorobenzene; 1,4-Dichlorobenzene | 106-46-7 |
| (32) trans-1, 4-Dichloro-2-butene | 110-57-6 |
| (33) 1,1-Dichlorethane; Ethylidene chloride | 75-34-3 |
| (34) 1,2-Dichlorethane; Ethylene dichloride | 107-06-2 |
| (35) 1,1-Dichloroethylene; 1,1-Dichloroethene; Vinylidene chloride | 75-35-4 |
| (36) cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene | 156-59-2 |
| (37) trans-1, 2-Dichloroethylene; trans-1,2-Dichloroethene | 156-60-5 |
| (38) 1,2-Dichloropropane; Propylene dichloride | 78-87-5 |
| (39) cis-1,3-Dichloropropene | 10061-01-5 |
| (40) trans-1,3-Dichloropropene | 10061-02-6 |
| (41) Ethylbenzene | 100-41-4 |
| (42) 2-Hexanone; Methyl butyl ketone | 591-78-6 |
| (43) Methyl bromide; Bromomethane | 74-83-9 |
| (44) Methyl chloride; Chloromethane | 74-87-3 |
| (45) Methylene bromide; Dibromomethane | 74-95-3 |
| (46) Methylene chloride; Dichloromethane | 75-09-2 |
| (47) Methyl ethyl ketone; MEK; 2-Butanone | 78-93-3 |
| (48) Methyl iodide; Idomethane | 74-88-4 |
| (49) 4-Methyl-2-pentanone; Methyl isobutyl ketone | 108-10-1 |
| (50) Styrene | 100-42-5 |
| (51) 1,1,1,2-Tetrachloroethane | 630-20-6 |
| (52) 1,1,2,2-Tetrachloroethane | 79-34-5 |
| (53) Tetrachloroethylene; Tetrachloroethene; Perchloroethylene | 127-18-4 |
| (54) Toluene | 108-88-3 |
| (55) 1,1,1-Trichloroethane; Methylchloroform | 71-55-6 |
| (56) 1,1,2-Trichloroethane | 79-00-5 |
| (57) Trichloroethylene; Trichloroethene | 79-01-6 |
| (58) Trichlorofluoromethane; CFC-11 | 75-69-4 |
| (59) 1,2,3-Trichloropropane | 96-18-4 |
| (60) Vinyl acetate | 108-05-4 |
| (61) Vinyl chloride | 75-01-4 |
| (62) Xylenes | 1330-20-7 |

1 Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

2 Chemical Abstract Service registry number. Where "Total" is entered, all species in the ground water that contain this element are included.

[70 FR 34555, June 14, 2005; 70 FR 44150, Aug. 1, 2005]

# Code of Federal Regulations

## Title 40 - Protection of Environment

Volume: 26
Date: 2012-07-01
Original Date: 2011-07-01
Title: Appendix II to Part 258 - List of Hazardous Inorganic and Organic Constituents
Context: Title 40 - Protection of Environment. CHAPTER I - ENVIRONMENTAL PROTECTION AGENCY (CONTINUED). SUBCHAPTER I - SOLID WASTES. PART 258 - CRITERIA FOR MUNICIPAL SOLID WASTE LANDFILLS.

**Pt. 258, App. II**

### Appendix II to Part 258—List of Hazardous Inorganic and Organic Constituents

| Common name 1 | CAS RN 2 | Chemical abstracts service index name 3 |
|---|---|---|
| Acenaphthene | 83-32-9 | Acenaphthylene, 1,2-dihydro- |
| Acenaphthylene | 208-96-8 | Acenaphthylene |
| Acetone | 67-64-1 | 2-Propanone |
| Acetonitrile; Methyl cyanide | 75-05-8 | Acetonitrile |
| Acetophenone | 98-86-2 | Ethanone, 1-phenyl- |
| 2-Acetylaminofluorene; 2-AAF | 53-96-3 | Acetamide, N-9H-fluoren-2-yl- |
| Acrolein | 107-02-8 | 2-Propenal |
| Acrylonitrile | 107-13-1 | 2-Propenenitrile |
| Aldrin | 309-00-2 | 1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-(1,4,4a,5,8,8a)- |
| Allyl chloride | 107-05-1 | 1-Propene, 3-chloro- |
| 4-Aminobiphenyl | 92-67-1 | [1,1'-Biphenyl]-4-amine |
| Anthracene | 120-12-7 | Anthracene |
| Antimony | (Total) | Antimony |
| Arsenic | (Total) | Arsenic |
| Barium | (Total) | Barium |
| Benzene | 71-43-2 | Benzene |
| Benzo[a]anthracene; Benzanthracene | 56-55-3 | Benz[a]anthracene |
| Benzo[b]fluoranthene | 205-99-2 | Benz[e]acephenanthrylene |
| Benzo[k]fluoranthene | 207-08-9 | Benzo[k]fluoranthene |
| Benzo[ghi]perylene | 191-24-2 | Benzo[ghi]perylene |
| Benzo[a]pyrene | 50-32-8 | Benzo[a]pyrene |
| Benzyl alcohol | 100-51-6 | Benzenemethanol |
| Beryllium | (Total) | Beryllium |
| alpha-BHC | 319-84-6 | Cyclohexane, 1,2,3,4,5,6-hexachloro-,(1α,2α,3β,4α,5β,6β)- |

| | | |
|---|---|---|
| beta-BHC | 319-85-7 | Cyclohexane, 1,2,3,4,5,6-hexachloro-,(1α,2β,3α,4β,5α,6β)- |
| delta-BHC | 319-86-8 | Cyclohexane, 1,2,3,4,5,6-hexachloro-,(1α,2α,3α,4β,5α,6β)- |
| gamma-BHC; Lindane | 58-89-9 | Cyclohexane, 1,2,3,4,5,6- hexachloro-,(1α,2α, 3β, 4α,5α,6β)- |
| Bis(2-chloroethoxy)methane | 111-91-1 | Ethane, 1,1'-[methylenebis (oxy)]bis [2-chloro- |
| Bis(2-chloroethyl)ether; Dichloroethyl ether | 111-44-4 | Ethane, 1,1'-oxybis[2-chloro- |
| Bis(2-chloro-1-methylethyl) ether; 2,2' -Dichlorodiisopropyl ether; DCIP, See footnote 4 | 108-60-1 | Propane, 2,2'-oxybis[1-chloro- |
| Bis(2-ethylhexyl) phthalate | 117-81-7 | 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl)ester |
| Bromochloromethane; Chlorobromethane | 74-97-5 | Methane, bromochloro- |
| Bromodichloromethane; Dibromochloromethane | 75-27-4 | Methane, bromodichloro- |
| Bromoform; Tribromomethane | 75-25-2 | Methane, tribromo- |
| 4-Bromophenyl phenyl ether | 101-55-3 | Benzene, 1-bromo-4-phenoxy- |
| Butyl benzyl phthalate; Benzyl butyl phthalate | 85-68-7 | 1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester |
| Cadmium | (Total) | Cadmium |
| Carbon disulfide | 75-15-0 | Carbon disulfide |
| Carbon tetrachloride | 56-23-5 | Methane, tetrachloro- |
| Chlordane | See footnote 5 | 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro- |
| p-Chloroaniline | 106-47-8 | Benzenamine, 4-chloro- |
| Chlorobenzene | 108-90-7 | Benzene, chloro- |
| Chlorobenzilate | 510-15-6 | Benzeneacetic acid, 4-chloro--(4-chlorophenyl)- -hydroxy-, ethyl ester. |
| p-Chloro-m-cresol; 4-Chloro-3-methylphenol | 59-50-7 | Phenol, 4-chloro-3-methyl- |
| Chloroethane; Ethyl chloride | 75-00-3 | Ethane, chloro- |
| Chloroform; Trichloromethane | 67-66-3 | Methane, trichloro- |
| 2-Chloronaphthalene | 91-58-7 | Naphthalene, 2-chloro- |
| 2-Chlorophenol | 95-57-8 | Phenol, 2-chloro- |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | Benzene, 1-chloro-4-phenoxy- |
| Chloroprene | 126-99-8 | 1,3-Butadiene, 2-chloro- |
| Chromium | (Total) | Chromium |
| Chrysene | 218-01-9 | Chrysene |
| Cobalt | (Total) | Cobalt |
| Copper | (Total) | Copper |
| m-Cresol; 3-Methylphenol | 108-39-4 | Phenol, 3-methyl- |
| o-Cresol; 2-Methylphenol | 95-48-7 | Phenol, 2-methyl- |
| p-Cresol; 4-Methylphenol | 106-44-5 | Phenol, 4-methyl- |
| Cyanide | 57-12-5 | Cyanide |

| | | |
|---|---|---|
| 2,4-D; 2,4-Dichlorophenoxyacetic acid | 94-75-7 | Acetic acid, (2,4-dichlorophenoxy)- |
| 4,4'-DDD | 72-54-8 | Benzene 1,1'-(2,2-dichloroethylidene) bis[4-chloro- |
| 4,4'-DDE | 72-55-9 | Benzene, 1,1'-(dichloroethenylidene) bis[4-chloro- |
| 4,4'-DDT | 50-29-3 | Benzene, 1,1'-(2,2,2-trichloroethylidene) bis[4-chloro- |
| Diallate | 2303-16-4 | Carbamothioic acid, bis(1-methylethyl)-, S- (2,3-dichloro-2-propenyl) ester. |
| Dibenz[a,h]anthracene | 53-70-3 | Dibenz[a,h]anthracene |
| Dibenzofuran | 132-64-9 | Dibenzofuran |
| Dibromochloromethane; Chlorodibromomethane | 124-48-1 | Methane, dibromochloro- |
| 1,2-Dibromo-3-chloropropane; DBCP | 96-12-8 | Propane, 1,2-dibromo-3-chloro- |
| 1,2-Dibromoethane; Ethylene dibromide; EDB | 106-93-4 | Ethane, 1,2-dibromo- |
| Di-n-butyl phthalate | 84-74-2 | 1,2-Benzenedicarboxylic acid, dibutyl ester |
| o-Dichlorobenzene; 1,2-Dichlorobenzene | 95-50-1 | Benzene, 1,2-dichloro- |
| m-Dichlorobenzene; 1,3-Dichlorobenzene | 541-73-1 | Benzene, 1,3-dichloro- |
| p-Dichlorobenzene; 1,4-Dichlorobenzene | 106-46-7 | Benzene, 1,4-dichloro- |
| 3,3'-Dichlorobenzidine | 91-94-1 | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro- |
| trans-1,4-Dichloro-2-butene | 110-57-6 | 2-Butene, 1,4-dichloro-, (E)- |
| Dichlorodifluoromethane; CFC 12 | 75-71-8 | Methane, dichlorodifluoro- |
| 1,1-Dichloroethane; Ethyldidene chloride | 75-34-3 | Ethane, 1,1-dichloro- |
| 1,2-Dichloroethane; Ethylene dichloride | 107-06-2 | Ethane, 1,2-dichloro- |
| 1,1-Dichloroethylene; 1,1-Dichloroethene; | 75-35-4 | Ethene, 1,1-dichloro- |
| Vinylidene chloride cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene | 156-59-2 | Ethene, 1,2-dichloro-(Z)- |
| trans-1,2-Dichloroethylene; trans-1,2-Dichloroethene | 156-60-5 | Ethene, 1,2-dichloro-, (E)- |
| 2,4-Dichlorophenol | 120-83-2 | Phenol, 2,4-dichloro- |
| 2,6-Dichlorophenol | 87-65-0 | Phenol, 2,6-dichloro- |
| 1,2-Dichloropropane | 78-87-5 | Propane, 1,2-dichloro- |
| 1,3-Dichloropropane; Trimethylene dichloride | 142-28-9 | Propane, 1,3-dichloro- |
| 2,2-Dichloropropane; Isopropylidene chloride | 594-20-7 | Propane, 2,2-dichloro- |
| 1,1-Dichloropropene | 563-58-6 | 1-Propene, 1,1-dichloro- |
| cis-1,3-Dichloropropene | 10061-01-5 | 1-Propene, 1,3-dichloro-, (Z)- |
| trans-1,3-Dichloropropene | 10061-02-6 | 1-Propene, 1,3-dichloro-, (E)- |
| Dieldrin | 60-57-1 | 2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα,2β,2aα,3β,6β,6aα,7β,7aα)- |
| Diethyl phthalate | 84-66-2 | 1,2-Benzenedicarboxylic acid, diethyl ester |
| O,O-Diethyl O-2-pyrazinyl phosphorothioate; Thionazin | 297-97-2 | Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester. |
| Dimethoate | 60-51-5 | Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester |

| | | |
|---|---|---|
| p-(Dimethylamino)azobenzene | 60-11-7 | Benzenamine, N,N-dimethyl-4-(phenylazo)- |
| 7,12-Dimethylbenz[a]anthracene | 57-97-6 | Benz[a]anthracene, 7,12-dimethyl- |
| 3,3'-Dimethylbenzidine | 119-93-7 | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl- |
| alpha, alpha-Dimethylphenethylamine | 122-09-8 | Benzeneethanamine, α,α-dimethyl- |
| 2,4-Dimethylphenol; m-Xylenol | 105-67-9 | Phenol, 2,4-dimethyl- |
| Dimethyl phthalate | 131-11-3 | 1,2-Benzenedicarboxylic acid, dimethyl ester |
| m-Dinitrobenzene | 99-65-0 | Benzene, 1,3-dinitro- |
| 4,6-Dinitro-o-cresol; 4,6-Dinitro-2-methylphenol | 534-52-1 | Phenol, 2-methyl-4,6-dinitro- |
| 2,4-Dinitrophenol | 51-28-5 | Phenol, 2,4-dinitro- |
| 2,4-Dinitrotoluene | 121-14-2 | Benzene, 1-methyl-2,4-dinitro- |
| 2,6-Dinitrotoluene | 606-20-2 | Benzene, 2-methyl-1,3-dinitro- |
| Dinoseb; DNBP; 2-sec-Butyl-4,6-dinitrophenol | 88-85-7 | Phenol, 2-(1-methylpropyl)-4,6-dinitro- |
| Di-n-octyl phthalate | 117-84-0 | 1,2-Benzenedicarboxylic acid, dioctyl ester |
| Diphenylamine | 122-39-4 | Benzenamine, N-phenyl- |
| Disulfoton | 298-04-4 | Phosphorodithioic acid, O,O-diethyl S-[2- (ethylthio)ethyl] ester |
| Endosulfan I | 959-98-8 | 6,9-Methano-2,4,3-benzodiox-athiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide, |
| Endosulfan II | 33213-65-9 | 6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide, (3α,5aα,6β,9β, 9aα)- |
| Endosulfan sulfate | 1031-07-8 | 6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3,3-dioxide |
| Endrin | 72-20-8 | 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα, 2β,2aβ, 3α,6α,6aβ,7β,7aα)- |
| Endrin aldehyde | 7421-93-4 | 1,2,4-Methenocyclo-penta[cd]pentalene-5-carboxaldehyde,2,2a,3,3,4,7-hexachlorodecahydro-(1α,2β,2aβ,4β,4aβ,5β,6aβ,6bβ,7R*)- |
| Ethylbenzene | 100-41-4 | Benzene, ethyl- |
| Ethyl methacrylate | 97-63-2 | 2-Propenoic acid, 2-methyl-, ethyl ester |
| Ethyl methanesulfonate | 62-50-0 | Methanesulfonic acid, ethyl ester |
| Famphur | 52-85-7 | Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl]-O,O-dimethyl ester |
| Fluoranthene | 206-44-0 | Fluoranthene |
| Fluorene | 86-73-7 | 9H-Fluorene |
| Heptachlor | 76-44-8 | 4,7-Methano-1H-indene,1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- |
| Heptachlor epoxide | 1024-57-3 | 2,5-Methano-2H-indeno[1,2-b]oxirene,2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a,-hexahydro-,(1aα,1bβ,2α,5α,5aβ,6β,6aα) |
| Hexachlorobenzene | 118-74-1 | Benzene, hexachloro- |
| Hexachlorobutadiene | 87-68-3 | 1,3-Butadiene, 1,1,2,3,4,4-hexachloro- |
| Hexachlorocyclopentadiene | 77-47-4 | 1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro- |
| Hexachloroethane | 67-72-1 | Ethane, hexachloro- |

| | | |
|---|---|---|
| Hexachloropropene | 1888-71-7 | 1-Propene, 1,1,2,3,3,3-hexachloro- |
| 2-Hexanone; Methyl butyl ketone | 591-78-6 | 2-Hexanone |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | Indeno[1,2,3-cd]pyrene |
| Isobutyl alcohol | 78-83-1 | 1-Propanol, 2-methyl- |
| Isodrin | 465-73-6 | 1,4,5,8-Dimethanonaphthalene,1,2,3,4,1 0,10-hexachloro-1,4,4a,5,8,8a hexahydro-(1α, 4α, 4aβ,5β,8β,8aβ)- |
| Isophorone | 78-59-1 | 2-Cyclohexen-1-one, 3,5,5-trimethyl- |
| Isosafrole | 120-58-1 | 1,3-Benzodioxole, 5-(1-propenyl)- |
| Kepone | 143-50-0 | 1,3,4-Metheno-2H-cyclobuta-[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro- |
| Lead | (Total) | Lead |
| Mercury | (Total) | Mercury |
| Methacrylonitrile | 126-98-7 | 2-Propenenitrile, 2-methyl- |
| Methapyrilene | 91-80-5 | 1,2,Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)- |
| Methoxychlor | 72-43-5 | Benzene, 1,1'-(2,2,2,trichloroethylidene)bis [4-methoxy- |
| Methyl bromide; Bromomethane | 74-83-9 | Methane, bromo- |
| Methyl chloride; Chloromethane | 74-87-3 | Methane, chloro- |
| 3-Methylcholanthrene | 56-49-5 | Benz[j]aceanthrylene, 1,2-dihydro-3-methyl- |
| Methyl ethyl ketone; MEK; 2-Butanone | 78-93-3 | 2-Butanone |
| Methyl iodide; Iodomethane | 74-88-4 | Methane, iodo- |
| Methyl methacrylate | 80-62-6 | 2-Propenoic acid, 2-methyl-, methyl ester |
| Methyl methanesulfonate | 66-27-3 | Methanesulfonic acid, methyl ester |
| 2-Methylnaphthalene | 91-57-6 | Naphthalene, 2-methyl- |
| Methyl parathion; Parathion methyl | 298-00-0 | Phosphorothioic acid, O,O-dimethyl |
| 4-Methyl-2-pentanone; Methyl isobutyl ketone | 108-10-1 | 2-Pentanone, 4-methyl- |
| Methylene bromide; Dibromomethane | 74-95-3 | Methane, dibromo- |
| Methylene chloride; Dichloromethane | 75-09-2 | Methane, dichloro- |
| Naphthalene | 91-20-3 | Naphthalene |
| 1,4-Naphthoquinone | 130-15-4 | 1,4-Naphthalenedione |
| 1-Naphthylamine | 134-32-7 | 1-Naphthalenamine |
| 2-Naphthylamine | 91-59-8 | 2-Naphthalenamine |
| Nickel | (Total) | Nickel |
| o-Nitroaniline; 2-Nitroaniline | 88-74-4 | Benzenamine, 2-nitro- |
| m-Nitroaniline; 3-Nitroaniline | 99-09-2 | Benzenamine, 3-nitro- |
| p-Nitroaniline; 4-Nitroaniline | 100-01-6 | Benzenamine, 4-nitro- |
| Nitrobenzene | 98-95-3 | Benzene, nitro- |
| o-Nitrophenol; 2-Nitrophenol | 88-75-5 | Phenol, 2-nitro- |
| p-Nitrophenol; 4-Nitrophenol | 100-02-7 | Phenol, 4-nitro- |
| | | |

| | | |
|---|---|---|
| N-Nitrosodi-n-butylamine | 924-16-3 | 1-Butanamine, N-butyl-N-nitroso- |
| N-Nitrosodiethylamine | 55-18-5 | Ethanamine, N-ethyl-N-nitroso- |
| N-Nitrosodimethylamine | 62-75-9 | Methanamine, N-methyl-N-nitroso- |
| N-Nitrosodiphenylamine | 86-30-6 | Benzenamine, N-nitroso-N-phenyl- |
| N-Nitrosodipropylamine; N-Nitroso-N-dipropylamine; Di-n-propylnitrosamine | 621-64-7 | 1-Propanamine, N-nitroso-N-propyl- |
| N-Nitrosomethylethalamine | 10595-95-6 | Ethanamine, N-methyl-N-nitroso- |
| N-Nitrosopiperidine | 100-75-4 | Piperidine, 1-nitroso- |
| N-Nitrosopyrrolidine | 930-55-2 | Pyrrolidine, 1-nitroso- |
| 5-Nitro-o-toluidine | 99-55-8 | Benzenamine, 2-methyl-5-nitro- |
| Parathion | 56-38-2 | Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester |
| Pentachlorobenzene | 608-93-5 | Benzene, pentachloro- |
| Pentachloronitrobenzene | 82-68-8 | Benzene, pentachloronitro- |
| Pentachlorophenol | 87-86-5 | Phenol, pentachloro- |
| Phenacetin | 62-44-2 | Acetamide, N-(4-ethoxyphenyl) |
| Phenanthrene | 85-01-8 | Phenanthrene |
| Phenol | 108-95-2 | Phenol |
| p-Phenylenediamine | 106-50-3 | 1,4-Benzenediamine |
| Phorate | 298-02-2 | Phosphorodithioic acid, O,O-diethyl S- [(ethylthio)methyl] ester |
| Polychlorinated biphenyls; PCBs | See footnote 6 | 1,1'-Biphenyl, chloro derivatives |
| Pronamide | 23950-58-5 | Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)- |
| Propionitrile; Ethyl cyanide | 107-12-0 | Propanenitrile |
| Pyrene | 129-00-0 | Pyrene |
| Safrole | 94-59-7 | 1,3-Benzodioxole, 5-(2- propenyl)- |
| Selenium | (Total) | Selenium |
| Silver | (Total) | Silver |
| Silvex; 2,4,5-TP | 93-72-1 | Propanoic acid, 2-(2,4,5- trichlorophenoxy)- |
| Styrene | 100-42-5 | Benzene, ethenyl- |
| Sulfide | 18496-25-8 | Sulfide |
| 2,4,5-T; 2,4,5-Trichlorophenoxyacetic acid | 93-76-5 | Acetic acid, (2,4,5- trichlorophenoxy)- |
| 2,3,7,8-TCDD; 2,3,7,8-Tetrachlorodibenzo- p-dioxin | 1746-01-6 | Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro- |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | Benzene, 1,2,4,5-tetrachloro- |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | Ethane, 1,1,1,2-tetrachloro- |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | Ethane, 1,1,2,2-tetrachloro- |
| Tetrachloroethylene; Tetrachloroethene; Perchloroethylene | 127-18-4 | Ethene, tetrachloro- |

| | | |
|---|---|---|
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | Phenol, 2,3,4,6-tetrachloro- |
| Thallium | (Total) | Thallium |
| Tin | (Total) | Tin |
| Toluene | 108-88-3 | Benzene, methyl- |
| o-Toluidine | 95-53-4 | Benzenamine, 2-methyl- |
| Toxaphene | See footnote 7 | Toxaphene |
| 1,2,4-Trichlorobenzene | 120-82-1 | Benzene, 1,2,4-trichloro- |
| 1,1,1-Trichloroethane; Methylchloroform | 71-55-6 | Ethane, 1,1,1-trichloro- |
| 1,1,2-Trichloroethane | 79-00-5 | Ethane, 1,1,2-trichloro- |
| Trichloroethylene; Trichloroethene | 79-01-6 | Ethene, trichloro- |
| Trichlorofluoromethane; CFC-11 | 75-69-4 | Methane, trichlorofluoro- |
| 2,4,5-Trichlorophenol | 95-95-4 | Phenol, 2,4,5-trichloro- |
| 2,4,6-Trichlorophenol | 88-06-2 | Phenol, 2,4,6-trichloro- |
| 1,2,3-Trichloropropane | 96-18-4 | Propane, 1,2,3-trichloro- |
| O,O,O-Triethyl phosphorothioate | 126-68-1 | Phosphorothioic acid, O,O,O-triethyl ester |
| sym-Trinitrobenzene | 99-35-4 | Benzene, 1,3,5-trinitro- |
| Vanadium | (Total) | Vanadium |
| Vinyl acetate | 108-05-4 | Acetic acid, ethenyl ester |
| Vinyl chloride; Chloroethene | 75-01-4 | Ethene, chloro- |
| Xylene (total) | See footnote 8 | Benzene, dimethyl- |
| Zinc | (Total) | Zinc |

1 Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

2 Chemical Abstracts Service registry number. Where "Total" is entered, all species in the ground water that contain this element are included.

3 CAS index names are those used in the 9th Cumulative Index.

4 This substance is often called bis(2-chloroisopropyl) ether, the name Chemical Abstracts Service applies to its noncommercial isomer, propane, 2,2"-oxybis[2-chloro-(CAS RN 39638-32-9).

5 Chlordane: This entry includes alpha-chlordane (CAS RN 5103-71-9), beta-chlordane (CAS RN 5103-74-2), gamma-chlordane (CAS RN 5566-34-7), and constituents of chlordane (CAS RN 57-74-9 and CAS RN 12789-03-6).

6 Polychlorinated biphenyls (CAS RN 1336-36-3); this category contains congener chemicals, including constituents of Aroclor-1016 (CAS RN 12674-11-2), Aroclor-1221 (CAS RN 11104-28-2), Aroclor-1232 (CAS RN 11141-16-5), Aroclor-1242 (CAS RN 53469-21-9), Aroclor-1248 (CAS RN 12672-29-6), Aroclor-1254 (CAS RN 11097-69-1), and Aroclor-1260 (CAS RN 11096-82-5).

7 Toxaphene: This entry includes congener chemicals contained in technical toxaphene (CAS RN 8001-35-2), i.e., chlorinated camphene.

8 Xylene (total): This entry includes o-xylene (CAS RN 96-47-6), m-xylene (CAS RN 108-38-3), p-xylene (CAS RN 106-42-3), and unspecified xylenes (dimethylbenzenes) (CAS RN 1330-20-7).

[70 FR 34556, June 14, 2005; 70 FR 44150, Aug. 1, 2005]

Project Name: United Rock Products

Date: 10-29-14

**Water Level Data Sheet**

Project Number: _____

| Well ID | Time | DTW | Ref Pt. | ~ Elev. | Well TD | | Comments: |
|---|---|---|---|---|---|---|---|
| Yard Well | 12:19 | 235.20 | 405.6 | | | | (IRW-1) PUMP ON |
| IRW-1A | 2:39 | 195.61 | 380.94 | | | | (Pit-1) MUCK/MUD |
| IRW-1B | 2:45 | 194.60 | 380.03 | | | | (Pit 1) |
| IRW-A | 8:00 | 249.37 | 437.27 | | 249.6 | | (Pit 3) DRY WELL/END CAP ONLY |
| IRW-B | 8:31 | 225.93 | 406.95 | | 250.1 | | (Pit 3) |

DTFP = Depth to Free Product
DTW = Depth to Water
FPT = Free Product Thickness
TD = Total Depth
DNAPL = Dense Non-Aqueous Phase Liquid

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: Dak

## *Chambers Environmental Services, Inc*
## Sampling Data Sheet

Date: 10-29-14

Well ID: IRW-B

**Purge Data**

| (Variable) Time | 0.2 C Temp. | 3-5% E.C.(uS) | 0.2 u pH | 20mv ORP | 0.2mg/L DO | 10% Turbidity | ML Volume | DTW | Notes |
|---|---|---|---|---|---|---|---|---|---|
| Start: 8:50 | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | 225.83 | |
| 9:06 | 19.6 | 701.4 | 8.20 | 32 | 8.41 | 66.80 | 500 | 225.85 | SILTY WATER |
| 9:11 | 20.6 | 668.7 | 8.40 | 24 | 8.42 | 59.56 | 900 | 225.85 | |
| 9:14 | 21.0 | 656.6 | 8.40 | 22 | 8.49 | 67.70 | 1200 | 225.84 | |
| 9:17 | 21.1 | 651.7 | 8.42 | 21 | 8.66 | 66.12 | 1500 | 225.85 | |
| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | ~100 | ML/MIN | | | | | | | |

Purge Pump: Bladder
Pump Set Time: 8:00
Pump/Inlet Depth (BGS): 240'

Decon:
Triple-Rinse

Total Vol. Purged 1500
Final Temp.: 21.1
Final EC: 651.7
Final pH: 8.42
Final ORP: 21
Final DO: 8.66
Draw Down: 0.02

Sample Start: 9:18
Sample St
Analyses: Sample Container:

Sample ID: /
(If different from above)
DTW @ Sample:

**Well Data**

| | |
|---|---|
| Bore OD: | 10" |
| Casing ID: | 4" |
| **Well TD:** | 250.1 |
| **D.T.W.:** | 225.83 |
| Ft./ Water: | |

Special Notes for This Well:

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

**Methods:** 1=3 BV sample after 80%.
2= 1 BV and monitor parameters each 0.5 BV.
3=Low-flow.
4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: DwC

## *Chambers Environmental Services, Inc*
## Sampling Data Sheet

Date: 10-29-14

~~Well~~ ID: PIT 3-1

**Purge Data**

| (Variable) | 0.2 C | 3-5% | 0.2 u | 20mv | 0.2mg/L | 10% | ML | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | Temp. | E.C.(uS) | pH | ORP | DO | Turbidity | Volume | DTW | Notes |
| Start: | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | | |
| 10:44 | 23.6 | 258 | 8.08 | 56 | 4.10 | 6.16 | — | — | |
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| | | | | | | | | | |
| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

Purge Pump: _____

Pump Set Time: _____

Pump/Inlet Depth (BGS): _____

Decon:

Triple-Rinse

Total Vol. Purged _____

Final Temp.: _____

Final EC: _____

Final pH: _____

Final ORP: _____

Final DO: _____

Draw Down: _____

Sample Start: _____

Sample St _____

Analyses: Sample Container:

Sample ID: _____

(If different from above)

DTW @ Sample: _____

**Well Data**

Bore OD:

Casing ID:

**Well TD:**

**D.T.W.:**

Ft./ Water:

Special Notes for This Well:

**Meters:**

Solinst 12202 Interphase Probe

Oakton 300 Series

Purge Method: 3

**Methods:** 1=3 BV sample after 80%.

2= 1 BV and monitor parameters each 0.5 BV.

3=Low-flow.

4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: DVC

## *Chambers Environmental Services, Inc*
## Sampling Data Sheet

Date: 10-29-14

~~Well~~ ID: AT3-2

**Purge Data**

| (Variable) | 0.2 C | 3-5% | 0.2 u | 20mv | 0.2mg/L | 10% | ML | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | Temp. | E.C.(uS) | pH | ORP | DO | Turbidity | Volume | DTW | Notes |
| Start: | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | | |
| | | | | | | | | | |
| 11:05 | 26.7 | 252 | 7.88 | 45 | 3.89 | 7.12 | – | – | |
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| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

Purge Pump: _____
Pump Set Time: _____
Pump/Inlet Depth (BGS): _____

Decon:
Triple-Rinse

Total Vol. Purged _____
Final Temp.: _____
Final EC: _____
Final pH: _____
Final ORP: _____
Final DO: _____
Draw Down: _____

Sample Start: _____
Sample St _____
Analyses: Sample Container:

Sample ID: _____
(If different from above)
DTW @ Sample: _____

**Well Data**
Bore OD:
Casing ID:
**Well TD:**
**D.T.W.:**
Ft./ Water:

Special Notes for This Well:

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

**Methods:** 1=3 BV sample after 80%.
2= 1 BV and monitor parameters each 0.5 BV
3=Low-flow.
4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: DWC

## *Chambers Environmental Services, Inc*
## Sampling Data Sheet

Date: 10-29-14

Well ID: Yard well

**Purge Data**

| (Variable) | 0.2 C | 3-5% | 0.2 u | 20mv | 0.2mg/L | 10% | ML | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | Temp. | E.C.(uS) | pH | ORP | DO | Turbidity | Volume | DTW | Notes |
| Start: | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | | |
| 12:25 | 21.1 | 370 | 8.05 | 54 | 4.66 | 3.98 | — | 235.20 | |
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| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

Purge Pump: Dedicated

Pump Set Time: —

Pump/Inlet Depth (BGS): —

Decon:
Triple-Rinse

Total Vol. Purged _____

Final Temp.: _____

Final EC: _____

Final pH: _____

Final ORP: _____

Final DO: _____

Draw Down: _____

Sample Start: 12:30

Sample St 12:41

Analyses: Sample Container:

Sample ID: _____

(If different from above)

DTW @ Sample: _____

**Well Data**

Bore OD: 12

Casing ID: 12

**Well TD:**

**D.T.W.:** 235.20

Ft./ Water:

Special Notes for This Well:

**Meters:**

Solinst 12202 Interphase Probe

Oakton 300 Series

Purge Method: 3

**Methods:** 1=3 BV sample after 80%.

2= 1 BV and monitor parameters each 0.5 BV.

3=Low-flow.

4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: DK

## *Chambers Environmental Services, Inc*
## Sampling Data Sheet

Date: 10-29-14

~~Well~~ ID: PIT 2-1

**Purge Data**

| (Variable) Time | 0.2 C Temp. | 3-5% E.C.(uS) | 0.2 u pH | 20mv ORP | 0.2mg/L DO | 10% Turbidity | ML Volume | DTW | Notes |
|---|---|---|---|---|---|---|---|---|---|
| Start: | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | | |
| 1:15 | 24.7 | 275 | 8.98 | 96 | 3.89 | 3.66 | — | — | |
| | | | | | | | | | |
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| | | | | | | | | | |
| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

Purge Pump: _____
Pump Set Time: _____
Pump/Inlet Depth (BGS): _____

Decon:
Triple-Rinse

Total Vol. Purged _____
Final Temp.: _____
Final EC: _____
Final pH: _____
Final ORP: _____
Final DO: _____
Draw Down: _____

Sample Start: 1:20
Sample St 1:35
Analyses: Sample Container: 9

Sample ID: _____
(If different from above)
DTW @ Sample: _____

**Well Data**
Bore OD:
Casing ID:
**Well TD:**
**D.T.W.:**
Ft./ Water:

Special Notes for This Well:

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

**Methods:** 1=3 BV sample after 80%.
2= 1 BV and monitor parameters each 0.5 BV.
3=Low-flow.
4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: BVC

## *Chambers Environmental Services, Inc*
## Sampling Data Sheet

Date: 10-29-14

~~Well~~ ID: PIT 2-2

**Purge Data**

| (Variable) Time | 0.2 C Temp. | 3-5% E.C.(uS) | 0.2 u pH | 20mv ORP | 0.2mg/L DO | 10% Turbidity | ML Volume | DTW | Notes |
|---|---|---|---|---|---|---|---|---|---|
| Start: | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | | |
| 1:40 | 24.5 | 278 | 9.01 | 66 | 3.88 | 4.96 | — | - | |
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| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

Purge Pump: _____
Pump Set Time: _____
Pump/Inlet Depth (BGS): _____

Decon:
Triple-Rinse

Total Vol. Purged _____
Final Temp.: _____
Final EC: _____
Final pH: _____
Final ORP: _____
Final DO: _____
Draw Down: _____

Sample Start: 1:45
Sample St _____
Analyses: Sample Container:
9

Sample ID: _____
(If different from above)
DTW @ Sample: _____

**Well Data**
Bore OD:
Casing ID:
**Well TD:**
**D.T.W.:**
Ft./ Water:

Special Notes for This Well:

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

**Methods:** 1=3 BV sample after 80%.
2= 1 BV and monitor parameters each 0.5 BV.
3=Low-flow.
4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

# CHAIN OF CUSTODY RECORD

**Chambers Environmental Services**

4510 Mt. Henry Ave, San Diego, CA 92117
858.297.3266-O 619.889.9331-C

Client Name/Consultant: Alta Environmental

Address: 3777 Long Beach Blvd., Annex Bldg

City/State/Zip: Long Beach, CA 90807

Project Manager: K. Hubbard

562-495-5777 Fax No.: 562-400-8336

Sampler Name: (Print) D. Chambers

Sampler Signature: D. Chambers

Lab: Associated Laboratories

Report To: K. Hubbard

Invoice To: Same

Project ID: United Rock Products

Project #:

| Sample ID / Description | Date Sampled | Time Sampled | No. of Containers | Grab | Composite | Field Filtered | Matrix: Groundwater | Wastewater | Drinking Water | Sludge | Soil | Other (specify): | Analyze For: VOC's 8260B | 1-4 Dioxane | BTEX MTBE | Oxygenates | TPH Extended Range | CCR Metals | T.D. Cd, T.D. Cr, T.D. Pb, T.D. Ni | COD, TDS | Nitrate, Sulfate, Boron | PCE, TCE, MTBE, BTEX | Carbonate, Bi-Carbonate | TPH-Diesel | Appendix I, II List | See Attached Sheets | High Concentrations | Sulfate, Chloride, E.C., pH | 24H 48H 7-day rush | Standard TAT | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| IRW-B | 10/29/14 | 9:18 | 16 | x | | N | x | | | | | | x | | | | | | x | x | x | | | x | X | X | | x | | X | |
| Pit 3-1 | | 10:45 | ↓ | ↓ | | ↓ | ↓ | | | | | | ↓ | | | | | | ↓ | ↓ | ↓ | | | ↓ | X | X | | ↓ | | | |
| Pit 3-2 | | 11:10 | ↓ | | | | | | | | | | | | | | | | | | | | | | X | X | | | | | |
| Yard Well | | 12:30 | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pit 2-1 | | 1:20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pit 2-2 | ↓ | 1:45 | ↓ | ↓ | | ↓ | ↓ | | | | | | ↓ | | | | | | ↓ | ↓ | ↓ | | | ↓ | | | | ↓ | | | |
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**Special Instructions:**

Call and confirm before analysis.

**Method of Shipment:** FEDEX, Courier, Client drop

**Laboratory Comments:**

Temperature Upon Receipt:

VOCs Free of Headspace? Y N

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| D. Chambers | 10/29/14 | 3:57 | | 10/29/14 | 15:57 |
| Relinquished by: | Date | Time | Received by: | Date | Time |

# Code of Federal Regulations

## Title 40 - Protection of Environment

Volume: 26
Date: 2012-07-01
Original Date: 2011-07-01
Title: Appendix I to Part 258 - Constituents for Detection Monitoring
Context: Title 40 - Protection of Environment. CHAPTER I - ENVIRONMENTAL PROTECTION AGENCY (CONTINUED). SUBCHAPTER I - SOLID WASTES. PART 258 - CRITERIA FOR MUNICIPAL SOLID WASTE LANDFILLS.

**Pt. 258, App. I**

### Appendix I to Part 258—Constituents for Detection Monitoring

| Common name 1 | CAS RN 2 |
|---|---|
| *Inorganic Constituents:* | |
| (1) Antimony | (Total) |
| (2) Arsenic | (Total) |
| (3) Barium | (Total) |
| (4) Beryllium | (Total) |
| (5) Cadmium | (Total) |
| (6) Chromium | (Total) |
| (7) Cobalt | (Total) |
| (8) Copper | (Total) |
| (9) Lead | (Total) |
| (10) Nickel | (Total) |
| (11) Selenium | (Total) |
| (12) Silver | (Total) |
| (13) Thallium | (Total) |
| (14) Vanadium | (Total) |
| (15) Zinc | (Total) |
| *Organic Constituents:* | |
| (16) Acetone | 67-64-1 |
| (17) Acrylonitrile | 107-13-1 |
| (18) Benzene | 71-43-2 |
| (19) Bromochloromethane | 74-97-5 |
| (20) Bromodichloromethane | 75-27-4 |
| (21) Bromoform; Tribromomethane | 75-25-2 |
| (22) Carbon disulfide | 75-15-0 |
| (23) Carbon tetrachloride | 56-23-5 |
| (24) Chlorobenzene | 108-90-7 |
| (25) Chloroethane; Ethyl chloride | 75-00-3 |
| (26) Chloroform; Trichloromethane | 67-66-3 |
| (27) Dibromochloromethane; Chlorodibromomethane | 124-48-1 |
| (28) 1,2-Dibromo-3-chloropropane; DBCP | 96-12-8 |

| | |
|---|---|
| (29) 1,2-Dibromoethane; Ethylene dibromide; EDB | 106-93-4 |
| (30) o-Dichlorobenzene; 1,2-Dichlorobenzene | 95-50-1 |
| (31) p-Dichlorobenzene; 1,4-Dichlorobenzene | 106-46-7 |
| (32) trans-1, 4-Dichloro-2-butene | 110-57-6 |
| (33) 1,1-Dichlorethane; Ethylidene chloride | 75-34-3 |
| (34) 1,2-Dichlorethane; Ethylene dichloride | 107-06-2 |
| (35) 1,1-Dichloroethylene; 1,1-Dichloroethene; Vinylidene chloride | 75-35-4 |
| (36) cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene | 156-59-2 |
| (37) trans-1, 2-Dichloroethylene; trans-1,2-Dichloroethene | 156-60-5 |
| (38) 1,2-Dichloropropane; Propylene dichloride | 78-87-5 |
| (39) cis-1,3-Dichloropropene | 10061-01-5 |
| (40) trans-1,3-Dichloropropene | 10061-02-6 |
| (41) Ethylbenzene | 100-41-4 |
| (42) 2-Hexanone; Methyl butyl ketone | 591-78-6 |
| (43) Methyl bromide; Bromomethane | 74-83-9 |
| (44) Methyl chloride; Chloromethane | 74-87-3 |
| (45) Methylene bromide; Dibromomethane | 74-95-3 |
| (46) Methylene chloride; Dichloromethane | 75-09-2 |
| (47) Methyl ethyl ketone; MEK; 2-Butanone | 78-93-3 |
| (48) Methyl iodide; Idomethane | 74-88-4 |
| (49) 4-Methyl-2-pentanone; Methyl isobutyl ketone | 108-10-1 |
| (50) Styrene | 100-42-5 |
| (51) 1,1,1,2-Tetrachloroethane | 630-20-6 |
| (52) 1,1,2,2-Tetrachloroethane | 79-34-5 |
| (53) Tetrachloroethylene; Tetrachloroethene; Perchloroethylene | 127-18-4 |
| (54) Toluene | 108-88-3 |
| (55) 1,1,1-Trichloroethane; Methylchloroform | 71-55-6 |
| (56) 1,1,2-Trichloroethane | 79-00-5 |
| (57) Trichloroethylene; Trichloroethene | 79-01-6 |
| (58) Trichlorofluoromethane; CFC-11 | 75-69-4 |
| (59) 1,2,3-Trichloropropane | 96-18-4 |
| (60) Vinyl acetate | 108-05-4 |
| (61) Vinyl chloride | 75-01-4 |
| (62) Xylenes | 1330-20-7 |

1 Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

2 Chemical Abstract Service registry number. Where "Total" is entered, all species in the ground water that contain this element are included.

[70 FR 34555, June 14, 2005; 70 FR 44150, Aug. 1, 2005]

# Code of Federal Regulations

## Title 40 - Protection of Environment

Volume: 26
Date: 2012-07-01
Original Date: 2011-07-01
Title: Appendix II to Part 258 - List of Hazardous Inorganic and Organic Constituents
Context: Title 40 - Protection of Environment. CHAPTER I - ENVIRONMENTAL PROTECTION AGENCY (CONTINUED). SUBCHAPTER I - SOLID WASTES. PART 258 - CRITERIA FOR MUNICIPAL SOLID WASTE LANDFILLS.

**Pt. 258, App. II**

### Appendix II to Part 258—List of Hazardous Inorganic and Organic Constituents

| Common name 1 | CAS RN 2 | Chemical abstracts service index name 3 |
|---|---|---|
| Acenaphthene | 83-32-9 | Acenaphthylene, 1,2-dihydro- |
| Acenaphthylene | 208-96-8 | Acenaphthylene |
| Acetone | 67-64-1 | 2-Propanone |
| Acetonitrile; Methyl cyanide | 75-05-8 | Acetonitrile |
| Acetophenone | 98-86-2 | Ethanone, 1-phenyl- |
| 2-Acetylaminofluorene; 2-AAF | 53-96-3 | Acetamide, N-9H-fluoren-2-yl- |
| Acrolein | 107-02-8 | 2-Propenal |
| Acrylonitrile | 107-13-1 | 2-Propenenitrile |
| Aldrin | 309-00-2 | 1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-(1,4,4a,5,8,8a)- |
| Allyl chloride | 107-05-1 | 1-Propene, 3-chloro- |
| 4-Aminobiphenyl | 92-67-1 | [1,1'-Biphenyl]-4-amine |
| Anthracene | 120-12-7 | Anthracene |
| Antimony | (Total) | Antimony |
| Arsenic | (Total) | Arsenic |
| Barium | (Total) | Barium |
| Benzene | 71-43-2 | Benzene |
| Benzo[a]anthracene; Benzanthracene | 56-55-3 | Benz[a]anthracene |
| Benzo[b]fluoranthene | 205-99-2 | Benz[e]acephenanthrylene |
| Benzo[k]fluoranthene | 207-08-9 | Benzo[k]fluoranthene |
| Benzo[ghi]perylene | 191-24-2 | Benzo[ghi]perylene |
| Benzo[a]pyrene | 50-32-8 | Benzo[a]pyrene |
| Benzyl alcohol | 100-51-6 | Benzenemethanol |
| Beryllium | (Total) | Beryllium |
| alpha-BHC | 319-84-6 | Cyclohexane, 1,2,3,4,5,6-hexachloro-,(1α,2α,3β,4α,5β,6β)- |

| | | |
|---|---|---|
| beta-BHC | 319-85-7 | Cyclohexane, 1,2,3,4,5,6-hexachloro-,(1α,2β,3α,4β,5α,6β)- |
| delta-BHC | 319-86-8 | Cyclohexane, 1,2,3,4,5,6-hexachloro-,(1α,2α,3α,4β,5α,6β)- |
| gamma-BHC; Lindane | 58-89-9 | Cyclohexane, 1,2,3,4,5,6- hexachloro-,(1α,2α, 3β, 4α,5α,6β)- |
| Bis(2-chloroethoxy)methane | 111-91-1 | Ethane, 1,1'-[methylenebis (oxy)]bis [2-chloro- |
| Bis(2-chloroethyl)ether; Dichloroethyl ether | 111-44-4 | Ethane, 1,1'-oxybis[2-chloro- |
| Bis(2-chloro-1-methylethyl) ether; 2,2' -Dichlorodiisopropyl ether; DCIP, See footnote 4 | 108-60-1 | Propane, 2,2'-oxybis[1-chloro- |
| Bis(2-ethylhexyl) phthalate | 117-81-7 | 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl)ester |
| Bromochloromethane; Chlorobromethane | 74-97-5 | Methane, bromochloro- |
| Bromodichloromethane; Dibromochloromethane | 75-27-4 | Methane, bromodichloro- |
| Bromoform; Tribromomethane | 75-25-2 | Methane, tribromo- |
| 4-Bromophenyl phenyl ether | 101-55-3 | Benzene, 1-bromo-4-phenoxy- |
| Butyl benzyl phthalate; Benzyl butyl phthalate | 85-68-7 | 1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester |
| Cadmium | (Total) | Cadmium |
| Carbon disulfide | 75-15-0 | Carbon disulfide |
| Carbon tetrachloride | 56-23-5 | Methane, tetrachloro- |
| Chlordane | See footnote 5 | 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro- |
| p-Chloroaniline | 106-47-8 | Benzenamine, 4-chloro- |
| Chlorobenzene | 108-90-7 | Benzene, chloro- |
| Chlorobenzilate | 510-15-6 | Benzeneacetic acid, 4-chloro--(4-chlorophenyl)- -hydroxy-, ethyl ester. |
| p-Chloro-m-cresol; 4-Chloro-3-methylphenol | 59-50-7 | Phenol, 4-chloro-3-methyl- |
| Chloroethane; Ethyl chloride | 75-00-3 | Ethane, chloro- |
| Chloroform; Trichloromethane | 67-66-3 | Methane, trichloro- |
| 2-Chloronaphthalene | 91-58-7 | Naphthalene, 2-chloro- |
| 2-Chlorophenol | 95-57-8 | Phenol, 2-chloro- |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | Benzene, 1-chloro-4-phenoxy- |
| Chloroprene | 126-99-8 | 1,3-Butadiene, 2-chloro- |
| Chromium | (Total) | Chromium |
| Chrysene | 218-01-9 | Chrysene |
| Cobalt | (Total) | Cobalt |
| Copper | (Total) | Copper |
| m-Cresol; 3-Methylphenol | 108-39-4 | Phenol, 3-methyl- |
| o-Cresol; 2-Methylphenol | 95-48-7 | Phenol, 2-methyl- |
| p-Cresol; 4-Methylphenol | 106-44-5 | Phenol, 4-methyl- |
| Cyanide | 57-12-5 | Cyanide |

| | | |
|---|---|---|
| 2,4-D; 2,4-Dichlorophenoxyacetic acid | 94-75-7 | Acetic acid, (2,4-dichlorophenoxy)- |
| 4,4'-DDD | 72-54-8 | Benzene 1,1'-(2,2-dichloroethylidene) bis[4-chloro- |
| 4,4'-DDE | 72-55-9 | Benzene, 1,1'-(dichloroethenylidene) bis[4-chloro- |
| 4,4'-DDT | 50-29-3 | Benzene, 1,1'-(2,2,2-trichloroethylidene) bis[4-chloro- |
| Diallate | 2303-16-4 | Carbamothioic acid, bis(1-methylethyl)-, S- (2,3-dichloro-2-propenyl) ester. |
| Dibenz[a,h]anthracene | 53-70-3 | Dibenz[a,h]anthracene |
| Dibenzofuran | 132-64-9 | Dibenzofuran |
| Dibromochloromethane; Chlorodibromomethane | 124-48-1 | Methane, dibromochloro- |
| 1,2-Dibromo-3-chloropropane; DBCP | 96-12-8 | Propane, 1,2-dibromo-3-chloro- |
| 1,2-Dibromoethane; Ethylene dibromide; EDB | 106-93-4 | Ethane, 1,2-dibromo- |
| Di-n-butyl phthalate | 84-74-2 | 1,2-Benzenedicarboxylic acid, dibutyl ester |
| o-Dichlorobenzene; 1,2-Dichlorobenzene | 95-50-1 | Benzene, 1,2-dichloro- |
| m-Dichlorobenzene; 1,3-Dichlorobenzene | 541-73-1 | Benzene, 1,3-dichloro- |
| p-Dichlorobenzene; 1,4-Dichlorobenzene | 106-46-7 | Benzene, 1,4-dichloro- |
| 3,3'-Dichlorobenzidine | 91-94-1 | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro- |
| trans-1,4-Dichloro-2-butene | 110-57-6 | 2-Butene, 1,4-dichloro-, (E)- |
| Dichlorodifluoromethane; CFC 12 | 75-71-8 | Methane, dichlorodifluoro- |
| 1,1-Dichloroethane; Ethyldidene chloride | 75-34-3 | Ethane, 1,1-dichloro- |
| 1,2-Dichloroethane; Ethylene dichloride | 107-06-2 | Ethane, 1,2-dichloro- |
| 1,1-Dichloroethylene; 1,1-Dichloroethene; | 75-35-4 | Ethene, 1,1-dichloro- |
| Vinylidene chloride cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene | 156-59-2 | Ethene, 1,2-dichloro-(Z)- |
| trans-1,2-Dichloroethylene; trans-1,2-Dichloroethene | 156-60-5 | Ethene, 1,2-dichloro-, (E)- |
| 2,4-Dichlorophenol | 120-83-2 | Phenol, 2,4-dichloro- |
| 2,6-Dichlorophenol | 87-65-0 | Phenol, 2,6-dichloro- |
| 1,2-Dichloropropane | 78-87-5 | Propane, 1,2-dichloro- |
| 1,3-Dichloropropane; Trimethylene dichloride | 142-28-9 | Propane, 1,3-dichloro- |
| 2,2-Dichloropropane; Isopropylidene chloride | 594-20-7 | Propane, 2,2-dichloro- |
| 1,1-Dichloropropene | 563-58-6 | 1-Propene, 1,1-dichloro- |
| cis-1,3-Dichloropropene | 10061-01-5 | 1-Propene, 1,3-dichloro-, (Z)- |
| trans-1,3-Dichloropropene | 10061-02-6 | 1-Propene, 1,3-dichloro-, (E)- |
| Dieldrin | 60-57-1 | 2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα,2β,2aα,3β,6β,6aα,7β,7aα)- |
| Diethyl phthalate | 84-66-2 | 1,2-Benzenedicarboxylic acid, diethyl ester |
| O,O-Diethyl O-2-pyrazinyl phosphorothioate; Thionazin | 297-97-2 | Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester. |
| Dimethoate | 60-51-5 | Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester |

| | | |
|---|---|---|
| p-(Dimethylamino)azobenzene | 60-11-7 | Benzenamine, N,N-dimethyl-4-(phenylazo)- |
| 7,12-Dimethylbenz[a]anthracene | 57-97-6 | Benz[a]anthracene, 7,12-dimethyl- |
| 3,3'-Dimethylbenzidine | 119-93-7 | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl- |
| alpha, alpha-Dimethylphenethylamine | 122-09-8 | Benzeneethanamine, α,α-dimethyl- |
| 2,4-Dimethylphenol; m-Xylenol | 105-67-9 | Phenol, 2,4-dimethyl- |
| Dimethyl phthalate | 131-11-3 | 1,2-Benzenedicarboxylic acid, dimethyl ester |
| m-Dinitrobenzene | 99-65-0 | Benzene, 1,3-dinitro- |
| 4,6-Dinitro-o-cresol; 4,6-Dinitro-2-methylphenol | 534-52-1 | Phenol, 2-methyl-4,6-dinitro- |
| 2,4-Dinitrophenol | 51-28-5 | Phenol, 2,4-dinitro- |
| 2,4-Dinitrotoluene | 121-14-2 | Benzene, 1-methyl-2,4-dinitro- |
| 2,6-Dinitrotoluene | 606-20-2 | Benzene, 2-methyl-1,3-dinitro- |
| Dinoseb; DNBP; 2-sec-Butyl-4,6-dinitrophenol | 88-85-7 | Phenol, 2-(1-methylpropyl)-4,6-dinitro- |
| Di-n-octyl phthalate | 117-84-0 | 1,2-Benzenedicarboxylic acid, dioctyl ester |
| Diphenylamine | 122-39-4 | Benzenamine, N-phenyl- |
| Disulfoton | 298-04-4 | Phosphorodithioic acid, O,O-diethyl S-[2- (ethylthio)ethyl] ester |
| Endosulfan I | 959-98-8 | 6,9-Methano-2,4,3-benzodiox-athiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide, |
| Endosulfan II | 33213-65-9 | 6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide, (3α,5aα,6β,9β, 9aα)- |
| Endosulfan sulfate | 1031-07-8 | 6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3,3-dioxide |
| Endrin | 72-20-8 | 2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα, 2β,2aβ, 3α,6α,6aβ,7β,7aα)- |
| Endrin aldehyde | 7421-93-4 | 1,2,4-Methenocyclo-penta[cd]pentalene-5-carboxaldehyde,2,2a,3,3,4,7-hexachlorodecahydro-(1α,2β,2aβ,4β,4aβ,5β,6aβ,6bβ,7R*)- |
| Ethylbenzene | 100-41-4 | Benzene, ethyl- |
| Ethyl methacrylate | 97-63-2 | 2-Propenoic acid, 2-methyl-, ethyl ester |
| Ethyl methanesulfonate | 62-50-0 | Methanesulfonic acid, ethyl ester |
| Famphur | 52-85-7 | Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl]-O,O-dimethyl ester |
| Fluoranthene | 206-44-0 | Fluoranthene |
| Fluorene | 86-73-7 | 9H-Fluorene |
| Heptachlor | 76-44-8 | 4,7-Methano-1H-indene,1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro- |
| Heptachlor epoxide | 1024-57-3 | 2,5-Methano-2H-indeno[1,2-b]oxirene,2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a,-hexahydro-,(1aα,1bβ,2α,5α,5aβ,6β,6aα) |
| Hexachlorobenzene | 118-74-1 | Benzene, hexachloro- |
| Hexachlorobutadiene | 87-68-3 | 1,3-Butadiene, 1,1,2,3,4,4-hexachloro- |
| Hexachlorocyclopentadiene | 77-47-4 | 1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro- |
| Hexachloroethane | 67-72-1 | Ethane, hexachloro- |

| | | |
|---|---|---|
| Hexachloropropene | 1888-71-7 | 1-Propene, 1,1,2,3,3,3-hexachloro- |
| 2-Hexanone; Methyl butyl ketone | 591-78-6 | 2-Hexanone |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | Indeno[1,2,3-cd]pyrene |
| Isobutyl alcohol | 78-83-1 | 1-Propanol, 2-methyl- |
| Isodrin | 465-73-6 | 1,4,5,8-Dimethanonaphthalene,1,2,3,4,1 0,10-hexachloro-1,4,4a,5,8,8a hexahydro-(1α, 4α, 4aβ,5β,8β,8aβ)- |
| Isophorone | 78-59-1 | 2-Cyclohexen-1-one, 3,5,5-trimethyl- |
| Isosafrole | 120-58-1 | 1,3-Benzodioxole, 5-(1-propenyl)- |
| Kepone | 143-50-0 | 1,3,4-Metheno-2H-cyclobuta-[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro- |
| Lead | (Total) | Lead |
| Mercury | (Total) | Mercury |
| Methacrylonitrile | 126-98-7 | 2-Propenenitrile, 2-methyl- |
| Methapyrilene | 91-80-5 | 1,2,Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)- |
| Methoxychlor | 72-43-5 | Benzene, 1,1'-(2,2,2,trichloroethylidene)bis [4-methoxy- |
| Methyl bromide; Bromomethane | 74-83-9 | Methane, bromo- |
| Methyl chloride; Chloromethane | 74-87-3 | Methane, chloro- |
| 3-Methylcholanthrene | 56-49-5 | Benz[j]aceanthrylene, 1,2-dihydro-3-methyl- |
| Methyl ethyl ketone; MEK; 2-Butanone | 78-93-3 | 2-Butanone |
| Methyl iodide; Iodomethane | 74-88-4 | Methane, iodo- |
| Methyl methacrylate | 80-62-6 | 2-Propenoic acid, 2-methyl-, methyl ester |
| Methyl methanesulfonate | 66-27-3 | Methanesulfonic acid, methyl ester |
| 2-Methylnaphthalene | 91-57-6 | Naphthalene, 2-methyl- |
| Methyl parathion; Parathion methyl | 298-00-0 | Phosphorothioic acid, O,O-dimethyl |
| 4-Methyl-2-pentanone; Methyl isobutyl ketone | 108-10-1 | 2-Pentanone, 4-methyl- |
| Methylene bromide; Dibromomethane | 74-95-3 | Methane, dibromo- |
| Methylene chloride; Dichloromethane | 75-09-2 | Methane, dichloro- |
| Naphthalene | 91-20-3 | Naphthalene |
| 1,4-Naphthoquinone | 130-15-4 | 1,4-Naphthalenedione |
| 1-Naphthylamine | 134-32-7 | 1-Naphthalenamine |
| 2-Naphthylamine | 91-59-8 | 2-Naphthalenamine |
| Nickel | (Total) | Nickel |
| o-Nitroaniline; 2-Nitroaniline | 88-74-4 | Benzenamine, 2-nitro- |
| m-Nitroaniline; 3-Nitroaniline | 99-09-2 | Benzenamine, 3-nitro- |
| p-Nitroaniline; 4-Nitroaniline | 100-01-6 | Benzenamine, 4-nitro- |
| Nitrobenzene | 98-95-3 | Benzene, nitro- |
| o-Nitrophenol; 2-Nitrophenol | 88-75-5 | Phenol, 2-nitro- |
| p-Nitrophenol; 4-Nitrophenol | 100-02-7 | Phenol, 4-nitro- |
| | | |

| | | |
|---|---|---|
| N-Nitrosodi-n-butylamine | 924-16-3 | 1-Butanamine, N-butyl-N-nitroso- |
| N-Nitrosodiethylamine | 55-18-5 | Ethanamine, N-ethyl-N-nitroso- |
| N-Nitrosodimethylamine | 62-75-9 | Methanamine, N-methyl-N-nitroso- |
| N-Nitrosodiphenylamine | 86-30-6 | Benzenamine, N-nitroso-N-phenyl- |
| N-Nitrosodipropylamine; N-Nitroso-N-dipropylamine; Di-n-propylnitrosamine | 621-64-7 | 1-Propanamine, N-nitroso-N-propyl- |
| N-Nitrosomethylethalamine | 10595-95-6 | Ethanamine, N-methyl-N-nitroso- |
| N-Nitrosopiperidine | 100-75-4 | Piperidine, 1-nitroso- |
| N-Nitrosopyrrolidine | 930-55-2 | Pyrrolidine, 1-nitroso- |
| 5-Nitro-o-toluidine | 99-55-8 | Benzenamine, 2-methyl-5-nitro- |
| Parathion | 56-38-2 | Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester |
| Pentachlorobenzene | 608-93-5 | Benzene, pentachloro- |
| Pentachloronitrobenzene | 82-68-8 | Benzene, pentachloronitro- |
| Pentachlorophenol | 87-86-5 | Phenol, pentachloro- |
| Phenacetin | 62-44-2 | Acetamide, N-(4-ethoxyphenyl) |
| Phenanthrene | 85-01-8 | Phenanthrene |
| Phenol | 108-95-2 | Phenol |
| p-Phenylenediamine | 106-50-3 | 1,4-Benzenediamine |
| Phorate | 298-02-2 | Phosphorodithioic acid, O,O-diethyl S- [(ethylthio)methyl] ester |
| Polychlorinated biphenyls; PCBs | See footnote 6 | 1,1'-Biphenyl, chloro derivatives |
| Pronamide | 23950-58-5 | Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)- |
| Propionitrile; Ethyl cyanide | 107-12-0 | Propanenitrile |
| Pyrene | 129-00-0 | Pyrene |
| Safrole | 94-59-7 | 1,3-Benzodioxole, 5-(2- propenyl)- |
| Selenium | (Total) | Selenium |
| Silver | (Total) | Silver |
| Silvex; 2,4,5-TP | 93-72-1 | Propanoic acid, 2-(2,4,5- trichlorophenoxy)- |
| Styrene | 100-42-5 | Benzene, ethenyl- |
| Sulfide | 18496-25-8 | Sulfide |
| 2,4,5-T; 2,4,5-Trichlorophenoxyacetic acid | 93-76-5 | Acetic acid, (2,4,5- trichlorophenoxy)- |
| 2,3,7,8-TCDD; 2,3,7,8-Tetrachlorodibenzo- p-dioxin | 1746-01-6 | Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro- |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | Benzene, 1,2,4,5-tetrachloro- |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | Ethane, 1,1,1,2-tetrachloro- |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | Ethane, 1,1,2,2-tetrachloro- |
| Tetrachloroethylene; Tetrachloroethene; Perchloroethylene | 127-18-4 | Ethene, tetrachloro- |

| | | |
|---|---|---|
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | Phenol, 2,3,4,6-tetrachloro- |
| Thallium | (Total) | Thallium |
| Tin | (Total) | Tin |
| Toluene | 108-88-3 | Benzene, methyl- |
| o-Toluidine | 95-53-4 | Benzenamine, 2-methyl- |
| Toxaphene | See footnote 7 | Toxaphene |
| 1,2,4-Trichlorobenzene | 120-82-1 | Benzene, 1,2,4-trichloro- |
| 1,1,1-Trichloroethane; Methylchloroform | 71-55-6 | Ethane, 1,1,1-trichloro- |
| 1,1,2-Trichloroethane | 79-00-5 | Ethane, 1,1,2-trichloro- |
| Trichloroethylene; Trichloroethene | 79-01-6 | Ethene, trichloro- |
| Trichlorofluoromethane; CFC-11 | 75-69-4 | Methane, trichlorofluoro- |
| 2,4,5-Trichlorophenol | 95-95-4 | Phenol, 2,4,5-trichloro- |
| 2,4,6-Trichlorophenol | 88-06-2 | Phenol, 2,4,6-trichloro- |
| 1,2,3-Trichloropropane | 96-18-4 | Propane, 1,2,3-trichloro- |
| O,O,O-Triethyl phosphorothioate | 126-68-1 | Phosphorothioic acid, O,O,O-triethyl ester |
| sym-Trinitrobenzene | 99-35-4 | Benzene, 1,3,5-trinitro- |
| Vanadium | (Total) | Vanadium |
| Vinyl acetate | 108-05-4 | Acetic acid, ethenyl ester |
| Vinyl chloride; Chloroethene | 75-01-4 | Ethene, chloro- |
| Xylene (total) | See footnote 8 | Benzene, dimethyl- |
| Zinc | (Total) | Zinc |

1 Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

2 Chemical Abstracts Service registry number. Where "Total" is entered, all species in the ground water that contain this element are included.

3 CAS index names are those used in the 9th Cumulative Index.

4 This substance is often called bis(2-chloroisopropyl) ether, the name Chemical Abstracts Service applies to its noncommercial isomer, propane, 2,2"-oxybis[2-chloro-(CAS RN 39638-32-9).

5 Chlordane: This entry includes alpha-chlordane (CAS RN 5103-71-9), beta-chlordane (CAS RN 5103-74-2), gamma-chlordane (CAS RN 5566-34-7), and constituents of chlordane (CAS RN 57-74-9 and CAS RN 12789-03-6).

6 Polychlorinated biphenyls (CAS RN 1336-36-3); this category contains congener chemicals, including constituents of Aroclor-1016 (CAS RN 12674-11-2), Aroclor-1221 (CAS RN 11104-28-2), Aroclor-1232 (CAS RN 11141-16-5), Aroclor-1242 (CAS RN 53469-21-9), Aroclor-1248 (CAS RN 12672-29-6), Aroclor-1254 (CAS RN 11097-69-1), and Aroclor-1260 (CAS RN 11096-82-5).

7 Toxaphene: This entry includes congener chemicals contained in technical toxaphene (CAS RN 8001-35-2), i.e., chlorinated camphene.

8 Xylene (total): This entry includes o-xylene (CAS RN 96-47-6), m-xylene (CAS RN 108-38-3), p-xylene (CAS RN 106-42-3), and unspecified xylenes (dimethylbenzenes) (CAS RN 1330-20-7).

[70 FR 34556, June 14, 2005; 70 FR 44150, Aug. 1, 2005]

# APPENDIX C

# GROUNDWATER DATABASE

## Pite #3 UNITED ROCK PRODUCTS DATABASE

| WATER LEVEL | | GROUNDWATER PARAMETERS | | | | | GENERAL MINERAL (mg/l) | | | | TRACE ELEMENTS | | | | GENERAL CHEMISTRY | | | | | | ORGANICS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | See attached organics portion - Note (1) | | | | |
| Sample Point | Date | pH | T(°F) | EC (µmhos/cm) | $CO_2$ (mg/l) | Alk (mg/l) | $SO_4$ | Cl | $NO_3$ | TDS | Ni (µg/l) | Pb (µg/l) | Cd (µg/l) | Cr (µg/l) | COD (mg/l) | OH (mg/l) | TH (mg/l) | $HCO_3$ (mg/l) | $CO_3$ (mg/l) | B (mg/l) | Benzene (µg/l) | MTBE (µg/l) | TCE (µg/l) | Tetra chloro ethene (µg/l) | Vinyl Chroide (µg/l) |
| IRW-3A | 3-Sep-14 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | NA | NA | NA | NA | NA |
| IRW-3B | 3-Sep-14 | 7.9 | 81.6 | 397 | 748 | 130 | 41.6 | 15.9 | 0.85 | 210 | <10 | <5 | <5 | <10 | 4 | <5 | 157 | 159 | <5 | 0.204 | <1 | <1 | <5 | <5 | <5 |
| SW-1 | 3-Sep-14 | 8.42 | 83.84 | 348 | <1 | 76 | 64.5 | 15 | 0.44 | 148 | <10 | <5 | <5 | <10 | 4 | <5 | 144 | 88 | <5 | 0.147 | <1 | <1 | <5 | <5 | <5 |
| Pit 3-1 | 29-Oct-14 | 8.08 | 74.5 | 388 | <1 | 102 | 63.8 | 16 | 0.88 | 184 | <20 | 7 | <5 | <10 | <4 | <5 | 163 | 125 | <5 | 0.098 | <1 | <1 | <5 | <5 | <5 |
| Pit 3-2 | 29-Oct-14 | 7.88 | 80.1 | 391 | <1 | 102 | 63.6 | 15.9 | 0.74 | 258 | <20 | 7 | <5 | <10 | <4 | <5 | 159 | 125 | <5 | 0.204 | <1 | <1 | <5 | <5 | <5 |
| IRW-B | 29-Oct-14 | 8.42 | 83.84 | 348 | <1 | 76 | 39.3 | 15.8 | 1.61 | 200 | <10 | <5 | <5 | <10 | <4 | <5 | 174 | 152 | 44 | 0.082 | <1 | <1 | <5 | <5 | <5 |

-- Information not available
(1) The WDR's required analysis for EPA App. I and II parameters for the first sampling event. Analysis of EPA App. I and II parameters shall be reported in the fourth quarter 2014 report.
(2) Samples not collected in well

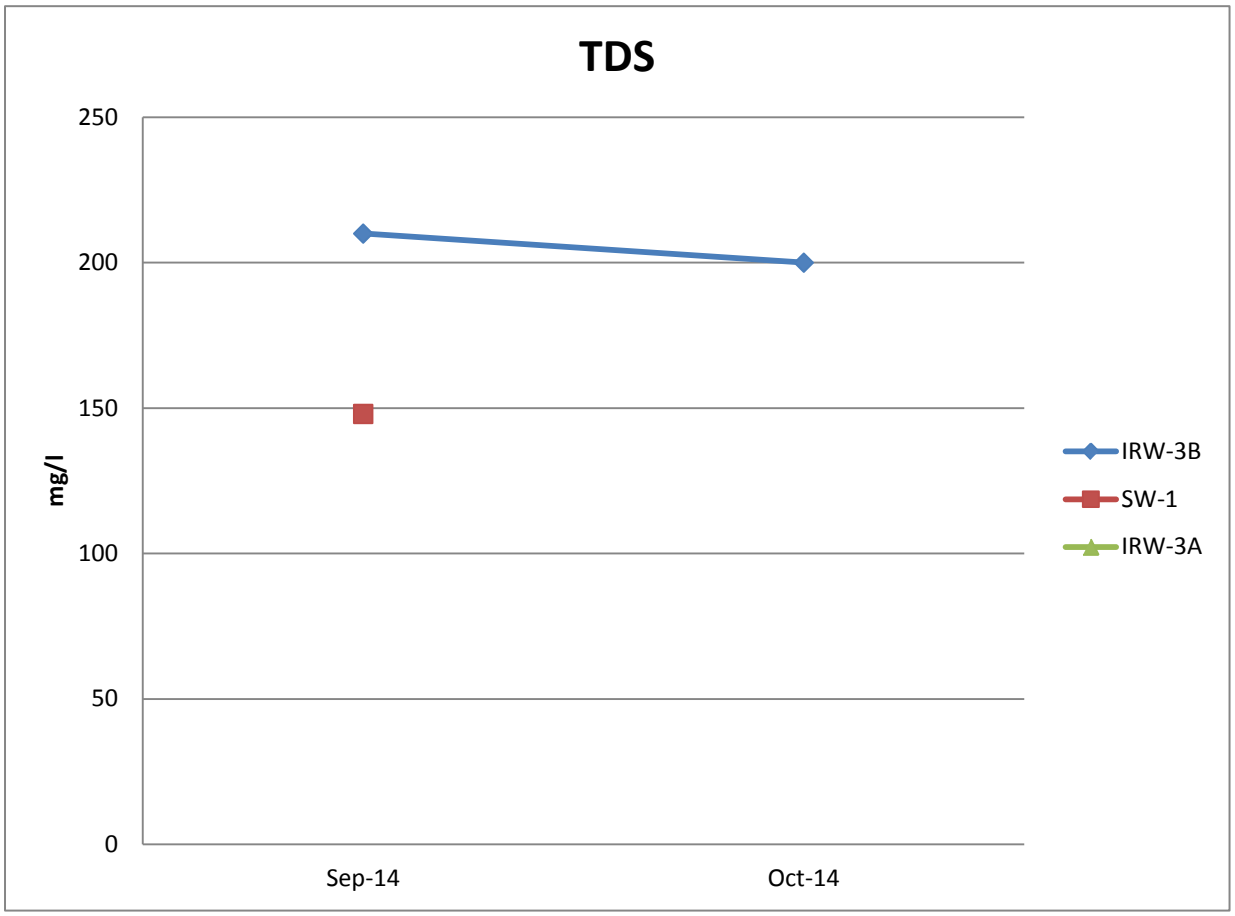


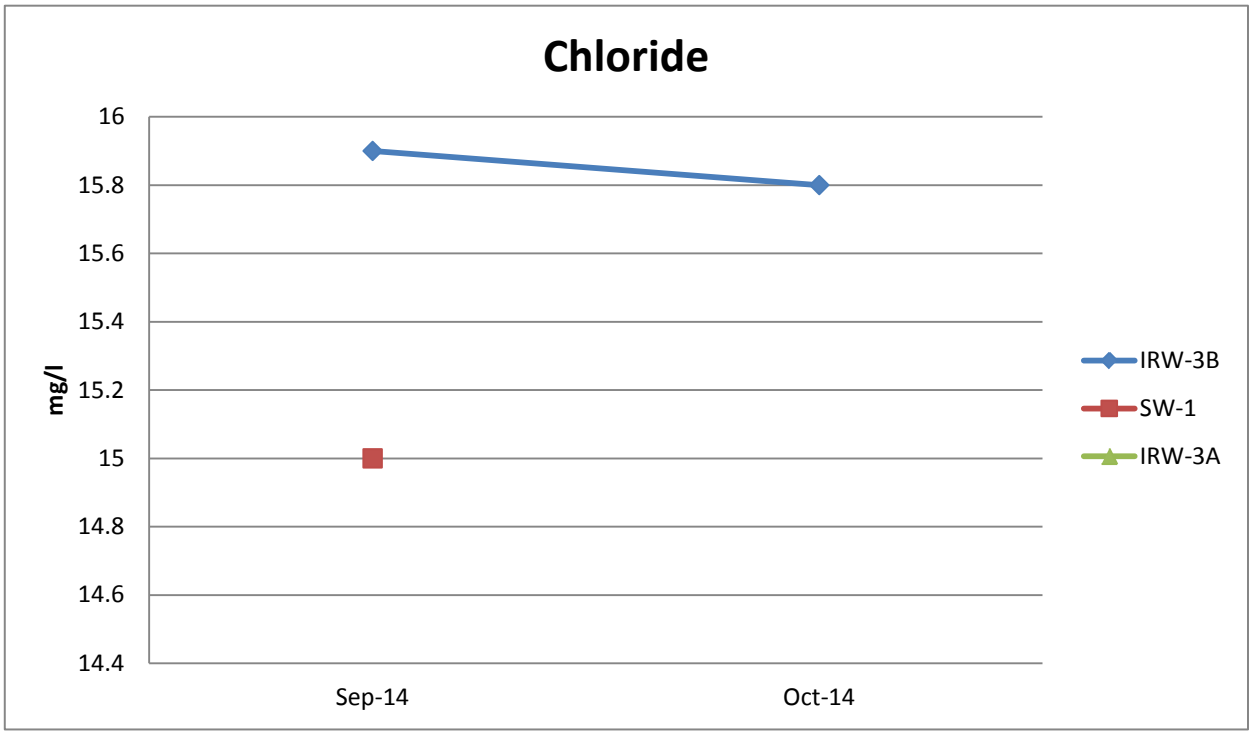
ALTA ENVIRONMENTAL

# APPENDIX D

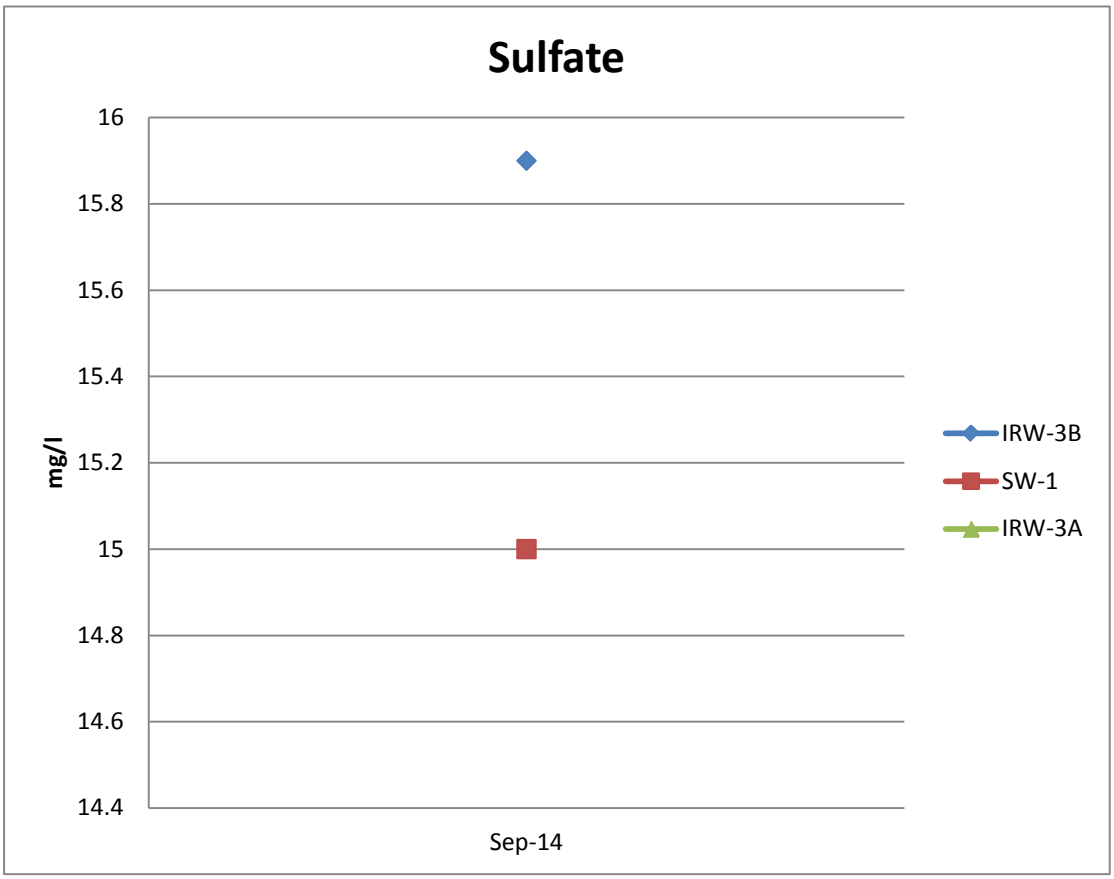
# GRAPHICAL SUMMARIES

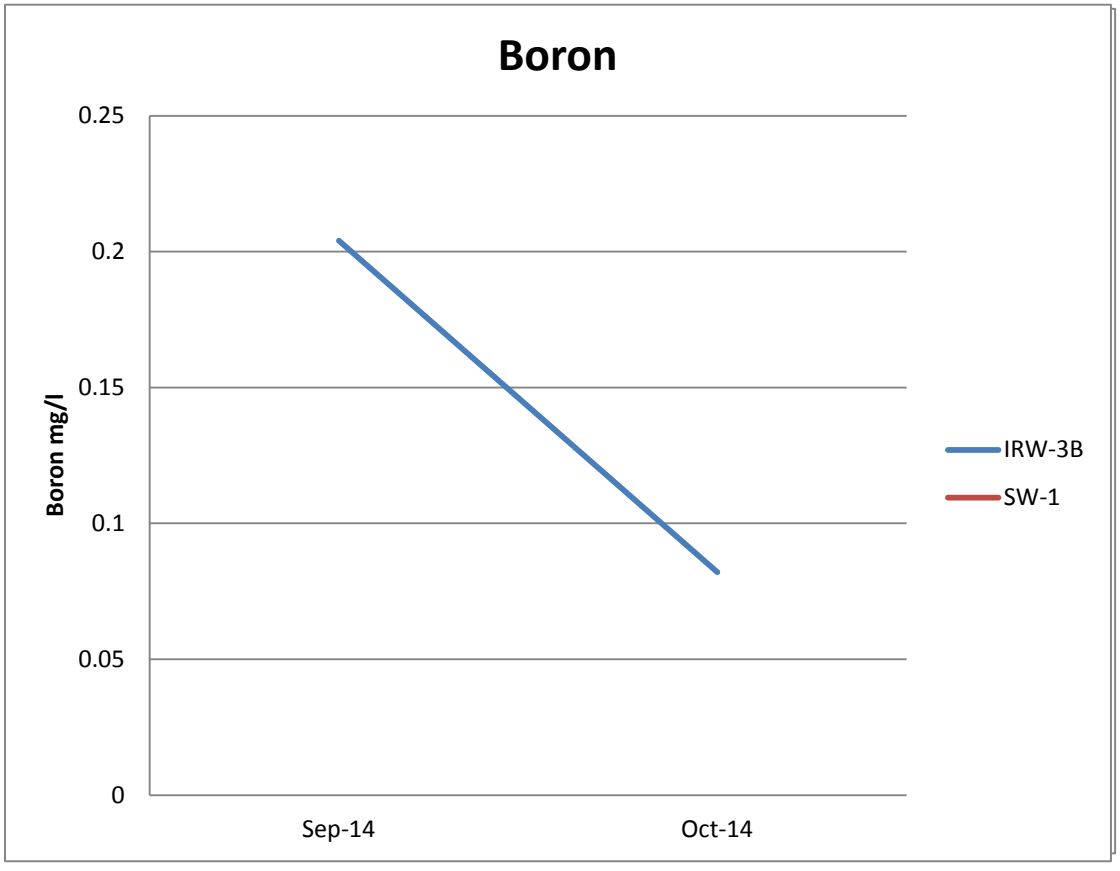
## 2014 Graphical Summaries



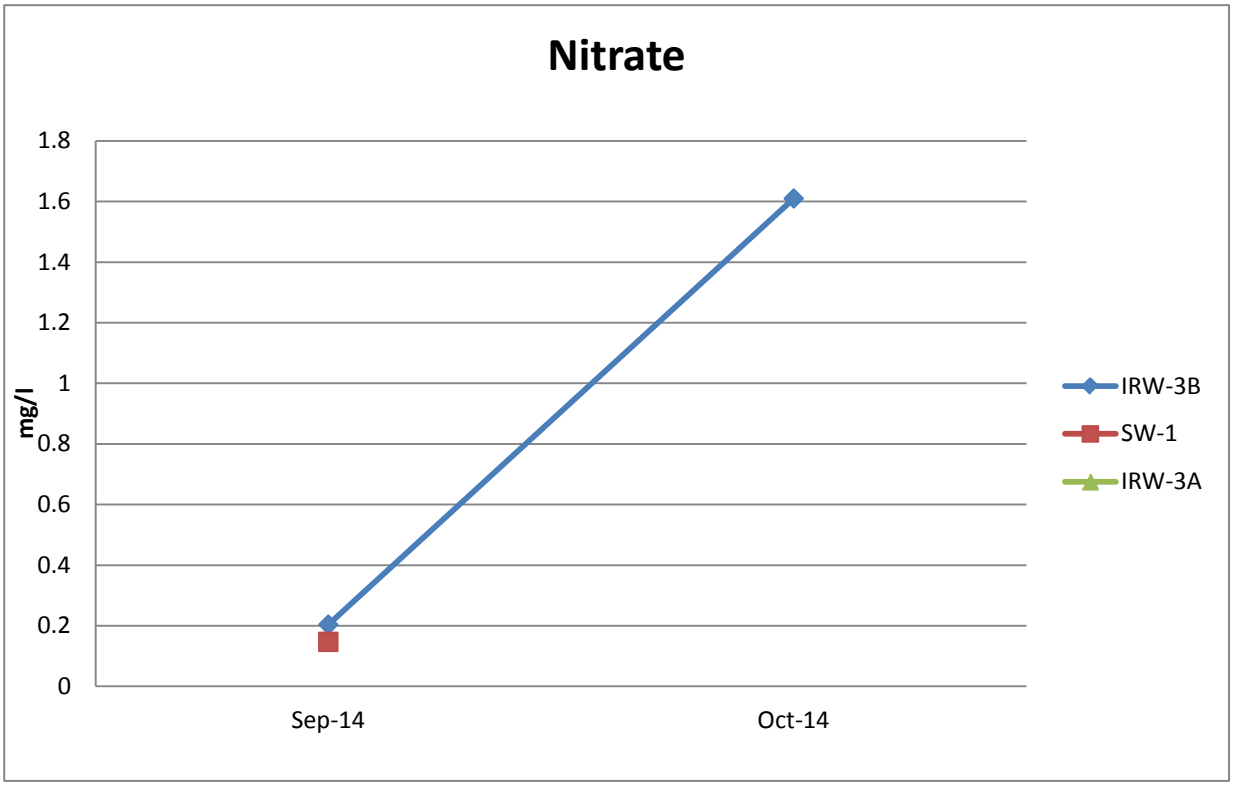



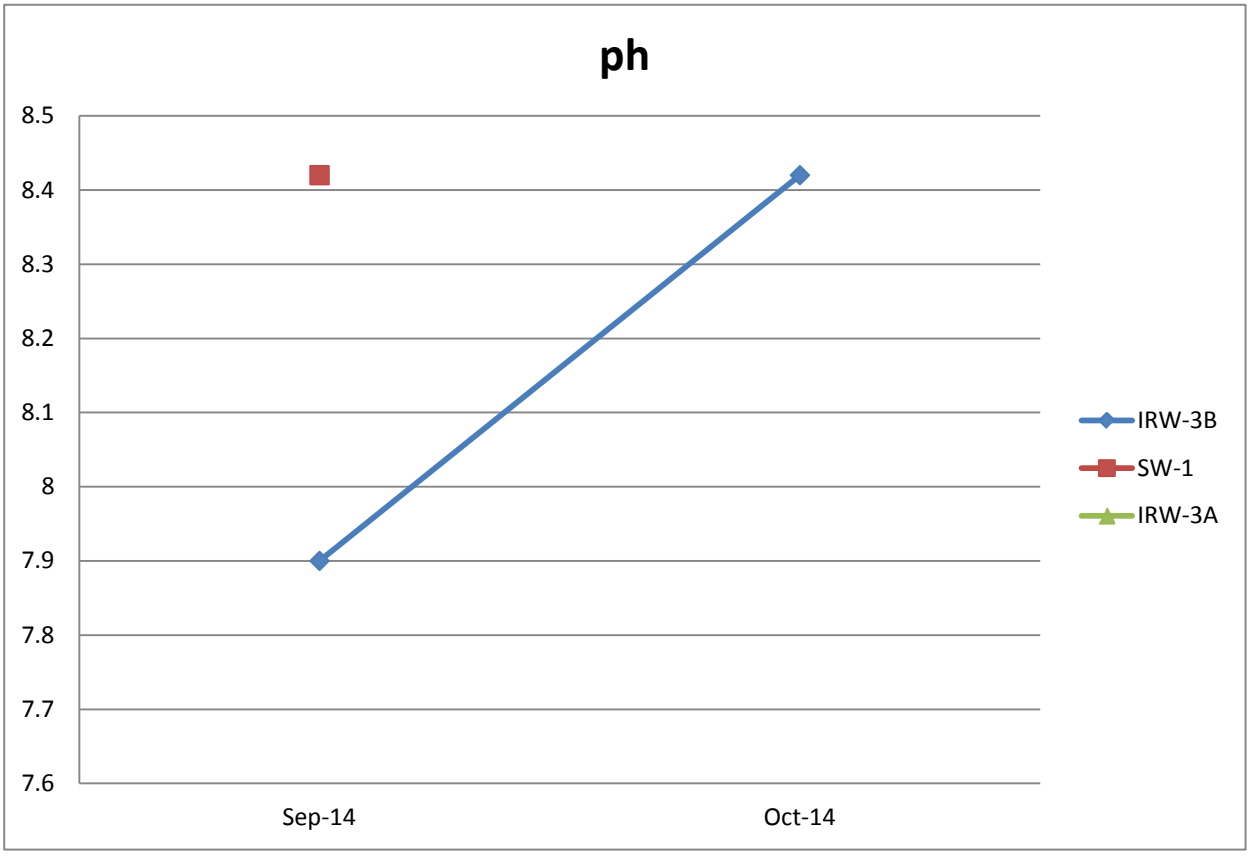
## 2014 Graphical Summaries



## 2014 Graphical Summaries



# APPENDIX E

# LANDFILL WASTE DISPOSAL

135 S. State College Blvd. Suite 400 Brea, CA 92821 (714) 578-9600

January 7, 2015

California Regional
Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Information Technology Unit

Subject: Waste Discharge Requirements- United Rock Pit 3
1137 Meridian Street
Irwindale, CA 91706
File No. 72-124, Order No.01-131, CI 5801

Pursuant to the General Provisions for Reporting (Section A) of the Monitoring and Reporting Program (File CI 5801) and Section III of the Reporting Conditions, we are respectively submitting our quarterly report.

Please be advised that there was no discharge placed in Pit #3 during the 4th Quarter of calendar year 2014.

The estimated life of the site is 83 years 9 months.

No purged ground water from monitoring wells is used at the site.

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the 7th day of January in Brea, California.

Very truly yours,

Ken Barker
Environmental Manager

Cc: Kathy Hubbard, Alta Environmental
William Tam, City of Irwindale Engineer

Agency:

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**
**LOS ANGELES REGION**

320 West 4th Street, Suite 200
Los Angeles, CA 90013-2343

# Waste Disposal And Groundwater Monitoring Report

## First Quarter 2015

United Rock Products – Pit #3
Irwindale, California
RWQCB File No. 72-124
Under Monitoring & Reporting Program No. CI 5801

**Prepared For:**

United Rock Products Corporation
1137 Meridian Street
Irwindale, CA 91706

Date: April15, 2015

3777 Long Beach, Blvd
Long Beach, CA 90807
(562) 495-5777 Fax: (562) 495-5877

CONTACT: Scott Taylor

Reference: URPC-14-4746

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Appendix B Associated Laboratories Analytical Results/Chambers Environmental Field Logs and Chain-of-Custody Forms
Appendix C Groundwater Database
Appendix D Historical Graphical Summaries
Appendix E Landfill Waste Disposal

## 1.0 INTRODUCTION

Alta Environmental (Alta – formerly Justice & Associates [J&A]) was retained by United Rock Products Corporation (URP) to conduct groundwater monitoring and reporting for URP's Pit #3. The purpose of this report is to provide an evaluation of the groundwater monitoring and the estimated average monthly quantities (in cubic yards) and types of materials deposited. Average monthly quantities and types of materials deposited are reported by URP in Appendix F.

## 2.0 FACILITY DESCRIPTION

URP (Discharger) owns and operates URP's Pit #3 (the Site), a construction aggregate mining pit at 1137 Meridian Street, in Irwindale, California. The site is bounded on the north by the Buena Vista Channel, on the south by Arrow Highway and on the east by Buena Vista Street (Figure 1). The center of the site is located at approximately 34°06'56" N and 117°59'23"W.

The Site includes approximately 110 acres of land and has been mined for sand and gravel by the Discharger and its predecessors since the early 1900s. Ground surface elevation around the pit varies from 406 feet above mean sea level (amsl) at the west edge of the pit to 431 feet amsl at the east edge of the pit.

The majority of the pit bottom has exposed groundwater resulting from the mining operation. The City of Irwindale approved conditional use permit CUP 6-04 in 2004. The CUP permits URP to mine the pit to a maximum depth of 440 feet bgs or until December 31, 2037, whichever comes first. The Site also has a reclamation plan approved in 2004 that states the excavation will be used as a groundwater recharge basin once the material has been depleted. Alternatively, the reclamation plan calls for the pit to be filled or partially filled.

The proposed discharge methods to the pit include backfilling the waste material from the Rock Plant to Pit #3 by means of sluicing and trucking. The sluicing process involves mixing the waste materials (primarily clay and silt) with groundwater that has been used in the mining process and pumping the mixture to various locations at the pit. Water is used in the mining process to wash fine material (clay and silt) off the coarse material (gravel and sand). No chemicals are added in either the mining or the sluicing processes.

Order No. 01-131 is the waste discharge requirements for the disposal of inert wastes into the Site during mine reclamation.

## 3.0 CURRENT MONITORING REQUIREMENTS

The monitoring is done to satisfy the Monitoring and Reporting Program (MRP) requirements of Order 01-131, File 72-124 and CI 5801, which was adopted by the Regional Water Quality Control Board (RWQCB) on September 21, 2001. The MRP requires quarterly groundwater and waste disposal reporting during the first year and semi-annually thereafter. In the event sampling is not performed during those months, substitute sampling shall occur as soon as possible after, and the reason for delay shall be given. The sampling schedule will continue to be semi-annual regardless of the substitute sampling. In addition, each monitoring report submitted to the Regional Board shall include a tabular list of the estimated average quantities of materials deposited at the site each month and the methods of disposal. This report contains the summary of both requirements.

### 3.1. Chronology of Order 01-131, File 72-124 and CI 5801

URP and its predecessors have excavated and processed aggregate from this site since as early as 1910. The majority of the pit has groundwater exposed by mining operations. URP purchased the property and operation in 1988.

The LARWQB adopted WDRs in 1973 for the previous owner, Livingston-Graham, to discharge inert materials to Pit #3. In 1988 the pit was purchased by United Rock Products and the pit is now known as URP Pit #3. New WDR's were adopted in 2001 and the previous order from 1973 was rescinded.

In May 2002 Justice & Associates submitted a Technical Report on behalf of United Rock Products to meet the 2001 WDR monitoring requirement. The technical report was approved in July 2002. A Revised Technical Report dated July 2014 was prepared to amend the 2002 report. Changes in the 2014 revised technical report included; revised sampling protocols for down-gradient wells, increasing the depth of up-gradient and down-gradient wells; and a modification to up-gradient and down-gradient monitoring well design.

## 4.0 GROUNDWATER MONITORING

### 4.1. First Quarter 2015

Pursuant to the WDR for Pit #3 (Order 01-131, File 72-124 and CI 5801), water level measurements should be collected from monitoring wells IRW-1 located at the Rock Plant and IRW-1A and IRW-1B located at Pit #1 in addition to monitoring wells IRW-3A and IRW-3B located at Pit #3. This well network should be used to estimate gradient in the vicinity of Pit #3. During the first quarter 2015, groundwater was detected only in Well IRW-3B. During well gauging, it was observed that Wells IRW-3A were dry. This is due to the lowering of the water table resulting from drought conditions in Southern California. Well IRW-1, IRW-1A, and IRW-1B was not measured. To complete the groundwater gradient analysis, measurable groundwater needs to be gauged from at least 3 wells to allow triangulation for the gradient calculation. Therefore, the groundwater gradient was not determined and the groundwater velocity was not calculated. During the second quarter 2015, the wells will continue to be monitored and data collected if possible.

First Quarter 2015 measurements from IRW-3B were collected on February 25, 2015. Table 1 presents the first quarter 2015 water level data.

**Table 1**
**Groundwater Monitoring Program for First Quarter 2015**

| Well # | General Well Location from Landfill | Date Measured | Depth to Groundwater (feet) | Total Well Depth (feet bgs) | Groundwater Elevation (feet relative to MSL) | Reference Point Elevation (feet above MSL) |
|---|---|---|---|---|---|---|
| IRW-1 | Cross-Gradient | -- | -- | 300 | -- | 405.60 |
| IRW-1A | Up-gradient | -- | -- | 196.6 | -- | 380.94 |
| IRW-1B | Cross-Gradient | -- | -- | 195.3 | -- | 380.03 |
| IRW-3A | Up-gradient | 2/25/2015 | DRY | 249.60 | DRY | 437.27 |
| IRW-3B | Down-gradient | 2/25/2015 | 226.69 | 250.1 | 180.06 | 406.75 |

.

### 4.2. Groundwater Velocity and Direction

The groundwater contours for the first quarter 2015 were not calculated due to insufficient data. During the second quarter 2015, the wells will continue to be monitored and the groundwater gradient and velocity will be calculated if groundwater is detected in at least three wells.

### 4.3. Monitoring Methods

The monitoring stations for the quarterly report consist of wells IRW-1, IRW-1A, IRW-1B, IRW-3A and IRW-3B as defined in the Revised Technical Report. Based on the reported groundwater gradient in the upper San Gabriel Basin, it has been determined that these wells will provide required information for compliance with MRP CI-5801.

Chambers Environmental performed the measurements for, IRW-3A and IRW-3B. Groundwater was detected only in Well IRW-3B. The Monitoring methods used were in accordance with EPA guidelines set forth in the Groundwater Sampling Protocol (Refer to Appendix A). Prior to conducting field measurements, the groundwater level probe was calibrated to ensure accuracy of measurements and cleaned prior to and after each measurement to minimize cross-contamination.

## 5.0 GROUNDWATER SAMPLING

The 2014 Revised Technical Report requires that samples be collected from IRW-3A, the up-gradient well at the Northeast corner of Pit #3. However, because no water was detected in the well, no water samples were collected from IRW-3A. Samples should also be collected from IRW-3B at the Southwest corner of Pit #3. Based on the general easterly flow direction of the groundwater in the vicinity of the subject site and the condition that only native geological material washed with local water will be sluiced back into Pit #3, the approved sampling network for Pit #3 also includes groundwater samples from the standing water in the south end of the pit. For each monitoring period, one grab groundwater sample should be collected from both wells and the standing water in the pit. The standing water monitoring will occur as long as there is standing water in the pit. Grab samples of the standing water in the pit will be collected using a stainless steel bailer from a depth of 10 to 15 feet below water surface. Groundwater samples from IRW-3A and IRW-3B will be collected using a submersible pump or passive sampling methods. The first round of samples should also be analyzed for the monitoring parameters listed on US EPA Appendix I and II Constituents. Since these parameters were analyzed during the fourth quarter 2014 round of sampling, they have not been included in this report.

Eurofins/Calscience is a State of California Department of Health Services accredited laboratory. This laboratory performed the chemical analyses in accordance with the current EPA guidelines and procedures. Appendix B contains the analytical results and chain-of-custody record for this quarterly report.

5.1. Groundwater Evaluation

A groundwater database presenting all analytical results is located in Appendix C. Table 2 represents a comparative analysis between the analytical results and the water protection standards established for URP Pit #3 as identified in the WDRs.

**Table 2**
**Water Quality Data Summary**
**First Quarter 2015 Sampling Event**

| Constituent | Water Quality Protection Standards | Monitoring Station | | |
|---|---|---|---|---|
| | | Pit 3-1 | Pit 3-2 | IRW-3B |
| Date Sampled | | 2/25/2015 | 2/25/2015 | 2/25/2015 |
| Total Dissolved Solids (TDS) | 450 mg/l | 205 | 310 | 250 |
| Chloride (Cl) | 100 mg/l | 16 | 16 | 14 |
| Sulfate ($SO_4$) | 100 mg/l | 66 | 66 | 48 |
| Nitrate (as ($NO_3$) | 45 mg/l | 0.51 | 0.51 | 0.30 |
| Boron | 0.5 mg/l | 0.128 | 0.131 | 0.112 |
| pH | 6.5 – 8.5 | 7.33 | 7.34 | 7.05* |
| | | | | |
| | | | | |

*Results from well purge data in field.

The sample results for samples collected in February 2015 indicate that standing groundwater in Pit #3 and groundwater collected from well IRW-3B currently meets Water Quality Protection Standards for all constituents. The standards are established for this facility by Order No. 01-013 and are based on the water quality objectives for the western area of the main San Gabriel Basin contained in the Basin Plan.

There was an insufficient amount of groundwater in IRW-3A to collect samples for analysis. The low aquifer is likely an effect of the significant drought conditions in Southern California. Therefore, two water column samples were collected from the standing exposed groundwater in the pit. Samples Pit 3-1 and Pit 3-2 have been included within this report to assess compliance with Water Quality Protection Standards.

If there is sufficient groundwater, samples will be collected from the monitoring wells for the next Quarterly report.

5.2. Purged Groundwater

Purged groundwater from the monitoring well is used at the Site for dust suppression (within 20-foot radius of each well). Fifteen Hundred (1500)

ml of purged water was generated during the February 25, 2015 sampling event (Refer to Appendix B).

5.3. Sluice Material and Waste Disposal

During January through March 2015 reporting period, no material was placed in Pit #3.

The landfill waste disposal information is included in Appendix G.

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

Alta conducted a review of the groundwater analytical data for the first quarter 2015 report. Based on field observations and analytical results, it appears that deposited waste and current waste disposal practices are not adversely impacting local groundwater quality.

Based on the data collected as required by the sampling and monitoring plan detailed in the Waste Discharge Requirements Order, none of the water quality protection standards listed in Table 2 are elevated above the limits listed in the Order. However, monitoring well IRW-3A was gauged dry and therefore not sampled. In addition, insufficient data was available to determine groundwater gradient and velocity. Providing sufficient water is available in the wells, during the next sampling quarter, the depth to water in all five wells will be measured, and wells IRW-3A and IRW-3B will be sampled.

We appreciate the opportunity to provide groundwater monitoring and reporting services. If you have any questions or comments concerning this report, please feel free to contact me at (562) 495-5777.

## 7.0 CERTIFICATION

### 7.1. Professional Certifications

The hydrogeologic information, results of groundwater testing, conclusions and recommendations in this report have been reviewed by of a California-registered professional geologist. This certification of conditions comprises a declaration of his professional judgment. It does not constitute a warranty or guarantee.




Steven R. Ridenour
PG
Senior Project Manager/Senior Geologist III
Alta Environmental

## 8.0 REFERENCES

Justice & Associates, Sully-Miller Irwindale Facility Phase I Environmental Site Assessment, 9-97

Justice & Associates, United Rock Products, Pit #3 & #3 Final Dredge Operation

Spill Prevention Control and Countermeasure Plan, 5-98

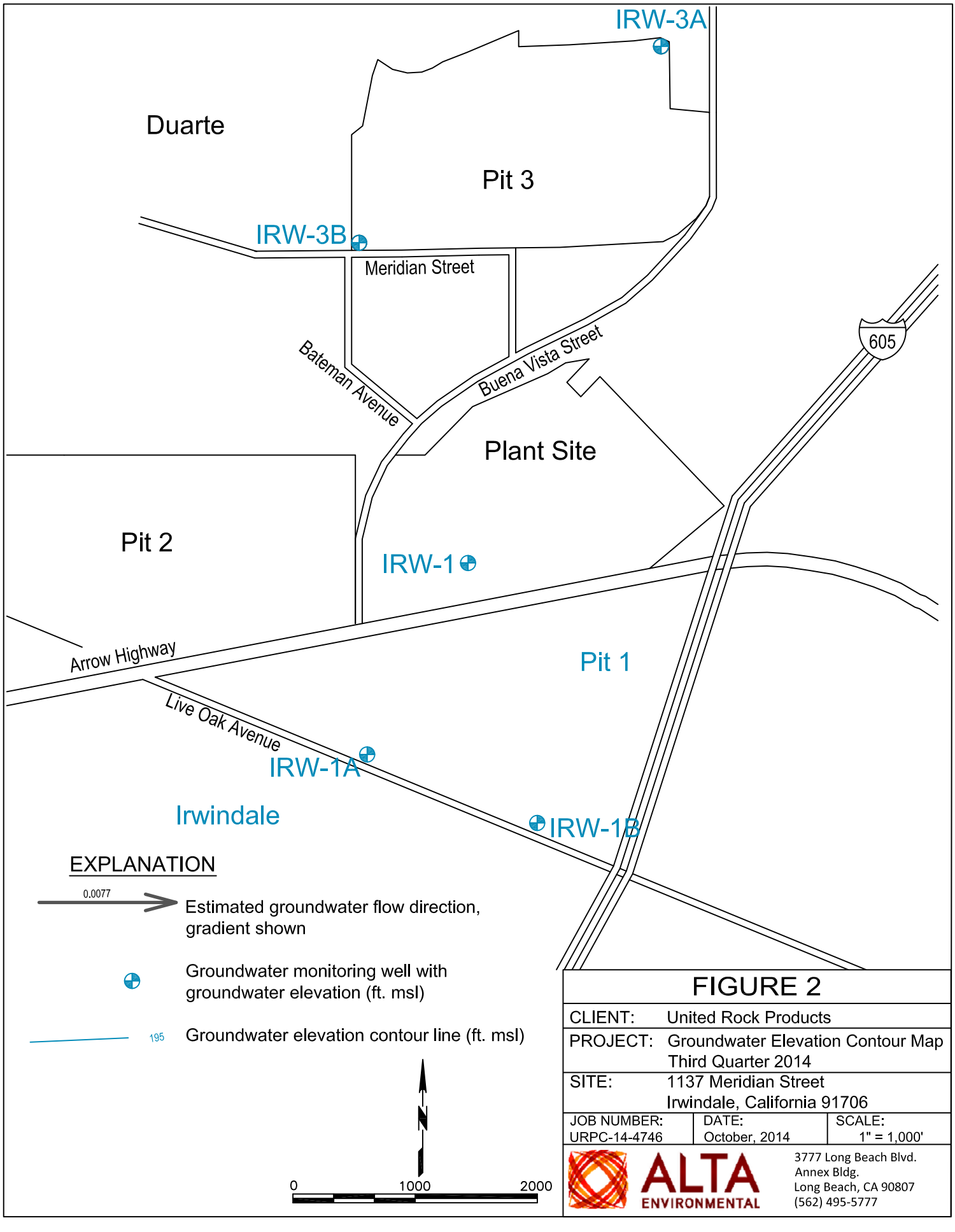
Luhdorff & Scalmanini, Supplemental Groundwater Investigation and Mitigation Monitoring Program, July 2001

Waste Discharge Requirements – United Rock Products – Pit #3 Irwindale, CA (File No. 72-124; Order No. 01-131, CI 5801)

Surface Waters-Field Operations Manual for Lakes USEPA Office of Research and Development EPA/620/R-97/001/June 1997

Technical Guidance Manual for Hydrogeologic Investigations and Groundwater Monitoring, State of Ohio EPA, 1995

# FIGURES




# FIGURE 2

| | |
|---|---|
| CLIENT: | United Rock Products |
| PROJECT: | Groundwater Elevation Contour Map<br>Third Quarter 2014 |
| SITE: | 1137 Meridian Street<br>Irwindale, California 91706 |

| JOB NUMBER: | DATE: | SCALE: |
|---|---|---|
| URPC-14-4746 | October, 2014 | 1" = 1,000' |

ALTA ENVIRONMENTAL
3777 Long Beach Blvd.
Annex Bldg.
Long Beach, CA 90807
(562) 495-5777

W:\Clients T-Z\United Rock Products (URPC)\URPC-14-4746 Pit #3 annual reporting\Photos - Drawings\Ground Water Contour Map 2014.dwg

# APPENDIX A

# GROUNDWATER SAMPLING PROTOCOL

# STANDARD FIELD PROCEDURES FOR MONITORING AND SAMPLING GROUNDWATER MONITORING WELLS AT URP Pit #3

## SEALED WELLS

One or more wells at the site are sealed and have down-hole pumps for discharging groundwater. Down-hole monitoring and sampling equipment cannot be used in those wells. Sealed wells must be monitored, purged and sampled using the down-hole pumps. Purge volume is estimated using historical depth-to-water and depth-to-bottom information. Once water is obtained from the discharge of the down-hole pumps, the procedures for recording water quality readings and for packaging groundwater samples for laboratory analysis are the same as for open wells, below.

## OPEN WELLS

The following standard operating procedures apply to wells that are accessible using down-hole monitoring and sampling equipment.

## DECONTAMINATION OF MONITORING AND SAMPLING EQUIPMENT

All down-hole monitoring and sampling equipment is decontaminated using a non-phosphate detergent solution prior to placing equipment into each well. A triple-rinse procedure is used to clean the equipment. The general triple-rinse decontamination procedure is as follows:

- Wash equipment in the first rinse containing detergent and clean tap water;
- Rinse thoroughly in the third rinse containing clean tap water;
- Rinse in the third rinse containing distilled or deionized water; and
- Allow equipment to air dry prior to next use.

## WELL GAUGING

All wells are gauged using an electronic measuring tape capable of recording depth-to-water to the nearest 0.01 foot. Depth-to-water is measured to a survey mark on the top of each well casing. In the absence of a survey mark, the well is gauged from the north side of the top-of-casing. Each depth-to-water measurement is performed twice to assure accuracy. After measuring the depth-to-water, either the electronic tape or a clean non-electronic tape is lowered to the bottom of the well to obtain a depth-to-bottom reading for each well. All measurements are recorded on standard field forms.

## PRE-PURGE WATER QUALITY MEASUREMENTS

Prior to purging, a small volume of groundwater is purged from each well using a clean PVC or stainless-steel bailer. That water is used to perform field tests for $CO_2$ and alkalinity. A Hatch Digital Titrator Model 16900 or similar field instrument capable of measuring the required parameters is used to obtain field readings. All field readings are recorded on standard field forms.

## WELL PURGING

One casing volume of water is calculated for each well using the depth-to-water and depth-to-bottom field readings and the diameter of the well casing. Using a clean PVC or stainless steel bailer with new string attached, each well is purged of three to five casing volumes of water prior to collecting water samples for laboratory analysis. Water volumes removed from each well are recorded on standard field forms. After each casing volume of water is removed from the well, field water quality parameters are recorded (see below). Upon completion of purging, the water level is allowed to recover to at least 80% of its pre-purge volume prior to sampling. For slow-recharging wells, water samples are collected after two hours if 80% recovery is not achieved.

If prior groundwater analytical results show that the groundwater in a specific well is sufficiently clean, purged groundwater from the well is spread on the ground in the vicinity of the well. If the groundwater is known to contain contaminants above State action levels, the purged water is placed into DOT-approved steel 55-gallon drums.

Drums containing purge water are sealed, appropriately labeled and temporarily stored on site until a licensed hauler is contracted to remove the drums. All drummed purge water is disposed of at a State-licensed water recycling facility.

## WATER QUALITY MEASUREMENTS DURING PURGING

After purging each casing volume of water from each well, field readings are taken of water quality parameters. A Beta Technologies, Inc. Hydac Water Quality Meter or similar instrument is used to record the temperature, electrical conductivity and pH of the groundwater. At least two out of three of those parameters must stabilize to within 10% between the last two readings before a water sample is collected. A minimum of three casing volumes are removed prior to sampling if water quality parameters stabilize. If water quality parameters do not stabilize, groundwater samples are collected after purging a maximum of five casing volumes. All field readings are recorded on standard field forms.

## WATER SAMPLE COLLECTION

A new polypropylene disposable bailer is used to collect the laboratory water samples from each well. Each disposable bailer is discarded after use in one well. Water from the bailer is placed into laboratory-supplied sample containers containing appropriate preservatives for the requested analytic. The bottles are filled, capped and placed in a cooler on ice. All samples collected for laboratory analysis are transported in the chilled cooler to a State-certified laboratory following standard chain-of-custody procedures.

## EXPOSED GROUNDWATER GRAB SAMPLES

A Discrete grab samples shall be collected from the exposed groundwater in the pit, using a stainless steel bailer from the surface. During the life of the WDRs, the shape and size of the lake will change. Consequently, we are not recommending specific points, but will keep the points near the southwest shoreline far enough away from the shore to test the full water column and as far away from each separate point as possible.

# APPENDIX B

# EUROFINS/CALSCIENCE ANALYTICAL RESULTS / CHAMBERS ENVIRONMENTAL FIELD LOGS AND CHAIN-OF-CUSTODY FORMS

ALTA ENVIRONMENTAL

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# WORK ORDER NUMBER: 15-02-1901

*The difference is service*



AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For**

**Client:** Sully Miller Contracting

**Client Project Name:** United Rock Products

**Attention:** Ken Barker
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Approved for release on 03/09/2015 by:
Danielle Roberts
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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Work Order Number: 15-02-1901


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# Work Order Narrative

Work Order: 15-02-1901 Page 1 of 1

**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 02/25/15. They were assigned to Work Order 15-02-1901.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

**Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

**Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

**Subcontractor Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

**Additional Comments:**

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

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# Sample Summary

| | | | |
|---|---|---|---|
| Client: | Sully Miller Contracting<br>135 State College Boulevard, suite 400<br>Brea, CA 92821-5819 | Work Order: | 15-02-1901 |
| | | Project Name: | United Rock Products |
| | | PO Number: | |
| | | Date/Time Received: | 02/25/15 14:32 |
| | | Number of Containers: | 39 |
| Attn: | Ken Barker | | |

| Sample Identification | Lab Number | Collection Date and Time | Number of Containers | Matrix |
|---|---|---|---|---|
| IRW-B | 15-02-1901-1 | 02/25/15 10:11 | 13 | Aqueous |
| PIT3-1 | 15-02-1901-2 | 02/25/15 11:45 | 13 | Aqueous |
| PIT3-2 | 15-02-1901-3 | 02/25/15 12:00 | 13 | Aqueous |

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# Detections Summary

| | | | |
|---|---|---|---|
| Client: | Sully Miller Contracting | Work Order: | 15-02-1901 |
| | 135 State College Boulevard, suite 400 | Project Name: | United Rock Products |
| | Brea, CA 92821-5819 | Received: | 02/25/15 |
| Attn: | Ken Barker | | |



**Client SampleID**

| Analyte | Result | Qualifiers | RL | Units | Method | Extraction |
|---|---|---|---|---|---|---|
| IRW-B (15-02-1901-1) | | | | | | |
| Boron | 0.112 | | 0.0200 | mg/L | EPA 200.7 | N/A |
| Chloride | 14 | | 1.0 | mg/L | EPA 300.0 | N/A |
| Nitrate (as N) | 0.30 | | 0.10 | mg/L | EPA 300.0 | N/A |
| Sulfate | 48 | | 1.0 | mg/L | EPA 300.0 | N/A |
| Alkalinity, Total (as CaCO3) | 107 | | 5.00 | mg/L | SM 2320B | N/A |
| Bicarbonate (as CaCO3) | 107 | | 5.00 | mg/L | SM 2320B | N/A |
| Hardness, Total (as CaCO3) | 150 | | 2.0 | mg/L | SM 2340C | N/A |
| Specific Conductance | 390 | | 1.0 | umhos/cm | SM 2510 B | N/A |
| Solids, Total Dissolved | 250 | | 1.00 | mg/L | SM 2540 C | N/A |
| pH | 5.41 | BV,BU | 0.01 | pH units | SM 4500 H+ B | N/A |
| Carbon Dioxide | 850 | | 5.0 | mg/L | SM4500-CO2D | N/A |
| PIT3-1 (15-02-1901-2) | | | | | | |
| Boron | 0.128 | | 0.0200 | mg/L | EPA 200.7 | N/A |
| Chloride | 16 | | 1.0 | mg/L | EPA 300.0 | N/A |
| Nitrate (as N) | 0.51 | | 0.10 | mg/L | EPA 300.0 | N/A |
| Sulfate | 66 | | 1.0 | mg/L | EPA 300.0 | N/A |
| Alkalinity, Total (as CaCO3) | 107 | | 5.00 | mg/L | SM 2320B | N/A |
| Bicarbonate (as CaCO3) | 107 | | 5.00 | mg/L | SM 2320B | N/A |
| Hardness, Total (as CaCO3) | 160 | | 2.0 | mg/L | SM 2340C | N/A |
| Specific Conductance | 400 | | 1.0 | umhos/cm | SM 2510 B | N/A |
| Solids, Total Dissolved | 205 | | 1.00 | mg/L | SM 2540 C | N/A |
| pH | 7.80 | BV,BU | 0.01 | pH units | SM 4500 H+ B | N/A |
| Carbon Dioxide | 2.0 | | 1.0 | mg/L | SM4500-CO2D | N/A |
| PIT3-2 (15-02-1901-3) | | | | | | |
| Boron | 0.131 | | 0.0200 | mg/L | EPA 200.7 | N/A |
| Chloride | 16 | | 1.0 | mg/L | EPA 300.0 | N/A |
| Nitrate (as N) | 0.51 | | 0.10 | mg/L | EPA 300.0 | N/A |
| Sulfate | 66 | | 1.0 | mg/L | EPA 300.0 | N/A |
| Alkalinity, Total (as CaCO3) | 104 | | 5.00 | mg/L | SM 2320B | N/A |
| Bicarbonate (as CaCO3) | 104 | | 5.00 | mg/L | SM 2320B | N/A |
| Hardness, Total (as CaCO3) | 150 | | 2.0 | mg/L | SM 2340C | N/A |
| Specific Conductance | 400 | | 1.0 | umhos/cm | SM 2510 B | N/A |
| Solids, Total Dissolved | 310 | | 1.00 | mg/L | SM 2540 C | N/A |
| pH | 8.08 | BV,BU | 0.01 | pH units | SM 4500 H+ B | N/A |
| Carbon Dioxide | 1.7 | | 1.0 | mg/L | SM4500-CO2D | N/A |

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* MDL is shown

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# Detections Summary

| | | | |
|---|---|---|---|
| Client: | Sully Miller Contracting | Work Order: | 15-02-1901 |
| | 135 State College Boulevard, suite 400 | Project Name: | United Rock Products |
| | Brea, CA 92821-5819 | Received: | 02/25/15 |
| Attn: | Ken Barker | | |



**Client SampleID**

| Analyte | Result | Qualifiers | RL | Units | Method | Extraction |
|---|---|---|---|---|---|---|

Subcontracted analyses, if any, are not included in this summary.

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* MDL is shown

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Project: United Rock Products

Date Received: 02/25/15
Work Order: 15-02-1901
Preparation: N/A
Method: EPA 300.0
Units: mg/L



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **IRW-B** | **15-02-1901-1-E** | **02/25/15 10:11** | **Aqueous** | **IC 15** | **N/A** | **02/26/15 00:04** | **150225L02** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Chloride | 14 | 1.0 | 1.00 | |
| Nitrate (as N) | 0.30 | 0.10 | 1.00 | |
| Sulfate | 48 | 1.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-1** | **15-02-1901-2-E** | **02/25/15 11:45** | **Aqueous** | **IC 15** | **N/A** | **02/26/15 00:21** | **150225L02** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Chloride | 16 | 1.0 | 1.00 | |
| Nitrate (as N) | 0.51 | 0.10 | 1.00 | |
| Sulfate | 66 | 1.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-2** | **15-02-1901-3-E** | **02/25/15 12:00** | **Aqueous** | **IC 15** | **N/A** | **02/26/15 00:38** | **150225L02** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Chloride | 16 | 1.0 | 1.00 | |
| Nitrate (as N) | 0.51 | 0.10 | 1.00 | |
| Sulfate | 66 | 1.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **099-12-906-5476** | **N/A** | **Aqueous** | **IC 15** | **N/A** | **02/25/15 23:14** | **150225L02** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Chloride | ND | 1.0 | 1.00 | |
| Nitrate (as N) | ND | 0.10 | 1.00 | |
| Sulfate | ND | 1.0 | 1.00 | |

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Date Received: 02/25/15
Work Order: 15-02-1901
Preparation: N/A
Method: SM 2320B
Units: mg/L

Project: United Rock Products



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **IRW-B** | **15-02-1901-1-H** | **02/25/15 10:11** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225ALKB3** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Alkalinity, Total (as CaCO3) | 107 | 5.00 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-1** | **15-02-1901-2-H** | **02/25/15 11:45** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225ALKB3** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Alkalinity, Total (as CaCO3) | 107 | 5.00 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-2** | **15-02-1901-3-H** | **02/25/15 12:00** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225ALKB3** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Alkalinity, Total (as CaCO3) | 104 | 5.00 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **099-15-859-609** | **N/A** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225ALKB3** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Alkalinity, Total (as CaCO3) | ND | 1.0 | 1.00 | |

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Project: United Rock Products

Date Received: 02/25/15
Work Order: 15-02-1901
Preparation: N/A
Method: SM 2320B
Units: mg/L



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **IRW-B** | **15-02-1901-1-H** | **02/25/15 10:11** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225HCOB3** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Bicarbonate (as CaCO3) | 107 | 5.00 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-1** | **15-02-1901-2-H** | **02/25/15 11:45** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225HCOB3** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Bicarbonate (as CaCO3) | 107 | 5.00 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-2** | **15-02-1901-3-H** | **02/25/15 12:00** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225HCOB3** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Bicarbonate (as CaCO3) | 104 | 5.00 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **099-15-861-458** | **N/A** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225HCOB3** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Bicarbonate (as CaCO3) | ND | 1.0 | 1.00 | |

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Project: United Rock Products

Date Received: 02/25/15
Work Order: 15-02-1901
Preparation: N/A
Method: SM 2320B
Units: mg/L



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **IRW-B** | **15-02-1901-1-H** | **02/25/15 10:11** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225CO3B3** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Carbonate (as CaCO3) | ND | 1.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-1** | **15-02-1901-2-H** | **02/25/15 11:45** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225CO3B3** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Carbonate (as CaCO3) | ND | 1.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-2** | **15-02-1901-3-H** | **02/25/15 12:00** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225CO3B3** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Carbonate (as CaCO3) | ND | 1.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **099-15-863-389** | **N/A** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225CO3B3** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Carbonate (as CaCO3) | ND | 1.0 | 1.00 | |

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Project: United Rock Products

Date Received: 02/25/15
Work Order: 15-02-1901
Preparation: N/A
Method: SM 2340C
Units: mg/L



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **IRW-B** | **15-02-1901-1-J** | **02/25/15 10:11** | **Aqueous** | **BUR21** | **N/A** | **03/03/15 17:00** | **F0303HARB1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Hardness, Total (as CaCO3) | 150 | 2.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-1** | **15-02-1901-2-J** | **02/25/15 11:45** | **Aqueous** | **BUR21** | **N/A** | **03/03/15 17:00** | **F0303HARB1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Hardness, Total (as CaCO3) | 160 | 2.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-2** | **15-02-1901-3-J** | **02/25/15 12:00** | **Aqueous** | **BUR21** | **N/A** | **03/03/15 17:00** | **F0303HARB1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Hardness, Total (as CaCO3) | 150 | 2.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **099-14-457-496** | **N/A** | **Aqueous** | **BUR21** | **N/A** | **03/03/15 17:00** | **F0303HARB1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Hardness, Total (as CaCO3) | ND | 2.0 | 1.00 | |

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Project: United Rock Products

Date Received: 02/25/15
Work Order: 15-02-1901
Preparation: N/A
Method: SM 2510 B
Units: umhos/cm



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **IRW-B** | **15-02-1901-1-D** | **02/25/15 10:11** | **Aqueous** | **SC 7** | **N/A** | **03/03/15 16:11** | **F0303SCD1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Specific Conductance | 390 | 1.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-1** | **15-02-1901-2-D** | **02/25/15 11:45** | **Aqueous** | **SC 7** | **N/A** | **03/03/15 16:11** | **F0303SCD1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Specific Conductance | 400 | 1.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-2** | **15-02-1901-3-D** | **02/25/15 12:00** | **Aqueous** | **SC 7** | **N/A** | **03/03/15 16:11** | **F0303SCD1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Specific Conductance | 400 | 1.0 | 1.00 | |

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Project: United Rock Products

Date Received: 02/25/15
Work Order: 15-02-1901
Preparation: N/A
Method: SM 2540 C
Units: mg/L



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **IRW-B** | **15-02-1901-1-L** | **02/25/15 10:11** | **Aqueous** | **SC 5** | **03/03/15** | **03/03/15 15:00** | **F0303TDSL1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Solids, Total Dissolved | 250 | 1.00 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-1** | **15-02-1901-2-L** | **02/25/15 11:45** | **Aqueous** | **SC 5** | **03/03/15** | **03/03/15 15:00** | **F0303TDSL1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Solids, Total Dissolved | 205 | 1.00 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-2** | **15-02-1901-3-L** | **02/25/15 12:00** | **Aqueous** | **SC 5** | **03/03/15** | **03/03/15 15:00** | **F0303TDSL1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Solids, Total Dissolved | 310 | 1.00 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **099-12-180-4450** | **N/A** | **Aqueous** | **SC 5** | **03/03/15** | **03/03/15 15:00** | **F0303TDSL1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Solids, Total Dissolved | ND | 1.0 | 1.00 | |

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Project: United Rock Products

Date Received: 02/25/15
Work Order: 15-02-1901
Preparation: N/A
Method: SM 4500 H+ B
Units: pH units



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **IRW-B** | **15-02-1901-1-F** | **02/25/15 10:11** | **Aqueous** | **PH 1** | **N/A** | **02/25/15 18:58** | **F0225PHD1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| pH | 5.41 | 0.01 | 1.00 | BV,BU |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-1** | **15-02-1901-2-F** | **02/25/15 11:45** | **Aqueous** | **PH 1** | **N/A** | **02/25/15 18:58** | **F0225PHD1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| pH | 7.80 | 0.01 | 1.00 | BV,BU |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-2** | **15-02-1901-3-F** | **02/25/15 12:00** | **Aqueous** | **PH 1** | **N/A** | **02/25/15 18:58** | **F0225PHD1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| pH | 8.08 | 0.01 | 1.00 | BV,BU |

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Project: United Rock Products

Date Received: 02/25/15
Work Order: 15-02-1901
Preparation: N/A
Method: SM 4500-CN E
Units: mg/L



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **IRW-B** | **15-02-1901-1-M** | **02/25/15 10:11** | **Aqueous** | **UV 8** | **03/06/15** | **03/06/15 18:17** | **F0306CNL2** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Cyanide, Total | ND | 0.020 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-1** | **15-02-1901-2-M** | **02/25/15 11:45** | **Aqueous** | **UV 8** | **03/06/15** | **03/06/15 18:17** | **F0306CNL2** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Cyanide, Total | ND | 0.020 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-2** | **15-02-1901-3-M** | **02/25/15 12:00** | **Aqueous** | **UV 8** | **03/06/15** | **03/06/15 18:17** | **F0306CNL2** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Cyanide, Total | ND | 0.020 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **099-05-061-3801** | **N/A** | **Aqueous** | **UV 8** | **03/06/15** | **03/06/15 18:17** | **F0306CNL2** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Cyanide, Total | ND | 0.020 | 1.00 | |

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Date Received: 02/25/15
Work Order: 15-02-1901
Preparation: N/A
Method: SM 5220 C
Units: mg/L

Project: United Rock Products



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **IRW-B** | **15-02-1901-1-G** | **02/25/15 10:11** | **Aqueous** | **BUR06** | **03/04/15** | **03/04/15 20:00** | **F0304ODB2** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Chemical Oxygen Demand | ND | 5.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-1** | **15-02-1901-2-G** | **02/25/15 11:45** | **Aqueous** | **BUR06** | **03/04/15** | **03/04/15 20:00** | **F0304ODB2** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Chemical Oxygen Demand | ND | 5.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-2** | **15-02-1901-3-G** | **02/25/15 12:00** | **Aqueous** | **BUR06** | **03/04/15** | **03/04/15 20:00** | **F0304ODB2** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Chemical Oxygen Demand | ND | 5.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **099-05-114-138** | **N/A** | **Aqueous** | **BUR06** | **03/04/15** | **03/04/15 20:00** | **F0304ODB2** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Chemical Oxygen Demand | ND | 5.0 | 1.00 | |

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Project: United Rock Products

Date Received: 02/25/15
Work Order: 15-02-1901
Preparation: N/A
Method: SM4500-CO2D
Units: mg/L



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **IRW-B** | **15-02-1901-1-H** | **02/25/15 10:11** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225CO2D3** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Carbon Dioxide | 850 | 5.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-1** | **15-02-1901-2-H** | **02/25/15 11:45** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225CO2D3** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Carbon Dioxide | 2.0 | 1.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-2** | **15-02-1901-3-H** | **02/25/15 12:00** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225CO2D3** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Carbon Dioxide | 1.7 | 1.0 | 1.00 | |

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Project: United Rock Products

Date Received: 02/25/15
Work Order: 15-02-1901
Preparation: N/A
Method: EPA 200.7
Units: mg/L



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **IRW-B** | **15-02-1901-1-K** | **02/25/15 10:11** | **Aqueous** | **ICP 7300** | **02/25/15** | **02/27/15 12:56** | **150225LA4A** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Cadmium | ND | 0.0100 | 1.00 | |
| Chromium | ND | 0.0100 | 1.00 | |
| Lead | ND | 0.0100 | 1.00 | |
| Nickel | ND | 0.0100 | 1.00 | |
| Boron | 0.112 | 0.0200 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-1** | **15-02-1901-2-K** | **02/25/15 11:45** | **Aqueous** | **ICP 7300** | **02/25/15** | **02/27/15 12:58** | **150225LA4A** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Cadmium | ND | 0.0100 | 1.00 | |
| Chromium | ND | 0.0100 | 1.00 | |
| Lead | ND | 0.0100 | 1.00 | |
| Nickel | ND | 0.0100 | 1.00 | |
| Boron | 0.128 | 0.0200 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-2** | **15-02-1901-3-K** | **02/25/15 12:00** | **Aqueous** | **ICP 7300** | **02/25/15** | **02/27/15 13:00** | **150225LA4A** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Cadmium | ND | 0.0100 | 1.00 | |
| Chromium | ND | 0.0100 | 1.00 | |
| Lead | ND | 0.0100 | 1.00 | |
| Nickel | ND | 0.0100 | 1.00 | |
| Boron | 0.131 | 0.0200 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **097-01-012-6088** | **N/A** | **Aqueous** | **ICP 7300** | **02/25/15** | **02/27/15 12:03** | **150225LA4A** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Cadmium | ND | 0.0100 | 1.00 | |
| Chromium | ND | 0.0100 | 1.00 | |
| Lead | ND | 0.0100 | 1.00 | |
| Nickel | ND | 0.0100 | 1.00 | |
| Boron | ND | 0.0200 | 1.00 | |

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Date Received: 02/25/15
Work Order: 15-02-1901
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: United Rock Products



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **IRW-B** | **15-02-1901-1-A** | **02/25/15 10:11** | **Aqueous** | **GC/MS L** | **02/26/15** | **02/27/15 07:18** | **150226L033** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Benzene | ND | 0.50 | 1.00 | |
| Tetrachloroethene | ND | 0.50 | 1.00 | |
| Trichloroethene | ND | 0.50 | 1.00 | |
| Vinyl Chloride | ND | 0.50 | 1.00 | |
| Methyl-t-Butyl Ether (MTBE) | ND | 0.50 | 1.00 | |

| Surrogate | Rec. (%) | Control Limits | Qualifiers |
|---|---|---|---|
| 1,4-Bromofluorobenzene | 98 | 68-120 | |
| Dibromofluoromethane | 101 | 80-127 | |
| 1,2-Dichloroethane-d4 | 112 | 80-128 | |
| Toluene-d8 | 100 | 80-120 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-1** | **15-02-1901-2-A** | **02/25/15 11:45** | **Aqueous** | **GC/MS L** | **02/26/15** | **02/27/15 07:47** | **150226L033** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Benzene | ND | 0.50 | 1.00 | |
| Tetrachloroethene | ND | 0.50 | 1.00 | |
| Trichloroethene | ND | 0.50 | 1.00 | |
| Vinyl Chloride | ND | 0.50 | 1.00 | |
| Methyl-t-Butyl Ether (MTBE) | ND | 0.50 | 1.00 | |

| Surrogate | Rec. (%) | Control Limits | Qualifiers |
|---|---|---|---|
| 1,4-Bromofluorobenzene | 98 | 68-120 | |
| Dibromofluoromethane | 100 | 80-127 | |
| 1,2-Dichloroethane-d4 | 109 | 80-128 | |
| Toluene-d8 | 100 | 80-120 | |

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Date Received: 02/25/15
Work Order: 15-02-1901
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: United Rock Products



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **PIT3-2** | **15-02-1901-3-A** | **02/25/15 12:00** | **Aqueous** | **GC/MS L** | **02/26/15** | **02/27/15 08:15** | **150226L033** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Benzene | ND | 0.50 | 1.00 | |
| Tetrachloroethene | ND | 0.50 | 1.00 | |
| Trichloroethene | ND | 0.50 | 1.00 | |
| Vinyl Chloride | ND | 0.50 | 1.00 | |
| Methyl-t-Butyl Ether (MTBE) | ND | 0.50 | 1.00 | |

| Surrogate | Rec. (%) | Control Limits | Qualifiers |
|---|---|---|---|
| 1,4-Bromofluorobenzene | 98 | 68-120 | |
| Dibromofluoromethane | 98 | 80-127 | |
| 1,2-Dichloroethane-d4 | 106 | 80-128 | |
| Toluene-d8 | 100 | 80-120 | |

| **Method Blank** | **099-10-025-3386** | **N/A** | **Aqueous** | **GC/MS L** | **02/26/15** | **02/27/15 00:40** | **150226L033** |
|---|---|---|---|---|---|---|---|

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Benzene | ND | 0.50 | 1.00 | |
| Tetrachloroethene | ND | 0.50 | 1.00 | |
| Trichloroethene | ND | 0.50 | 1.00 | |
| Vinyl Chloride | ND | 0.50 | 1.00 | |
| Methyl-t-Butyl Ether (MTBE) | ND | 0.50 | 1.00 | |

| Surrogate | Rec. (%) | Control Limits | Qualifiers |
|---|---|---|---|
| 1,4-Bromofluorobenzene | 100 | 68-120 | |
| Dibromofluoromethane | 103 | 80-127 | |
| 1,2-Dichloroethane-d4 | 125 | 80-128 | |
| Toluene-d8 | 100 | 80-120 | |

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Quality Control - Spike/Spike Duplicate

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Project: United Rock Products

Date Received: 02/25/15
Work Order: 15-02-1901
Preparation: N/A
Method: EPA 300.0



| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | MS/MSD Batch Number |
|---|---|---|---|---|---|---|
| **PIT3-2** | **Sample** | **Aqueous** | **IC 15** | **N/A** | **02/26/15 00:38** | **150225S02** |
| **PIT3-2** | **Matrix Spike** | **Aqueous** | **IC 15** | **N/A** | **02/26/15 00:55** | **150225S02** |
| **PIT3-2** | **Matrix Spike Duplicate** | **Aqueous** | **IC 15** | **N/A** | **02/26/15 01:12** | **150225S02** |

| Parameter | Sample Conc. | Spike Added | MS Conc. | MS %Rec. | MSD Conc. | MSD %Rec. | %Rec. CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 15.64 | 5000 | 4932 | 98 | 4935 | 98 | 80-120 | 0 | 0-20 | |
| Nitrate (as N) | 0.5072 | 500.0 | 491.0 | 98 | 491.2 | 98 | 80-120 | 0 | 0-20 | |
| Sulfate | 65.58 | 5000 | 4946 | 98 | 4956 | 98 | 80-120 | 0 | 0-20 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - Spike/Spike Duplicate

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Project: United Rock Products

Date Received: 02/25/15
Work Order: 15-02-1901
Preparation: N/A
Method: EPA 200.7



| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | MS/MSD Batch Number |
|---|---|---|---|---|---|---|
| **15-02-1880-1** | **Sample** | **Aqueous** | **ICP 7300** | **02/25/15** | **02/25/15 19:42** | **150225SA4** |
| **15-02-1880-1** | **Matrix Spike** | **Aqueous** | **ICP 7300** | **02/25/15** | **02/25/15 19:43** | **150225SA4** |
| **15-02-1880-1** | **Matrix Spike Duplicate** | **Aqueous** | **ICP 7300** | **02/25/15** | **02/25/15 19:45** | **150225SA4** |

| Parameter | Sample Conc. | Spike Added | MS Conc. | MS %Rec. | MSD Conc. | MSD %Rec. | %Rec. CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|---|---|---|---|
| Cadmium | ND | 0.5000 | 0.5570 | 111 | 0.5468 | 109 | 80-120 | 2 | 0-20 | |
| Chromium | 0.9394 | 0.5000 | 1.470 | 106 | 1.455 | 103 | 80-120 | 1 | 0-20 | |
| Lead | ND | 0.5000 | 0.5442 | 109 | 0.5301 | 106 | 80-120 | 3 | 0-20 | |
| Nickel | ND | 0.5000 | 0.5796 | 116 | 0.5642 | 113 | 80-120 | 3 | 0-20 | |
| Boron | 0.1726 | 0.5000 | 0.7170 | 109 | 0.7205 | 110 | 80-120 | 0 | 0-20 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - Spike/Spike Duplicate

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Date Received: 02/25/15
Work Order: 15-02-1901
Preparation: EPA 5030C
Method: EPA 8260B

Project: United Rock Products



| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | MS/MSD Batch Number |
|---|---|---|---|---|---|---|
| **15-02-1914-10** | **Sample** | **Aqueous** | **GC/MS L** | **02/26/15** | **02/27/15 01:37** | **150226S024** |
| **15-02-1914-10** | **Matrix Spike** | **Aqueous** | **GC/MS L** | **02/26/15** | **02/27/15 02:05** | **150226S024** |
| **15-02-1914-10** | **Matrix Spike Duplicate** | **Aqueous** | **GC/MS L** | **02/26/15** | **02/27/15 02:34** | **150226S024** |

| Parameter | Sample Conc. | Spike Added | MS Conc. | MS %Rec. | MSD Conc. | MSD %Rec. | %Rec. CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | 10.00 | 10.30 | 103 | 10.04 | 100 | 75-125 | 3 | 0-20 | |
| Carbon Tetrachloride | ND | 10.00 | 9.162 | 92 | 8.889 | 89 | 69-135 | 3 | 0-20 | |
| Chlorobenzene | ND | 10.00 | 10.88 | 109 | 10.66 | 107 | 75-125 | 2 | 0-20 | |
| 1,2-Dibromoethane | ND | 10.00 | 9.957 | 100 | 9.859 | 99 | 75-126 | 1 | 0-20 | |
| 1,2-Dichlorobenzene | ND | 10.00 | 10.69 | 107 | 10.47 | 105 | 75-125 | 2 | 0-20 | |
| 1,2-Dichloroethane | ND | 10.00 | 10.53 | 105 | 10.53 | 105 | 75-127 | 0 | 0-20 | |
| 1,1-Dichloroethene | ND | 10.00 | 10.95 | 109 | 10.24 | 102 | 66-126 | 7 | 0-20 | |
| Ethylbenzene | ND | 10.00 | 10.48 | 105 | 10.21 | 102 | 75-125 | 3 | 0-20 | |
| Toluene | ND | 10.00 | 10.59 | 106 | 10.22 | 102 | 75-125 | 4 | 0-20 | |
| Trichloroethene | 32.30 | 10.00 | 42.61 | 103 | 41.18 | 89 | 75-125 | 3 | 0-20 | |
| Vinyl Chloride | ND | 10.00 | 9.142 | 91 | 8.688 | 87 | 52-142 | 5 | 0-20 | |
| p/m-Xylene | ND | 20.00 | 21.34 | 107 | 20.82 | 104 | 75-125 | 2 | 0-20 | |
| o-Xylene | ND | 10.00 | 10.89 | 109 | 10.57 | 106 | 75-127 | 3 | 0-20 | |
| Methyl-t-Butyl Ether (MTBE) | ND | 10.00 | 9.465 | 95 | 9.513 | 95 | 71-131 | 1 | 0-20 | |
| Tert-Butyl Alcohol (TBA) | ND | 50.00 | 54.86 | 110 | 50.87 | 102 | 20-180 | 8 | 0-40 | |
| Diisopropyl Ether (DIPE) | ND | 10.00 | 10.00 | 100 | 9.574 | 96 | 64-136 | 4 | 0-20 | |
| Ethyl-t-Butyl Ether (ETBE) | ND | 10.00 | 8.805 | 88 | 8.742 | 87 | 73-133 | 1 | 0-20 | |
| Tert-Amyl-Methyl Ether (TAME) | ND | 10.00 | 9.074 | 91 | 9.177 | 92 | 75-125 | 1 | 0-20 | |
| Ethanol | ND | 100.0 | 120.8 | 121 | 109.5 | 109 | 73-139 | 10 | 0-27 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - Sample Duplicate

| | | | |
|---|---|---|---|
| Sully Miller Contracting | | Date Received: | 02/25/15 |
| 135 State College Boulevard, suite 400 | | Work Order: | 15-02-1901 |
| Brea, CA 92821-5819 | | Preparation: | N/A |
| | | Method: | SM 2320B |
| Project: United Rock Products | | | Page 1 of 9 |

| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | Duplicate Batch Number |
|---|---|---|---|---|---|---|
| **IRW-B** | **Sample** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225ALKD3** |
| **IRW-B** | **Sample Duplicate** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225ALKD3** |

| Parameter | Sample Conc. | DUP Conc. | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|
| Alkalinity, Total (as CaCO3) | 107.0 | 107.0 | 0 | 0-25 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - Sample Duplicate

| | | | |
|---|---|---|---|
| Sully Miller Contracting | | Date Received: | 02/25/15 |
| 135 State College Boulevard, suite 400 | | Work Order: | 15-02-1901 |
| Brea, CA 92821-5819 | | Preparation: | N/A |
| | | Method: | SM 2320B |
| Project: United Rock Products | | | Page 2 of 9 |

| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | Duplicate Batch Number |
|---|---|---|---|---|---|---|
| **IRW-B** | **Sample** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225HCOD3** |
| **IRW-B** | **Sample Duplicate** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225HCOD3** |

| Parameter | Sample Conc. | DUP Conc. | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|
| Bicarbonate (as CaCO3) | 107.0 | 107.0 | 0 | 0-25 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - Sample Duplicate

| | | | |
|---|---|---|---|
| Sully Miller Contracting | | Date Received: | 02/25/15 |
| 135 State College Boulevard, suite 400 | | Work Order: | 15-02-1901 |
| Brea, CA 92821-5819 | | Preparation: | N/A |
| | | Method: | SM 2320B |
| Project: United Rock Products | | | Page 3 of 9 |

| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | Duplicate Batch Number |
|---|---|---|---|---|---|---|
| **IRW-B** | **Sample** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225CO3D3** |
| **IRW-B** | **Sample Duplicate** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225CO3D3** |

| Parameter | Sample Conc. | DUP Conc. | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|
| Carbonate (as CaCO3) | ND | ND | N/A | 0-25 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - Sample Duplicate

| | | | |
|---|---|---|---|
| Sully Miller Contracting | | Date Received: | 02/25/15 |
| 135 State College Boulevard, suite 400 | | Work Order: | 15-02-1901 |
| Brea, CA 92821-5819 | | Preparation: | N/A |
| | | Method: | SM 2340C |
| Project: United Rock Products | | | Page 4 of 9 |

| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | Duplicate Batch Number |
|---|---|---|---|---|---|---|
| **IRW-B** | **Sample** | **Aqueous** | **BUR21** | **N/A** | **03/03/15 17:00** | **F0303HARD1** |
| **IRW-B** | **Sample Duplicate** | **Aqueous** | **BUR21** | **N/A** | **03/03/15 17:00** | **F0303HARD1** |

| Parameter | Sample Conc. | DUP Conc. | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|
| Hardness, Total (as CaCO3) | 153.0 | 153.0 | 0 | 0-25 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - Sample Duplicate

| | | | |
|---|---|---|---|
| Sully Miller Contracting | | Date Received: | 02/25/15 |
| 135 State College Boulevard, suite 400 | | Work Order: | 15-02-1901 |
| Brea, CA 92821-5819 | | Preparation: | N/A |
| | | Method: | SM 2510 B |
| Project: United Rock Products | | | Page 5 of 9 |

| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | Duplicate Batch Number |
|---|---|---|---|---|---|---|
| **IRW-B** | **Sample** | **Aqueous** | **SC 7** | **N/A** | **03/03/15 16:11** | **F0303SCD1** |
| **IRW-B** | **Sample Duplicate** | **Aqueous** | **SC 7** | **N/A** | **03/03/15 16:11** | **F0303SCD1** |

| Parameter | Sample Conc. | DUP Conc. | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|
| Specific Conductance | 389.0 | 388.0 | 0 | 0-25 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - Sample Duplicate

| | | | |
|---|---|---|---|
| Sully Miller Contracting | | Date Received: | 02/25/15 |
| 135 State College Boulevard, suite 400 | | Work Order: | 15-02-1901 |
| Brea, CA 92821-5819 | | Preparation: | N/A |
| | | Method: | SM 2540 C |
| Project: United Rock Products | | | Page 6 of 9 |

| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | Duplicate Batch Number |
|---|---|---|---|---|---|---|
| **15-02-1864-1** | **Sample** | **Aqueous** | **SC 5** | **03/03/15 00:00** | **03/03/15 15:00** | **F0303TDSD1** |
| **15-02-1864-1** | **Sample Duplicate** | **Aqueous** | **SC 5** | **03/03/15 00:00** | **03/03/15 15:00** | **F0303TDSD1** |

| Parameter | Sample Conc. | DUP Conc. | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|
| Solids, Total Dissolved | 355.0 | 375.0 | 5 | 0-20 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - Sample Duplicate

| | | | |
|---|---|---|---|
| Sully Miller Contracting | | Date Received: | 02/25/15 |
| 135 State College Boulevard, suite 400 | | Work Order: | 15-02-1901 |
| Brea, CA 92821-5819 | | Preparation: | N/A |
| | | Method: | SM 4500 H+ B |
| Project: United Rock Products | | | Page 7 of 9 |

| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | Duplicate Batch Number |
|---|---|---|---|---|---|---|
| **IRW-B** | **Sample** | **Aqueous** | **PH 1** | **N/A** | **02/25/15 18:58** | **F0225PHD1** |
| **IRW-B** | **Sample Duplicate** | **Aqueous** | **PH 1** | **N/A** | **02/25/15 18:58** | **F0225PHD1** |

| Parameter | Sample Conc. | DUP Conc. | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|
| pH | 5.410 | 5.430 | 0 | 0-25 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - Sample Duplicate

| | | | |
|---|---|---|---|
| Sully Miller Contracting | | Date Received: | 02/25/15 |
| 135 State College Boulevard, suite 400 | | Work Order: | 15-02-1901 |
| Brea, CA 92821-5819 | | Preparation: | N/A |
| | | Method: | SM 5220 C |
| Project: United Rock Products | | | Page 8 of 9 |

| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | Duplicate Batch Number |
|---|---|---|---|---|---|---|
| **15-03-0038-1** | **Sample** | **Aqueous** | **BUR06** | **03/04/15 00:00** | **03/04/15 20:00** | **F0304ODD2** |
| **15-03-0038-1** | **Sample Duplicate** | **Aqueous** | **BUR06** | **03/04/15 00:00** | **03/04/15 20:00** | **F0304ODD2** |

| Parameter | Sample Conc. | DUP Conc. | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|
| Chemical Oxygen Demand | 113.0 | 104.0 | 8 | 0-25 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - Sample Duplicate

| | | | |
|---|---|---|---|
| Sully Miller Contracting | | Date Received: | 02/25/15 |
| 135 State College Boulevard, suite 400 | | Work Order: | 15-02-1901 |
| Brea, CA 92821-5819 | | Preparation: | N/A |
| | | Method: | SM4500-CO2D |
| Project: United Rock Products | | | Page 9 of 9 |

| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | Duplicate Batch Number |
|---|---|---|---|---|---|---|
| **IRW-B** | **Sample** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225CO2D3** |
| **IRW-B** | **Sample Duplicate** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225CO2D3** |

| Parameter | Sample Conc. | DUP Conc. | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|
| Carbon Dioxide | 851.9 | 892.1 | 5 | 0-25 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - LCS

| | | | |
|---|---|---|---|
| Sully Miller Contracting | | Date Received: | 02/25/15 |
| 135 State College Boulevard, suite 400 | | Work Order: | 15-02-1901 |
| Brea, CA 92821-5819 | | Preparation: | N/A |
| | | Method: | EPA 300.0 |
| Project: United Rock Products | | | Page 1 of 6 |

| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | LCS Batch Number |
|---|---|---|---|---|---|---|
| **099-12-906-5476** | **LCS** | **Aqueous** | **IC 15** | **N/A** | **02/25/15 23:30** | **150225L02** |

| Parameter | Spike Added | Conc. Recovered | LCS %Rec. | %Rec. CL | Qualifiers |
|---|---|---|---|---|---|
| Chloride | 50.00 | 49.44 | 99 | 90-110 | |
| Nitrate (as N) | 5.000 | 4.914 | 98 | 90-110 | |
| Sulfate | 50.00 | 49.04 | 98 | 90-110 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - LCS/LCSD

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Project: United Rock Products

Date Received: 02/25/15
Work Order: 15-02-1901
Preparation: N/A
Method: SM 2320B



| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | LCS/LCSD Batch Number |
|---|---|---|---|---|---|---|
| **099-15-859-609** | **LCS** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225ALKB3** |
| **099-15-859-609** | **LCSD** | **Aqueous** | **PH1/BUR03** | **N/A** | **02/25/15 17:15** | **F0225ALKB3** |

| Parameter | Spike Added | LCS Conc. | LCS %Rec. | LCSD Conc. | LCSD %Rec. | %Rec. CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|---|---|---|
| Alkalinity, Total (as CaCO3) | 100.0 | 98.00 | 98 | 98.00 | 98 | 80-120 | 0 | 0-20 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - LCS/LCSD

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Project: United Rock Products

Date Received: 02/25/15
Work Order: 15-02-1901
Preparation: N/A
Method: SM 2540 C



| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | LCS/LCSD Batch Number |
|---|---|---|---|---|---|---|
| **099-12-180-4450** | **LCS** | **Aqueous** | **SC 5** | **03/03/15** | **03/03/15 15:00** | **F0303TDSL1** |
| **099-12-180-4450** | **LCSD** | **Aqueous** | **SC 5** | **03/03/15** | **03/03/15 15:00** | **F0303TDSL1** |

| Parameter | Spike Added | LCS Conc. | LCS %Rec. | LCSD Conc. | LCSD %Rec. | %Rec. CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|---|---|---|
| Solids, Total Dissolved | 100.0 | 100.0 | 100 | 95.00 | 95 | 80-120 | 5 | 0-20 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - LCS/LCSD

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Project: United Rock Products

Date Received: 02/25/15
Work Order: 15-02-1901
Preparation: N/A
Method: SM 4500-CN E



| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | LCS/LCSD Batch Number |
|---|---|---|---|---|---|---|
| **099-05-061-3801** | **LCS** | **Aqueous** | **UV 8** | **03/06/15** | **03/06/15 18:17** | **F0306CNL2** |
| **099-05-061-3801** | **LCSD** | **Aqueous** | **UV 8** | **03/06/15** | **03/06/15 18:17** | **F0306CNL2** |

| Parameter | Spike Added | LCS Conc. | LCS %Rec. | LCSD Conc. | LCSD %Rec. | %Rec. CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | 0.2000 | 0.1650 | 82 | 0.1640 | 82 | 80-120 | 1 | 0-20 | |

RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - LCS

| | | | |
|---|---|---|---|
| Sully Miller Contracting | | Date Received: | 02/25/15 |
| 135 State College Boulevard, suite 400 | | Work Order: | 15-02-1901 |
| Brea, CA 92821-5819 | | Preparation: | N/A |
| | | Method: | EPA 200.7 |
| Project: United Rock Products | | | Page 5 of 6 |

| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | LCS Batch Number |
|---|---|---|---|---|---|---|
| **097-01-012-6088** | **LCS** | **Aqueous** | **ICP 7300** | **02/25/15** | **03/04/15 15:03** | **150225LA4A** |

| Parameter | Spike Added | Conc. Recovered | LCS %Rec. | %Rec. CL | Qualifiers |
|---|---|---|---|---|---|
| Cadmium | 0.5000 | 0.5015 | 100 | 85-115 | |
| Chromium | 0.5000 | 0.5115 | 102 | 85-115 | |
| Lead | 0.5000 | 0.5035 | 101 | 85-115 | |
| Nickel | 0.5000 | 0.5189 | 104 | 85-115 | |
| Boron | 0.5000 | 0.4873 | 97 | 85-115 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - LCS

| | | | |
|---|---|---|---|
| Sully Miller Contracting | | Date Received: | 02/25/15 |
| 135 State College Boulevard, suite 400 | | Work Order: | 15-02-1901 |
| Brea, CA 92821-5819 | | Preparation: | EPA 5030C |
| | | Method: | EPA 8260B |
| Project: United Rock Products | | | Page 6 of 6 |

| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | LCS Batch Number |
|---|---|---|---|---|---|---|
| **099-10-025-3386** | **LCS** | **Aqueous** | **GC/MS L** | **02/26/15** | **02/26/15 23:43** | **150226L033** |

| Parameter | Spike Added | Conc. Recovered | LCS %Rec. | %Rec. CL | ME CL | Qualifiers |
|---|---|---|---|---|---|---|
| Benzene | 10.00 | 9.883 | 99 | 80-120 | 73-127 | |
| Carbon Tetrachloride | 10.00 | 9.902 | 99 | 80-129 | 72-137 | |
| Chlorobenzene | 10.00 | 10.71 | 107 | 80-120 | 73-127 | |
| 1,2-Dibromoethane | 10.00 | 9.691 | 97 | 80-120 | 73-127 | |
| 1,2-Dichlorobenzene | 10.00 | 10.54 | 105 | 80-120 | 73-127 | |
| 1,2-Dichloroethane | 10.00 | 10.12 | 101 | 80-122 | 73-129 | |
| 1,1-Dichloroethene | 10.00 | 11.00 | 110 | 77-120 | 70-127 | |
| Ethylbenzene | 10.00 | 10.20 | 102 | 80-120 | 73-127 | |
| Toluene | 10.00 | 10.20 | 102 | 80-120 | 73-127 | |
| Trichloroethene | 10.00 | 9.936 | 99 | 80-120 | 73-127 | |
| Vinyl Chloride | 10.00 | 9.729 | 97 | 63-135 | 51-147 | |
| p/m-Xylene | 20.00 | 21.03 | 105 | 80-120 | 73-127 | |
| o-Xylene | 10.00 | 10.62 | 106 | 80-120 | 73-127 | |
| Methyl-t-Butyl Ether (MTBE) | 10.00 | 10.06 | 101 | 75-123 | 67-131 | |
| Tert-Butyl Alcohol (TBA) | 50.00 | 50.42 | 101 | 80-120 | 73-127 | |
| Diisopropyl Ether (DIPE) | 10.00 | 10.58 | 106 | 73-121 | 65-129 | |
| Ethyl-t-Butyl Ether (ETBE) | 10.00 | 9.510 | 95 | 76-124 | 68-132 | |
| Tert-Amyl-Methyl Ether (TAME) | 10.00 | 8.890 | 89 | 80-120 | 73-127 | |
| Ethanol | 100.0 | 121.9 | 122 | 73-133 | 63-143 | |

Total number of LCS compounds: 19
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

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# Glossary of Terms and Qualifiers

Work Order: 15-02-1901 Page 1 of 1

| Qualifiers | Definition |
|---|---|
| * | See applicable analysis comment. |
| < | Less than the indicated value. |
| > | Greater than the indicated value. |
| 1 | Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification. |
| 2 | Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification. |
| 3 | Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control. |
| 4 | The MS/MSD RPD was out of control due to suspected matrix interference. |
| 5 | The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference. |
| 6 | Surrogate recovery below the acceptance limit. |
| 7 | Surrogate recovery above the acceptance limit. |
| B | Analyte was present in the associated method blank. |
| BU | Sample analyzed after holding time expired. |
| BV | Sample received after holding time expired. |
| E | Concentration exceeds the calibration range. |
| ET | Sample was extracted past end of recommended max. holding time. |
| HD | The chromatographic pattern was inconsistent with the profile of the reference fuel standard. |
| HDH | The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected). |
| HDL | The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected). |
| J | Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated. |
| JA | Analyte positively identified but quantitation is an estimate. |
| ME | LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean). |
| ND | Parameter not detected at the indicated reporting limit. |
| Q | Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater. |
| SG | The sample extract was subjected to Silica Gel treatment prior to analysis. |
| X | % Recovery and/or RPD out-of-range. |
| Z | Analyte presence was not confirmed by second column or GC/MS analysis. |

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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# CHAIN OF CUSTODY RECORD

**Chambers Environmental Services**

4510 Mt. Henry Ave, San Diego, CA 92117
858.279.3266

**15-02-1901**

02/25/15

Lab: Calscience Labs

**Client Name/Consultant:** United Rock Products

**Address:** 135 S. State College Blvd, Suite 400

**City/State/Zip:** Brea, CA 92821

**Project Manager:** Ken Barker

**Sampler Name: (Print)** D. Chambers

**Sampler Signature:** D. Chambers

**Report To:** Same

**Invoice To:** Same

**Project ID:** Pit-3: United Rock Products

**Project #:**

Matrix | Analyze For:

| | Sample ID / Description | Date Sampled | Time Sampled | No. of Containers | Grab | Composite | Field Filtered | Groundwater | Wastewater | Drinking Water | Sludge | Soil | Other (specify): | VOC'S 8260 | Specific Conductance | Total Hardness | COD, TDS | Cyanide | CO2 | Metals | Anions | Alk., pH | 24H 48H 7-day rush | Standard TAT | Fax Results | Send QC with report |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | IRW-B | 2/25/15 | 10:11 | 13 | x | | N | x | | | | | | X | X | X | X | X | X | X | X | X | | X | | |
| 2 | PIT 3-1 | ↓ | 11:45 | ↓ | ↓ | | ↓ | ↓ | | | | | | X | X | X | X | X | X | X | X | X | | X | | |
| 3 | PIT 3-2 | ↓ | 12:00 | ↓ | ↓ | | ↓ | ↓ | | | | | | X | X | X | X | X | X | X | X | X | | X | | |

**Special Instructions:**

**Call and confirm before analysis.**

**Method of Shipment:** FEDEX, Courrier, Client drop

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| D. Chambers | 02/25/15 | 2:32pm | Danny Ele | 2/25/15 | 14:32 |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| | | | | | |

**Laboratory Comments:**

Temperature Upon Receipt:

VOCs Free of Headspace? Y N



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eurofins | Calscience

WORK ORDER #: 15-02-1901

# SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Sully Miller

DATE: 02/25/15

**TEMPERATURE:** Thermometer ID: SC4 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

**Temperature** 3.2 °C + 0.2 °C (CF) = 3.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

**Ambient Temperature:** ☐ Air ☐ Filter **Checked by:** brg

**CUSTODY SEALS INTACT:**

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Checked by:** brg

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Checked by:** 965

| **SAMPLE CONDITION:** | Yes | No | N/A |
|---|---|---|---|
| Chain-Of-Custody (COC) document(s) received with samples | ☑ | ☐ | ☐ |
| COC document(s) received complete | ☑ | ☐ | ☐ |
| ☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels. | | | |
| ☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished. | | | |
| Sampler's name indicated on COC | ☑ | ☐ | ☐ |
| Sample container label(s) consistent with COC | ☑ | ☐ | ☐ |
| Sample container(s) intact and good condition | ☑ | ☐ | ☐ |
| Proper containers and sufficient volume for analyses requested | ☑ | ☐ | ☐ |
| Analyses received within holding time | ☑ | ☐ | ☐ |
| Aqueous samples received within 15-minute holding time | | | |
| ☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen | ☐ | ☐ | ☑ |
| Proper preservation noted on COC or sample container | ☑ | ☐ | ☐ |
| ☐ Unpreserved vials received for Volatiles analysis | | | |
| Volatile analysis container(s) free of headspace | ☑ | ☐ | ☐ |
| Tedlar bag(s) free of condensation | ☐ | ☐ | ☑ |

**CONTAINER TYPE:**

**Solid:** ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

**Aqueous:** ☐VOA ☑VOAh (3) ☐VOA**na₂** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na₂** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☑250AGB ☐250CGB ☑250CGB**s** ☑1PB ☑1PB**na** ☑500PB (965 2 vials)

☑250PB ☑250PB**n** (2) ☑125PB (3) ☐125PB**znna** ☐100PJ ☐100PJ**na₂** ☐_____ ☐_____ ☐_____

**Air:** ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ **Labeled/Checked by:** 965

**Container:** **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope **Reviewed by:** 8/2

**Preservative:** **h:** HCL **n:** $HNO_3$ **na₂:**$Na_2S_2O_3$ **na:** NaOH **p:** $H_3PO_4$ **s:** $H_2SO_4$ **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered **Scanned by:** 8/2



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Project Name: United Rock Products

Date: 02/25/15

**Water Level Data Sheet**

Project Number: _____

| Well ID | Time | DTW | Ref Pt. | ~ Elev. | Well TD | | Comments: |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Yard Well | | | 405.6 | | | | (IRW-1) |
| | | | | | | | |
| IRW-1A | | | 380.94 | | | | (Pit-1) |
| | | | | | | | |
| IRW-1B | | | 380.03 | | | | (Pit 1) |
| | | | | | | | |
| IRW-A | | DRY | | | 249.6 | | (Pit 3) |
| | | | | | | | |
| IRW-B | | 226.69 | | | 250.1 | | (Pit 3) |

Ref Pt = Reference Point
DTW = Depth to Water
TD = Total Depth
Elev. = Elevation

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: DWC

## *Chambers Environmental Services, Inc*
## Sampling Data Sheet

Date: 02/25/15

Well ID: IRW-B

**Purge Data**

| (Variable) | 0.2 C | 3-5% | 0.2 u | 20mv | 0.2mg/L | 10% | ML | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | Temp. | E.C.(uS) | pH | ORP | DO | Turbidity | Volume | DTW | Notes |
| Start: 9:20 | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | 226.69 | |
| 10:00 | 16.1 | 1927 | 7.24 | 61 | 5.95 | 7.76 | 500 | 226.69 | |
| 10:04 | 16.7 | 1688 | 7.12 | 72 | 5.49 | 6.09 | 900 | 226.70 | |
| 10:07 | 16.9 | 1695 | 7.09 | 83 | 5.28 | 5.12 | 1200 | 226.69 | |
| 10:10 | 17.0 | 1699 | 7.05 | 84 | 5.11 | 5.10 | 1500 | 226.69 | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| Stop: 10:44 | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

Purge Pump: Bladder

Pump Set Time:

Pump/Inlet Depth (BGS): 235

Decon:

Triple-Rinse

Total Vol. Purged 1500

Final Temp.: 17.0

Final EC: 1699

Final pH: 7.05

Final ORP: 84

Final DO: 5.11

Draw Down: 0.01

Sample Start: 10:11

Sample St: 10:44

Analyses: Sample Container:

**Well Data**

| | |
|---|---|
| Bore OD: | 10 ? |
| Casing ID: | 4 |
| **Well TD:** | 250.1 |
| **D.T.W.:** | 226.69 |
| Ft./ Water: | |

Special Notes for This Well:

Sample ID: /

(If different from above)

DTW @ Sample: 226.69

13

**Meters:**

Solinst 12202 Interphase Probe

Oakton 300 Series

Purge Method: 3

**Methods:** 1=3 BV sample after 80%.

2= 1 BV and monitor parameters each 0.5 BV

3=Low-flow.

4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

**Chambers Environmental Services, Inc**
**Sampling Data Sheet**

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: DWC

Date: 02/25/15

~~Well~~ ID: PIT 3-1

**Purge Data**

| (Variable) | 0.2 C | 3-5% | 0.2 u | 20mv | 0.2mg/L | 10% | ML | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | Temp. | E.C.(uS) | pH | ORP | DO | Turbidity | Volume | DTW | Notes |
| Start: | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | | |
| | | | | | 1 | 1 | 1 | 1 | |
| 11:42 | 19.9 | 483.8 | 7.33 | 80 | | | | | |
| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

Purge Pump: 1
Pump Set Time:
Pump/Inlet Depth (BGS):

Decon:
Triple-Rinse

Total Vol. Purged
Final Temp.:
Final EC:
Final pH:
Final ORP:
Final DO:
Draw Down:

Sample Start: 11:45
Sample St
Analyses: Sample Container:

Sample ID:
(If different from above)
DTW @ Sample:

**Well Data**
Bore OD:
Casing ID:
**Well TD:**
**D.T.W.:**
Ft./ Water:

Special Notes for This Well:

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

**Methods:** 1=3 BV sample after 80%.
2= 1 BV and monitor parameters each 0.5 BV.
3=Low-flow.
4= slow recharge. 5= non-purge.

4510 Mt. Henry Ave.,
San Diego CA 92107

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: _____

## *Chambers Environmental Services, Inc*
## Sampling Data Sheet

Date: 02/25/15

~~Well~~ ID: Pit 3-2

**Purge Data**

| (Variable) | 0.2 C | 3-5% | 0.2 u | 20mv | 0.2mg/L | 10% | ML | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | Temp. | E.C.(uS) | pH | ORP | DO | Turbidity | Volume | DTW | Notes |
| Start: | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | | |
| | | | | | | | | | |
| | | | | | | | | | |
| 11:55 | 20.1 | 4426 | 7.34 | 73 | 1 | 1 | 1 | 1 | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
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| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

Purge Pump: _____
Pump Set Time: _____
Pump/Inlet Depth (BGS): _____

Decon:
Triple-Rinse

Total Vol. Purged _____
Final Temp.: _____
Final EC: _____
Final pH: _____
Final ORP: _____
Final DO: _____
Draw Down: _____

Sample Start: 12:00
Sample St _____
Analyses: Sample Container:

**Well Data**
Bore OD:
Casing ID:
**Well TD:**
**D.T.W.:**
Ft./ Water:

Special Notes for This Well:

Sample ID: _____
(If different from above)
DTW @ Sample: _____

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

**Methods:** 1=3 BV sample after 80%.
2= 1 BV and monitor parameters each 0.5 BV.
3=Low-flow.
4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

# CHAIN OF CUSTODY RECORD

**Chambers Environmental Services**
4510 Mt. Henry Ave, San Diego, CA 92117
858.279.3266

02/25/15

**Client Name/Consultant:** United Rock Products
**Address:** 135 S. State College Blvd, Suite 400
**City/State/Zip:** Brea, CA 92821
**Project Manager:** Ken Barker
**Sampler Name: (Print)** D. Chambers
**Sampler Signature:** D. Chambers

Lab: Calscience Labs
**Report To:** Same
**Invoice To:** Same
**Project ID:** Pit-3: United Rock Products
**Project #:**

| Sample ID / Description | Date Sampled | Time Sampled | No. of Containers | Grab | Composite | Field Filtered | Matrix: Groundwater | Wastewater | Drinking Water | Sludge | Soil | Other (specify): | Analyze For: VOC's 8260 | Specific Conductance | Total Hardness | COD, TDS | Cyanide | CO2 | Metals | Anions | Alk., pH | 24H 48H 7-day rush | Standard TAT | Fax Results | Send QC with report |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| IRW-B | 2/25/15 | 10:11 | 13 | x | | N | x | | | | | | X | X | X | X | X | X | X | X | X | | X | | |
| PIT 3-1 | ↓ | 11:45 | ↓ | ↓ | | ↓ | ↓ | | | | | | X | X | X | X | X | X | X | X | X | | X | | |
| PIT 3-2 | ↓ | 12:00 | ↓ | ↓ | | ↓ | ↓ | | | | | | X | X | X | X | X | X | X | X | X | | X | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | | | | | | | | |

**Special Instructions:**
Call and confirm before analysis.

**Method of Shipment:** FEDEX, Courrier, Client drop

**Laboratory Comments:**
Temperature Upon Receipt:
VOCs Free of Headspace? Y N

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| D. Chambers | 02/25/15 | 2:32PM | Dannyle ECI | 2/25/15 | 14:32 |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| | | | | | |

# APPENDIX C

# GROUNDWATER DATABASE

## Pite #3 UNITED ROCK PRODUCTS DATABASE

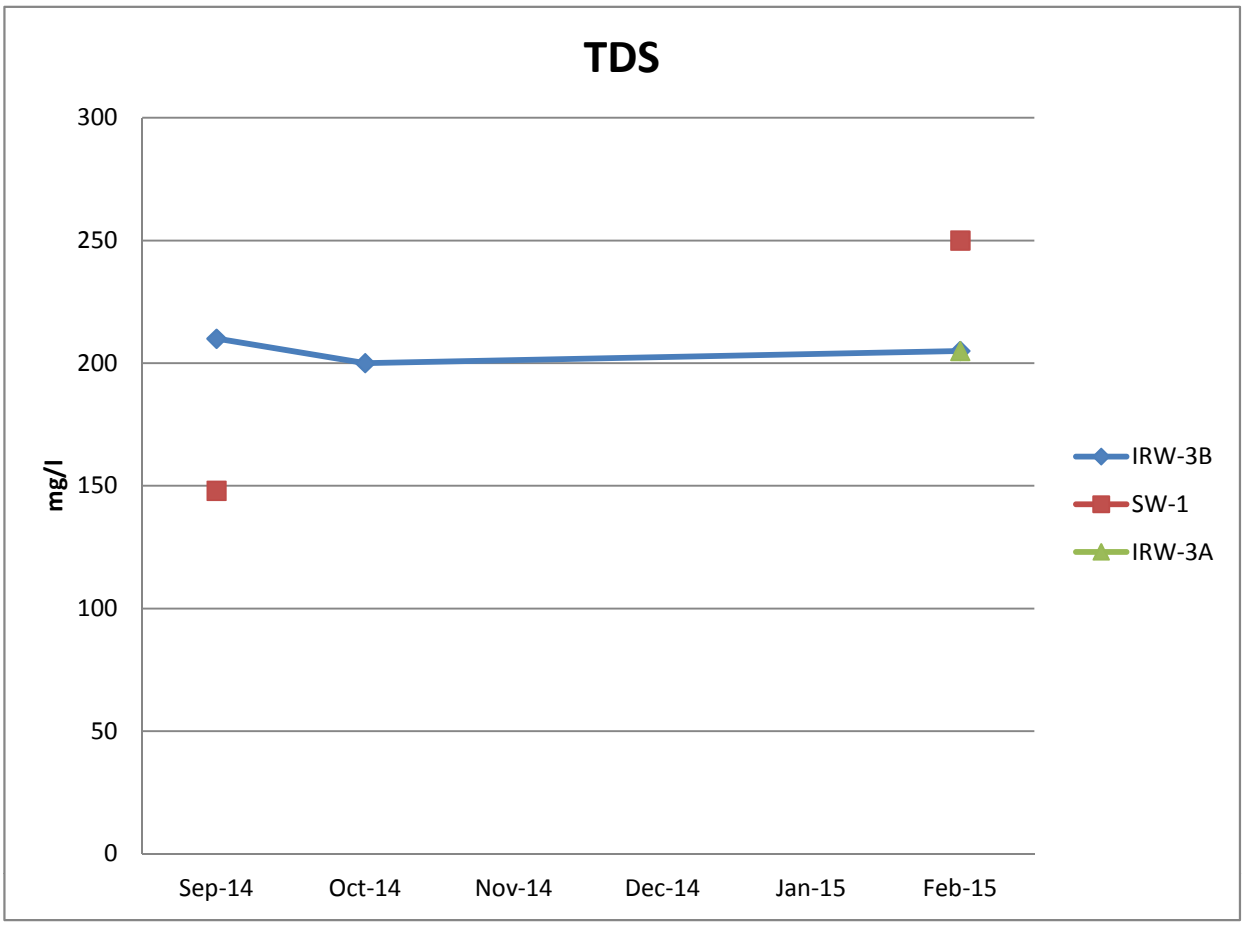
| WATER LEVEL | | GROUNDWATER PARAMETERS | | | | | GENERAL MINERAL (mg/l) | | | | TRACE ELEMENTS | | | | GENERAL CHEMISTRY | | | | | | | ORGANICS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | | See attached organics portion - Note (1) | | | | |
| Sample Point | Date | pH | T(°F) | EC (µmhos/cm) | $CO_2$ (mg/l) | Alk (mg/l) | $SO_4$ | Cl | $NO_3$ | TDS | Ni (µg/l) | Pb (µg/l) | Cd (µg/l) | Cr (µg/l) | COD (mg/l) | OH (mg/l) | TH (mg/l) | $HCO_3$ (mg/l) | $CO_3$ (mg/l) | B (mg/l) | | Benzene (µg/l) | MTBE (µg/l) | TCE (µg/l) | Tetra chloro ethene (µg/l) | Vinyl Chroide (µg/l) |
| IRW-3A | 3-Sep-14 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | | NA | NA | NA | NA | NA |
| IRW-3B | 3-Sep-14 | 7.9 | 81.6 | 397 | 748 | 130 | 41.6 | 15.9 | 0.85 | 210 | <10 | <5 | <5 | <10 | 4 | <5 | 157 | 159 | <5 | 0.204 | | <1 | <1 | <5 | <5 | <5 |
| SW-1 | 3-Sep-14 | 8.42 | 83.84 | 348 | <1 | 76 | 64.5 | 15 | 0.44 | 148 | <10 | <5 | <5 | <10 | 4 | <5 | 144 | 88 | <5 | 0.147 | | <1 | <1 | <5 | <5 | <5 |
| Pit 3-1 | 29-Oct-14 | 8.08 | 74.5 | 388 | <1 | 102 | 63.8 | 16 | 0.88 | 184 | <20 | 7 | <5 | <10 | <4 | <5 | 163 | 125 | <5 | 0.098 | | <1 | <1 | <5 | <5 | <5 |
| Pit 3-2 | 29-Oct-14 | 7.88 | 80.1 | 391 | <1 | 102 | 63.6 | 15.9 | 0.74 | 258 | <20 | 7 | <5 | <10 | <4 | <5 | 159 | 125 | <5 | 0.204 | | <1 | <1 | <5 | <5 | <5 |
| IRW-B | 29-Oct-14 | 8.42 | 83.84 | 348 | <1 | 76 | 39.3 | 15.8 | 1.61 | 200 | <10 | <5 | <5 | <10 | <4 | <5 | 174 | 152 | 44 | 0.082 | | <1 | <1 | <5 | <5 | <5 |
| Pit 3-1 | 25-Feb-15 | 7.33 | 67.82 | 400 | 2 | 107 | 66 | 16 | 0.51 | 205 | <10 | <10 | <10 | <10 | <5 | -- | 160 | 107 | <1 | 0.128 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-2 | 25-Feb-15 | 7.34 | 68.18 | 400 | 1.7 | 104 | 66 | 0.51 | 0.51 | 310 | <10 | <10 | <10 | <10 | <5 | -- | 150 | 104 | <1 | 0.131 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| IRW-B | 25-Feb-15 | 7.05 | 62.6 | 390 | 850 | 107 | 48 | 14 | 0.3 | 250 | <10 | <10 | <10 | <10 | <5 | -- | 150 | 107 | <1 | 0.112 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

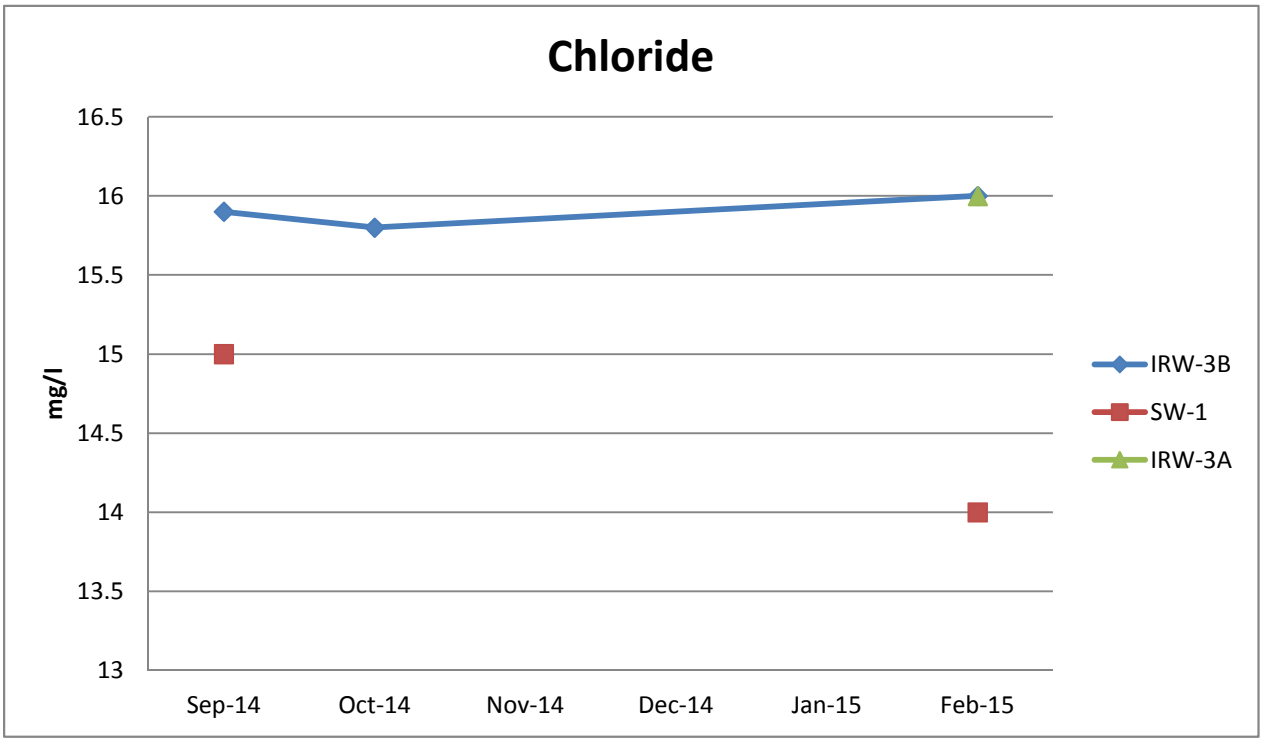
-- Information not available
(1) The WDR's required analysis for EPA App. I and II parameters for the first sampling event. Analysis of EPA App. I and II parameters shall be reported in the fourth quarter 2014 report.
(2) Samples not collected in well

# APPENDIX D

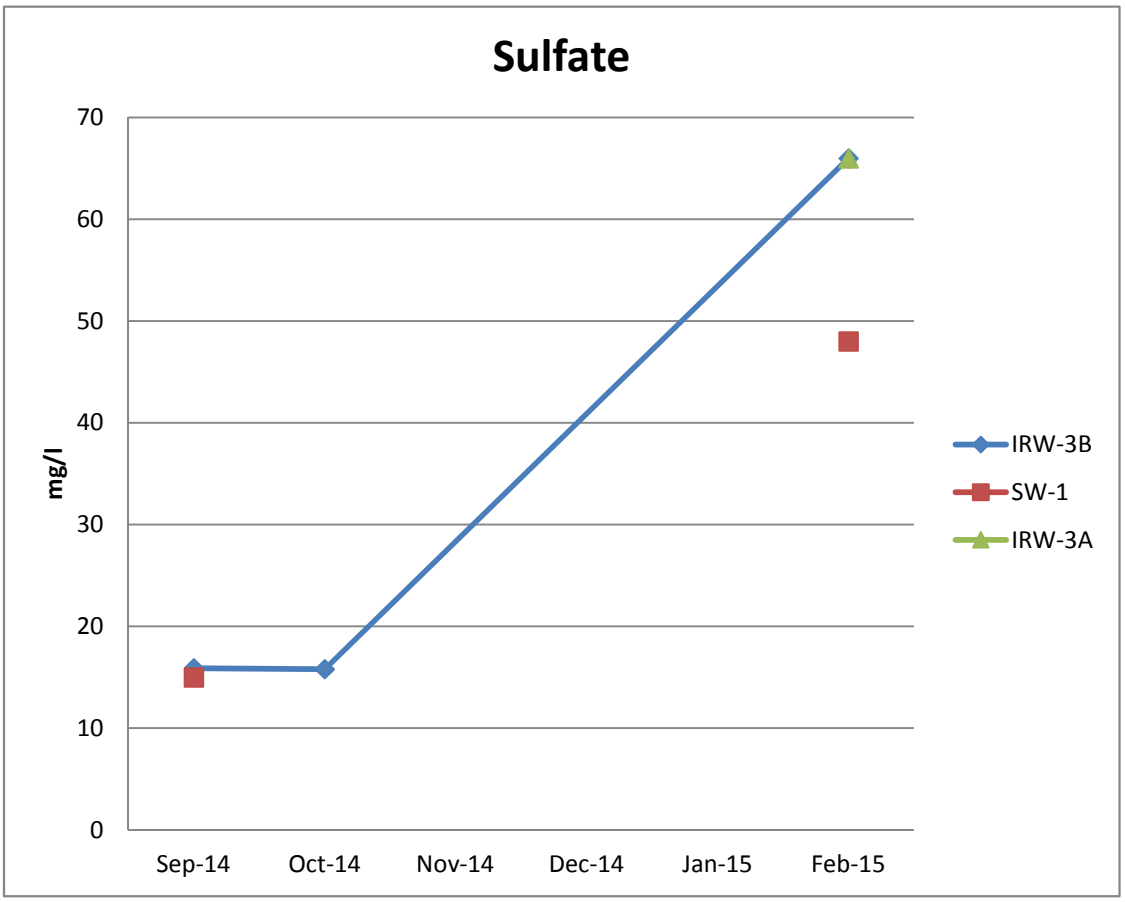
# GRAPHICAL SUMMARIES

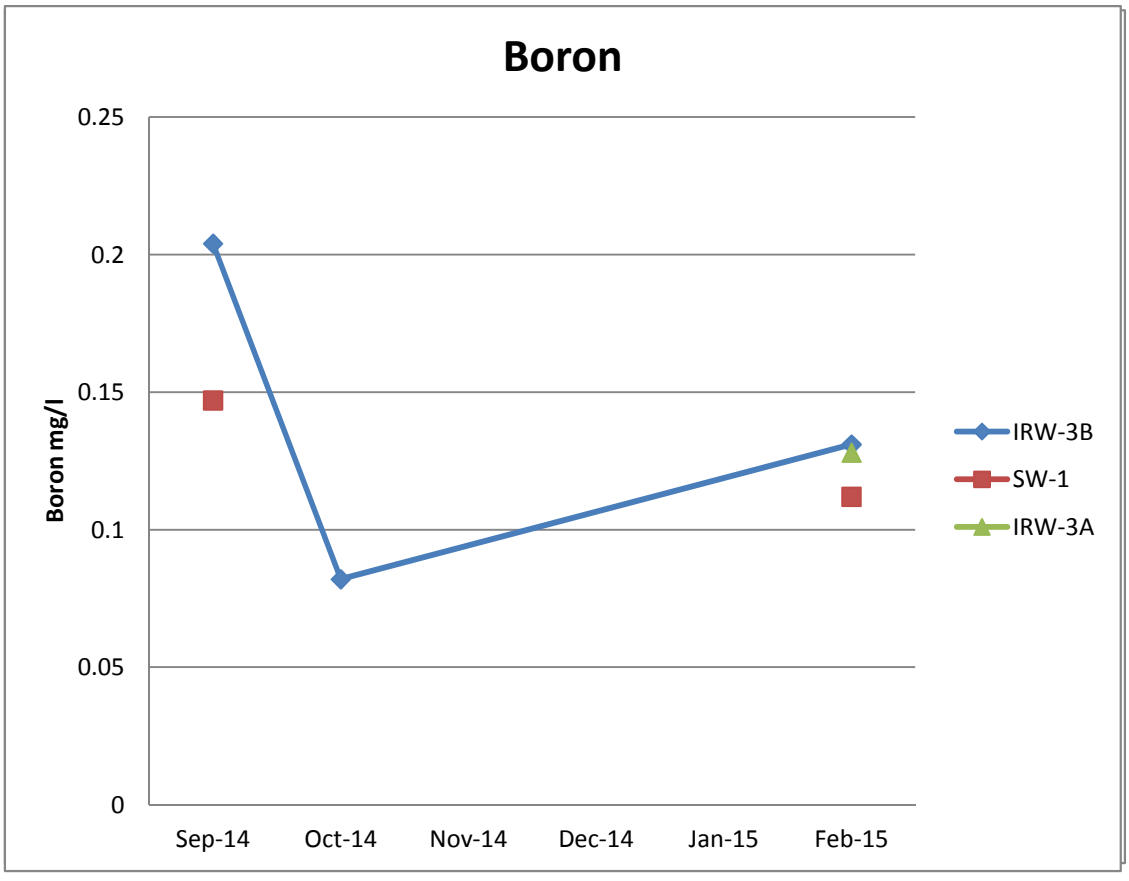
## Historical Graphical Summaries



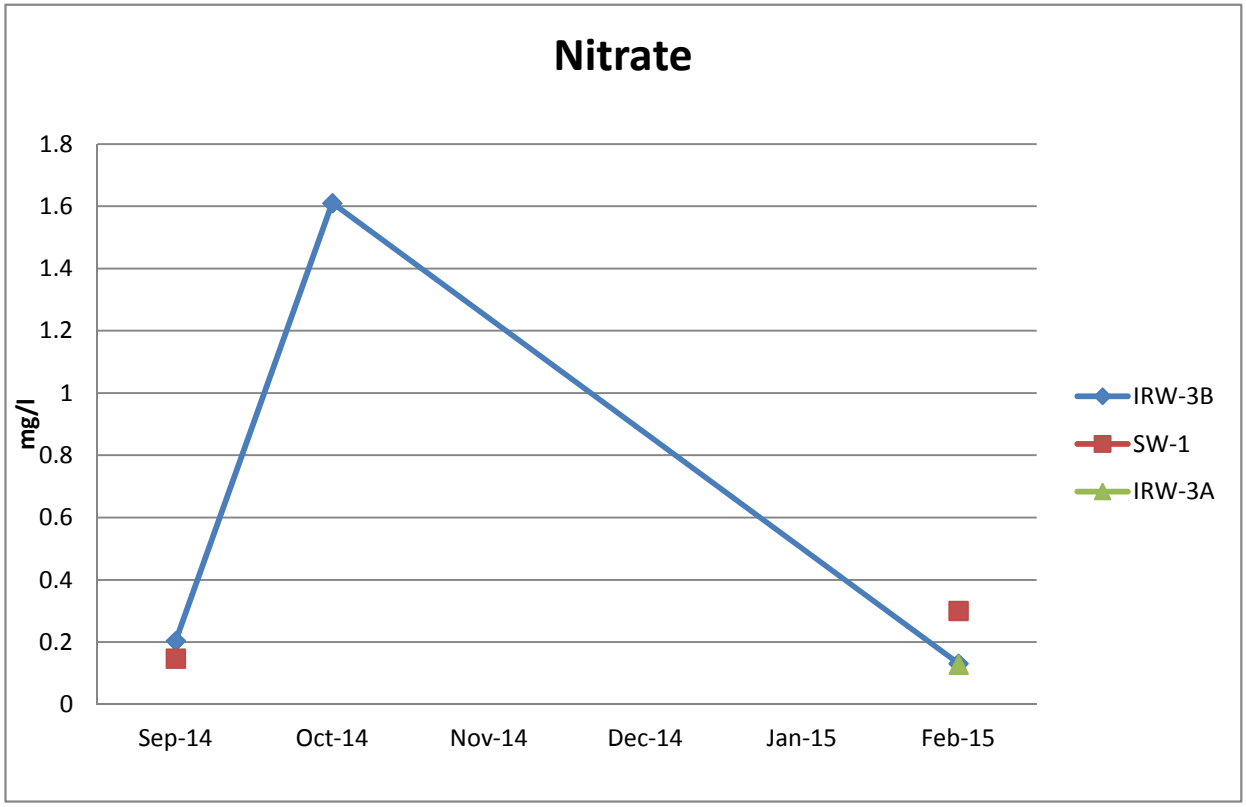



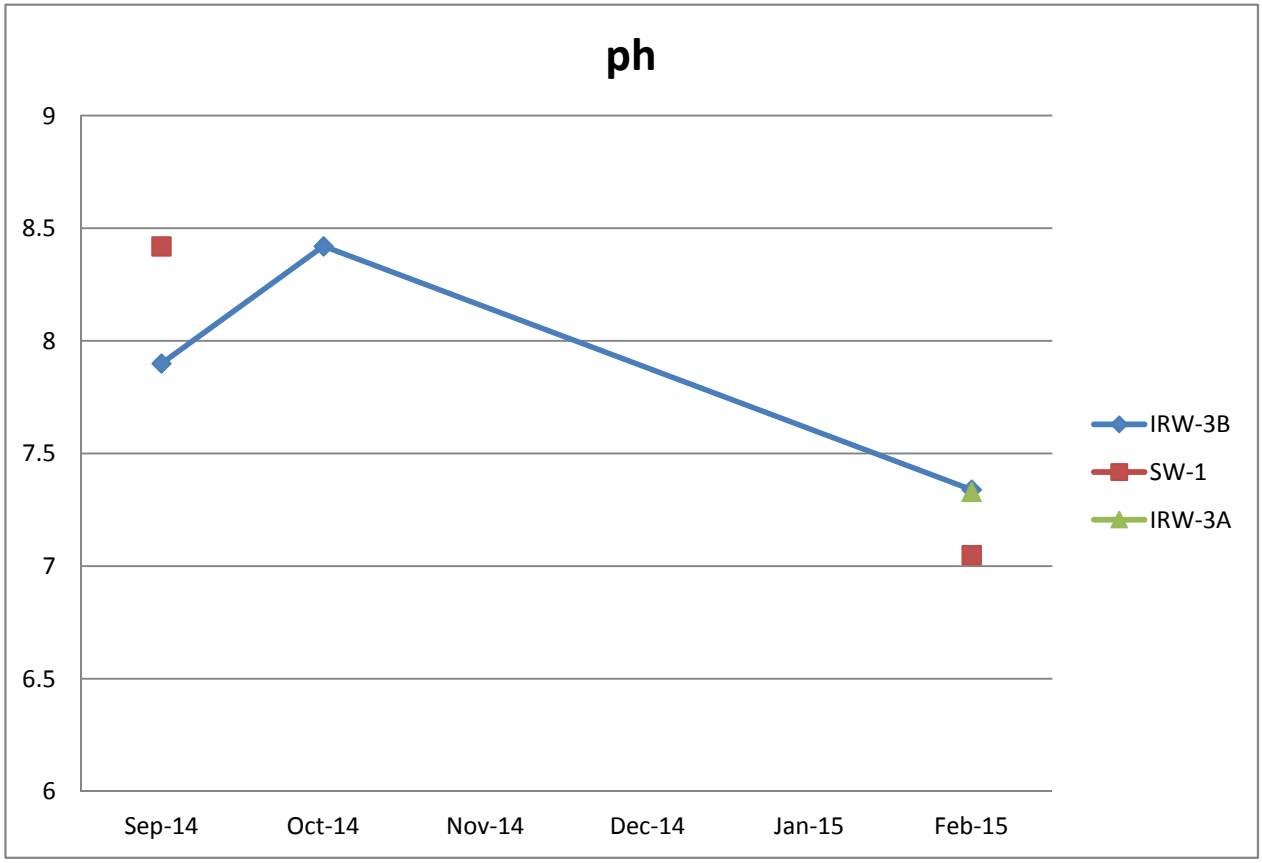
## Historical Graphical Summaries



## Historical Graphical Summaries



# APPENDIX E

# LANDFILL WASTE DISPOSAL

135 S. State College Blvd. Suite 400 Brea, CA 92821 (714) 578-9600

April 1, 2015

California Regional
Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Information Technology Unit

Subject: Waste Discharge Requirements- United Rock Pit 3
1137 Meridian Street
Irwindale, CA 91706
File No. 72-124, Order No.01-131, CI 5801

Pursuant to the General Provisions for Reporting (Section A) of the Monitoring and Reporting Program (File CI 5801) and Section III of the Reporting Conditions, we are respectively submitting our quarterly report.

Please be advised that there was no discharge placed in Pit #3 during the 1st Quarter of calendar year 2015.

The estimated life of the site is 83 years 6 months.

No purged ground water from monitoring wells is used at the site.

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the 1st day of April in Brea, California.

Very truly yours,

Ken Barker
Environmental Manager

Cc: Scott Taylor, Alta Environmental
William Tam, City of Irwindale Engineer

Agency:

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**
**LOS ANGELES REGION**

320 West 4th Street, Suite 200
Los Angeles, CA 90013-2343

# Waste Disposal And Groundwater Monitoring Report

## Second Quarter 2015

United Rock Products – Pit #3
Irwindale, California
RWQCB File No. 72-124
Under Monitoring & Reporting Program No. CI 5801

**Prepared For:**

United Rock Products Corporation
1137 Meridian Street
Irwindale, CA 91706

Date: July 15, 2015

3777 Long Beach, Blvd
Long Beach, CA 90807
(562) 495-5777 Fax: (562) 495-5877

CONTACT: Scott Taylor

Reference: URPC-14-4746

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## 1.0 INTRODUCTION

Alta Environmental (Alta – formerly Justice & Associates [J&A]) was retained by United Rock Products Corporation (URP) to conduct groundwater monitoring and reporting for URP's Pit 3. The purpose of this report is to provide an evaluation of the groundwater monitoring and the estimated average monthly quantities (in cubic yards) and types of materials deposited. Average monthly quantities and types of materials deposited are reported by URP in Appendix F.

## 2.0 FACILITY DESCRIPTION

URP (Discharger) owns and operates URP's Pit 3 (the Site), a construction aggregate mining pit at 1137 Meridian Street, in Irwindale, California. The site is bounded on the north by the Buena Vista Channel, on the south by Arrow Highway and on the east by Buena Vista Street (Figure 1). The center of the site is located at approximately 34°06'56" N and 117°59'23"W.

The Site includes approximately 110 acres of land and has been mined for sand and gravel by the Discharger and its predecessors since the early 1900s. Ground surface elevation around the pit varies from 406 feet above mean sea level (amsl) at the west edge of the pit to 431 feet amsl at the east edge of the pit.

The majority of the pit bottom has exposed groundwater resulting from the mining operation. The City of Irwindale approved conditional use permit CUP 6-04 in 2004. The CUP permits URP to mine the pit to a maximum depth of 440 feet bgs or until December 31, 2037, whichever comes first. The Site also has a reclamation plan approved in 2004 that states the excavation will be used as a groundwater recharge basin once the material has been depleted. Alternatively, the reclamation plan calls for the pit to be filled or partially filled.

The proposed discharge methods to the pit include backfilling the waste material from the Rock Plant to Pit 3 by means of sluicing and trucking. The sluicing process involves mixing the waste materials (primarily clay and silt) with groundwater that has been used in the mining process and pumping the mixture to various locations at the pit. Water is used in the mining process to wash fine material (clay and silt) off the coarse material (gravel and sand). No chemicals are added in either the mining or the sluicing processes.

Order No. 01-131 is the waste discharge requirements for the disposal of inert wastes into the Site during mine reclamation.

## 3.0 CURRENT MONITORING REQUIREMENTS

The monitoring is done to satisfy the Monitoring and Reporting Program (MRP) requirements of Order 01-131, File 72-124 and CI 5801, which was adopted by the Regional Water Quality Control Board (RWQCB) on September 21, 2001. The MRP requires quarterly groundwater and waste disposal reporting during the first year and semi-annually thereafter. In the event sampling is not performed during those months, substitute sampling shall occur as soon as possible after, and the reason for delay shall be given. The sampling schedule will continue to be semi-annual regardless of the substitute sampling. In addition, each monitoring report submitted to the Regional Board shall include a tabular list of the estimated average quantities of materials deposited at the site each month and the methods of disposal. This report contains the summary of both requirements.

### 3.1. Chronology of Order 01-131, File 72-124 and CI 5801

URP and its predecessors have excavated and processed aggregate from this site since as early as 1910. The majority of the pit has groundwater exposed by mining operations. URP purchased the property and operation in 1988.

The LARWQB adopted WDRs in 1973 for the previous owner, Livingston-Graham, to discharge inert materials to Pit 3. In 1988 the pit was purchased by United Rock Products and the pit is now known as URP Pit 3. New WDR's were adopted in 2001 and the previous order from 1973 was rescinded.

In May 2002 Justice & Associates submitted a Technical Report on behalf of United Rock Products to meet the 2001 WDR monitoring requirement. The technical report was approved in July 2002. A Revised Technical Report dated July 2014 was prepared to amend the 2002 report. Changes in the 2014 revised technical report included; revised sampling protocols for down-gradient wells, increasing the depth of up-gradient and down-gradient wells; and a modification to up-gradient and down-gradient monitoring well design.

## 4.0 GROUNDWATER MONITORING

### 4.1. Second Quarter 2015

Pursuant to the WDR for Pit #3 (Order 01-131, File 72-124 and CI 5801), water level measurements should be collected from monitoring wells IRW-1 located at the Rock Plant, Wells IRW-1A and IRW-1B located at Pit #1, and Wells IRW-3A and IRW-3B located at Pit 3. This well network should be used to estimate gradient in the vicinity of Pit 3. During the second quarter 2015, groundwater was detected only in Well IRW-3B and Well IRW-1. During well gauging, it was observed that Wells IRW-3A, IRW-1A, and IRW-1B were dry. This is likely due to the lowering of the water table resulting from drought conditions in Southern California. To complete the groundwater gradient analysis, measurable groundwater needs to be gauged from at least 3 wells to allow triangulation for the gradient calculation. Therefore, the groundwater gradient was not determined and the groundwater velocity was not calculated. During the third quarter 2015, the wells will continue to be monitored and data collected if possible.

Second Quarter 2015 measurements from the five groundwater-monitoring wells were collected on April 10, 2015. Table 1 presents the second quarter 2015 water level data.

**Table 1**
**Groundwater Monitoring Program for Second Quarter 2015**

| Well # | General Well Location from Landfill | Date Measured | Depth to Groundwater (feet) | Total Well Depth (feet bgs) | Groundwater Elevation (feet relative to MSL) | Reference Point Elevation (feet above MSL) |
|---|---|---|---|---|---|---|
| IRW-1 | Cross-Gradient | 4/10/2015 | 229.80 | -- | 175.80 | 405.60 |
| IRW-1A | Up-gradient | 4/10/2015 | DRY | 196.4 | DRY | 380.94 |
| IRW-1B | Cross-Gradient | 4/10/2015 | DRY | 195.3 | DRY | 380.03 |
| IRW-3A | Up-gradient | 4/10/2015 | DRY | 249.6 | DRY | 437.27 |
| IRW-3B | Down-gradient | 4/10/2015 | 227.68 | 250.1 | 179.07 | 406.75 |

.

### 4.2. Groundwater Velocity and Direction

The groundwater contours for the second quarter 2015 were not calculated due to insufficient data. During the third quarter 2015, the wells will

continue to be monitored and the groundwater gradient and velocity will be calculated if groundwater is detected in at least three wells.

4.3. Monitoring Methods

The monitoring stations for the quarterly report consist of wells IRW-1, IRW-1A, IRW-1B, IRW-3A and IRW-3B as defined in the Revised Technical Report. Based on the reported groundwater gradient in the upper San Gabriel Basin, it has been determined that these wells will provide required information for compliance with MRP CI-5801.

Chambers Environmental performed the measurements for Wells IRW-1, IRW-1A, IRW-1B, IRW-3A, and IRW-3B. Groundwater was detected only in Wells IRW-1 and IRW-3B. The Monitoring methods used were in accordance with EPA guidelines set forth in the Groundwater Sampling Protocol (Refer to Appendix A). Prior to conducting field measurements, the groundwater level probe was calibrated to ensure accuracy of measurements and cleaned prior to and after each measurement to minimize cross-contamination.

## 5.0 GROUNDWATER SAMPLING

The 2014 Revised Technical Report requires that samples be collected from IRW-3A, the up-gradient well at the Northeast corner of Pit 3. However, because no water was detected in the well, no water samples were collected from IRW-3A. Samples were collected from IRW-3B at the southwest corner of Pit 3. Based on the general easterly flow direction of the groundwater in the vicinity of the subject site and the condition that only native geological material washed with local water will be sluiced back into Pit 3, the approved sampling network for Pit #3 also includes groundwater samples from the standing water in the south end of the pit.

For each monitoring period, one grab groundwater sample should be collected from both wells and the standing water in the pit. The standing water monitoring will occur as long as there is standing water in the pit. Grab samples of the standing water in the pit will be collected using a stainless steel bailer from a depth of 10 to 15 feet below water surface. Groundwater samples from IRW-3A and IRW-3B will be collected using a submersible pump or passive sampling methods. The first round of samples should also be analyzed for the monitoring parameters listed on US EPA Appendix I and II Constituents. Since these parameters were analyzed during the fourth quarter 2014 round of sampling, they have not been included in this report.

Eurofins/Calscience is a State of California Department of Health Services accredited laboratory. This laboratory performed the chemical analyses in accordance with the current EPA guidelines and procedures. Appendix B contains the analytical results and chain-of-custody record for this quarterly report.

5.1. Groundwater Evaluation

A groundwater database presenting all analytical results is located in Appendix C. Table 2 represents a comparative analysis between the analytical results and the water protection standards established for URP Pit 3 as identified in the WDRs.

**Table 2**
**Water Quality Data Summary**
**Second Quarter 2015 Sampling Event**

| Constituent | Water Quality Protection Standards | Monitoring Station | | | |
|---|---|---|---|---|---|
| | | Pit 3-1 | Pit 3-2 | IRW-3B | IRW-1 |
| Date Sampled | | 4/10/15 | 4/10/15 | 4/10/15 | 4/10/15 |
| Total Dissolved Solids (TDS) | 450 mg/l | 305 | 315 | 300 | 250 |
| Chloride (Cl) | 100 mg/l | --- | --- | --- | 6.8 |
| Sulfate ($SO_4$) | 100 mg/l | --- | --- | --- | 17 |
| Nitrate (as ($NO_3$) | 45 mg/l | --- | --- | --- | 1.3 |
| Boron | 0.5 mg/l | 0.0890 | 0.0826 | 0.0713 | 0.0457 |
| pH | 6.5 – 8.5 | 7.62* (7.84*) | 7.98 (7.51*) | 5.37 (7.01*) | 7.72 (7.58*) |

*Results from well purge data in field.

The results for samples collected in April 2015 indicate that standing groundwater in Pit 3 and groundwater collected from Wells IRW-1 (taken from Pit #2 water analysis) and IRW-3B currently meet Water Quality Protection Standards for all constituents except PH. The standards are established for this facility by Order No. 01-013 and are based on the water quality objectives for the western area of the main San Gabriel Basin contained in the Basin Plan.

There was an insufficient amount of groundwater in Wells IRW-1A, IRW-1B, and IRW-3A to collect samples for analysis. The low groundwater level is likely an effect of the significant drought conditions in Southern California. Therefore, two water column samples were collected from the standing exposed groundwater in Pit 3. Samples Pit 3-1 and Pit 3-2 have been included within this report to assess compliance with Water Quality Protection Standards.

If there is sufficient groundwater, samples will be collected from the monitoring wells for the next Quarterly report.

The pH samples were tested by the laboratory in accordance with the approved methodology. The sample for IRW-3B was below the expected

sample range according to the basin plan of 6.5 to 8.5. However, pH samples were also taken in the field. Those results along with the laboratory results for both the wells and pit samples showed pH well with in the expected range. For this reason the lab pH for the IRW-3B appears to be an anomaly.

The water sampling for each of the monitoring stations is to include analytical results for EPA Method 300 (Chloride, Nitrate, Sulfate) per the WDR. Method 300 was inadvertently left off of the list of analytes on the Chain of Custody and as a result the analysis was not performed. The analysis will be performed on the next round of testing. The previous samples taken have shown concentrations well below the Water Quality Protection Standard. Specifically Chloride has been measured between .52 and 15.9 and the standard is 100 Mg/l.

### 5.2. Purged Groundwater

Purged groundwater from the monitoring well is used at the Site for dust suppression (within 20-foot radius of each well). Fifteen Hundred (1500) ml of purged water was generated during the April 10, 2015 sampling event (Refer to Appendix B).

### 5.3. Sluice Material and Waste Disposal

During April through June 2015 reporting period, no material was placed in Pit #3.

The landfill waste disposal information is included in Appendix G.

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

Alta conducted a review of the groundwater analytical data for the second quarter 2015 report. Based on field observations and analytical results, it appears that deposited waste and current waste disposal practices are not adversely impacting local groundwater quality.

Based on the data collected as required by the sampling and monitoring plan detailed in the Waste Discharge Requirements Order, none of the water quality protection standards listed in Table 2 are elevated above the limits listed in the Order. However, monitoring wells IRW-3A, IRW-1A, and IRW-1B were gauged dry and therefore not sampled. In addition, insufficient data was available to determine groundwater gradient and velocity. Providing sufficient water is available in the wells, during the next sampling quarter, the depth to water in all five wells will be measured.

We appreciate the opportunity to provide groundwater monitoring and reporting services. If you have any questions or comments concerning this report, please feel free to contact me at (562) 495-5777.

# 7.0 CERTIFICATION

## 7.1. Professional Certifications

The hydrogeologic information, results of groundwater testing, conclusions and recommendations in this report have been reviewed by of a California-registered professional geologist. This certification of conditions comprises a declaration of his professional judgment. It does not constitute a warranty or guarantee.




Steven R. Ridenour
PG
Senior Project Manager/Senior Geologist III
Alta Environmental

## 8.0 REFERENCES

Justice & Associates, Sully-Miller Irwindale Facility Phase I Environmental Site Assessment, 9-97

Justice & Associates, United Rock Products, Pit #3 & #3 Final Dredge Operation

Spill Prevention Control and Countermeasure Plan, 5-98

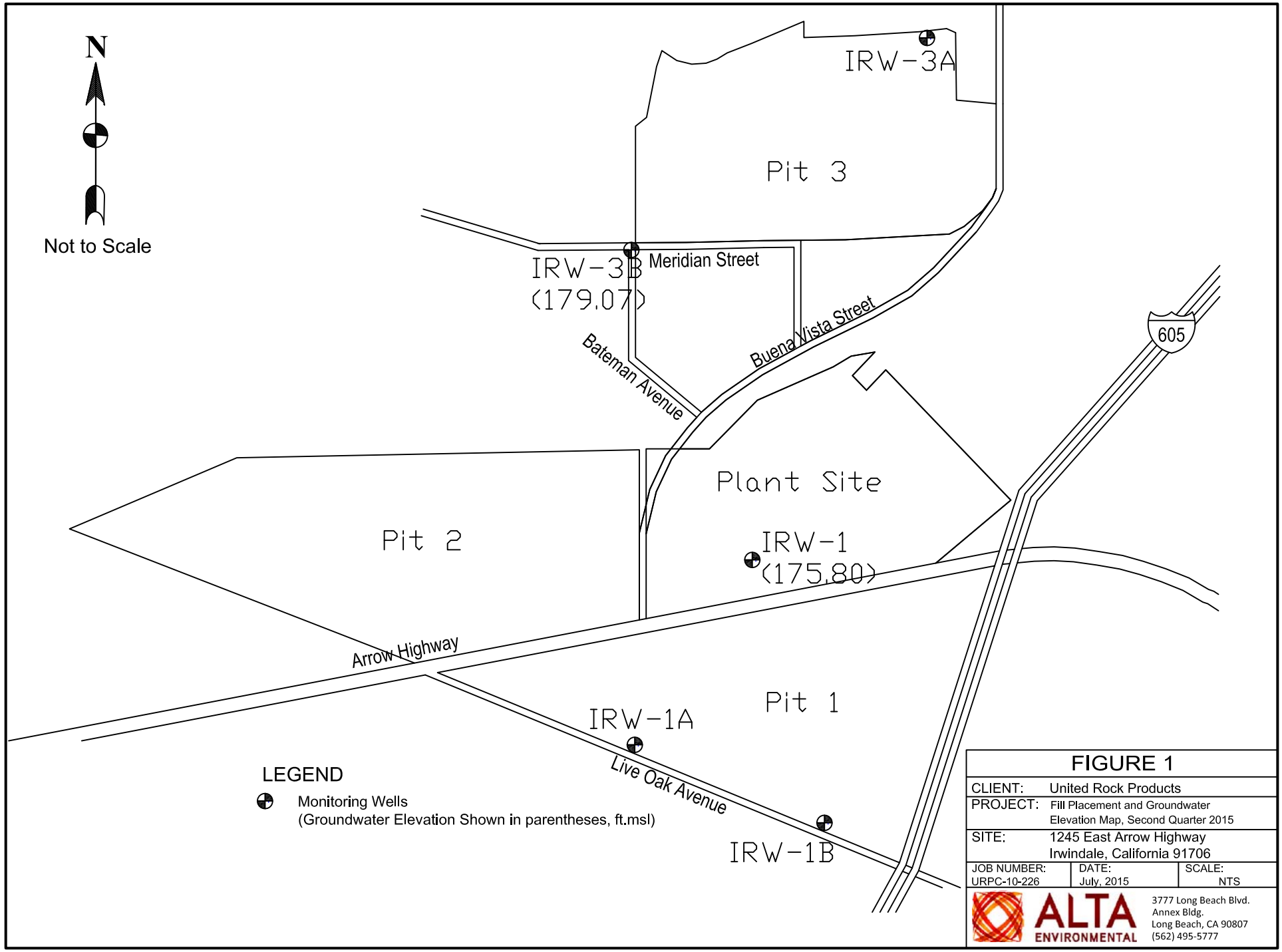
Luhdorff & Scalmanini, Supplemental Groundwater Investigation and Mitigation Monitoring Program, July 2001

Waste Discharge Requirements – United Rock Products – Pit #3 Irwindale, CA (File No. 72-124; Order No. 01-131, CI 5801)

Surface Waters-Field Operations Manual for Lakes USEPA Office of Research and Development EPA/620/R-97/001/June 1997

Technical Guidance Manual for Hydrogeologic Investigations and Groundwater Monitoring, State of Ohio EPA, 1995

# FIGURES




# FIGURE 1

| | |
|---|---|
| CLIENT: | United Rock Products |
| PROJECT: | Fill Placement and Groundwater Elevation Map, Second Quarter 2015 |
| SITE: | 1245 East Arrow Highway Irwindale, California 91706 |

| JOB NUMBER: | DATE: | SCALE: |
|---|---|---|
| URPC-10-226 | July, 2015 | NTS |

ALTA ENVIRONMENTAL
3777 Long Beach Blvd.
Annex Bldg.
Long Beach, CA 90807
(562) 495-5777

# APPENDIX A

# GROUNDWATER SAMPLING PROTOCOL

# STANDARD FIELD PROCEDURES FOR MONITORING AND SAMPLING GROUNDWATER MONITORING WELLS AT URP Pit #3

## SEALED WELLS

One or more wells at the site are sealed and have down-hole pumps for discharging groundwater. Down-hole monitoring and sampling equipment cannot be used in those wells. Sealed wells must be monitored, purged and sampled using the down-hole pumps. Purge volume is estimated using historical depth-to-water and depth-to-bottom information. Once water is obtained from the discharge of the down-hole pumps, the procedures for recording water quality readings and for packaging groundwater samples for laboratory analysis are the same as for open wells, below.

## OPEN WELLS

The following standard operating procedures apply to wells that are accessible using down-hole monitoring and sampling equipment.

## DECONTAMINATION OF MONITORING AND SAMPLING EQUIPMENT

All down-hole monitoring and sampling equipment is decontaminated using a non-phosphate detergent solution prior to placing equipment into each well. A triple-rinse procedure is used to clean the equipment. The general triple-rinse decontamination procedure is as follows:

- Wash equipment in the first rinse containing detergent and clean tap water;
- Rinse thoroughly in the third rinse containing clean tap water;
- Rinse in the third rinse containing distilled or deionized water; and
- Allow equipment to air dry prior to next use.

## WELL GAUGING

All wells are gauged using an electronic measuring tape capable of recording depth-to-water to the nearest 0.01 foot. Depth-to-water is measured to a survey mark on the top of each well casing. In the absence of a survey mark, the well is gauged from the north side of the top-of-casing. Each depth-to-water measurement is performed twice to assure accuracy. After measuring the depth-to-water, either the electronic tape or a clean non-electronic tape is lowered to the bottom of the well to obtain a depth-to-bottom reading for each well. All measurements are recorded on standard field forms.

## PRE-PURGE WATER QUALITY MEASUREMENTS

Prior to purging, a small volume of groundwater is purged from each well using a clean PVC or stainless-steel bailer. That water is used to perform field tests for $CO_2$ and alkalinity. A Hatch Digital Titrator Model 16900 or similar field instrument capable of measuring the required parameters is used to obtain field readings. All field readings are recorded on standard field forms.

## WELL PURGING

One casing volume of water is calculated for each well using the depth-to-water and depth-to-bottom field readings and the diameter of the well casing. Using a clean PVC or stainless steel bailer with new string attached, each well is purged of three to five casing volumes of water prior to collecting water samples for laboratory analysis. Water volumes removed from each well are recorded on standard field forms. After each casing volume of water is removed from the well, field water quality parameters are recorded (see below). Upon completion of purging, the water level is allowed to recover to at least 80% of its pre-purge volume prior to sampling. For slow-recharging wells, water samples are collected after two hours if 80% recovery is not achieved.

If prior groundwater analytical results show that the groundwater in a specific well is sufficiently clean, purged groundwater from the well is spread on the ground in the vicinity of the well. If the groundwater is known to contain contaminants above State action levels, the purged water is placed into DOT-approved steel 55-gallon drums.

Drums containing purge water are sealed, appropriately labeled and temporarily stored on site until a licensed hauler is contracted to remove the drums. All drummed purge water is disposed of at a State-licensed water recycling facility.

## WATER QUALITY MEASUREMENTS DURING PURGING

After purging each casing volume of water from each well, field readings are taken of water quality parameters. A Beta Technologies, Inc. Hydac Water Quality Meter or similar instrument is used to record the temperature, electrical conductivity and pH of the groundwater. At least two out of three of those parameters must stabilize to within 10% between the last two readings before a water sample is collected. A minimum of three casing volumes are removed prior to sampling if water quality parameters stabilize. If water quality parameters do not stabilize, groundwater samples are collected after purging a maximum of five casing volumes. All field readings are recorded on standard field forms.

## WATER SAMPLE COLLECTION

A new polypropylene disposable bailer is used to collect the laboratory water samples from each well. Each disposable bailer is discarded after use in one well. Water from the bailer is placed into laboratory-supplied sample containers containing appropriate preservatives for the requested analytic. The bottles are filled, capped and placed in a cooler on ice. All samples collected for laboratory analysis are transported in the chilled cooler to a State-certified laboratory following standard chain-of-custody procedures.

## EXPOSED GROUNDWATER GRAB SAMPLES

A Discrete grab samples shall be collected from the exposed groundwater in the pit, using a stainless steel bailer from the surface. During the life of the WDRs, the shape and size of the lake will change. Consequently, we are not recommending specific points, but will keep the points near the southwest shoreline far enough away from the shore to test the full water column and as far away from each separate point as possible.

# APPENDIX B

# EUROFINS/CALSCIENCE ANALYTICAL RESULTS / CHAMBERS ENVIRONMENTAL FIELD LOGS AND CHAIN-OF-CUSTODY FORMS

ALTA ENVIRONMENTAL

eurofins | Calscience

# WORK ORDER NUMBER: 15-04-0839

*The difference is service*



AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For**

**Client:** Sully Miller Contracting

**Client Project Name:** Pit-3: United Rock Products

**Attention:** Ken Barker
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Approved for release on 04/20/2015 by:
Danielle Roberts
Project Manager

ResultLink

Email your PM

Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

eurofins | Calscience

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Work Order Number: 15-04-0839


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# Work Order Narrative

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**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 04/10/15. They were assigned to Work Order 15-04-0839.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

**Holding Times:**

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

**Quality Control:**

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

**Subcontractor Information:**

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

**Additional Comments:**

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

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# Sample Summary

| | | | |
|---|---|---|---|
| Client: | Sully Miller Contracting | Work Order: | 15-04-0839 |
| | 135 State College Boulevard, suite 400 | Project Name: | Pit-3: United Rock Products |
| | Brea, CA 92821-5819 | PO Number: | |
| | | Date/Time Received: | 04/10/15 16:10 |
| | | Number of Containers: | 36 |
| Attn: | Ken Barker | | |

| Sample Identification | Lab Number | Collection Date and Time | Number of Containers | Matrix |
|---|---|---|---|---|
| IRW-B | 15-04-0839-1 | 04/10/15 09:45 | 12 | Aqueous |
| Pit 3-1 | 15-04-0839-2 | 04/10/15 13:50 | 12 | Aqueous |
| Pit 3-2 | 15-04-0839-3 | 04/10/15 14:05 | 12 | Aqueous |

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# Detections Summary

| | | | |
|---|---|---|---|
| Client: | Sully Miller Contracting | Work Order: | 15-04-0839 |
| | 135 State College Boulevard, suite 400 | Project Name: | Pit-3: United Rock Products |
| | Brea, CA 92821-5819 | Received: | 04/10/15 |
| Attn: | Ken Barker | | |



**Client SampleID**

| Analyte | Result | Qualifiers | RL | Units | Method | Extraction |
|---|---|---|---|---|---|---|
| IRW-B (15-04-0839-1) | | | | | | |
| Boron | 0.0713 | | 0.0200 | mg/L | EPA 200.7 | N/A |
| Alkalinity, Total (as CaCO3) | 106 | | 5.00 | mg/L | SM 2320B | N/A |
| Bicarbonate (as CaCO3) | 106 | | 5.00 | mg/L | SM 2320B | N/A |
| Hardness, Total (as CaCO3) | 150 | | 2.0 | mg/L | SM 2340C | N/A |
| Specific Conductance | 380 | | 1.0 | umhos/cm | SM 2510 B | N/A |
| Solids, Total Dissolved | 300 | | 1.00 | mg/L | SM 2540 C | N/A |
| pH | 5.37 | BV,BU | 0.01 | pH units | SM 4500 H+ B | N/A |
| Carbon Dioxide | 610 | | 5.0 | mg/L | SM4500-CO2D | N/A |
| Pit 3-1 (15-04-0839-2) | | | | | | |
| Boron | 0.0890 | | 0.0200 | mg/L | EPA 200.7 | N/A |
| Alkalinity, Total (as CaCO3) | 110 | | 5.00 | mg/L | SM 2320B | N/A |
| Bicarbonate (as CaCO3) | 110 | | 5.00 | mg/L | SM 2320B | N/A |
| Hardness, Total (as CaCO3) | 150 | | 2.0 | mg/L | SM 2340C | N/A |
| Specific Conductance | 410 | | 1.0 | umhos/cm | SM 2510 B | N/A |
| Solids, Total Dissolved | 305 | | 1.00 | mg/L | SM 2540 C | N/A |
| pH | 7.62 | BV,BU | 0.01 | pH units | SM 4500 H+ B | N/A |
| Carbon Dioxide | 1.2 | | 1.0 | mg/L | SM4500-CO2D | N/A |
| Pit 3-2 (15-04-0839-3) | | | | | | |
| Boron | 0.0826 | | 0.0200 | mg/L | EPA 200.7 | N/A |
| Alkalinity, Total (as CaCO3) | 109 | | 5.00 | mg/L | SM 2320B | N/A |
| Bicarbonate (as CaCO3) | 109 | | 5.00 | mg/L | SM 2320B | N/A |
| Hardness, Total (as CaCO3) | 160 | | 2.0 | mg/L | SM 2340C | N/A |
| Specific Conductance | 410 | | 1.0 | umhos/cm | SM 2510 B | N/A |
| Solids, Total Dissolved | 315 | | 1.00 | mg/L | SM 2540 C | N/A |
| pH | 7.98 | BV,BU | 0.01 | pH units | SM 4500 H+ B | N/A |
| Carbon Dioxide | 1.2 | | 1.0 | mg/L | SM4500-CO2D | N/A |

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Subcontracted analyses, if any, are not included in this summary.

* MDL is shown

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Date Received: 04/10/15
Work Order: 15-04-0839
Preparation: N/A
Method: SM 2320B
Units: mg/L

Project: Pit-3: United Rock Products



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **IRW-B** | **15-04-0839-1-G** | **04/10/15 09:45** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410ALKB5** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Alkalinity, Total (as CaCO3) | 106 | 5.00 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Pit 3-1** | **15-04-0839-2-G** | **04/10/15 13:50** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410ALKB5** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Alkalinity, Total (as CaCO3) | 110 | 5.00 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Pit 3-2** | **15-04-0839-3-G** | **04/10/15 14:05** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410ALKB5** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Alkalinity, Total (as CaCO3) | 109 | 5.00 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **099-15-859-669** | **N/A** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410ALKB5** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Alkalinity, Total (as CaCO3) | ND | 1.0 | 1.00 | |

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Date Received: 04/10/15
Work Order: 15-04-0839
Preparation: N/A
Method: SM 2320B
Units: mg/L

Project: Pit-3: United Rock Products



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **IRW-B** | **15-04-0839-1-G** | **04/10/15 09:45** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410HCOB5** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Bicarbonate (as CaCO3) | 106 | 5.00 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Pit 3-1** | **15-04-0839-2-G** | **04/10/15 13:50** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410HCOB5** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Bicarbonate (as CaCO3) | 110 | 5.00 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Pit 3-2** | **15-04-0839-3-G** | **04/10/15 14:05** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410HCOB5** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Bicarbonate (as CaCO3) | 109 | 5.00 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **099-15-861-489** | **N/A** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410HCOB5** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Bicarbonate (as CaCO3) | ND | 1.0 | 1.00 | |

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Date Received: 04/10/15
Work Order: 15-04-0839
Preparation: N/A
Method: SM 2320B
Units: mg/L

Project: Pit-3: United Rock Products



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **IRW-B** | **15-04-0839-1-G** | **04/10/15 09:45** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410CO3B5** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Carbonate (as CaCO3) | ND | 1.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Pit 3-1** | **15-04-0839-2-G** | **04/10/15 13:50** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410CO3B5** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Carbonate (as CaCO3) | ND | 1.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Pit 3-2** | **15-04-0839-3-G** | **04/10/15 14:05** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410CO3B5** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Carbonate (as CaCO3) | ND | 1.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **099-15-863-423** | **N/A** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410CO3B5** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Carbonate (as CaCO3) | ND | 1.0 | 1.00 | |

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Date Received: 04/10/15
Work Order: 15-04-0839
Preparation: N/A
Method: SM 2340C
Units: mg/L

Project: Pit-3: United Rock Products



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **IRW-B** | **15-04-0839-1-K** | **04/10/15 09:45** | **Aqueous** | **BUR21** | **N/A** | **04/16/15 15:10** | **F0416HARB1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Hardness, Total (as CaCO3) | 150 | 2.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Pit 3-1** | **15-04-0839-2-J** | **04/10/15 13:50** | **Aqueous** | **BUR21** | **N/A** | **04/16/15 15:10** | **F0416HARB1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Hardness, Total (as CaCO3) | 150 | 2.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Pit 3-2** | **15-04-0839-3-K** | **04/10/15 14:05** | **Aqueous** | **BUR21** | **N/A** | **04/16/15 15:10** | **F0416HARB1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Hardness, Total (as CaCO3) | 160 | 2.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **099-14-457-515** | **N/A** | **Aqueous** | **BUR21** | **N/A** | **04/16/15 15:10** | **F0416HARB1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Hardness, Total (as CaCO3) | ND | 2.0 | 1.00 | |

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Project: Pit-3: United Rock Products

Date Received: 04/10/15
Work Order: 15-04-0839
Preparation: N/A
Method: SM 2510 B
Units: umhos/cm



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **IRW-B** | **15-04-0839-1-F** | **04/10/15 09:45** | **Aqueous** | **SC 2** | **N/A** | **04/16/15 16:25** | **F0416SCD1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Specific Conductance | 380 | 1.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Pit 3-1** | **15-04-0839-2-F** | **04/10/15 13:50** | **Aqueous** | **SC 2** | **N/A** | **04/16/15 16:25** | **F0416SCD1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Specific Conductance | 410 | 1.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Pit 3-2** | **15-04-0839-3-F** | **04/10/15 14:05** | **Aqueous** | **SC 2** | **N/A** | **04/16/15 16:25** | **F0416SCD1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Specific Conductance | 410 | 1.0 | 1.00 | |

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Date Received: 04/10/15
Work Order: 15-04-0839
Preparation: N/A
Method: SM 2540 C
Units: mg/L

Project: Pit-3: United Rock Products



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **IRW-B** | **15-04-0839-1-L** | **04/10/15 09:45** | **Aqueous** | **SC 5** | **04/15/15** | **04/15/15 18:00** | **F0415TDSL1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Solids, Total Dissolved | 300 | 1.00 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Pit 3-1** | **15-04-0839-2-L** | **04/10/15 13:50** | **Aqueous** | **SC 5** | **04/15/15** | **04/15/15 18:00** | **F0415TDSL1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Solids, Total Dissolved | 305 | 1.00 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Pit 3-2** | **15-04-0839-3-L** | **04/10/15 14:05** | **Aqueous** | **SC 5** | **04/15/15** | **04/15/15 18:00** | **F0415TDSL1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Solids, Total Dissolved | 315 | 1.00 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **099-12-180-4525** | **N/A** | **Aqueous** | **SC 5** | **04/15/15** | **04/15/15 18:00** | **F0415TDSL1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Solids, Total Dissolved | ND | 1.0 | 1.00 | |

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Project: Pit-3: United Rock Products

Date Received: 04/10/15
Work Order: 15-04-0839
Preparation: N/A
Method: SM 4500 H+ B
Units: pH units



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **IRW-B** | **15-04-0839-1-D** | **04/10/15 09:45** | **Aqueous** | **PH 1** | **N/A** | **04/10/15 17:13** | **F0410PHD2** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| pH | 5.37 | 0.01 | 1.00 | BV,BU |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Pit 3-1** | **15-04-0839-2-D** | **04/10/15 13:50** | **Aqueous** | **PH 1** | **N/A** | **04/10/15 17:13** | **F0410PHD2** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| pH | 7.62 | 0.01 | 1.00 | BV,BU |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Pit 3-2** | **15-04-0839-3-D** | **04/10/15 14:05** | **Aqueous** | **PH 1** | **N/A** | **04/10/15 17:13** | **F0410PHD2** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| pH | 7.98 | 0.01 | 1.00 | BV,BU |

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Date Received: 04/10/15
Work Order: 15-04-0839
Preparation: N/A
Method: SM 5220 C
Units: mg/L

Project: Pit-3: United Rock Products



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **IRW-B** | **15-04-0839-1-H** | **04/10/15 09:45** | **Aqueous** | **BUR06** | **04/16/15** | **04/16/15 20:00** | **F0416ODB1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Chemical Oxygen Demand | ND | 5.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Pit 3-1** | **15-04-0839-2-H** | **04/10/15 13:50** | **Aqueous** | **BUR06** | **04/16/15** | **04/16/15 20:00** | **F0416ODB1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Chemical Oxygen Demand | ND | 5.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Pit 3-2** | **15-04-0839-3-H** | **04/10/15 14:05** | **Aqueous** | **BUR06** | **04/16/15** | **04/16/15 20:00** | **F0416ODB1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Chemical Oxygen Demand | ND | 5.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **099-05-114-141** | **N/A** | **Aqueous** | **BUR06** | **04/16/15** | **04/16/15 20:00** | **F0416ODB1** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Chemical Oxygen Demand | ND | 5.0 | 1.00 | |

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Date Received: 04/10/15
Work Order: 15-04-0839
Preparation: N/A
Method: SM4500-CO2D
Units: mg/L

Project: Pit-3: United Rock Products



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **IRW-B** | **15-04-0839-1-G** | **04/10/15 09:45** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410CO2D5** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Carbon Dioxide | 610 | 5.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Pit 3-1** | **15-04-0839-2-G** | **04/10/15 13:50** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410CO2D5** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Carbon Dioxide | 1.2 | 1.0 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Pit 3-2** | **15-04-0839-3-G** | **04/10/15 14:05** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410CO2D5** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Carbon Dioxide | 1.2 | 1.0 | 1.00 | |

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Date Received: 04/10/15
Work Order: 15-04-0839
Preparation: N/A
Method: EPA 200.7
Units: mg/L

Project: Pit-3: United Rock Products



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **IRW-B** | **15-04-0839-1-J** | **04/10/15 09:45** | **Aqueous** | **ICP 7300** | **04/13/15** | **04/15/15 12:44** | **150413LA1A** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Cadmium | ND | 0.0100 | 1.00 | |
| Chromium | ND | 0.0100 | 1.00 | |
| Lead | ND | 0.0100 | 1.00 | |
| Nickel | ND | 0.0100 | 1.00 | |
| Boron | 0.0713 | 0.0200 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Pit 3-1** | **15-04-0839-2-J** | **04/10/15 13:50** | **Aqueous** | **ICP 7300** | **04/13/15** | **04/15/15 12:49** | **150413LA1A** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Cadmium | ND | 0.0100 | 1.00 | |
| Chromium | ND | 0.0100 | 1.00 | |
| Lead | ND | 0.0100 | 1.00 | |
| Nickel | ND | 0.0100 | 1.00 | |
| Boron | 0.0890 | 0.0200 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Pit 3-2** | **15-04-0839-3-J** | **04/10/15 14:05** | **Aqueous** | **ICP 7300** | **04/13/15** | **04/15/15 12:51** | **150413LA1A** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Cadmium | ND | 0.0100 | 1.00 | |
| Chromium | ND | 0.0100 | 1.00 | |
| Lead | ND | 0.0100 | 1.00 | |
| Nickel | ND | 0.0100 | 1.00 | |
| Boron | 0.0826 | 0.0200 | 1.00 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **097-01-012-6157** | **N/A** | **Aqueous** | **ICP 7300** | **04/13/15** | **04/15/15 11:43** | **150413LA1A** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Cadmium | ND | 0.0100 | 1.00 | |
| Chromium | ND | 0.0100 | 1.00 | |
| Lead | ND | 0.0100 | 1.00 | |
| Nickel | ND | 0.0100 | 1.00 | |
| Boron | ND | 0.0200 | 1.00 | |

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Date Received: 04/10/15
Work Order: 15-04-0839
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: Pit-3: United Rock Products



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **IRW-B** | **15-04-0839-1-A** | **04/10/15 09:45** | **Aqueous** | **GC/MS L** | **04/11/15** | **04/11/15 19:35** | **150411L037** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Benzene | ND | 0.50 | 1.00 | |
| Tetrachloroethene | ND | 0.50 | 1.00 | |
| Trichloroethene | ND | 0.50 | 1.00 | |
| Vinyl Chloride | ND | 0.50 | 1.00 | |
| Methyl-t-Butyl Ether (MTBE) | ND | 0.50 | 1.00 | |

| Surrogate | Rec. (%) | Control Limits | Qualifiers |
|---|---|---|---|
| 1,4-Bromofluorobenzene | 90 | 68-120 | |
| Dibromofluoromethane | 127 | 80-127 | |
| 1,2-Dichloroethane-d4 | 116 | 80-128 | |
| Toluene-d8 | 102 | 80-120 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Pit 3-1** | **15-04-0839-2-A** | **04/10/15 13:50** | **Aqueous** | **GC/MS L** | **04/11/15** | **04/11/15 20:07** | **150411L037** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Benzene | ND | 0.50 | 1.00 | |
| Tetrachloroethene | ND | 0.50 | 1.00 | |
| Trichloroethene | ND | 0.50 | 1.00 | |
| Vinyl Chloride | ND | 0.50 | 1.00 | |
| Methyl-t-Butyl Ether (MTBE) | ND | 0.50 | 1.00 | |

| Surrogate | Rec. (%) | Control Limits | Qualifiers |
|---|---|---|---|
| 1,4-Bromofluorobenzene | 91 | 68-120 | |
| Dibromofluoromethane | 127 | 80-127 | |
| 1,2-Dichloroethane-d4 | 119 | 80-128 | |
| Toluene-d8 | 101 | 80-120 | |

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Date Received: 04/10/15
Work Order: 15-04-0839
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: Pit-3: United Rock Products



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Pit 3-2** | **15-04-0839-3-C** | **04/10/15 14:05** | **Aqueous** | **GC/MS L** | **04/14/15** | **04/14/15 21:58** | **150414L031** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Benzene | ND | 0.50 | 1.00 | |
| Tetrachloroethene | ND | 0.50 | 1.00 | |
| Trichloroethene | ND | 0.50 | 1.00 | |
| Vinyl Chloride | ND | 0.50 | 1.00 | |
| Methyl-t-Butyl Ether (MTBE) | ND | 0.50 | 1.00 | |

| Surrogate | Rec. (%) | Control Limits | Qualifiers |
|---|---|---|---|
| 1,4-Bromofluorobenzene | 95 | 68-120 | |
| Dibromofluoromethane | 101 | 80-127 | |
| 1,2-Dichloroethane-d4 | 97 | 80-128 | |
| Toluene-d8 | 98 | 80-120 | |

| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **099-10-025-3439** | **N/A** | **Aqueous** | **GC/MS L** | **04/11/15** | **04/11/15 14:40** | **150411L037** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Benzene | ND | 0.50 | 1.00 | |
| Tetrachloroethene | ND | 0.50 | 1.00 | |
| Trichloroethene | ND | 0.50 | 1.00 | |
| Vinyl Chloride | ND | 0.50 | 1.00 | |
| Methyl-t-Butyl Ether (MTBE) | ND | 0.50 | 1.00 | |

| Surrogate | Rec. (%) | Control Limits | Qualifiers |
|---|---|---|---|
| 1,4-Bromofluorobenzene | 84 | 68-120 | |
| Dibromofluoromethane | 114 | 80-127 | |
| 1,2-Dichloroethane-d4 | 102 | 80-128 | |
| Toluene-d8 | 100 | 80-120 | |

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Analytical Report

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Date Received: 04/10/15
Work Order: 15-04-0839
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: Pit-3: United Rock Products



| Client Sample Number | Lab Sample Number | Date/Time Collected | Matrix | Instrument | Date Prepared | Date/Time Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|---|
| **Method Blank** | **099-10-025-3442** | **N/A** | **Aqueous** | **GC/MS L** | **04/14/15** | **04/14/15 13:16** | **150414L031** |

| Parameter | Result | RL | DF | Qualifiers |
|---|---|---|---|---|
| Benzene | ND | 0.50 | 1.00 | |
| Tetrachloroethene | ND | 0.50 | 1.00 | |
| Trichloroethene | ND | 0.50 | 1.00 | |
| Vinyl Chloride | ND | 0.50 | 1.00 | |
| Methyl-t-Butyl Ether (MTBE) | ND | 0.50 | 1.00 | |

| Surrogate | Rec. (%) | Control Limits | Qualifiers |
|---|---|---|---|
| 1,4-Bromofluorobenzene | 87 | 68-120 | |
| Dibromofluoromethane | 112 | 80-127 | |
| 1,2-Dichloroethane-d4 | 96 | 80-128 | |
| Toluene-d8 | 98 | 80-120 | |

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

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# Quality Control - Spike/Spike Duplicate

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Project: Pit-3: United Rock Products

Date Received: 04/10/15
Work Order: 15-04-0839
Preparation: N/A
Method: EPA 200.7



| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | MS/MSD Batch Number |
|---|---|---|---|---|---|---|
| **IRW-B** | **Sample** | **Aqueous** | **ICP 7300** | **04/13/15** | **04/15/15 12:44** | **150413SA1A** |
| **IRW-B** | **Matrix Spike** | **Aqueous** | **ICP 7300** | **04/13/15** | **04/15/15 12:45** | **150413SA1A** |
| **IRW-B** | **Matrix Spike Duplicate** | **Aqueous** | **ICP 7300** | **04/13/15** | **04/15/15 12:47** | **150413SA1A** |

| Parameter | Sample Conc. | Spike Added | MS Conc. | MS %Rec. | MSD Conc. | MSD %Rec. | %Rec. CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|---|---|---|---|
| Cadmium | ND | 0.5000 | 0.5519 | 110 | 0.5677 | 114 | 80-120 | 3 | 0-20 | |
| Chromium | ND | 0.5000 | 0.5595 | 112 | 0.5755 | 115 | 80-120 | 3 | 0-20 | |
| Lead | ND | 0.5000 | 0.5553 | 111 | 0.5706 | 114 | 80-120 | 3 | 0-20 | |
| Nickel | ND | 0.5000 | 0.5568 | 111 | 0.5698 | 114 | 80-120 | 2 | 0-20 | |
| Boron | 0.07133 | 0.5000 | 0.6008 | 106 | 0.6209 | 110 | 80-120 | 3 | 0-20 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - Sample Duplicate

| | | | |
|---|---|---|---|
| Sully Miller Contracting | | Date Received: | 04/10/15 |
| 135 State College Boulevard, suite 400 | | Work Order: | 15-04-0839 |
| Brea, CA 92821-5819 | | Preparation: | N/A |
| | | Method: | SM 2320B |
| Project: Pit-3: United Rock Products | | | Page 1 of 9 |

| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | Duplicate Batch Number |
|---|---|---|---|---|---|---|
| **IRW-B** | **Sample** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410ALKD5** |
| **IRW-B** | **Sample Duplicate** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410ALKD5** |

| Parameter | Sample Conc. | DUP Conc. | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|
| Alkalinity, Total (as CaCO3) | 106.0 | 107.0 | 1 | 0-25 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - Sample Duplicate

| | | | |
|---|---|---|---|
| Sully Miller Contracting | | Date Received: | 04/10/15 |
| 135 State College Boulevard, suite 400 | | Work Order: | 15-04-0839 |
| Brea, CA 92821-5819 | | Preparation: | N/A |
| | | Method: | SM 2320B |
| Project: Pit-3: United Rock Products | | | Page 2 of 9 |

| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | Duplicate Batch Number |
|---|---|---|---|---|---|---|
| **IRW-B** | **Sample** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410HCOD5** |
| **IRW-B** | **Sample Duplicate** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410HCOD5** |

| Parameter | Sample Conc. | DUP Conc. | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|
| Bicarbonate (as CaCO3) | 106.0 | 107.0 | 1 | 0-25 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - Sample Duplicate

| | | | |
|---|---|---|---|
| Sully Miller Contracting | | Date Received: | 04/10/15 |
| 135 State College Boulevard, suite 400 | | Work Order: | 15-04-0839 |
| Brea, CA 92821-5819 | | Preparation: | N/A |
| | | Method: | SM 2320B |
| Project: Pit-3: United Rock Products | | | Page 3 of 9 |

| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | Duplicate Batch Number |
|---|---|---|---|---|---|---|
| **IRW-B** | **Sample** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410CO3D5** |
| **IRW-B** | **Sample Duplicate** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410CO3D5** |

| Parameter | Sample Conc. | DUP Conc. | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|
| Carbonate (as CaCO3) | ND | ND | N/A | 0-25 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - Sample Duplicate

| | | | |
|---|---|---|---|
| Sully Miller Contracting | | Date Received: | 04/10/15 |
| 135 State College Boulevard, suite 400 | | Work Order: | 15-04-0839 |
| Brea, CA 92821-5819 | | Preparation: | N/A |
| | | Method: | SM 2340C |
| Project: Pit-3: United Rock Products | | | Page 4 of 9 |

| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | Duplicate Batch Number |
|---|---|---|---|---|---|---|
| **15-04-0952-5** | **Sample** | **Aqueous** | **BUR21** | **N/A** | **04/16/15 15:10** | **F0416HARD1** |
| **15-04-0952-5** | **Sample Duplicate** | **Aqueous** | **BUR21** | **N/A** | **04/16/15 15:10** | **F0416HARD1** |

| Parameter | Sample Conc. | DUP Conc. | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|
| Hardness, Total (as CaCO3) | 441.0 | 440.0 | 0 | 0-25 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - Sample Duplicate

| | | | |
|---|---|---|---|
| Sully Miller Contracting | | Date Received: | 04/10/15 |
| 135 State College Boulevard, suite 400 | | Work Order: | 15-04-0839 |
| Brea, CA 92821-5819 | | Preparation: | N/A |
| | | Method: | SM 2510 B |
| Project: Pit-3: United Rock Products | | | Page 5 of 9 |

| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | Duplicate Batch Number |
|---|---|---|---|---|---|---|
| **IRW-B** | **Sample** | **Aqueous** | **SC 2** | **N/A** | **04/16/15 16:25** | **F0416SCD1** |
| **IRW-B** | **Sample Duplicate** | **Aqueous** | **SC 2** | **N/A** | **04/16/15 16:25** | **F0416SCD1** |

| Parameter | Sample Conc. | DUP Conc. | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|
| Specific Conductance | 382.0 | 383.0 | 0 | 0-25 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - Sample Duplicate

| | | | |
|---|---|---|---|
| Sully Miller Contracting | | Date Received: | 04/10/15 |
| 135 State College Boulevard, suite 400 | | Work Order: | 15-04-0839 |
| Brea, CA 92821-5819 | | Preparation: | N/A |
| | | Method: | SM 2540 C |
| Project: Pit-3: United Rock Products | | | Page 6 of 9 |

| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | Duplicate Batch Number |
|---|---|---|---|---|---|---|
| **15-04-0809-1** | **Sample** | **Aqueous** | **SC 5** | **04/15/15 00:00** | **04/15/15 18:00** | **F0415TDSD1** |
| **15-04-0809-1** | **Sample Duplicate** | **Aqueous** | **SC 5** | **04/15/15 00:00** | **04/15/15 18:00** | **F0415TDSD1** |

| Parameter | Sample Conc. | DUP Conc. | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|
| Solids, Total Dissolved | 1145 | 1135 | 1 | 0-20 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - Sample Duplicate

| | |
|---|---|
| Sully Miller Contracting | Date Received: 04/10/15 |
| 135 State College Boulevard, suite 400 | Work Order: 15-04-0839 |
| Brea, CA 92821-5819 | Preparation: N/A |
| | Method: SM 4500 H+ B |
| Project: Pit-3: United Rock Products | Page 7 of 9 |

| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | Duplicate Batch Number |
|---|---|---|---|---|---|---|
| **15-04-0823-2** | **Sample** | **Aqueous** | **PH 1** | **N/A** | **04/10/15 17:13** | **F0410PHD2** |
| **15-04-0823-2** | **Sample Duplicate** | **Aqueous** | **PH 1** | **N/A** | **04/10/15 17:13** | **F0410PHD2** |

| Parameter | Sample Conc. | DUP Conc. | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|
| pH | 10.91 | 10.97 | 1 | 0-25 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - Sample Duplicate

| | | | |
|---|---|---|---|
| Sully Miller Contracting | | Date Received: | 04/10/15 |
| 135 State College Boulevard, suite 400 | | Work Order: | 15-04-0839 |
| Brea, CA 92821-5819 | | Preparation: | N/A |
| | | Method: | SM 5220 C |
| Project: Pit-3: United Rock Products | | | Page 8 of 9 |

| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | Duplicate Batch Number |
|---|---|---|---|---|---|---|
| **15-04-0840-3** | **Sample** | **Aqueous** | **BUR06** | **04/16/15 00:00** | **04/16/15 20:00** | **F0416ODD1** |
| **15-04-0840-3** | **Sample Duplicate** | **Aqueous** | **BUR06** | **04/16/15 00:00** | **04/16/15 20:00** | **F0416ODD1** |

| Parameter | Sample Conc. | DUP Conc. | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|
| Chemical Oxygen Demand | ND | ND | N/A | 0-25 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - Sample Duplicate

| | | | |
|---|---|---|---|
| Sully Miller Contracting | | Date Received: | 04/10/15 |
| 135 State College Boulevard, suite 400 | | Work Order: | 15-04-0839 |
| Brea, CA 92821-5819 | | Preparation: | N/A |
| | | Method: | SM4500-CO2D |
| Project: Pit-3: United Rock Products | | | Page 9 of 9 |

| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | Duplicate Batch Number |
|---|---|---|---|---|---|---|
| **IRW-B** | **Sample** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410CO2D5** |
| **IRW-B** | **Sample Duplicate** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410CO2D5** |

| Parameter | Sample Conc. | DUP Conc. | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|
| Carbon Dioxide | 611.4 | 617.2 | 1 | 0-25 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - LCS/LCSD

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Project: Pit-3: United Rock Products

Date Received: 04/10/15
Work Order: 15-04-0839
Preparation: N/A
Method: SM 2320B



| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | LCS/LCSD Batch Number |
|---|---|---|---|---|---|---|
| **099-15-859-669** | **LCS** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410ALKB5** |
| **099-15-859-669** | **LCSD** | **Aqueous** | **PH1/BUR03** | **N/A** | **04/10/15 19:31** | **F0410ALKB5** |

| Parameter | Spike Added | LCS Conc. | LCS %Rec. | LCSD Conc. | LCSD %Rec. | %Rec. CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|---|---|---|
| Alkalinity, Total (as CaCO3) | 100.0 | 97.00 | 97 | 97.00 | 97 | 80-120 | 0 | 0-20 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - LCS/LCSD

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Project: Pit-3: United Rock Products

Date Received: 04/10/15
Work Order: 15-04-0839
Preparation: N/A
Method: SM 2540 C



| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | LCS/LCSD Batch Number |
|---|---|---|---|---|---|---|
| **099-12-180-4525** | **LCS** | **Aqueous** | **SC 5** | **04/15/15** | **04/15/15 18:00** | **F0415TDSL1** |
| **099-12-180-4525** | **LCSD** | **Aqueous** | **SC 5** | **04/15/15** | **04/15/15 18:00** | **F0415TDSL1** |

| Parameter | Spike Added | LCS Conc. | LCS %Rec. | LCSD Conc. | LCSD %Rec. | %Rec. CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|---|---|---|
| Solids, Total Dissolved | 100.0 | 100.0 | 100 | 95.00 | 95 | 80-120 | 5 | 0-20 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - LCS

| | | | |
|---|---|---|---|
| Sully Miller Contracting | | Date Received: | 04/10/15 |
| 135 State College Boulevard, suite 400 | | Work Order: | 15-04-0839 |
| Brea, CA 92821-5819 | | Preparation: | N/A |
| | | Method: | EPA 200.7 |
| Project: Pit-3: United Rock Products | | | Page 3 of 5 |

| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | LCS Batch Number |
|---|---|---|---|---|---|---|
| **097-01-012-6157** | **LCS** | **Aqueous** | **ICP 7300** | **04/13/15** | **04/15/15 11:45** | **150413LA1A** |

| Parameter | Spike Added | Conc. Recovered | LCS %Rec. | %Rec. CL | Qualifiers |
|---|---|---|---|---|---|
| Cadmium | 0.5000 | 0.5011 | 100 | 85-115 | |
| Chromium | 0.5000 | 0.4916 | 98 | 85-115 | |
| Lead | 0.5000 | 0.5001 | 100 | 85-115 | |
| Nickel | 0.5000 | 0.5203 | 104 | 85-115 | |
| Boron | 0.5000 | 0.4610 | 92 | 85-115 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - LCS/LCSD

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Project: Pit-3: United Rock Products

Date Received: 04/10/15
Work Order: 15-04-0839
Preparation: EPA 5030C
Method: EPA 8260B



| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | LCS/LCSD Batch Number |
|---|---|---|---|---|---|---|
| **099-10-025-3439** | **LCS** | **Aqueous** | **GC/MS L** | **04/11/15** | **04/11/15 13:30** | **150411L037** |
| **099-10-025-3439** | **LCSD** | **Aqueous** | **GC/MS L** | **04/11/15** | **04/11/15 14:02** | **150411L037** |

| Parameter | Spike Added | LCS Conc. | LCS %Rec. | LCSD Conc. | LCSD %Rec. | %Rec. CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 10.00 | 10.10 | 101 | 10.36 | 104 | 80-120 | 3 | 0-22 | |
| Trichloroethene | 10.00 | 10.08 | 101 | 10.39 | 104 | 80-120 | 3 | 0-25 | |
| Vinyl Chloride | 10.00 | 10.22 | 102 | 9.950 | 100 | 63-135 | 3 | 0-30 | |
| Methyl-t-Butyl Ether (MTBE) | 10.00 | 8.956 | 90 | 9.976 | 100 | 75-123 | 11 | 0-27 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Quality Control - LCS/LCSD

Sully Miller Contracting
135 State College Boulevard, suite 400
Brea, CA 92821-5819

Date Received: 04/10/15
Work Order: 15-04-0839
Preparation: EPA 5030C
Method: EPA 8260B

Project: Pit-3: United Rock Products



| Quality Control Sample ID | Type | Matrix | Instrument | Date Prepared | Date Analyzed | LCS/LCSD Batch Number |
|---|---|---|---|---|---|---|
| **099-10-025-3442** | **LCS** | **Aqueous** | **GC/MS L** | **04/14/15** | **04/14/15 11:57** | **150414L031** |
| **099-10-025-3442** | **LCSD** | **Aqueous** | **GC/MS L** | **04/14/15** | **04/14/15 12:29** | **150414L031** |

| Parameter | Spike Added | LCS Conc. | LCS %Rec. | LCSD Conc. | LCSD %Rec. | %Rec. CL | RPD | RPD CL | Qualifiers |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 10.00 | 10.53 | 105 | 10.45 | 104 | 80-120 | 1 | 0-22 | |
| Trichloroethene | 10.00 | 10.45 | 104 | 10.47 | 105 | 80-120 | 0 | 0-25 | |
| Vinyl Chloride | 10.00 | 8.524 | 85 | 8.242 | 82 | 63-135 | 3 | 0-30 | |
| Methyl-t-Butyl Ether (MTBE) | 10.00 | 8.869 | 89 | 9.816 | 98 | 75-123 | 10 | 0-27 | |

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RPD: Relative Percent Difference. CL: Control Limits

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# Glossary of Terms and Qualifiers

Work Order: 15-04-0839 Page 1 of 1

| Qualifiers | Definition |
|---|---|
| * | See applicable analysis comment. |
| < | Less than the indicated value. |
| > | Greater than the indicated value. |
| 1 | Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification. |
| 2 | Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification. |
| 3 | Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control. |
| 4 | The MS/MSD RPD was out of control due to suspected matrix interference. |
| 5 | The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference. |
| 6 | Surrogate recovery below the acceptance limit. |
| 7 | Surrogate recovery above the acceptance limit. |
| B | Analyte was present in the associated method blank. |
| BU | Sample analyzed after holding time expired. |
| BV | Sample received after holding time expired. |
| E | Concentration exceeds the calibration range. |
| ET | Sample was extracted past end of recommended max. holding time. |
| HD | The chromatographic pattern was inconsistent with the profile of the reference fuel standard. |
| HDH | The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected). |
| HDL | The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected). |
| J | Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated. |
| JA | Analyte positively identified but quantitation is an estimate. |
| ME | LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean). |
| ND | Parameter not detected at the indicated reporting limit. |
| Q | Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater. |
| SG | The sample extract was subjected to Silica Gel treatment prior to analysis. |
| X | % Recovery and/or RPD out-of-range. |
| Z | Analyte presence was not confirmed by second column or GC/MS analysis. |

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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# CHAIN OF CUSTODY RECORD

**Chambers Environmental Services**
4510 Mt. Henry Ave, San Diego, CA 92117
858.279.3266

Lab: Calscience Labs

**15-04-0839**

**Client Name/Consultant:** United Rock Products
**Address:** 135 S. State College Blvd, Suite 400
**City/State/Zip:** Brea, CA 92821
**Project Manager:** Ken Barker

**Report To:** Same
**Invoice To:** Same
**Project ID:** Pit-3: United Rock Products
**Project #:**

**Sampler Name: (Print)** D. Chambers
**Sampler Signature:** D. Chambers

Pit 3

| | Sample ID / Description | Date Sampled | Time Sampled | No. of Containers | Grab | Composite | Field Filtered | Matrix: Groundwater | Wastewater | Drinking Water | Sludge | Soil | Other (specify): | Analyze For: VOC's 8260 | Specific Conductance | Total Hardness | COD, TDS | Cyanide | CO2 | Metals | Anions | Alk., pH | 24H 48H 7-day rush | Standard TAT | Fax Results | Send QC with report |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | IRW-13 | 4/10/15 | 9:45 | 12 | x | | N | x | | | | | | X | X | X | X | | X | X | X | X | | X | | |
| 2 | Pit 3-1 | ↓ | 13:50 | ↓ | ↓ | | ↓ | ↓ | | | | | | ↓ | ↓ | ↓ | ↓ | | ↓ | ↓ | ↓ | ↓ | | ↓ | | |
| 3 | Pit 3-2 | ↓ | 14:05 | ↓ | ↓ | | ↓ | ↓ | | | | | | ↓ | ↓ | ↓ | ↓ | | ↓ | ↓ | ↓ | ↓ | | ↓ | | |

**Special Instructions:**

**Call and confirm before analysis.**

**Method of Shipment:** FEDEX, Courrier, Client drop

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| Dan Chambers | 4/10/15 | 1610 | | 4/10/15 | 1610 |
| Relinquished by: | Date | Time | Received by: | Date | Time |

**Laboratory Comments:**
Temperature Upon Receipt:
VOCs Free of Headspace? Y N



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## Danielle Roberts

**From:** Dan Chambers <dwchambers@hotmail.com>
**Sent:** Friday, April 03, 2015 10:39 AM
**To:** Danielle Roberts
**Cc:** Ken Barker
**Subject:** Pit 3, URP sample container request

0839

Hi Danielle:

I am planning on sampling groundwater at the **Pit 3** area of United Rock Products next week, on Thursday. I will need 3 container bundles for 3 sample locations at **Pit 3**.

The list of analytes are:

- pH
- Electrical Conductivity
- Alkalinity
- Bicarbonate (as HCO3)
- Carbonate (as CO3)
- Carbon Dioxide
- COD
- Total Hardness (as CaCO3)
- TDS
- Nitrates
- Chloride
- Sulfate
- Boron
- Cadmium
- Chromium
- Lead
- Nickel
- Benzene
- PCE
- TCE
- MTBE
- Vinyl chloride

I will also need a large cooler for transporting these samples, so please include a cooler with these containers. Please ship cooler & containers with no signature required; I may be away from my office performing other field work.

Please ship the cooler/containers to:

**Dan Chambers C/O**



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***Chambers Environmental Services, Inc.***
4510 Mt. Henry Ave.
San Diego, CA 92117
(Home Office)

0839

If you have any questions, please don not hesitate to contact me by phone or email.

Thanks you,
**Dan Chambers**
***Chambers Environmental Services, Inc.***
**619-889-9331**
WWW.ChambersEnvironmental.ORG

***Information in this transmission, and any attached documents are confidential. If you are not the intended recipient of this message, you may not disclose, print, copy or relay this information in any form. If you have received this in error, please reply by e-mail and delete the message immediately.***

Notify us here to report this email as spam.

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WORK ORDER NUMBER: 15-04- 0839

# SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: Chambers Env'l. Services/SULLY-MILLER DATE: 04 / 10 / 2015

**TEMPERATURE:** (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC2 (CF:-0.3°C); Temperature (w/o CF): 1.5 °C (w/ CF): 1.2 °C; ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter Checked by: 836

**CUSTODY SEAL:**

Cooler ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 836

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 977

| **SAMPLE CONDITION:** | Yes | No | N/A |
|---|---|---|---|
| Chain-of-Custody (COC) document(s) received with samples | ☑ | ☐ | ☐ |
| COC document(s) received complete | ☑ | ☐ | ☐ |
| ☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers | | | |
| ☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished time | | | |
| Sampler's name indicated on COC | ☑ | ☐ | ☐ |
| Sample container label(s) consistent with COC | ☑ | ☐ | ☐ |
| Sample container(s) intact and in good condition | ☑ | ☐ | ☐ |
| Proper containers for analyses requested | ☑ | ☐ | ☐ |
| Sufficient volume/mass for analyses requested | ☑ | ☐ | ☐ |
| Samples received within holding time | ☑ | ☐ | ☐ |
| Aqueous samples for certain analyses received within 15-minute holding time | | | |
| ☑ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen | ☐ | ☑ | DG 4/10/15 ☒ |
| Proper preservation chemical(s) noted on COC and/or sample container | ☑ | ☐ | ☐ |
| Unpreserved aqueous sample(s) received for certain analyses | | | |
| ☐ Volatile Organics ☐ Total Metals ☐ Dissolved Metals | | | |
| Container(s) for certain analysis free of headspace | ☑ | ☐ | ☐ |
| ☑ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500) | | | |
| ☑ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach) | | | |
| Tedlar™ bag(s) free of condensation | ☐ | ☐ | ☑ |

**CONTAINER TYPE:** (Trip Blank Lot Number: _____)

**Aqueous:** ☐ VOA ☑ VOA**h** [3] ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☑ 125PB [3]

☐ 125PB**znna** ☑ 250AGB ☐ 250CGB ☑ 250CGB**s** ☑ 250PB ☑ 250PB**n** [2] ☐ 500AGB ☐ 500AGJ ☐ 500AGJ**s**

☐ 500PB ☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** ☑ 1PB ☐ 1PB**na** ☐ _____ ☐ _____ ☐ _____ ☐ _____

**Solid:** ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (_____) ☐ EnCores® (_____) ☐ TerraCores® (_____) ☐ _____

**Air:** ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ **Other Matrix** (_____): ☐ _____ ☐ _____

Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag

Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = $HNO_3$, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = $H_3PO_4$, **s** = $H_2SO_4$, **u** = ultra-pure, **znna** = $Zn(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: 977

Reviewed by: SVL



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Project Name: United Rock Products

Date: 04/10/15

**Water Level Data Sheet**

Project Number: _____

| Well ID | Time | DTW | Ref Pt. | ~ Elev. | Well TD | | Comments: |
|---|---|---|---|---|---|---|---|
| Yard Well | 12:40 | 229.80 | 405.6 | | | | (IRW-1) |
| IRW-1A | 7:10 | DRY | 380.94 | | 195.4 | | (Pit-1) |
| IRW-1B | 7:17 | DRY | 380.03 | | 194.3 | | (Pit 1) |
| IRW-A | 7:50 | DRY | | | 249.6 | | (Pit 3) |
| IRW-B | 8:00 | 227.68 | | | 250.1 | | (Pit 3) |

Ref Pt = Reference Point
DTW = Depth to Water
TD = Total Depth
Elev. = Elevation

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: _____

# *Chambers Environmental Services, Inc*
## Sampling Data Sheet

Date: 4/10/15

Well ID: Yard Well

**Purge Data**

| (Variable) | 0.2 C | 3-5% | 0.2 u | 20mv | 0.2mg/L | 10% | ML | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | Temp. | E.C.(uS) | pH | ORP | DO | Turbidity | Volume | DTW | Notes |
| Start: | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | | |
| 12:50 | 20.6 | 681 | 7.58 | 10 | 3.61 | 4.11 | - | - | |
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| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

Purge Pump: /

Pump Set Time: /

Pump/Inlet Depth (BGS): /

Decon:

Triple-Rinse

Total Vol. Purged -

Final Temp.: 20.6

Final EC: 681

Final pH: 7.58

Final ORP: 10

Final DO: 3.61

Draw Down: /

Sample Start: 12:50

Sample St _____

Analyses: Sample Container:

**Well Data**

Bore OD:

Casing ID:

**Well TD:**

**D.T.W.:**

Ft./ Water:

Special Notes for This Well:

Sample ID: /

(If different from above)

DTW @ Sample: _____

**Meters:**

Solinst 12202 Interphase Probe

Oakton 300 Series

Purge Method: 3

**Methods:** 1=3 BV sample after 80%.

2= 1 BV and monitor parameters each 0.5 BV.

3=Low-flow.

4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

**Chambers Environmental Services, Inc**
**Sampling Data Sheet**

Site: United Rock Products

Site Address: Irwindale, CA

Date: 4/10/15

Well ID: IRW-B

Sampler: DWC

**Purge Data**

| (Variable) | 0.2 C | 3-5% | 0.2 u | 20mv | 0.2mg/L | 10% | ML | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | Temp. | E.C.(uS) | pH | ORP | DO | Turbidity | Volume | DTW | Notes |
| Start: 09:00 | ~~~~~ | ~~~~~ | ~~~~~ | ~~~~~ | ~~~~~ | ~~~~~ | ~~~~~ | 227.68 | |
| 09:35 | 19.7 | 490 | 7.01 | -56 | 4.83 | 6.12 | 500 | 227.68 | |
| 09:39 | 19.8 | 506 | 6.98 | -50 | 4.90 | 5.86 | 900 | 227.69 | |
| 09:42 | 20.0 | 491 | 6.86 | -51 | 4.80 | 5.66 | 1200 | 227.69 | |
| 09:45 | 19.9 | 495 | 6.85 | -50 | 4.75 | 5.60 | 1500 | 227.68 | |
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| Stop: 10:03 | | | | | | | | | |
| Rate: (ML/Min.) | ~100 | | | | | | | | |

Purge Pump: Bladder
Pump Set Time: 8:00
Pump/Inlet Depth (BGS): 248

Decon:
Triple-Rinse

Total Vol. Purged 1500
Final Temp.: 19.9
Final EC: 495
Final pH: 6.85
Final ORP: -50
Final DO: 4.75
Draw Down: 0.01

Sample Start: 09:45
Sample St 10:03
Analyses: Sample Container:
VARIOUS SEE COC
12

Sample ID: —
(If different from above)
DTW @ Sample: 227.68

**Well Data**
Bore OD:
Casing ID:
**Well TD:**
**D.T.W.:**
Ft./ Water:

Special Notes for This Well:

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

**Methods:** 1=3 BV sample after 80%.
2= 1 BV and monitor parameters each 0.5 BV.
3=Low-flow.
4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

**Chambers Environmental Services, Inc**
**Sampling Data Sheet**

Site: United Rock Products

Site Address: Irwindale, CA

Date: 4-10-15

Well ID: PIT 3-1

Sampler: DWC

**Purge Data**

| (Variable) | 0.2 C | 3-5% | 0.2 u | 20mv | 0.2mg/L | 10% | ML | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | Temp. | E.C.(uS) | pH | ORP | DO | Turbidity | Volume | DTW | Notes |
| Start: | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | | |
| 13:48 | 22.6 | 792 | 7.84 | -25 | 3.88 | | | | |
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| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

Purge Pump: C
Pump Set Time:
Pump/Inlet Depth (BGS): ~

Decon:
Triple-Rinse

Total Vol. Purged
Final Temp.:
Final EC:
Final pH:
Final ORP:
Final DO:
Draw Down:

Sample Start: 13:50
Sample St
Analyses: Sample Container:

Sample ID:
(If different from above)
DTW @ Sample:

**Well Data**
Bore OD:
Casing ID:
**Well TD:**
**D.T.W.:**
Ft./ Water:

Special Notes for This Well:

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

**Methods:** 1=3 BV sample after 80%.
2= 1 BV and monitor parameters each 0.5 BV.
3=Low-flow.
4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: AWC

## *Chambers Environmental Services, Inc*
## Sampling Data Sheet

Date: 4-10-15

Well ID: PIT 3-2

**Purge Data**

| (Variable) | 0.2 C | 3-5% | 0.2 u | 20mv | 0.2mg/L | 10% | ML | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | Temp. | E.C.(uS) | pH | ORP | DO | Turbidity | Volume | DTW | Notes |
| Start: | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | | |
| 14:03 | 22.1 | 690 | 7.51 | — | ~ | | | | |
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| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

Purge Pump: _____

Pump Set Time: _____

Pump/Inlet Depth (BGS): _____

Decon:

Triple-Rinse

Total Vol. Purged _____

Final Temp.: _____

Final EC: _____

Final pH: _____

Final ORP: _____

Final DO: _____

Draw Down: _____

Sample Start: 14:05

Sample St _____

Analyses: Sample Container:

Sample ID: _____

(If different from above)

DTW @ Sample: _____

**Well Data**

Bore OD:

Casing ID:

**Well TD:**

**D.T.W.:**

Ft./ Water:

Special Notes for This Well:

**Meters:**

Solinst 12202 Interphase Probe

Oakton 300 Series

Purge Method: 3

**Methods:** **1**=3 BV sample after 80%.

**2**= 1 BV and monitor parameters each 0.5 BV.

**3**=Low-flow.

**4**= slow recharge. **5**= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

# CHAIN OF CUSTODY RECORD

**Chambers Environmental Services**

4510 Mt. Henry Ave, San Diego, CA 92117
858.279.3266

Client Name/Consultant: United Rock Products

Address: 135 S. State College Blvd, Suite 400

City/State/Zip: Brea, CA 92821

Project Manager: Ken Barker

Sampler Name: (Print) D. Chambers

Sampler Signature: D. Chambers

Lab: Calscience Labs

Report To: Same

Invoice To: Same

Project ID: Pit-3: United Rock Products

Project #:

| Sample ID / Description | Date Sampled | Time Sampled | No. of Containers | Grab | Composite | Field Filtered | Matrix: Groundwater | Wastewater | Drinking Water | Sludge | Soil | Other (specify): | Analyze For: VOC's 8260 | Specific Conductance | Total Hardness | COD, TDS | Cyanide | CO2 | Metals | Anions | Alk., pH | 24H 48H 7-day rush | Standard TAT | Fax Results | Send QC with report |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pit 3 | | | | | | | | | | | | | | | | | | | | | | | | | |
| IRW-B | 4/10/15 | 9:45 | 12 | x | | N | x | | | | | | X | X | X | X | | X | X | X | X | | X | | |
| Pit 3-1 | ↓ | 13:50 | ↓ | ↓ | | ↓ | ↓ | | | | | | ↓ | ↓ | ↓ | ↓ | | ↓ | ↓ | ↓ | ↓ | | ↓ | | |
| Pit 3-2 | ↓ | 14:05 | ↓ | ↓ | | ↓ | ↓ | | | | | | ↓ | ↓ | ↓ | ↓ | | ↓ | ↓ | ↓ | ↓ | | ↓ | | |

**Special Instructions:**

Call and confirm before analysis.

**Method of Shipment:** FEDEX, Courrier, Client drop

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| D. Chambers | 4/10/15 | 1610 | [signature] | 4/14/15 | 1610 |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| | | | | | |

**Laboratory Comments:**

Temperature Upon Receipt:

VOCs Free of Headspace? Y N

# CHAIN OF CUSTODY RECORD

Pit 2, United Rock Products

**Chambers Environmental Services**

4510 Mt. Henry Ave, San Diego, CA 92117
858.297.3266-O 619.889.9331-C

Client Name/Consultant: Sully-Miller

Address: 135 State College Blvd., suite 400

City/State/Zip: Brea, CA 92821

Project Manager: Ken Barker

626-523-1319 Fax No.: 562-400-8336

Sampler Name: (Print) D. Chambers

Sampler Signature: D. Chambers

Lab: Associated Laboratories

Report To: Ken Barker

Same

Invoice To: Same

Project ID: United Rock Products Pit 2

Project #:

| Sample ID / Description | Date Sampled | Time Sampled | No. of Containers | Grab | Composite | Field Filtered | Matrix: Groundwater | Wastewater | Drinking Water | Sludge | Soil | Other (specify): | Analyze For: VOC's 8260B | TPH-Diesel | BTEX | MTBE | Oxygenates | TPH Extended Range | CCR Metals | T.D. Cd, T.D. Cr, T.D. pB, T.D. Ni | COD, TDS | Nitrate, Sulfate, Boron | PCE, TCE, MTBE, BTEX | Carbonate, Bi-Carbonate | TPH-Diesel | Appendix I, II List | See Attached Sheets | High Concentrations | Sulfate, Chloride, E.C., p | 24H 48H 7-day rush | Standard TAT | | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Yard Well | 4/10/15 | 12:50 | 14 | x | | N | x | | | | | | x | x | | | | | | x | x | x | | | x | | | | x | | x | | |
| Pit 2-1 | ↓ | 11:55 | ↓ | ↓ | | ↓ | ↓ | | | | | | ↓ | ↓ | | | | | | ↓ | ↓ | ↓ | | | ↓ | | | | ↓ | | ↓ | | |
| Pit 2-2 | ↓ | 11:45 | ↓ | ↓ | | ↓ | ↓ | | | | | | ↓ | ↓ | | | | | | ↓ | ↓ | ↓ | | | ↓ | | | | ↓ | | ↓ | | |
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**Special Instructions:**

Call and confirm before analysis.

**Method of Shipment:** FEDEX, Courrier, Client drop

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| Dan Chambers | 4/10/15 | 1610 | EY | 4/10/15 | 1610 |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| | | | | | |

**Laboratory Comments:**

Temperature Upon Receipt:

VOCs Free of Headspace? Y N

# APPENDIX C

# GROUNDWATER DATABASE

## Pit #3 UNITED ROCK PRODUCTS DATABASE

| WATER LEVEL | | GROUNDWATER PARAMETERS | | | | | GENERAL MINERAL (mg/l) | | | | TRACE ELEMENTS | | | | GENERAL CHEMISTRY | | | | | | | ORGANICS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | | See attached organics portion - Note (1) | | | | |
| Sample Point | Date | pH | T(°F) | EC (µmhos/cm) | $CO_2$ (mg/l) | Alk (mg/l) | $SO_4$ | Cl | $NO_3$ | TDS | Ni (µg/l) | Pb (µg/l) | Cd (µg/l) | Cr (µg/l) | COD (mg/l) | OH (mg/l) | TH (mg/l) | $HCO_3$ (mg/l) | $CO_3$ (mg/l) | B (mg/l) | | Benzene (µg/l) | MTBE (µg/l) | TCE (µg/l) | Tetra chloro ethene (µg/l) | Vinyl Chroide (µg/l) |
| IRW-3A | 3-Sep-14 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | | NA | NA | NA | NA | NA |
| IRW-3B | 3-Sep-14 | 7.9 | 81.6 | 397 | 748 | 130 | 41.6 | 15.9 | 0.85 | 210 | <10 | <5 | <5 | <10 | 4 | <5 | 157 | 159 | <5 | 0.204 | | <1 | <1 | <5 | <5 | <5 |
| SW-1 | 3-Sep-14 | 8.42 | 83.84 | 348 | <1 | 76 | 64.5 | 15 | 0.44 | 148 | <10 | <5 | <5 | <10 | 4 | <5 | 144 | 88 | <5 | 0.147 | | <1 | <1 | <5 | <5 | <5 |
| Pit 3-1 | 29-Oct-14 | 8.08 | 74.5 | 388 | <1 | 102 | 63.8 | 16 | 0.88 | 184 | <20 | 7 | <5 | <10 | <4 | <5 | 163 | 125 | <5 | 0.098 | | <1 | <1 | <5 | <5 | <5 |
| Pit 3-2 | 29-Oct-14 | 7.88 | 80.1 | 391 | <1 | 102 | 63.6 | 15.9 | 0.74 | 258 | <20 | 7 | <5 | <10 | <4 | <5 | 159 | 125 | <5 | 0.204 | | <1 | <1 | <5 | <5 | <5 |
| IRW-B | 29-Oct-14 | 8.42 | 83.84 | 348 | <1 | 76 | 39.3 | 15.8 | 1.61 | 200 | <10 | <5 | <5 | <10 | <4 | <5 | 174 | 152 | 44 | 0.082 | | <1 | <1 | <5 | <5 | <5 |
| Pit 3-1 | 25-Feb-15 | 7.33 | 67.82 | 400 | 2 | 107 | 66 | 16 | 0.51 | 205 | <10 | <10 | <10 | <10 | <5 | -- | 160 | 107 | <1 | 0.128 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-2 | 25-Feb-15 | 7.34 | 68.18 | 400 | 1.7 | 104 | 66 | 0.51 | 0.51 | 310 | <10 | <10 | <10 | <10 | <5 | -- | 150 | 104 | <1 | 0.131 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| IRW-B | 25-Feb-15 | 7.05 | 62.6 | 390 | 850 | 107 | 48 | 14 | 0.3 | 250 | <10 | <10 | <10 | <10 | <5 | -- | 150 | 107 | <1 | 0.112 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-1 | 10-Apr-15 | 7.62 | 22.6 | 410 | 1.2 | 110 | -- | -- | -- | 305 | <10 | <10 | <10 | <10 | <5 | -- | 150 | 110 | <1 | 0.089 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-2 | 10-Apr-15 | 7.98 | 22.1 | 410 | 1.2 | 109 | -- | -- | -- | 315 | <10 | <10 | <10 | <10 | <5 | -- | 160 | 109 | <1 | 0.0826 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| IRW-3B | 10-Apr-15 | 5.37 | 19.9 | 380 | 610 | 106 | -- | -- | -- | 300 | <10 | <10 | <10 | <10 | <5 | -- | 150 | 106 | <1 | 0.0713 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

-- Information not available
(1) The WDR's required analysis for EPA App. I and II parameters for the first sampling event. Analysis of EPA App. I and II parameters shall be reported in the fourth quarter 2014 report.
(2) Samples not collected in well



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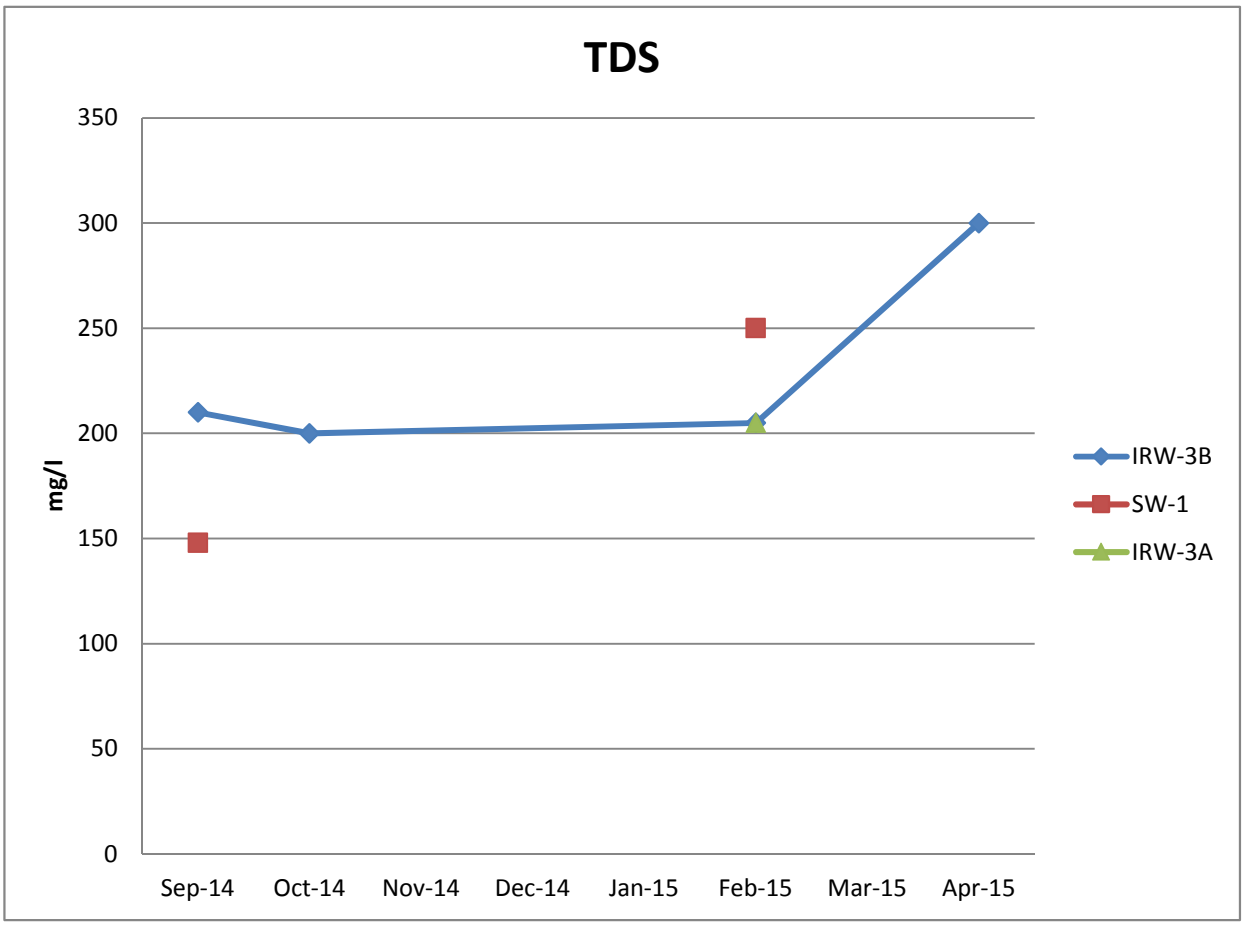
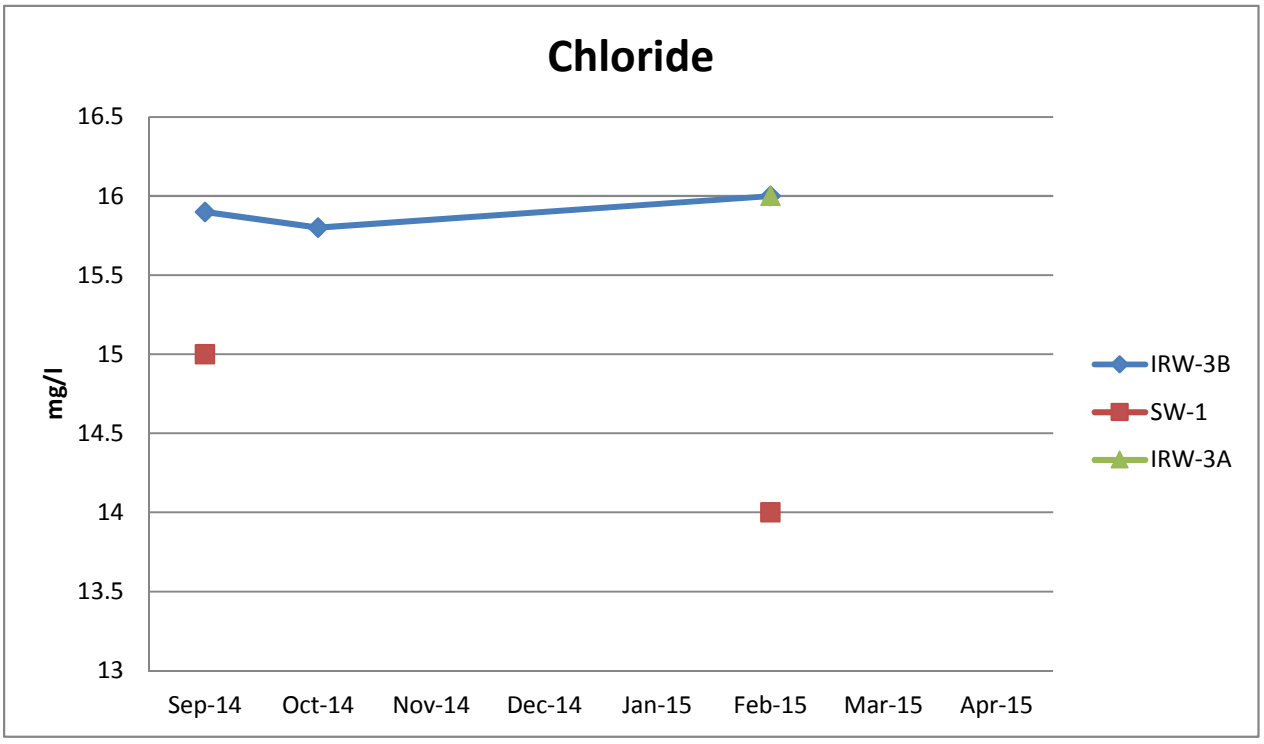
# APPENDIX D

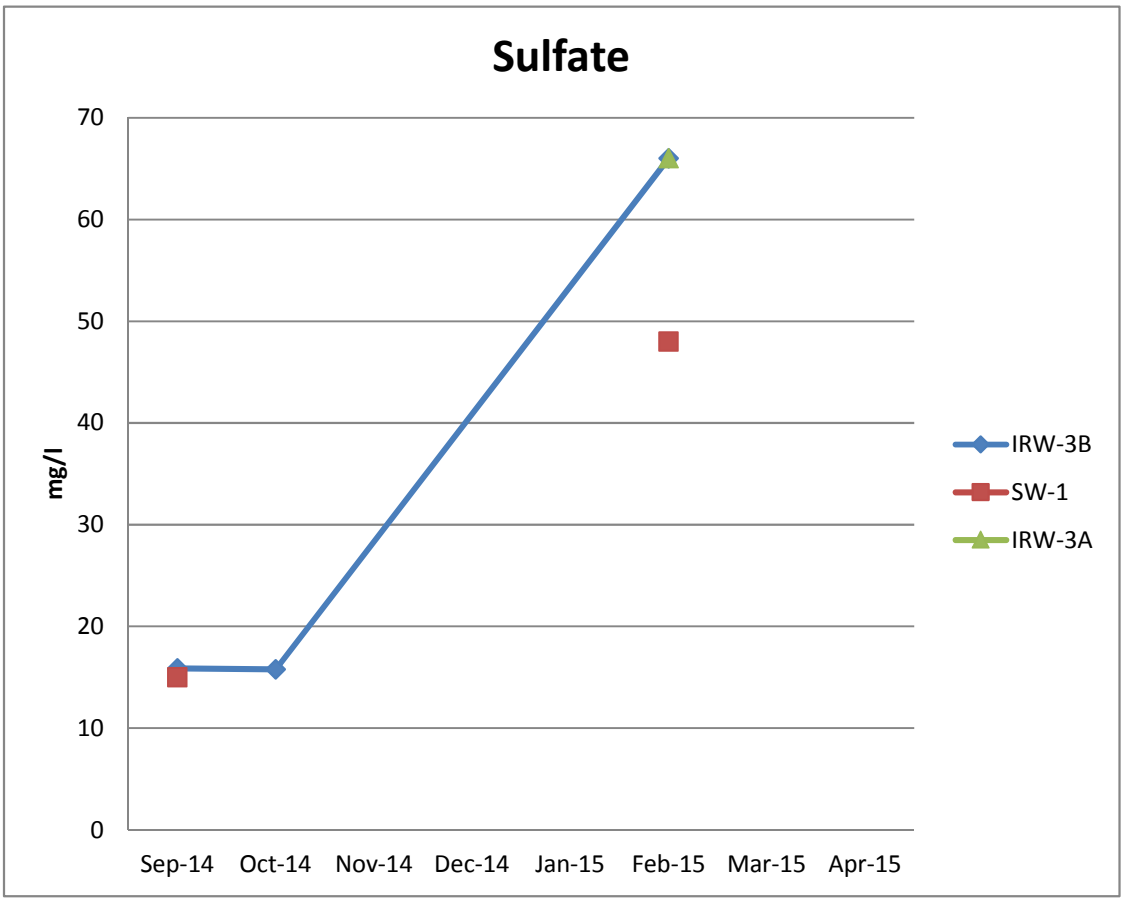
# GRAPHICAL SUMMARIES

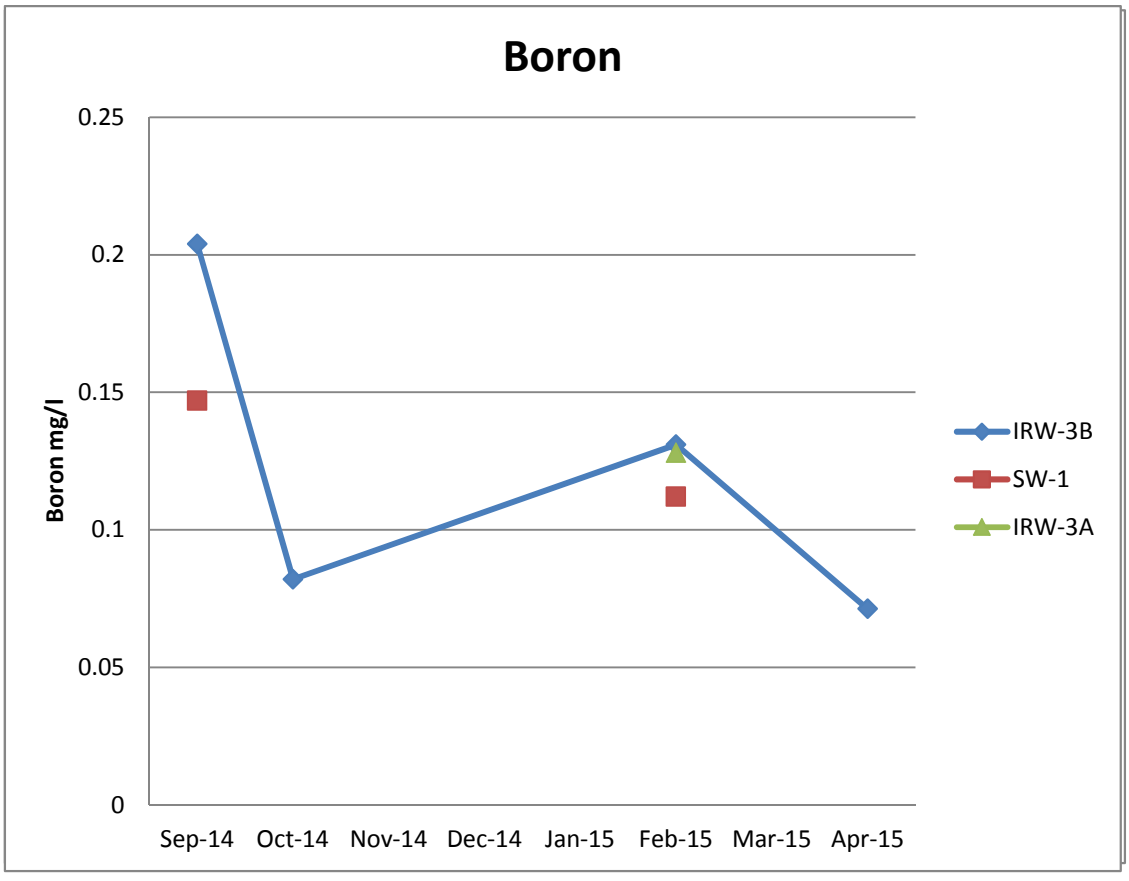
## Historical Graphical Summaries



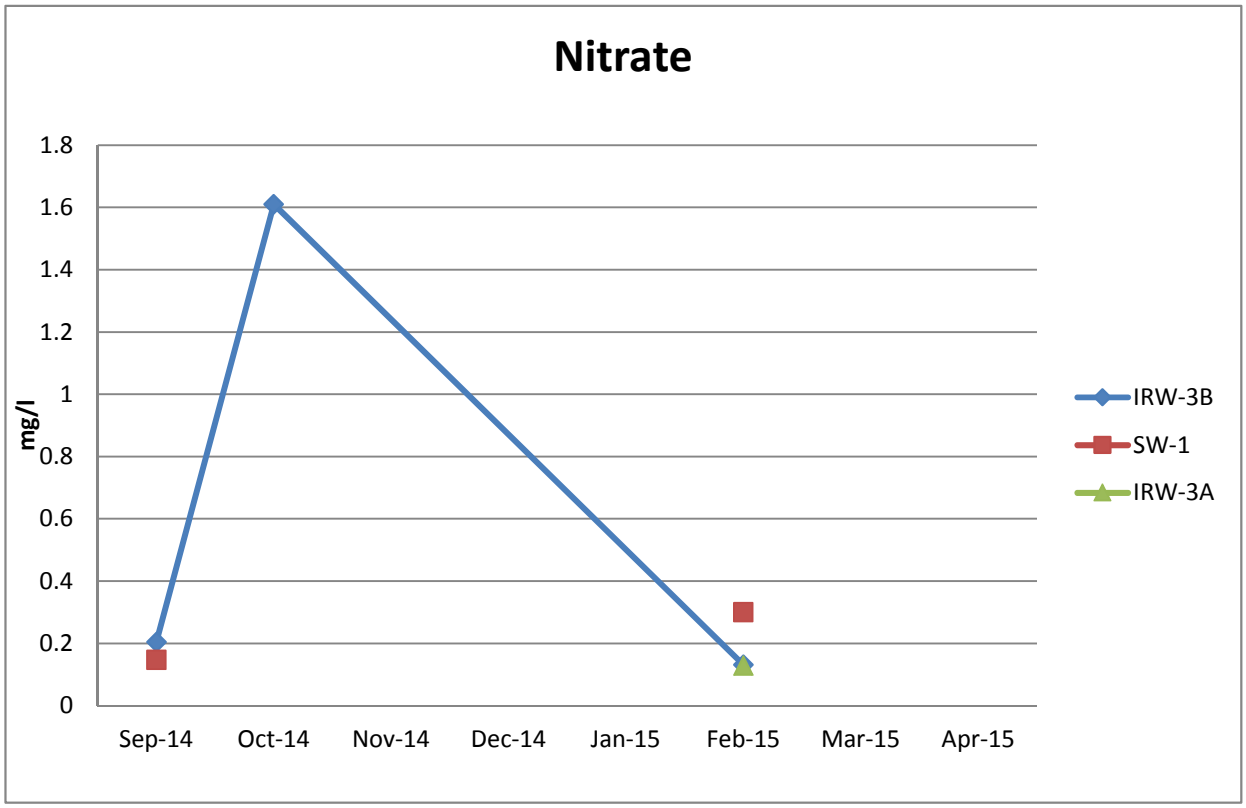



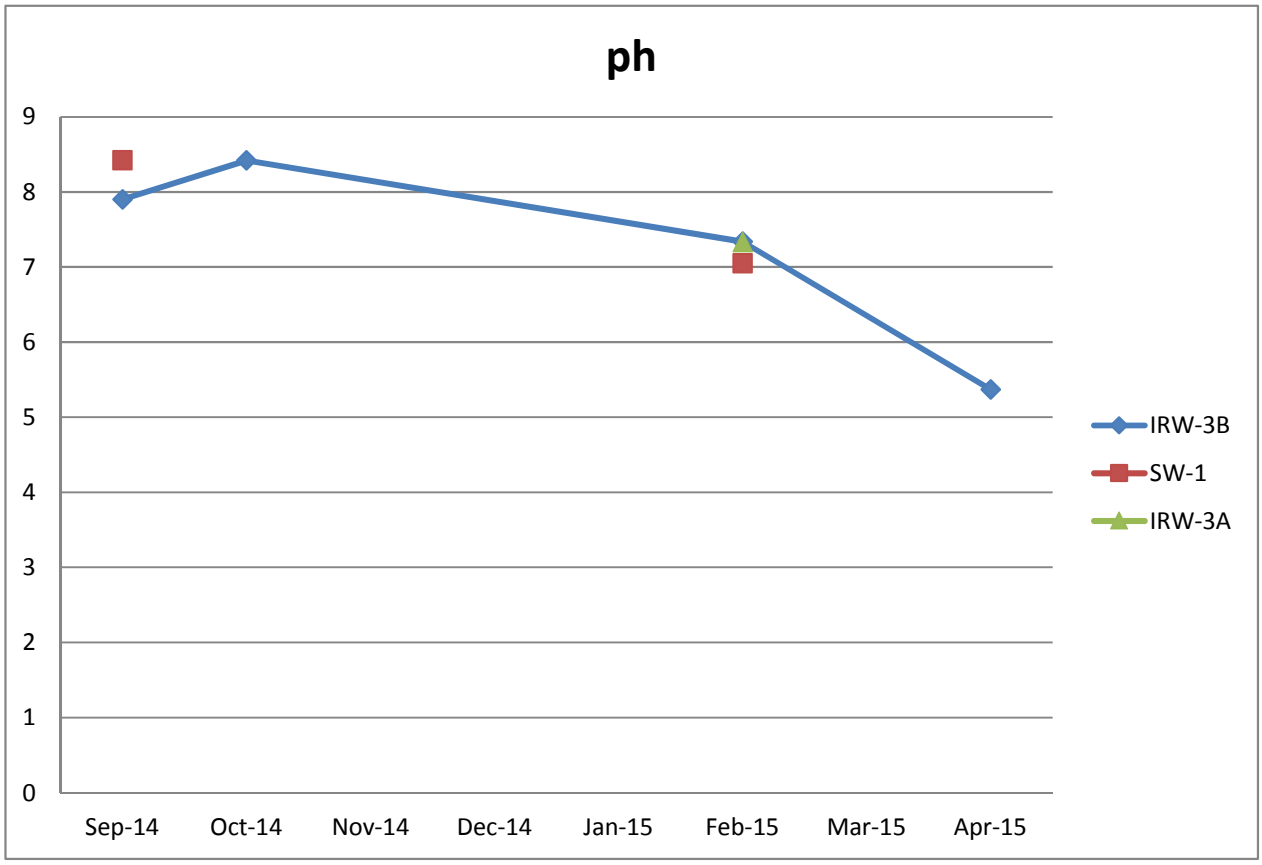
## Historical Graphical Summaries



## Historical Graphical Summaries



# APPENDIX E

# LANDFILL WASTE DISPOSAL

135 S. State College Blvd. Suite 400 Brea, CA 92821 (714) 578-9600

July 13, 2015

California Regional
Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Information Technology Unit

Subject: Waste Discharge Requirements- United Rock Pit 3
1137 Meridian Street
Irwindale, CA 91706
File No. 72-124, Order No.01-131, CI 5801

Pursuant to the General Provisions for Reporting (Section A) of the Monitoring and Reporting Program (File CI 5801) and Section III of the Reporting Conditions, we are respectively submitting our quarterly report.

Please be advised that there was no discharge placed in Pit #3 during the 2nd Quarter of calendar year 2015.

The estimated life of the site is 83 years 3 months.

No purged ground water from monitoring wells is used at the site.

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the 13st day of July 2015 in Brea, California.

Very truly yours,

Ken Barker

Ken Barker
Environmental Manager

Cc: Scott Taylor, Alta Environmental
William Tam, City of Irwindale Engineer

Agency:

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**
**LOS ANGELES REGION**

320 West 4th Street, Suite 200
Los Angeles, CA 90013-2343

# Waste Disposal And Groundwater Monitoring Report

## Third Quarter 2015

United Rock Products – Pit #3
Irwindale, California
RWQCB File No. 72-124
Under Monitoring & Reporting Program No. CI 5801

**Prepared For:**

United Rock Products Corporation
1137 Meridian Street
Irwindale, CA 91706

Date: October 14, 2015

3777 Long Beach, Blvd
Long Beach, CA 90807
(562) 495-5777 Fax: (562) 495-5877

CONTACT: Scott Taylor

Reference: URPC-14-4746

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Appendix A Groundwater Sampling Protocol
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Appendix C Groundwater Database
Appendix D Historical Graphical Summaries
Appendix E Landfill Waste Disposal

## 1.0 INTRODUCTION

Alta Environmental (Alta – formerly Justice & Associates [J&A]) was retained by United Rock Products Corporation (URP) to conduct groundwater monitoring and reporting for URP's Pit 3. The purpose of this report is to provide an evaluation of the groundwater monitoring and the estimated average monthly quantities (in cubic yards) and types of materials deposited. Average monthly quantities and types of materials deposited are reported by URP in Appendix E.

## 2.0 FACILITY DESCRIPTION

URP (Discharger) owns and operates URP's Pit 3 (the Site), a construction aggregate mining pit at 1137 Meridian Street, in Irwindale, California. The site is bounded on the north by the Buena Vista Channel, on the south by Meridian Street and on the east by Buena Vista Street (Figure 1). The center of the site is located at approximately 34°06'56" N and 117°59'23"W.

The Site includes approximately 110 acres of land and has been mined for sand and gravel by the Discharger and its predecessors since the early 1900s. Ground surface elevation around the pit varies from 406 feet above mean sea level (amsl) at the west edge of the pit to 431 feet amsl at the east edge of the pit.

The majority of the pit bottom has exposed groundwater resulting from the mining operation. The City of Irwindale approved conditional use permit CUP 6-04 in 2004, which allows URP to mine the pit to a maximum depth of 440 feet bgs or until December 31, 2037, whichever comes first. The Site also has a reclamation plan approved in 2004 that states the excavation will be used as a groundwater recharge basin once the material has been depleted. Alternatively, the reclamation plan calls for the pit to be filled or partially filled.

The proposed discharge methods to the pit include backfilling the waste material from the Rock Plant to Pit 3 by means of sluicing and trucking. The sluicing process involves mixing the waste materials (primarily clay and silt) with groundwater that has been used in the mining process and pumping the mixture to various locations at the pit. Water is used in the mining process to wash fine material (clay and silt) off the coarse material (gravel and sand). No chemicals are added in either the mining or the sluicing processes.

Order No. 01-131 is the Waste Discharge Requirements (WDRs) for the disposal of inert wastes into the Site during mine reclamation.

## 3.0 CURRENT MONITORING REQUIREMENTS

The monitoring is done to satisfy the Monitoring and Reporting Program (MRP) requirements of Order 01-131, File 72-124 and CI 5801, which was adopted by the Regional Water Quality Control Board (RWQCB) on September 21, 2001. The MRP requires quarterly groundwater and waste disposal reporting during the first year and semi-annually thereafter. In the event sampling is not performed during those months, substitute sampling shall occur as soon as possible after, and the reason for delay shall be given. The sampling schedule will continue to be Quarterly regardless of the substitute sampling. In addition, each monitoring report submitted to the RWQCB shall include a tabular list of the estimated average quantities of materials deposited at the site each month and the methods of disposal. This report contains the summary of both requirements.

### 3.1. Chronology of Order 01-131, File 72-124 and CI 5801

URP and its predecessors have excavated and processed aggregate from this site since as early as 1910. The majority of the pit has groundwater exposed by mining operations. URP purchased the property and operation in 1988.

The RWQCB adopted WDRs in 1973 for the previous owner, Livingston-Graham, to discharge inert materials to Pit 3. In 1988 the pit was purchased by URP and the pit is now known as URP Pit 3. New WDR's were adopted in 2001 and the previous order from 1973 was rescinded.

In May 2002, Justice & Associates submitted a Technical Report on behalf of URP to meet the 2001 WDR monitoring requirement. The technical report was approved in July 2002. A Revised Technical Report dated July 2014 was prepared to amend the 2002 report. Changes in the 2014 revised technical report included; revised sampling protocols for down-gradient wells, increasing the depth of up-gradient and down-gradient wells; and a modification to up-gradient and down-gradient monitoring well design.

## 4.0 GROUNDWATER MONITORING

### 4.1. Third Quarter 2015

Pursuant to the WDR for Pit #3 (Order 01-131, File 72-124 and CI 5801), water level measurements are to be collected from monitoring wells IRW-1 located at the Rock Plant, Wells IRW-1A and IRW-1B located at Pit #1, and Wells IRW-3A and IRW-3B located at Pit #3 (Figure 1). This well network is to be used to estimate gradient in the vicinity of Pit #3. During the third quarter 2015, groundwater was detected only in Well IRW-3B and Well IRW-1. During well gauging, it was observed that Wells IRW-

3A, IRW-1A, and IRW-1B were dry. This is likely due to the lowering of the water table resulting from drought conditions in Southern California. To complete the groundwater gradient analysis, measurable groundwater needs to be gauged from at least 3 wells to allow triangulation for the gradient calculation. Therefore, the groundwater gradient was not determined and the groundwater velocity was not calculated. During the fourth quarter 2015, the wells will continue to be monitored and data collected if groundwater is encountered.

Third Quarter 2015 measurements from the five groundwater-monitoring wells were collected on July 14, 2015. Table 1 presents the third quarter 2015 water level data.

**Table 1**
**Groundwater Monitoring Program for Third Quarter 2015**

| Well # | General Well Location from Pit #3 | Date Measured | Depth to Groundwater (feet) | Total Well Depth (feet bgs) | Groundwater Elevation (feet relative to MSL) | Reference Point Elevation (feet above MSL) |
|---|---|---|---|---|---|---|
| IRW-1 | Cross-Gradient | 7/14/2015 | 239.80 | 300 | 165.80 | 405.60 |
| IRW-1A | Cross-Gradient | 7/14/2015 | DRY | 196.4 | DRY | 380.94 |
| IRW-1B | Cross-Gradient | 7/14/2015 | DRY | 195.3 | DRY | 380.03 |
| IRW-3A | Up-gradient | 7/14/2015 | DRY | 249.6 | DRY | 437.27 |
| IRW-3B | Down-gradient | 7/14/2015 | 229.95 | 250.1 | 176.80 | 406.75 |

4.2. Groundwater Velocity and Direction

The groundwater contours for the third quarter 2015 were not calculated due to insufficient data. During the fourth quarter 2015, the wells will continue to be monitored and the groundwater gradient and velocity will be calculated if groundwater is detected in at least three wells.

4.3. Monitoring Methods

The monitoring stations for the quarterly report consist of wells IRW-1, IRW-1A, IRW-1B, IRW-3A and IRW-3B as defined in the Revised Technical Report. Based on the reported groundwater gradient in the upper San Gabriel Basin, it has been determined that these wells will provide required information for compliance with MRP CI-5801.

Chambers Environmental performed the measurements for Wells IRW-1, IRW-1A, IRW-1B, IRW-3A, and IRW-3B. Groundwater was detected only in Wells IRW-1 and IRW-3B. The Monitoring methods used were in accordance with EPA guidelines set forth in the Groundwater Sampling Protocol (Refer to Appendix A). Prior to conducting field measurements, the groundwater level probe was calibrated to ensure accuracy of

measurements and cleaned prior to and after each measurement to minimize cross-contamination.

## 5.0 GROUNDWATER SAMPLING

The 2014 Revised Technical Report requires that samples be collected from IRW-3A, the up-gradient well at the Northeast corner of Pit #3. However, because no water was detected in the well, no water samples were collected from IRW-3A. Samples were collected from IRW-3B at the southwest corner of Pit #3. Based on the general easterly flow direction of the groundwater in the vicinity of the subject site and the condition that only native geological material washed with local water will be sluiced back into Pit 3, the approved sampling network for Pit #3 also includes groundwater samples from the standing water in the south end of the pit.

For each monitoring period, one grab groundwater sample is to be collected from both wells and the standing water in the pit. The standing water monitoring will occur as long as there is standing water in the pit. Grab samples of the standing water in the pit will be collected using a stainless steel bailer from a depth of 10 to 15 feet below water surface. Groundwater samples from IRW-3A and IRW-3B will be collected using a submersible pump or passive sampling methods. The first round of samples were analyzed for the monitoring parameters listed on US EPA Appendix I and II Constituents. Since these parameters were analyzed during the fourth quarter 2014 sampling event, they have not been included in this report.

The groundwater samples were analyzed by TestAmerica, which is a State of California Department of Health Services accredited laboratory. This laboratory performed the chemical analyses in accordance with the current EPA guidelines and procedures. Appendix B contains the analytical results and chain-of-custody record for this quarterly report.

### 5.1. Groundwater Evaluation

A groundwater database presenting all analytical results is located in Appendix C. Table 2 represents a comparative analysis between the analytical results and the water protection standards established for URP Pit #3 as identified in the WDRs.

**Table 2**
**Water Quality Data Summary**
**Third Quarter 2015 Sampling Event**

| Constituent | Water Quality Protection Standards | Monitoring Station | | |
|---|---|---|---|---|
| | | Pit 3-1 | Pit 3-2 | IRW-3B |
| Date Sampled | | 7/14/15 | 7/14/15 | 7/14/15 |
| Total Dissolved Solids (TDS) | 450 mg/l | 300 | 300 | 290 |
| Chloride (Cl) | 100 mg/l | 19 | 19 | 18 |
| Sulfate ($SO_4$) | 100 mg/l | 54 | 56 | 45 |
| Nitrate (as ($NO_3$) | 45 mg/l | 2.7 | 2.8 | 2.2 |
| Boron | 0.5 mg/l | 0.083 | 0.084 | 0.067 |
| pH | 6.5 – 8.5 | 8.42 (7.06*) | 8.45 (7.15*) | 5.66 (6.69*) |

*Results from field readings

The results for samples collected in July 2015 indicate that standing groundwater in Pit #3 and groundwater collected from Well IRW-3B currently meet Water Quality Protection Standards for all constituents except pH. The standards are established for this facility by Order No. 01-131 and are based on the water quality objectives for the western area of the main San Gabriel Basin contained in the Basin Plan.

There was an insufficient amount of groundwater in Wells IRW-1A, IRW-1B, and IRW-3A to collect samples for analysis. The absence of groundwater in these wells is likely due to the significant drought conditions in Southern California. Therefore, two water column samples, identified as Pit 3-1 and Pit 3-2, were collected at Pit #3. Samples Pit 3-1 and Pit 3-2 have been included within this report to assess compliance with Water Quality Protection Standards.

If there is sufficient groundwater, samples will be collected from the monitoring wells for the next quarterly report.

The pH samples were tested by the laboratory in accordance with the approved methodology. The pH result of 5.66 as analyzed by the laboratory for IRW-3B was below the expected sample range according to the basin plan of 6.5 to 8.5. However, pH was also measured using field instruments at the end of well purging (IRW-3B) or at the time of sample collection (Pit 3-1 and Pit 3-2). Those results showed pH within the expected range. Therefore, the laboratory result of 5.66 for IRW-3B appears to be an anomaly.

The water sampling for each of the monitoring stations is to include analytical results for EPA Method 300 (chloride, nitrate, and sulfate) per the WDR. The samples for IRW-3B, Pit 3-1 and Pit 3-2 are below the Water Quality Protection Standards for each sample.

5.2. Purged Groundwater

Purged groundwater from the monitoring well is used at the Site for dust suppression (within 20-foot radius of each well). One thousand eight hundred (1,800) milliliters of purged water was generated during the July 14, 2015 sampling event (Refer to Appendix B).

5.3. Sluice Material and Waste Disposal

During July through September 2015 reporting period, no material was placed in Pit #3.

The landfill waste disposal information is included in Appendix E.

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

Alta conducted a review of the groundwater analytical data for the third quarter 2015 report. Based on field observations and analytical results, it appears that deposited waste and current waste disposal practices are not adversely impacting local groundwater quality.

Based on the data collected as required by the sampling and monitoring plan detailed in the WDR Order No. 01-131, none of the water quality protection standards listed in Table 2 are elevated above the limits listed in the Order. However, monitoring wells IRW-3A, IRW-1A, and IRW-1B were gauged dry and therefore not sampled. In addition, insufficient data was available to determine groundwater gradient and velocity. Providing sufficient water is available in the wells during the next sampling event, the depth to water in all five wells will be measured.

We appreciate the opportunity to provide groundwater monitoring and reporting services. If you have any questions or comments concerning this report, please feel free to contact me at (562) 495-5777.

## 7.0 CERTIFICATION

### 7.1. Professional Certifications

The hydrogeologic information, results of groundwater testing, conclusions and recommendations in this report have been reviewed by of a California-registered professional geologist. This certification of conditions comprises a declaration of his professional judgment. It does not constitute a warranty or guarantee.




Steven R. Ridenour, PG
Senior Project Manager/Senior Geologist III
Alta Environmental

## 8.0 REFERENCES

Justice & Associates, Sully-Miller Irwindale Facility Phase I Environmental Site Assessment, 9-97

Justice & Associates, United Rock Products, Pit #3 & #3 Final Dredge Operation

Spill Prevention Control and Countermeasure Plan, 5-98

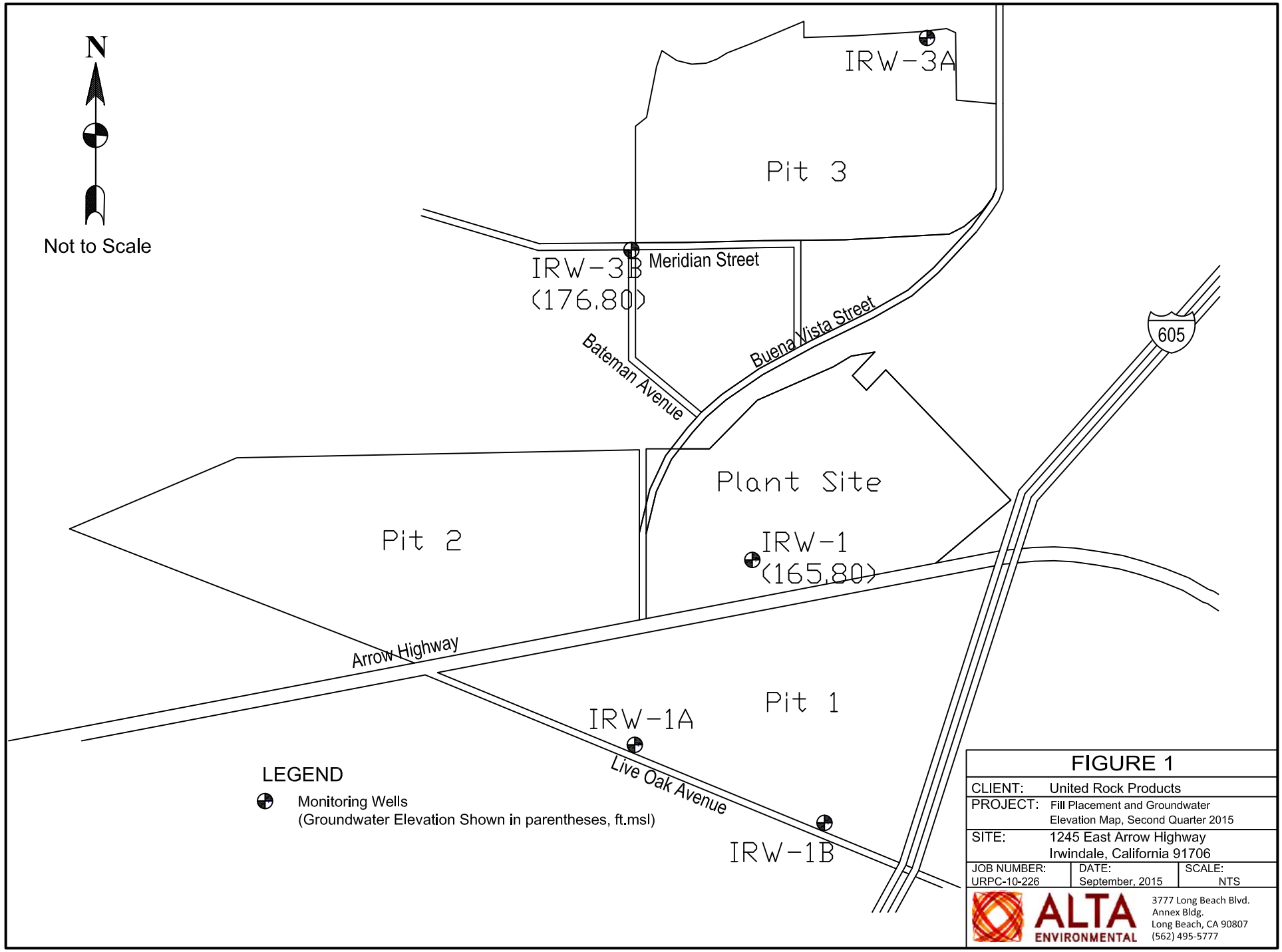
Luhdorff & Scalmanini, Supplemental Groundwater Investigation and Mitigation Monitoring Program, July 2001

Waste Discharge Requirements – United Rock Products – Pit #3 Irwindale, CA (File No. 72-124; Order No. 01-131, CI 5801)

Surface Waters-Field Operations Manual for Lakes USEPA Office of Research and Development EPA/620/R-97/001/June 1997

Technical Guidance Manual for Hydrogeologic Investigations and Groundwater Monitoring, State of Ohio EPA, 1995

# FIGURES




# FIGURE 1

| | |
|---|---|
| CLIENT: | United Rock Products |
| PROJECT: | Fill Placement and Groundwater Elevation Map, Second Quarter 2015 |
| SITE: | 1245 East Arrow Highway Irwindale, California 91706 |

| JOB NUMBER: | DATE: | SCALE: |
|---|---|---|
| URPC-10-226 | September, 2015 | NTS |

ALTA ENVIRONMENTAL
3777 Long Beach Blvd.
Annex Bldg.
Long Beach, CA 90807
(562) 495-5777

# APPENDIX A

# GROUNDWATER SAMPLING PROTOCOL

# STANDARD FIELD PROCEDURES FOR MONITORING AND SAMPLING GROUNDWATER MONITORING WELLS AT URP Pit #3

## SEALED WELLS

One or more wells at the site are sealed and have down-hole pumps for discharging groundwater. Down-hole monitoring and sampling equipment cannot be used in those wells. Sealed wells must be monitored, purged and sampled using the down-hole pumps. Purge volume is estimated using historical depth-to-water and depth-to-bottom information. Once water is obtained from the discharge of the down-hole pumps, the procedures for recording water quality readings and for packaging groundwater samples for laboratory analysis are the same as for open wells, below.

## OPEN WELLS

The following standard operating procedures apply to wells that are accessible using down-hole monitoring and sampling equipment.

## DECONTAMINATION OF MONITORING AND SAMPLING EQUIPMENT

All down-hole monitoring and sampling equipment is decontaminated using a non-phosphate detergent solution prior to placing equipment into each well. A triple-rinse procedure is used to clean the equipment. The general triple-rinse decontamination procedure is as follows:

- Wash equipment in the first rinse containing detergent and clean tap water;
- Rinse thoroughly in the third rinse containing clean tap water;
- Rinse in the third rinse containing distilled or deionized water; and
- Allow equipment to air dry prior to next use.

## WELL GAUGING

All wells are gauged using an electronic measuring tape capable of recording depth-to-water to the nearest 0.01 foot. Depth-to-water is measured to a survey mark on the top of each well casing. In the absence of a survey mark, the well is gauged from the north side of the top-of-casing. Each depth-to-water measurement is performed twice to assure accuracy. After measuring the depth-to-water, either the electronic tape or a clean non-electronic tape is lowered to the bottom of the well to obtain a depth-to-bottom reading for each well. All measurements are recorded on standard field forms.

## PRE-PURGE WATER QUALITY MEASUREMENTS

Prior to purging, a small volume of groundwater is purged from each well using a clean PVC or stainless-steel bailer. That water is used to perform field tests for $CO_2$ and alkalinity. A Hatch Digital Titrator Model 16900 or similar field instrument capable of measuring the required parameters is used to obtain field readings. All field readings are recorded on standard field forms.

## WELL PURGING

One casing volume of water is calculated for each well using the depth-to-water and depth-to-bottom field readings and the diameter of the well casing. Using a clean PVC or stainless steel bailer with new string attached, each well is purged of three to five casing volumes of water prior to collecting water samples for laboratory analysis. Water volumes removed from each well are recorded on standard field forms. After each casing volume of water is removed from the well, field water quality parameters are recorded (see below). Upon completion of purging, the water level is allowed to recover to at least 80% of its pre-purge volume prior to sampling. For slow-recharging wells, water samples are collected after two hours if 80% recovery is not achieved.

If prior groundwater analytical results show that the groundwater in a specific well is sufficiently clean, purged groundwater from the well is spread on the ground in the vicinity of the well. If the groundwater is known to contain contaminants above State action levels, the purged water is placed into DOT-approved steel 55-gallon drums.

Drums containing purge water are sealed, appropriately labeled and temporarily stored on site until a licensed hauler is contracted to remove the drums. All drummed purge water is disposed of at a State-licensed water recycling facility.

## WATER QUALITY MEASUREMENTS DURING PURGING

After purging each casing volume of water from each well, field readings are taken of water quality parameters. A Beta Technologies, Inc. Hydac Water Quality Meter or similar instrument is used to record the temperature, electrical conductivity and pH of the groundwater. At least two out of three of those parameters must stabilize to within 10% between the last two readings before a water sample is collected. A minimum of three casing volumes are removed prior to sampling if water quality parameters stabilize. If water quality parameters do not stabilize, groundwater samples are collected after purging a maximum of five casing volumes. All field readings are recorded on standard field forms.

## WATER SAMPLE COLLECTION

A new polypropylene disposable bailer is used to collect the laboratory water samples from each well. Each disposable bailer is discarded after use in one well. Water from the bailer is placed into laboratory-supplied sample containers containing appropriate preservatives for the requested analytic. The bottles are filled, capped and placed in a cooler on ice. All samples collected for laboratory analysis are transported in the chilled cooler to a State-certified laboratory following standard chain-of-custody procedures.

## EXPOSED GROUNDWATER GRAB SAMPLES

A Discrete grab samples shall be collected from the exposed groundwater in the pit, using a stainless steel bailer from the surface. During the life of the WDRs, the shape and size of the lake will change. Consequently, we are not recommending specific points, but will keep the points near the southwest shoreline far enough away from the shore to test the full water column and as far away from each separate point as possible.

# APPENDIX B

# TEST AMERICA
# ANALYTICAL RESULTS /
# CHAMBERS ENVIRONMENTAL FIELD LOGS AND
# CHAIN-OF-CUSTODY FORMS

ALTA ENVIRONMENTAL

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-115329-1
Client Project/Site: United Rock Products Pit 3

For:
Sully-Miller Contracting Co.
135 S. State College Blvd. Suite 400
Brea, California 92821

Attn: Ken Barker

*Authorized for release by:*
*7/27/2015 8:47:47 AM*

Danielle Roberts, Senior Project Manager
(949)261-1022
danielle.roberts@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Sample Summary

Client: Sully-Miller Contracting Co.
Project/Site: United Rock Products Pit 3

TestAmerica Job ID: 440-115329-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 440-115329-1 | IRW-B | Water | 07/14/15 09:16 | 07/14/15 12:40 |
| 440-115329-2 | Pit 3-1 | Water | 07/14/15 10:35 | 07/14/15 12:40 |
| 440-115329-3 | Pit 3-2 | Water | 07/14/15 10:45 | 07/14/15 12:40 |

Client: Sully-Miller Contracting Co.
Project/Site: United Rock Products Pit 3

TestAmerica Job ID: 440-115329-1

## Job ID: 440-115329-1

### Laboratory: TestAmerica Irvine

**Narrative**

**Job Narrative**
**440-115329-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 7/14/2015 12:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 16.4º C.

**GC/MS VOA**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**HPLC/IC**
Method(s) 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for the following sample associated with analytical batch 440-266982 were outside control limits: (440-114944-A-1 MS) and (440-114944-A-1 MSD). The associated laboratory control sample (LCS) recovery met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**Metals**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**General Chemistry**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**VOA Prep**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

## Client Sample ID: IRW-B

**Date Collected: 07/14/15 09:16**
**Date Received: 07/14/15 12:40**

**Lab Sample ID: 440-115329-1**
**Matrix: Water**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.50 | | ug/L | | | 07/19/15 10:57 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.50 | | ug/L | | | 07/19/15 10:57 | 1 |
| Tetrachloroethene | ND | | 0.50 | | ug/L | | | 07/19/15 10:57 | 1 |
| Trichloroethene | ND | | 0.50 | | ug/L | | | 07/19/15 10:57 | 1 |
| Vinyl chloride | ND | | 0.50 | | ug/L | | | 07/19/15 10:57 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *110* | | *80 - 128* | | *07/19/15 10:57* | *1* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *80 - 120* | | *07/19/15 10:57* | *1* |
| *Dibromofluoromethane (Surr)* | *101* | | *76 - 132* | | *07/19/15 10:57* | *1* |

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **18** | | 5.0 | | mg/L | | | 07/16/15 09:51 | 10 |
| **Nitrate as NO3** | **2.2** | | 0.50 | | mg/L | | | 07/16/15 08:42 | 1 |
| **Sulfate** | **45** | | 5.0 | | mg/L | | | 07/16/15 09:51 | 10 |

### Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Boron** | **0.067** | | 0.050 | | mg/L | | 07/16/15 14:11 | 07/17/15 11:23 | 1 |
| **Calcium** | **44** | | 0.10 | | mg/L | | 07/16/15 14:11 | 07/17/15 11:23 | 1 |
| Cadmium | ND | | 0.0050 | | mg/L | | 07/16/15 14:11 | 07/17/15 11:23 | 1 |
| Chromium | ND | | 0.0050 | | mg/L | | 07/16/15 14:11 | 07/17/15 11:23 | 1 |
| **Magnesium** | **9.7** | | 0.020 | | mg/L | | 07/16/15 14:11 | 07/17/15 11:23 | 1 |
| Nickel | ND | | 0.010 | | mg/L | | 07/16/15 14:11 | 07/17/15 11:23 | 1 |
| Lead | ND | | 0.0050 | | mg/L | | 07/16/15 14:11 | 07/17/15 11:23 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **290** | | 10 | | mg/L | | | 07/17/15 08:35 | 1 |
| Chemical Oxygen Demand | ND | | 20 | | mg/L | | | 07/16/15 18:16 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Alkalinity as CaCO3** | **110** | | 4.0 | | mg/L | | | 07/16/15 09:44 | 1 |
| **Bicarbonate ion as HCO3** | **130** | | 4.8 | | mg/L | | | 07/16/15 09:44 | 1 |
| Carbonate as CO3 | ND | | 2.4 | | mg/L | | | 07/16/15 09:44 | 1 |
| Hydroxide as OH | ND | | 1.4 | | mg/L | | | 07/16/15 09:44 | 1 |
| **Hardness as calcium carbonate** | **170** | | 10 | | mg/L | | | 07/19/15 16:22 | 1 |
| **Specific Conductance** | **390** | | 1.0 | | umhos/cm | | | 07/17/15 08:57 | 1 |
| **Resistivity** | **2600** | | 1.0 | | ohm cm | | | 07/17/15 08:57 | 1 |
| **Carbon Dioxide, Free** | **180** | | 2.0 | | mg/L | | | 07/19/15 20:12 | 1 |
| **pH** | **5.66** | **HF** | 0.100 | | SU | | | 07/16/15 10:48 | 1 |

## Client Sample ID: Pit 3-1

**Date Collected: 07/14/15 10:35**
**Date Received: 07/14/15 12:40**

**Lab Sample ID: 440-115329-2**
**Matrix: Water**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.50 | | ug/L | | | 07/19/15 12:35 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.50 | | ug/L | | | 07/19/15 12:35 | 1 |

## Client Sample ID: Pit 3-1

**Date Collected: 07/14/15 10:35**
**Date Received: 07/14/15 12:40**

## Lab Sample ID: 440-115329-2

**Matrix: Water**

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Tetrachloroethene | ND | | 0.50 | | ug/L | | | 07/19/15 12:35 | 1 |
| Trichloroethene | ND | | 0.50 | | ug/L | | | 07/19/15 12:35 | 1 |
| Vinyl chloride | ND | | 0.50 | | ug/L | | | 07/19/15 12:35 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *111* | | *80 - 128* | | *07/19/15 12:35* | *1* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *80 - 120* | | *07/19/15 12:35* | *1* |
| *Dibromofluoromethane (Surr)* | *103* | | *76 - 132* | | *07/19/15 12:35* | *1* |

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **19** | | 0.50 | | mg/L | | | 07/16/15 08:57 | 1 |
| **Nitrate as NO3** | **2.7** | | 0.50 | | mg/L | | | 07/16/15 08:57 | 1 |
| **Sulfate** | **54** | | 5.0 | | mg/L | | | 07/16/15 10:05 | 10 |

### Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Boron** | **0.083** | | 0.050 | | mg/L | | 07/16/15 14:11 | 07/17/15 11:25 | 1 |
| **Calcium** | **40** | | 0.10 | | mg/L | | 07/16/15 14:11 | 07/17/15 11:25 | 1 |
| Cadmium | ND | | 0.0050 | | mg/L | | 07/16/15 14:11 | 07/17/15 11:25 | 1 |
| Chromium | ND | | 0.0050 | | mg/L | | 07/16/15 14:11 | 07/17/15 11:25 | 1 |
| **Magnesium** | **9.6** | | 0.020 | | mg/L | | 07/16/15 14:11 | 07/17/15 11:25 | 1 |
| Nickel | ND | | 0.010 | | mg/L | | 07/16/15 14:11 | 07/17/15 11:25 | 1 |
| Lead | ND | | 0.0050 | | mg/L | | 07/16/15 14:11 | 07/17/15 11:25 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **300** | | 10 | | mg/L | | | 07/17/15 08:35 | 1 |
| Chemical Oxygen Demand | ND | | 20 | | mg/L | | | 07/16/15 18:17 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Alkalinity as CaCO3** | **97** | | 4.0 | | mg/L | | | 07/16/15 09:57 | 1 |
| **Bicarbonate ion as HCO3** | **120** | | 4.8 | | mg/L | | | 07/16/15 09:57 | 1 |
| Carbonate as CO3 | ND | | 2.4 | | mg/L | | | 07/16/15 09:57 | 1 |
| Hydroxide as OH | ND | | 1.4 | | mg/L | | | 07/16/15 09:57 | 1 |
| **Hardness as calcium carbonate** | **170** | | 10 | | mg/L | | | 07/19/15 16:22 | 1 |
| **Specific Conductance** | **400** | | 1.0 | | umhos/cm | | | 07/17/15 08:57 | 1 |
| **Resistivity** | **2500** | | 1.0 | | ohm cm | | | 07/17/15 08:57 | 1 |
| Carbon Dioxide, Free | ND | | 2.0 | | mg/L | | | 07/19/15 20:12 | 1 |
| **pH** | **8.42** | **HF** | 0.100 | | SU | | | 07/16/15 10:48 | 1 |

## Client Sample ID: Pit 3-2

**Date Collected: 07/14/15 10:45**
**Date Received: 07/14/15 12:40**

## Lab Sample ID: 440-115329-3

**Matrix: Water**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.50 | | ug/L | | | 07/19/15 13:05 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.50 | | ug/L | | | 07/19/15 13:05 | 1 |
| Tetrachloroethene | ND | | 0.50 | | ug/L | | | 07/19/15 13:05 | 1 |
| Trichloroethene | ND | | 0.50 | | ug/L | | | 07/19/15 13:05 | 1 |

**Client Sample ID: Pit 3-2**
**Date Collected: 07/14/15 10:45**
**Date Received: 07/14/15 12:40**

**Lab Sample ID: 440-115329-3**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Vinyl chloride | ND | | 0.50 | | ug/L | | | 07/19/15 13:05 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *110* | | *80 - 128* | | *07/19/15 13:05* | *1* |
| *4-Bromofluorobenzene (Surr)* | *99* | | *80 - 120* | | *07/19/15 13:05* | *1* |
| *Dibromofluoromethane (Surr)* | *103* | | *76 - 132* | | *07/19/15 13:05* | *1* |

## Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **19** | | 0.50 | | mg/L | | | 07/16/15 09:12 | 1 |
| **Nitrate as NO3** | **2.8** | | 0.50 | | mg/L | | | 07/16/15 09:12 | 1 |
| **Sulfate** | **56** | | 5.0 | | mg/L | | | 07/16/15 10:20 | 10 |

## Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Boron** | **0.084** | | 0.050 | | mg/L | | 07/16/15 14:11 | 07/17/15 11:27 | 1 |
| **Calcium** | **41** | | 0.10 | | mg/L | | 07/16/15 14:11 | 07/17/15 11:27 | 1 |
| Cadmium | ND | | 0.0050 | | mg/L | | 07/16/15 14:11 | 07/17/15 11:27 | 1 |
| Chromium | ND | | 0.0050 | | mg/L | | 07/16/15 14:11 | 07/17/15 11:27 | 1 |
| **Magnesium** | **9.6** | | 0.020 | | mg/L | | 07/16/15 14:11 | 07/17/15 11:27 | 1 |
| Nickel | ND | | 0.010 | | mg/L | | 07/16/15 14:11 | 07/17/15 11:27 | 1 |
| Lead | ND | | 0.0050 | | mg/L | | 07/16/15 14:11 | 07/17/15 11:27 | 1 |

## General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Total Dissolved Solids** | **300** | | 10 | | mg/L | | | 07/17/15 08:35 | 1 |
| Chemical Oxygen Demand | ND | | 20 | | mg/L | | | 07/16/15 18:17 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Alkalinity as CaCO3** | **98** | | 4.0 | | mg/L | | | 07/16/15 10:04 | 1 |
| **Bicarbonate ion as HCO3** | **120** | | 4.8 | | mg/L | | | 07/16/15 10:04 | 1 |
| Carbonate as CO3 | ND | | 2.4 | | mg/L | | | 07/16/15 10:04 | 1 |
| Hydroxide as OH | ND | | 1.4 | | mg/L | | | 07/16/15 10:04 | 1 |
| **Hardness as calcium carbonate** | **170** | | 10 | | mg/L | | | 07/19/15 16:22 | 1 |
| **Specific Conductance** | **400** | | 1.0 | | umhos/cm | | | 07/17/15 08:57 | 1 |
| **Resistivity** | **2500** | | 1.0 | | ohm cm | | | 07/17/15 08:57 | 1 |
| Carbon Dioxide, Free | ND | | 2.0 | | mg/L | | | 07/19/15 20:12 | 1 |
| **pH** | **8.45** | **HF** | 0.100 | | SU | | | 07/16/15 10:48 | 1 |

# Method Summary

Client: Sully-Miller Contracting Co.
Project/Site: United Rock Products Pit 3

TestAmerica Job ID: 440-115329-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8260B | Volatile Organic Compounds (GC/MS) | SW846 | TAL IRV |
| 300.0 | Anions, Ion Chromatography | MCAWW | TAL IRV |
| 200.7 Rev 4.4 | Metals (ICP) | EPA | TAL IRV |
| SM 2320B | Alkalinity | SM | TAL IRV |
| SM 2340C | Hardness, Total (mg/l as CaC03) | SM | TAL IRV |
| SM 2510B | Conductivity, Specific Conductance | SM | TAL IRV |
| SM 2540C | Solids, Total Dissolved (TDS) | SM | TAL IRV |
| SM 4500 CO2 C | Free Carbon Dioxide | SM | TAL IRV |
| SM 4500 H+ B | pH | SM | TAL IRV |
| SM 5220D | COD | SM | TAL IRV |

**Protocol References:**

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

# Lab Chronicle

Client: Sully-Miller Contracting Co.
Project/Site: United Rock Products Pit 3

TestAmerica Job ID: 440-115329-1

## Client Sample ID: IRW-B

**Lab Sample ID: 440-115329-1**

**Date Collected: 07/14/15 09:16**

**Matrix: Water**

**Date Received: 07/14/15 12:40**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 10 mL | 10 mL | 267859 | 07/19/15 10:57 | TN | TAL IRV |
| Total/NA | Analysis | 300.0 | | 1 | 5 mL | | 266982 | 07/16/15 08:42 | NN | TAL IRV |
| Total/NA | Analysis | 300.0 | | 10 | 5 mL | 1.0 mL | 266983 | 07/16/15 09:51 | NN | TAL IRV |
| Total Recoverable | Prep | 200.2 | | | 25 mL | 25 mL | 267396 | 07/16/15 14:11 | ND | TAL IRV |
| Total Recoverable | Analysis | 200.7 Rev 4.4 | | 1 | 25 mL | 25 mL | 267649 | 07/17/15 11:23 | EN | TAL IRV |
| Total/NA | Analysis | SM 2320B | | 1 | | | 267325 | 07/16/15 09:44 | YZ | TAL IRV |
| Total/NA | Analysis | SM 2340C | | 1 | 10 mL | 25 mL | 267878 | 07/19/15 16:22 | SN | TAL IRV |
| Total/NA | Analysis | SM 2510B | | 1 | | | 267585 | 07/17/15 08:57 | XL | TAL IRV |
| Total/NA | Analysis | SM 2540C | | 1 | 100 mL | 100 mL | 267584 | 07/17/15 08:35 | XL | TAL IRV |
| Total/NA | Analysis | SM 4500 CO2 C | | 1 | | | 267885 | 07/19/15 20:12 | SN | TAL IRV |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | | 50 mL | 267326 | 07/16/15 10:48 | ST | TAL IRV |
| Total/NA | Analysis | SM 5220D | | 1 | 0.625 mL | 2.5 mL | 267487 | 07/16/15 18:16 | MSM | TAL IRV |

## Client Sample ID: Pit 3-1

**Lab Sample ID: 440-115329-2**

**Date Collected: 07/14/15 10:35**

**Matrix: Water**

**Date Received: 07/14/15 12:40**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 10 mL | 10 mL | 267859 | 07/19/15 12:35 | TN | TAL IRV |
| Total/NA | Analysis | 300.0 | | 1 | 5 mL | 1.0 mL | 266982 | 07/16/15 08:57 | NN | TAL IRV |
| Total/NA | Analysis | 300.0 | | 1 | 5 mL | 1.0 mL | 266983 | 07/16/15 08:57 | NN | TAL IRV |
| Total/NA | Analysis | 300.0 | | 10 | 5 mL | | 266983 | 07/16/15 10:05 | NN | TAL IRV |
| Total Recoverable | Prep | 200.2 | | | 25 mL | 25 mL | 267396 | 07/16/15 14:11 | ND | TAL IRV |
| Total Recoverable | Analysis | 200.7 Rev 4.4 | | 1 | 25 mL | 25 mL | 267649 | 07/17/15 11:25 | EN | TAL IRV |
| Total/NA | Analysis | SM 2320B | | 1 | | | 267325 | 07/16/15 09:57 | YZ | TAL IRV |
| Total/NA | Analysis | SM 2340C | | 1 | 10 mL | 25 mL | 267878 | 07/19/15 16:22 | SN | TAL IRV |
| Total/NA | Analysis | SM 2510B | | 1 | | | 267585 | 07/17/15 08:57 | XL | TAL IRV |
| Total/NA | Analysis | SM 2540C | | 1 | 100 mL | 100 mL | 267584 | 07/17/15 08:35 | XL | TAL IRV |
| Total/NA | Analysis | SM 4500 CO2 C | | 1 | | | 267885 | 07/19/15 20:12 | SN | TAL IRV |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | | 50 mL | 267326 | 07/16/15 10:48 | ST | TAL IRV |
| Total/NA | Analysis | SM 5220D | | 1 | 0.625 mL | 2.5 mL | 267487 | 07/16/15 18:17 | MSM | TAL IRV |

## Client Sample ID: Pit 3-2

**Lab Sample ID: 440-115329-3**

**Date Collected: 07/14/15 10:45**

**Matrix: Water**

**Date Received: 07/14/15 12:40**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 10 mL | 10 mL | 267859 | 07/19/15 13:05 | TN | TAL IRV |
| Total/NA | Analysis | 300.0 | | 1 | 5 mL | 1.0 mL | 266982 | 07/16/15 09:12 | NN | TAL IRV |
| Total/NA | Analysis | 300.0 | | 1 | 5 mL | 1.0 mL | 266983 | 07/16/15 09:12 | NN | TAL IRV |

# Lab Chronicle

Client: Sully-Miller Contracting Co.
Project/Site: United Rock Products Pit 3

TestAmerica Job ID: 440-115329-1

## Client Sample ID: Pit 3-2

**Date Collected: 07/14/15 10:45**
**Date Received: 07/14/15 12:40**

## Lab Sample ID: 440-115329-3

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 300.0 | | 10 | 5 mL | | 266983 | 07/16/15 10:20 | NN | TAL IRV |
| Total Recoverable | Prep | 200.2 | | | 25 mL | 25 mL | 267396 | 07/16/15 14:11 | ND | TAL IRV |
| Total Recoverable | Analysis | 200.7 Rev 4.4 | | 1 | 25 mL | 25 mL | 267649 | 07/17/15 11:27 | EN | TAL IRV |
| Total/NA | Analysis | SM 2320B | | 1 | | | 267325 | 07/16/15 10:04 | YZ | TAL IRV |
| Total/NA | Analysis | SM 2340C | | 1 | 10 mL | 25 mL | 267878 | 07/19/15 16:22 | SN | TAL IRV |
| Total/NA | Analysis | SM 2510B | | 1 | | | 267585 | 07/17/15 08:57 | XL | TAL IRV |
| Total/NA | Analysis | SM 2540C | | 1 | 100 mL | 100 mL | 267584 | 07/17/15 08:35 | XL | TAL IRV |
| Total/NA | Analysis | SM 4500 CO2 C | | 1 | | | 267885 | 07/19/15 20:12 | SN | TAL IRV |
| Total/NA | Analysis | SM 4500 H+ B | | 1 | | 50 mL | 267326 | 07/16/15 10:48 | ST | TAL IRV |
| Total/NA | Analysis | SM 5220D | | 1 | 0.625 mL | 2.5 mL | 267487 | 07/16/15 18:17 | MSM | TAL IRV |

**Laboratory References:**

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 440-267859/4**
**Matrix: Water**
**Analysis Batch: 267859**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.50 | | ug/L | | | 07/19/15 09:29 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.50 | | ug/L | | | 07/19/15 09:29 | 1 |
| Tetrachloroethene | ND | | 0.50 | | ug/L | | | 07/19/15 09:29 | 1 |
| Trichloroethene | ND | | 0.50 | | ug/L | | | 07/19/15 09:29 | 1 |
| Vinyl chloride | ND | | 0.50 | | ug/L | | | 07/19/15 09:29 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *110* | | *80 - 128* | | *07/19/15 09:29* | *1* |
| *4-Bromofluorobenzene (Surr)* | *102* | | *80 - 120* | | *07/19/15 09:29* | *1* |
| *Dibromofluoromethane (Surr)* | *106* | | *76 - 132* | | *07/19/15 09:29* | *1* |

**Lab Sample ID: LCS 440-267859/5**
**Matrix: Water**
**Analysis Batch: 267859**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Benzene | 25.0 | 23.7 | | ug/L | | 95 | 68 - 130 |
| Methyl-t-Butyl Ether (MTBE) | 25.0 | 26.5 | | ug/L | | 106 | 63 - 131 |
| Tetrachloroethene | 25.0 | 25.4 | | ug/L | | 102 | 70 - 130 |
| Trichloroethene | 25.0 | 24.7 | | ug/L | | 99 | 70 - 130 |
| Vinyl chloride | 25.0 | 27.4 | | ug/L | | 109 | 59 - 133 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *109* | | *80 - 128* |
| *4-Bromofluorobenzene (Surr)* | *105* | | *80 - 120* |
| *Dibromofluoromethane (Surr)* | *103* | | *76 - 132* |

**Lab Sample ID: 440-115329-1 MS**
**Matrix: Water**
**Analysis Batch: 267859**

**Client Sample ID: IRW-B**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 25.0 | 23.6 | | ug/L | | 94 | 66 - 130 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 25.0 | 26.9 | | ug/L | | 108 | 70 - 130 |
| Tetrachloroethene | ND | | 25.0 | 25.4 | | ug/L | | 102 | 70 - 137 |
| Trichloroethene | ND | | 25.0 | 24.8 | | ug/L | | 99 | 70 - 130 |
| Vinyl chloride | ND | | 25.0 | 27.3 | | ug/L | | 109 | 50 - 137 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *104* | | *80 - 128* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *80 - 120* |
| *Dibromofluoromethane (Surr)* | *101* | | *76 - 132* |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-115329-1 MSD**
**Matrix: Water**
**Analysis Batch: 267859**

**Client Sample ID: IRW-B**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 25.0 | 24.0 | | ug/L | | 96 | 66 - 130 | 2 | 20 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 25.0 | 27.7 | | ug/L | | 111 | 70 - 130 | 3 | 25 |
| Tetrachloroethene | ND | | 25.0 | 26.8 | | ug/L | | 107 | 70 - 137 | 5 | 20 |
| Trichloroethene | ND | | 25.0 | 24.9 | | ug/L | | 100 | 70 - 130 | 0 | 20 |
| Vinyl chloride | ND | | 25.0 | 26.6 | | ug/L | | 107 | 50 - 137 | 2 | 30 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *108* | | *80 - 128* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *80 - 120* |
| *Dibromofluoromethane (Surr)* | *100* | | *76 - 132* |

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 440-266982/37**
**Matrix: Water**
**Analysis Batch: 266982**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Nitrate as NO3 | ND | | 0.50 | | mg/L | | | 07/16/15 01:46 | 1 |

**Lab Sample ID: LCS 440-266982/38**
**Matrix: Water**
**Analysis Batch: 266982**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Nitrate as NO3 | 5.00 | 4.80 | | mg/L | | 96 | 90 - 110 |

**Lab Sample ID: MB 440-266983/37**
**Matrix: Water**
**Analysis Batch: 266983**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | ND | | 0.50 | | mg/L | | | 07/16/15 01:46 | 1 |
| Sulfate | ND | | 0.50 | | mg/L | | | 07/16/15 01:46 | 1 |

**Lab Sample ID: LCS 440-266983/38**
**Matrix: Water**
**Analysis Batch: 266983**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Chloride | 5.00 | 4.88 | | mg/L | | 97 | 90 - 110 |
| Sulfate | 5.00 | 4.86 | | mg/L | | 97 | 90 - 110 |

## Method: 200.7 Rev 4.4 - Metals (ICP)

**Lab Sample ID: MB 440-267396/1-A**
**Matrix: Water**
**Analysis Batch: 267649**

**Client Sample ID: Method Blank**
**Prep Type: Total Recoverable**
**Prep Batch: 267396**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Boron | ND | | 0.050 | | mg/L | | 07/16/15 14:11 | 07/17/15 10:21 | 1 |
| Calcium | ND | | 0.10 | | mg/L | | 07/16/15 14:11 | 07/17/15 10:21 | 1 |
| Cadmium | ND | | 0.0050 | | mg/L | | 07/16/15 14:11 | 07/17/15 10:21 | 1 |
| Chromium | ND | | 0.0050 | | mg/L | | 07/16/15 14:11 | 07/17/15 10:21 | 1 |
| Magnesium | ND | | 0.020 | | mg/L | | 07/16/15 14:11 | 07/17/15 10:21 | 1 |
| Nickel | ND | | 0.010 | | mg/L | | 07/16/15 14:11 | 07/17/15 10:21 | 1 |
| Lead | ND | | 0.0050 | | mg/L | | 07/16/15 14:11 | 07/17/15 10:21 | 1 |

**Lab Sample ID: LCS 440-267396/2-A**
**Matrix: Water**
**Analysis Batch: 267649**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total Recoverable**
**Prep Batch: 267396**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Boron | 0.500 | 0.462 | | mg/L | | 92 | 85 - 115 |
| Calcium | 2.50 | 2.39 | | mg/L | | 96 | 85 - 115 |
| Cadmium | 0.500 | 0.486 | | mg/L | | 97 | 85 - 115 |
| Chromium | 0.500 | 0.501 | | mg/L | | 100 | 85 - 115 |
| Magnesium | 2.50 | 2.43 | | mg/L | | 97 | 85 - 115 |
| Nickel | 0.500 | 0.503 | | mg/L | | 101 | 85 - 115 |
| Lead | 0.500 | 0.472 | | mg/L | | 94 | 85 - 115 |

## Method: SM 2320B - Alkalinity

**Lab Sample ID: MB 440-267325/3**
**Matrix: Water**
**Analysis Batch: 267325**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Alkalinity as CaCO3 | ND | | 4.0 | | mg/L | | | 07/16/15 09:38 | 1 |
| Bicarbonate ion as HCO3 | ND | | 4.8 | | mg/L | | | 07/16/15 09:38 | 1 |
| Carbonate as CO3 | ND | | 2.4 | | mg/L | | | 07/16/15 09:38 | 1 |
| Hydroxide as OH | ND | | 1.4 | | mg/L | | | 07/16/15 09:38 | 1 |

**Lab Sample ID: LCS 440-267325/2**
**Matrix: Water**
**Analysis Batch: 267325**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Alkalinity as CaCO3 | 77.9 | 70.2 | | mg/L | | 90 | 80 - 120 |

**Lab Sample ID: 440-115329-1 DU**
**Matrix: Water**
**Analysis Batch: 267325**

**Client Sample ID: IRW-B**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Alkalinity as CaCO3 | 110 | | 109 | | mg/L | | 3 | 20 |
| Bicarbonate ion as HCO3 | 130 | | 133 | | mg/L | | 3 | 20 |
| Carbonate as CO3 | ND | | ND | | mg/L | | NC | 20 |
| Hydroxide as OH | ND | | ND | | mg/L | | NC | 20 |

## Method: SM 2340C - Hardness, Total (mg/l as CaC03)

**Lab Sample ID: MB 440-267878/1**
**Matrix: Water**
**Analysis Batch: 267878**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Hardness as calcium carbonate | ND | | 4.0 | | mg/L | | | 07/19/15 16:22 | 1 |

**Lab Sample ID: LCS 440-267878/2**
**Matrix: Water**
**Analysis Batch: 267878**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hardness as calcium carbonate | | | 358 | 354 | | mg/L | | 99 | 90 - 110 | | |

## Method: SM 2510B - Conductivity, Specific Conductance

**Lab Sample ID: MB 440-267585/3**
**Matrix: Water**
**Analysis Batch: 267585**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance | ND | | 1.0 | | umhos/cm | | | 07/17/15 08:57 | 1 |

**Lab Sample ID: LCS 440-267585/4**
**Matrix: Water**
**Analysis Batch: 267585**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance | | | 462 | 468 | | umhos/cm | | 101 | 90 - 110 | | |

**Lab Sample ID: 440-115329-1 DU**
**Matrix: Water**
**Analysis Batch: 267585**

**Client Sample ID: IRW-B**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance | 390 | | | 386 | | umhos/cm | | | | 0.5 | 5 |
| Resistivity | 2600 | | | 2590 | | ohm cm | | | | 0.5 | 5 |

## Method: SM 2540C - Solids, Total Dissolved (TDS)

**Lab Sample ID: MB 440-267584/1**
**Matrix: Water**
**Analysis Batch: 267584**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | ND | | 10 | | mg/L | | | 07/17/15 08:35 | 1 |

**Lab Sample ID: LCS 440-267584/2**
**Matrix: Water**
**Analysis Batch: 267584**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | | | 1000 | 1040 | | mg/L | | 104 | 90 - 110 | | |

## Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

**Lab Sample ID: 440-115329-1 DU**
**Matrix: Water**
**Analysis Batch: 267584**

**Client Sample ID: IRW-B**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 290 | | | 283 | | mg/L | | | | 2 | 5 |

## Method: SM 4500 CO2 C - Free Carbon Dioxide

**Lab Sample ID: MB 440-267885/1**
**Matrix: Water**
**Analysis Batch: 267885**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbon Dioxide, Free | ND | | 2.0 | | mg/L | | | 07/19/15 20:12 | 1 |

**Lab Sample ID: 440-115329-1 DU**
**Matrix: Water**
**Analysis Batch: 267885**

**Client Sample ID: IRW-B**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon Dioxide, Free | 180 | | | 180 | | mg/L | | | | 2 | 20 |

## Method: SM 4500 H+ B - pH

**Lab Sample ID: 440-115329-1 DU**
**Matrix: Water**
**Analysis Batch: 267326**

**Client Sample ID: IRW-B**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| pH | 5.66 | HF | | 5.640 | | SU | | | | 0.4 | 2 |

## Method: SM 5220D - COD

**Lab Sample ID: MB 440-267487/9**
**Matrix: Water**
**Analysis Batch: 267487**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | ND | | 20 | | mg/L | | | 07/16/15 18:16 | 1 |

**Lab Sample ID: LCS 440-267487/10**
**Matrix: Water**
**Analysis Batch: 267487**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | | | 200 | 201 | | mg/L | | 100 | 90 - 110 | | |

Client: Sully-Miller Contracting Co.
Project/Site: United Rock Products Pit 3

TestAmerica Job ID: 440-115329-1

## Method: SM 5220D - COD (Continued)

**Lab Sample ID: 440-115329-1 MS**
**Matrix: Water**
**Analysis Batch: 267487**

**Client Sample ID: IRW-B**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | ND | | 200 | 196 | | mg/L | | 98 | 70 - 120 |

**Lab Sample ID: 440-115329-1 MSD**
**Matrix: Water**
**Analysis Batch: 267487**

**Client Sample ID: IRW-B**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | ND | | 200 | 195 | | mg/L | | 98 | 70 - 120 | 0 | 15 |

# QC Association Summary

Client: Sully-Miller Contracting Co.
Project/Site: United Rock Products Pit 3

TestAmerica Job ID: 440-115329-1

## GC/MS VOA

### Analysis Batch: 267859

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-115329-1 | IRW-B | Total/NA | Water | 8260B | |
| 440-115329-1 MS | IRW-B | Total/NA | Water | 8260B | |
| 440-115329-1 MSD | IRW-B | Total/NA | Water | 8260B | |
| 440-115329-2 | Pit 3-1 | Total/NA | Water | 8260B | |
| 440-115329-3 | Pit 3-2 | Total/NA | Water | 8260B | |
| LCS 440-267859/5 | Lab Control Sample | Total/NA | Water | 8260B | |
| MB 440-267859/4 | Method Blank | Total/NA | Water | 8260B | |

## HPLC/IC

### Analysis Batch: 266982

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-115329-1 | IRW-B | Total/NA | Water | 300.0 | |
| 440-115329-2 | Pit 3-1 | Total/NA | Water | 300.0 | |
| 440-115329-3 | Pit 3-2 | Total/NA | Water | 300.0 | |
| LCS 440-266982/38 | Lab Control Sample | Total/NA | Water | 300.0 | |
| MB 440-266982/37 | Method Blank | Total/NA | Water | 300.0 | |

### Analysis Batch: 266983

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-115329-1 | IRW-B | Total/NA | Water | 300.0 | |
| 440-115329-2 | Pit 3-1 | Total/NA | Water | 300.0 | |
| 440-115329-2 | Pit 3-1 | Total/NA | Water | 300.0 | |
| 440-115329-3 | Pit 3-2 | Total/NA | Water | 300.0 | |
| 440-115329-3 | Pit 3-2 | Total/NA | Water | 300.0 | |
| LCS 440-266983/38 | Lab Control Sample | Total/NA | Water | 300.0 | |
| MB 440-266983/37 | Method Blank | Total/NA | Water | 300.0 | |

## Metals

### Prep Batch: 267396

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-115329-1 | IRW-B | Total Recoverable | Water | 200.2 | |
| 440-115329-2 | Pit 3-1 | Total Recoverable | Water | 200.2 | |
| 440-115329-3 | Pit 3-2 | Total Recoverable | Water | 200.2 | |
| LCS 440-267396/2-A | Lab Control Sample | Total Recoverable | Water | 200.2 | |
| MB 440-267396/1-A | Method Blank | Total Recoverable | Water | 200.2 | |

### Analysis Batch: 267649

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-115329-1 | IRW-B | Total Recoverable | Water | 200.7 Rev 4.4 | 267396 |
| 440-115329-2 | Pit 3-1 | Total Recoverable | Water | 200.7 Rev 4.4 | 267396 |
| 440-115329-3 | Pit 3-2 | Total Recoverable | Water | 200.7 Rev 4.4 | 267396 |
| LCS 440-267396/2-A | Lab Control Sample | Total Recoverable | Water | 200.7 Rev 4.4 | 267396 |
| MB 440-267396/1-A | Method Blank | Total Recoverable | Water | 200.7 Rev 4.4 | 267396 |

## General Chemistry

### Analysis Batch: 267325

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-115329-1 | IRW-B | Total/NA | Water | SM 2320B | |
| 440-115329-1 DU | IRW-B | Total/NA | Water | SM 2320B | |
| 440-115329-2 | Pit 3-1 | Total/NA | Water | SM 2320B | |
| 440-115329-3 | Pit 3-2 | Total/NA | Water | SM 2320B | |
| LCS 440-267325/2 | Lab Control Sample | Total/NA | Water | SM 2320B | |
| MB 440-267325/3 | Method Blank | Total/NA | Water | SM 2320B | |

### Analysis Batch: 267326

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-115329-1 | IRW-B | Total/NA | Water | SM 4500 H+ B | |
| 440-115329-1 DU | IRW-B | Total/NA | Water | SM 4500 H+ B | |
| 440-115329-2 | Pit 3-1 | Total/NA | Water | SM 4500 H+ B | |
| 440-115329-3 | Pit 3-2 | Total/NA | Water | SM 4500 H+ B | |

### Analysis Batch: 267487

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-115329-1 | IRW-B | Total/NA | Water | SM 5220D | |
| 440-115329-1 MS | IRW-B | Total/NA | Water | SM 5220D | |
| 440-115329-1 MSD | IRW-B | Total/NA | Water | SM 5220D | |
| 440-115329-2 | Pit 3-1 | Total/NA | Water | SM 5220D | |
| 440-115329-3 | Pit 3-2 | Total/NA | Water | SM 5220D | |
| LCS 440-267487/10 | Lab Control Sample | Total/NA | Water | SM 5220D | |
| MB 440-267487/9 | Method Blank | Total/NA | Water | SM 5220D | |

### Analysis Batch: 267584

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-115329-1 | IRW-B | Total/NA | Water | SM 2540C | |
| 440-115329-1 DU | IRW-B | Total/NA | Water | SM 2540C | |
| 440-115329-2 | Pit 3-1 | Total/NA | Water | SM 2540C | |
| 440-115329-3 | Pit 3-2 | Total/NA | Water | SM 2540C | |
| LCS 440-267584/2 | Lab Control Sample | Total/NA | Water | SM 2540C | |
| MB 440-267584/1 | Method Blank | Total/NA | Water | SM 2540C | |

### Analysis Batch: 267585

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-115329-1 | IRW-B | Total/NA | Water | SM 2510B | |
| 440-115329-1 DU | IRW-B | Total/NA | Water | SM 2510B | |
| 440-115329-2 | Pit 3-1 | Total/NA | Water | SM 2510B | |
| 440-115329-3 | Pit 3-2 | Total/NA | Water | SM 2510B | |
| LCS 440-267585/4 | Lab Control Sample | Total/NA | Water | SM 2510B | |
| MB 440-267585/3 | Method Blank | Total/NA | Water | SM 2510B | |

### Analysis Batch: 267878

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-115329-1 | IRW-B | Total/NA | Water | SM 2340C | |
| 440-115329-2 | Pit 3-1 | Total/NA | Water | SM 2340C | |
| 440-115329-3 | Pit 3-2 | Total/NA | Water | SM 2340C | |
| LCS 440-267878/2 | Lab Control Sample | Total/NA | Water | SM 2340C | |
| MB 440-267878/1 | Method Blank | Total/NA | Water | SM 2340C | |

## General Chemistry (Continued)

### Analysis Batch: 267885

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-115329-1 | IRW-B | Total/NA | Water | SM 4500 CO2 C | |
| 440-115329-1 DU | IRW-B | Total/NA | Water | SM 4500 CO2 C | |
| 440-115329-2 | Pit 3-1 | Total/NA | Water | SM 4500 CO2 C | |
| 440-115329-3 | Pit 3-2 | Total/NA | Water | SM 4500 CO2 C | |
| MB 440-267885/1 | Method Blank | Total/NA | Water | SM 4500 CO2 C | |

## Qualifiers

### General Chemistry

| Qualifier | Qualifier Description |
|---|---|
| HF | Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Certification Summary

Client: Sully-Miller Contracting Co.
Project/Site: United Rock Products Pit 3

TestAmerica Job ID: 440-115329-1

## Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska | State Program | 10 | CA01531 | 06-30-16 |
| Arizona | State Program | 9 | AZ0671 | 10-13-15 |
| California | LA Cty Sanitation Districts | 9 | 10256 | 01-31-16 * |
| California | State Program | 9 | 2706 | 06-30-16 |
| Guam | State Program | 9 | Cert. No. 12.002r | 01-23-16 |
| Hawaii | State Program | 9 | N/A | 01-29-16 |
| Nevada | State Program | 9 | CA015312007A | 07-31-15 |
| New Mexico | State Program | 6 | N/A | 01-29-15 * |
| Northern Mariana Islands | State Program | 9 | MP0002 | 01-29-15 * |
| Oregon | NELAP | 10 | 4005 | 01-29-16 |

* Certification renewal pending - certification considered valid.

# CHAIN OF CUSTODY RECORD

4480 - 13474 Pit 3, United Rock Products

**Chambers Environmental Services**

4510 Mt. Henry Ave, San Diego, CA 92117
858.297.3266-O 619.889.9331-C

Lab: ~~Associated Laboratories~~ TEST AMERICA IRVINE

**Client Name/Consultant:** Alta Environmental
**Address:** 3777 Long Beach Blvd., Annex Bldg
**City/State/Zip:** Long Beach, CA 90807
**Project Manager:** Scott Taylor
562-495-5777 **Fax No.:** 562-400-8336
**Sampler Name: (Print)** D. Chambers
**Sampler Signature:** D. Chambers

**Report To:** Scott Taylor
**Invoice To:** United Rock Products c/o Ken Barker
**Project ID:** United Rock Products Pit 3
**Project #:**

| Sample ID / Description | Date Sampled | Time Sampled | No. of Containers | Grab | Composite | Field Filtered | Matrix: Groundwater | Wastewater | Drinking Water | Sludge | Soil | Other (specify): | Analyze For: VOC'S 8260B | BTEX | MTBE | Oxygenates | Vinyl Chloride | Chloride, Cd., Cr., | COD, TDS, Pb., Ni., | Nitrate, Sulfate, Boron | PCE, TCE, MTBE, Benzene | Carbonate, Bi-Carbonate | TPH-Diesel | Appendix I, II List | See Attached Sheets | ALK, CO2, T. Hardness | Sulfate, Chloride, E.C., pH | 24H 48H 7-day rush | Standard TAT | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| IRW-B | 7/14/15 | 9:16 | 6 | x | | N | x | | | | | | x | | | | x | x | x | x | x | x | x | | | x | x | | X | |
| Pit 3-1 | ↓ | 10:35 | ↓ | ↓ | | ↓ | ↓ | | | | | | X | | | | X | X | X | X | X | X | X | | | X | X | | X | |
| Pit 3-2 | ↓ | 10:45 | ↓ | ↓ | | ↓ | ↓ | | | | | | X | | | | X | X | X | X | X | X | X | | | X | X | | X | |
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440-115329 Chain of Custody

**Special Instructions:**

**Call and confirm before analysis.** ★

**Method of Shipment:** FEDEX, Courrier, (Client drop)

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| D. Chambers | 7/14/15 | 12:40 | | | |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| | | | | 7/14/15 | 1240 |

**Laboratory Comments:**
Temperature Upon Receipt:
VOCs Free of Headspace? Y N

On ice
16.0/16.4°C IR-75

# Login Sample Receipt Checklist

Client: Sully-Miller Contracting Co.

Job Number: 440-115329-1

**Login Number: 115329**
**List Number: 1**
**Creator: Escalante, Maria I**

**List Source: TestAmerica Irvine**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | False | Received same day of collection; chilling process has begun. |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

Project Name: United Rock Products

Date: 7/14/15

**Water Level Data Sheet**

Project Number: _____

| Well ID | Time | DTW | Ref Pt. | ~ Elev. | Well TD | | Comments: |
|---|---|---|---|---|---|---|---|
| Yard Well | 7:30 | 239.80 | 405.6 | | pump | ON. | (IRW-1) |
| IRW-1A | | DRY | 380.94 | | | | (Pit-1) |
| IRW-1B | | DRY | 380.03 | | | | (Pit 1) |
| IRW-A | | DRY | | | 249.6 | | (Pit 3) |
| IRW-B | 8:05 | 229.95 | | | 250.1 | | (Pit 3) |

Ref Pt = Reference Point
DTW = Depth to Water
TD = Total Depth
Elev. = Elevation

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: DWC

## *Chambers Environmental Services, Inc*
## Sampling Data Sheet

Date: 7/14/15

Well ID: IRW-B

**Purge Data**

| (Variable) | 0.2 C | 3-5% | 0.2 u | 20mv | 0.2mg/L | 10% | ML | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | Temp. | E.C.(uS) | pH | ORP | DO | Turbidity | Volume | DTW | Notes |
| Start: 8:31 | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | 229.95 | |
| 9:00 | 22.7 | 470.7 | 7.23 | 162 | 5.22 | 6.16 | 500 | 230.01 | |
| 9:05 | 22.6 | 416.9 | 6.95 | 190 | 4.32 | 4.11 | 900 | 230.02 | |
| 9:09 | 22.5 | 394.8 | 6.80 | 202 | 4.21 | 4.10 | 1200 | 230.01 | |
| 9:12 | 22.4 | 389.9 | 6.69 | 214 | 4.15 | 4.14 | 1500 | 230.02 | |
| 9:15 | 22.3 | 390.1 | 6.69 | 219 | 4.14 | 4.12 | 1800 | 230.02 | |
| | | | | | | | | | |
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| | | | | | | | | | |
| Stop: 9:15 | 9:37 | | | | | | | | |
| Rate: (ML/Min.) | ~ | 100 | | | | | | | |

Purge Pump: BLADDER
Pump Set Time: 8:00
Pump/Inlet Depth (BGS): 240'

Decon:
Triple-Rinse

Total Vol. Purged 1800
Final Temp.: 22.3
Final EC: 390.1
Final pH: 6.69
Final ORP: 219
Final DO: 4.14
Draw Down: 0.07

Sample Start: 9:16
Sample Stop: 9:37
Analyses: Sample Container: 6

Sample ID: 1
(If different from above)
DTW @ Sample: 230.02

**Well Data**

| | |
|---|---|
| Bore OD: | 10" |
| Casing ID: | 4" |
| **Well TD:** | 250.1 |
| **D.T.W.:** | 229.95 |
| Ft./ Water: | |

Special Notes for This Well:

Calibrated MULTIMETERS HERE.

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

**Methods:** 1=3 BV sample after 80%.
2= 1 BV and monitor parameters each 0.5 BV.
3=Low-flow.
4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

**Chambers Environmental Services, Inc**
**Sampling Data Sheet**

Site: United Rock Products

Site Address: Irwindale, CA

Date: 7-14-15

~~Well~~ ID: PIT 3-1

Sampler: DWC

**Purge Data**

| (Variable) | 0.2 C | 3-5% | 0.2 u | 20mv | 0.2mg/L | 10% | ML | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | Temp. | E.C.(uS) | pH | ORP | DO | Turbidity | Volume | DTW | Notes |
| Start: | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | | |
| | | | | | | | | | |
| 10:32 | 26.4 | 402.8 | 7.02 | | | | | | |
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| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

Purge Pump: ~~—~~
Pump Set Time: ~~—~~
Pump/Inlet Depth (BGS): ~~—~~

Decon:
Triple-Rinse

Total Vol. Purged_____
Final Temp.: _____
Final EC: _____
Final pH: _____
Final ORP: _____
Final DO: _____
Draw Down: _____

Sample Start: _____
Sample Stop: _____
Analyses: Sample Container:

Sample ID: _____
(If different from above)
DTW @ Sample: _____

**Well Data**
Bore OD:
Casing ID:
**Well TD:**
**D.T.W.:**
Ft./ Water:

Special Notes for This Well:

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

**Methods:** 1=3 BV sample after 80%.
2= 1 BV and monitor parameters each 0.5 BV.
3=Low-flow.
4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: DWC

## *Chambers Environmental Services, Inc*
## Sampling Data Sheet

Date: 7/14/15

Well ID: PIT 3-2

**Purge Data**

| (Variable) | 0.2 C | 3-5% | 0.2 u | 20mv | 0.2mg/L | 10% | ML | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | Temp. | E.C.(uS) | pH | ORP | DO | Turbidity | Volume | DTW | Notes |
| Start: | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | | |
| | | | | | | | | | |
| 10:42 | 26.5 | 426.4 | 7.15 | | | | | | |
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| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

Purge Pump: _____
Pump Set Time: _____
Pump/Inlet Depth (BGS): _____

Decon:
Triple-Rinse

Total Vol. Purged _____
Final Temp.: _____
Final EC: _____
Final pH: _____
Final ORP: _____
Final DO: _____
Draw Down: _____

Sample Start: _____
Sample Stop: _____
Analyses: Sample Container:

Sample ID: _____
(If different from above)
DTW @ Sample: _____

**Well Data**
Bore OD:
Casing ID:
**Well TD:**
**D.T.W.:**
Ft./ Water:

Special Notes for This Well:

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

**Methods:** 1=3 BV sample after 80%.
2= 1 BV and monitor parameters each 0.5 BV.
3=Low-flow.
4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

# CHAIN OF CUSTODY RECORD

Pit 3, United Rock Products

**Chambers Environmental Services**

4510 Mt. Henry Ave, San Diego, CA 92117
858.297.3266-O 619.889.9331-C

Lab: ~~Associated Laboratories~~ TEST AMERICA IRVINE

**Client Name/Consultant:** Alta Environmental
**Address:** 3777 Long Beach Blvd., Annex Bldg
**City/State/Zip:** Long Beach, CA 90807
**Project Manager:** Scott Taylor
562-495-5777 **Fax No.:** 562-400-8336
**Sampler Name: (Print)** D. Chambers
**Sampler Signature:** D. Chambers

**Report To:** Scott Taylor
**Invoice To:** United Rock Products c/o Ken Barker
**Project ID:** United Rock Products Pit 3
**Project #:**

| Sample ID / Description | Date Sampled | Time Sampled | No. of Containers | Grab | Composite | Field Filtered | Matrix: Groundwater | Wastewater | Drinking Water | Sludge | Soil | Other (specify): | Analyze For: VOC's 8260B | BTEX MTBE Oxygenates | Vinyl Chloride | Chloride, Cd., Cr., | COD, TDS, Pb., Ni., | Nitrate, Sulfate, Boron | PCE, TCE, MTBE, Benzene | Carbonate, Bi-Carbonate | TPH-Diesel | Appendix I, II List | See Attached Sheets | ALK, CO2, T. Hardness | Sulfate, Chloride, E.C., pH | 24H 48H 7-day rush | Standard TAT | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| IRW-B | 7/14/15 | 9:16 | 6 | x | | N | x | | | | | | x | | x | x | x | x | x | x | x | | | x | x | | X | |
| Pit 3-1 | ↓ | 10:35 | ↓ | ↓ | | ↓ | ↓ | | | | | | X | | X | X | X | X | X | X | X | | | X | X | | X | |
| Pit 3-2 | ↓ | 10:45 | ↓ | ↓ | | ↓ | ↓ | | | | | | X | | X | X | X | X | X | X | X | | | X | X | | X | |
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**Special Instructions:**

**Call and confirm before analysis.** ☆

**Method of Shipment:** FEDEX, Courier, (Client drop)

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| D. Chambers | 7/14/15 | 12:40 | | | |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| | | | | 7/14/15 | 1240 |

**Laboratory Comments:**
Temperature Upon Receipt:
VOCs Free of Headspace? Y N

On ice
16.0/16.4°C IR-75

# APPENDIX C

# GROUNDWATER DATABASE

## Pit #3 UNITED ROCK PRODUCTS DATABASE

| WATER LEVEL | | GROUNDWATER PARAMETERS | | | | | GENERAL MINERAL (mg/l) | | | | TRACE ELEMENTS | | | | GENERAL CHEMISTRY | | | | | | | ORGANICS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | | See attached organics portion - Note (1) | | | | |
| Sample Point | Date | pH | T(°F) | EC (µmhos/cm) | $CO_2$ (mg/l) | Alk (mg/l) | $SO_4$ | Cl | $NO_3$ | TDS | Ni (µg/l) | Pb (µg/l) | Cd (µg/l) | Cr (µg/l) | COD (mg/l) | OH (mg/l) | TH (mg/l) | $HCO_3$ (mg/l) | $CO_3$ (mg/l) | B (mg/l) | | Benzene (µg/l) | MTBE (µg/l) | TCE (µg/l) | Tetra chloro ethene (µg/l) | Vinyl Chroide (µg/l) |
| IRW-3A | 3-Sep-14 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | | NA | NA | NA | NA | NA |
| IRW-3B | 3-Sep-14 | 7.9 | 81.6 | 397 | 748 | 130 | 41.6 | 15.9 | 0.85 | 210 | <10 | <5 | <5 | <10 | 4 | <5 | 157 | 159 | <5 | 0.204 | | <1 | <1 | <5 | <5 | <5 |
| SW-1 | 3-Sep-14 | 8.42 | 83.84 | 348 | <1 | 76 | 64.5 | 15 | 0.44 | 148 | <10 | <5 | <5 | <10 | 4 | <5 | 144 | 88 | <5 | 0.147 | | <1 | <1 | <5 | <5 | <5 |
| Pit 3-1 | 29-Oct-14 | 8.08 | 74.5 | 388 | <1 | 102 | 63.8 | 16 | 0.88 | 184 | <20 | 7 | <5 | <10 | <4 | <5 | 163 | 125 | <5 | 0.098 | | <1 | <1 | <5 | <5 | <5 |
| Pit 3-2 | 29-Oct-14 | 7.88 | 80.1 | 391 | <1 | 102 | 63.6 | 15.9 | 0.74 | 258 | <20 | 7 | <5 | <10 | <4 | <5 | 159 | 125 | <5 | 0.204 | | <1 | <1 | <5 | <5 | <5 |
| IRW-B | 29-Oct-14 | 8.42 | 83.84 | 348 | <1 | 76 | 39.3 | 15.8 | 1.61 | 200 | <10 | <5 | <5 | <10 | <4 | <5 | 174 | 152 | 44 | 0.082 | | <1 | <1 | <5 | <5 | <5 |
| Pit 3-1 | 25-Feb-15 | 7.33 | 67.82 | 400 | 2 | 107 | 66 | 16 | 0.51 | 205 | <10 | <10 | <10 | <10 | <5 | -- | 160 | 107 | <1 | 0.128 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-2 | 25-Feb-15 | 7.34 | 68.18 | 400 | 1.7 | 104 | 66 | 0.51 | 0.51 | 310 | <10 | <10 | <10 | <10 | <5 | -- | 150 | 104 | <1 | 0.131 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| IRW-B | 25-Feb-15 | 7.05 | 62.6 | 390 | 850 | 107 | 48 | 14 | 0.3 | 250 | <10 | <10 | <10 | <10 | <5 | -- | 150 | 107 | <1 | 0.112 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-1 | 10-Apr-15 | 7.62 | 22.6 | 410 | 1.2 | 110 | -- | -- | -- | 305 | <10 | <10 | <10 | <10 | <5 | -- | 150 | 110 | <1 | 0.089 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-2 | 10-Apr-15 | 7.98 | 22.1 | 410 | 1.2 | 109 | -- | -- | -- | 315 | <10 | <10 | <10 | <10 | <5 | -- | 160 | 109 | <1 | 0.0826 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| IRW-3B | 10-Apr-15 | 5.37 | 19.9 | 380 | 610 | 106 | -- | -- | -- | 300 | <10 | <10 | <10 | <10 | <5 | -- | 150 | 106 | <1 | 0.0713 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-1 | 7-Jul-15 | 8.42 | 79.52 | 400 | <2 | 97 | 54 | 18 | 2.7 | 300 | <10 | <5 | <5 | <5 | <20 | <1.4 | 170 | 120 | <2.4 | 0.083 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-2 | 7-Jul-15 | 8.45 | 79.7 | 400 | <2 | 98 | 56 | 19 | 2.8 | 300 | <10 | <5 | <5 | <5 | <20 | <1.4 | 170 | 120 | <2.4 | 0.084 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| IRW-3B | 7-Jul-15 | 5.66 | 72.14 | 390 | 180 | 110 | 45 | 19 | 2.2 | 290 | <10 | <5 | <5 | <5 | <20 | <1.4 | 170 | 130 | <2.4 | 0.067 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

-- Information not available

(1) The WDR's required analysis for EPA App. I and II parameters for the first sampling event. Analysis of EPA App. I and II parameters shall be reported in the fourth quarter 2014 report.

(2) Samples not collected in well

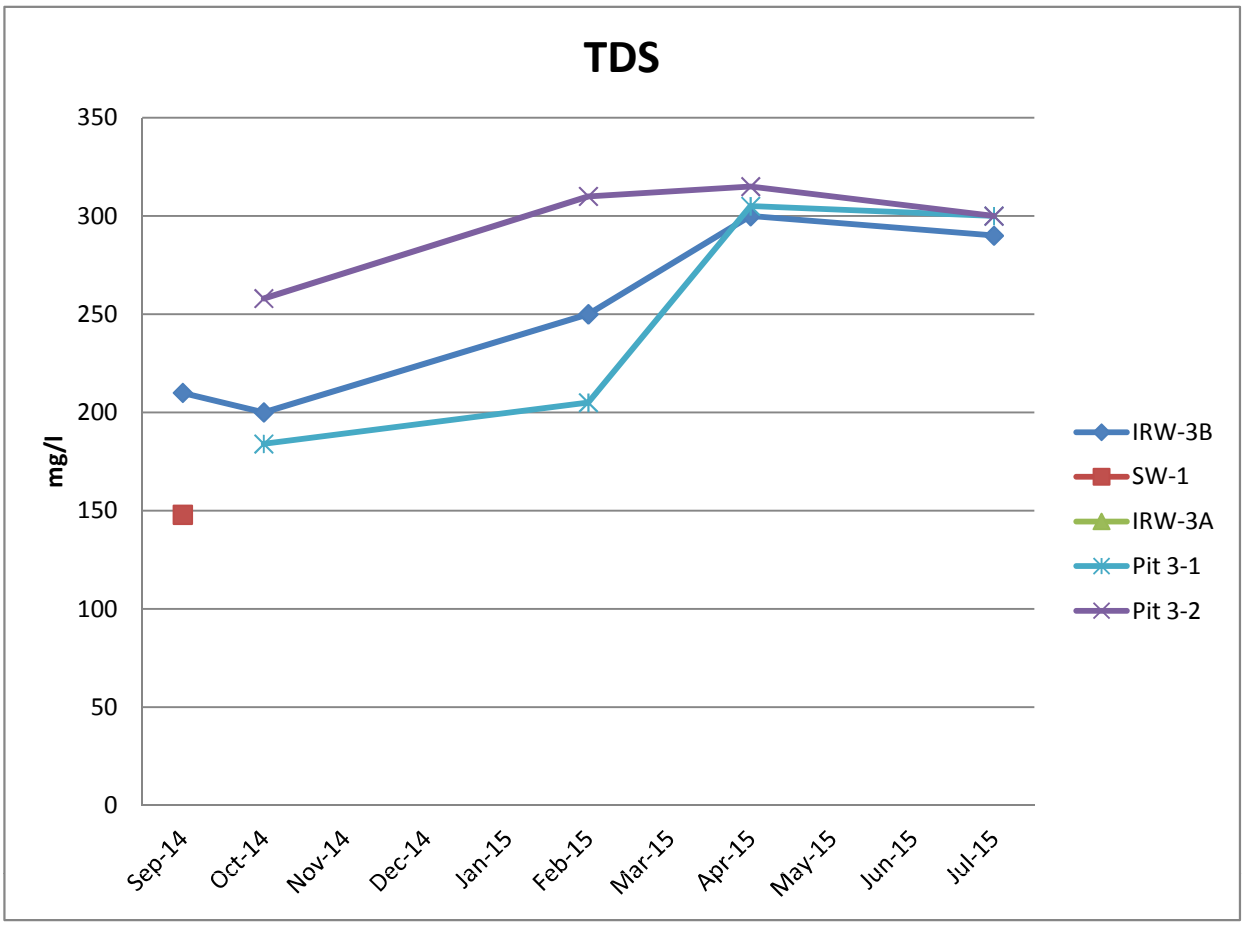


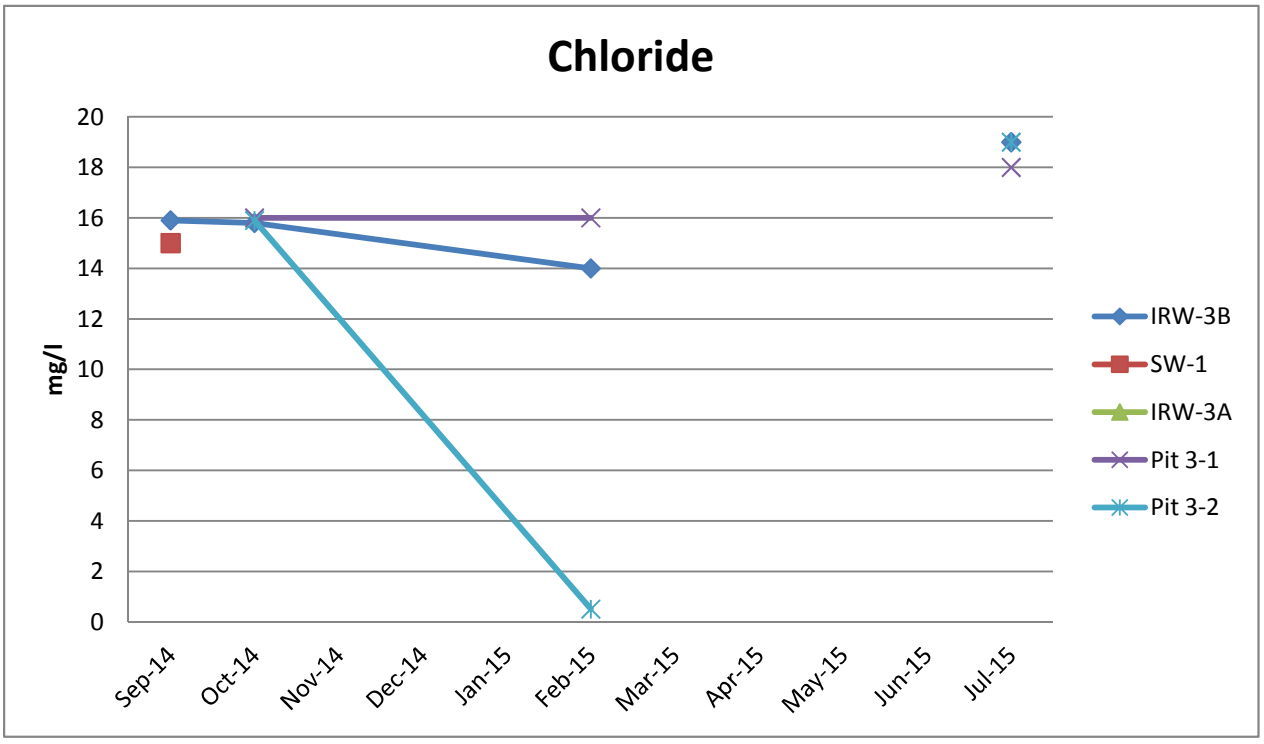
ALTA ENVIRONMENTAL

# APPENDIX D

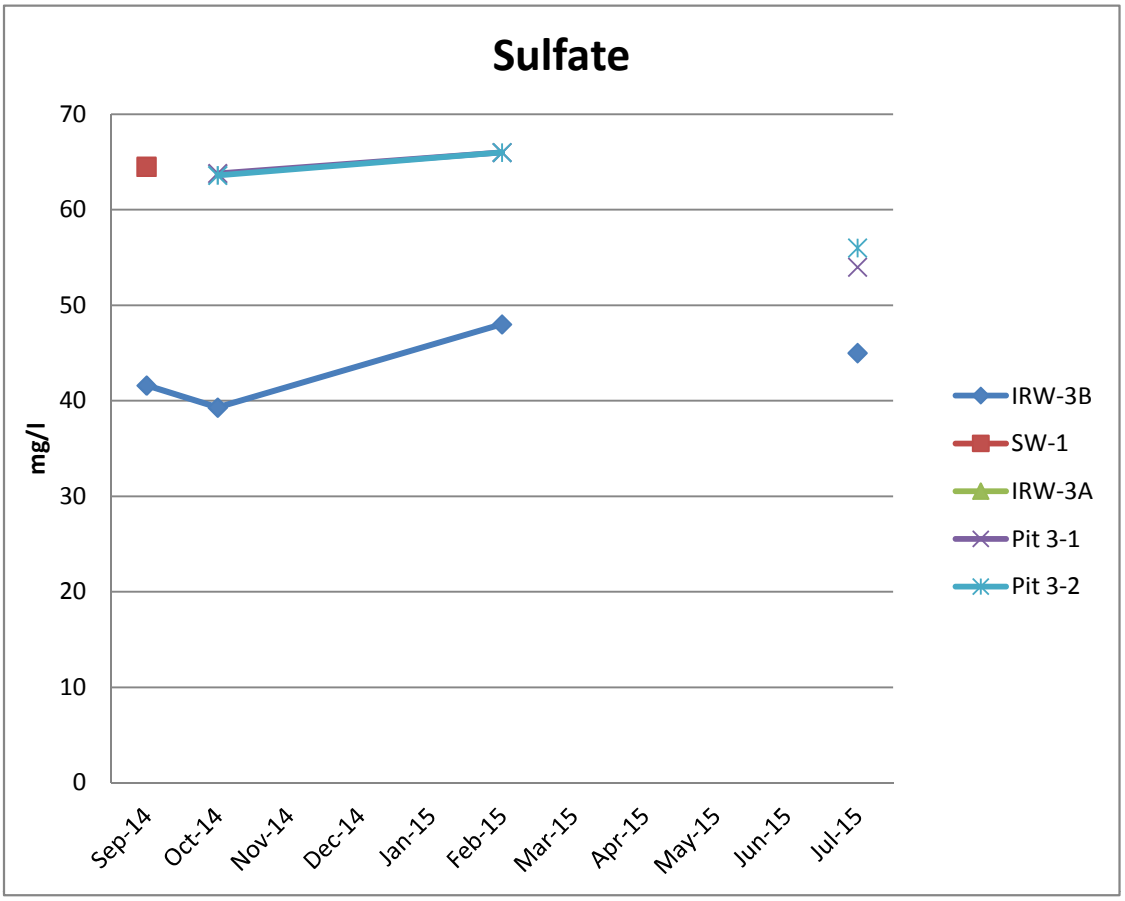
# GRAPHICAL SUMMARIES

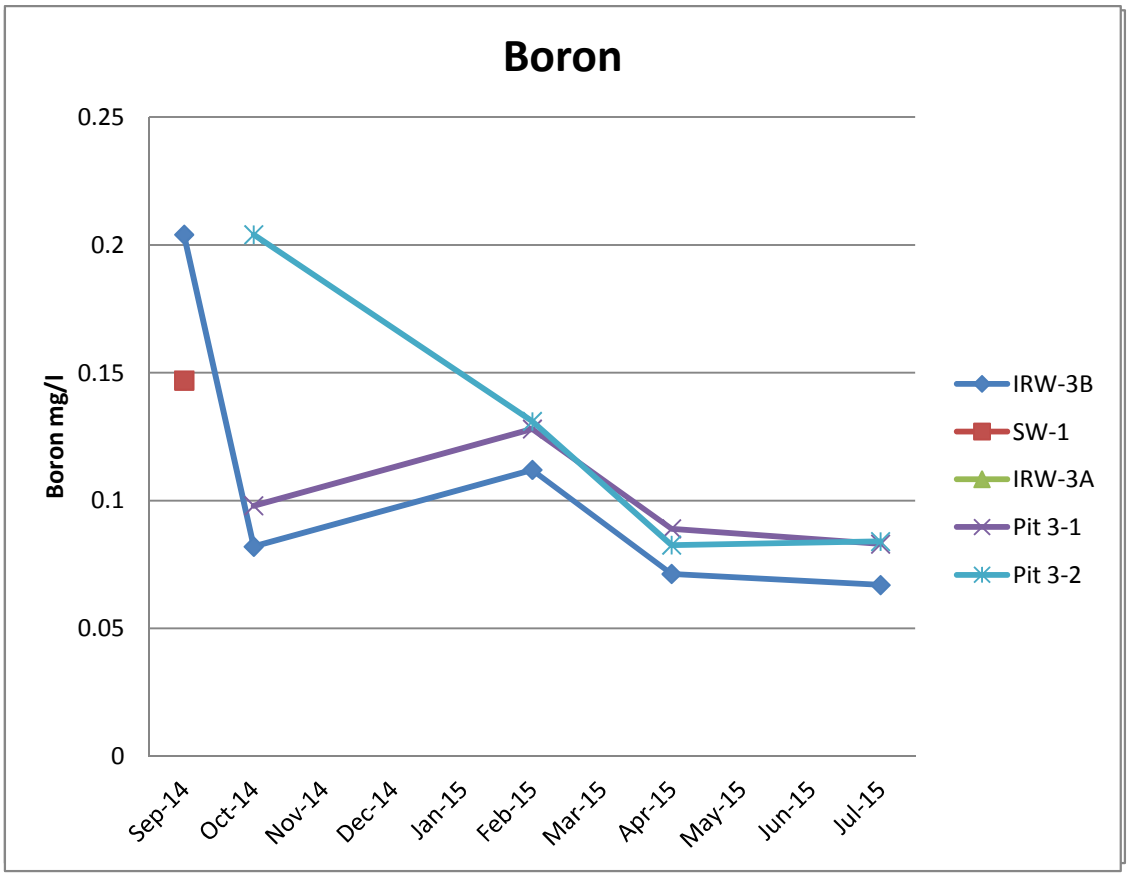
## Historical Graphical Summaries



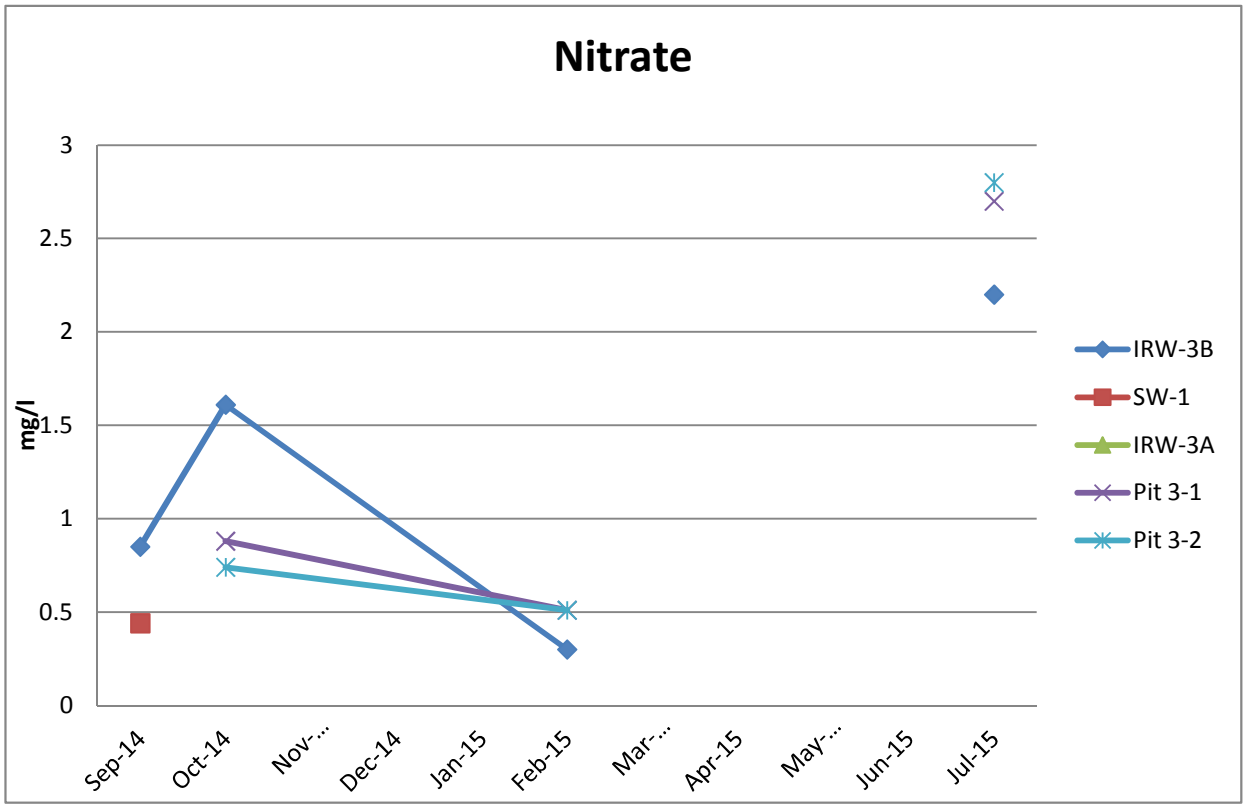



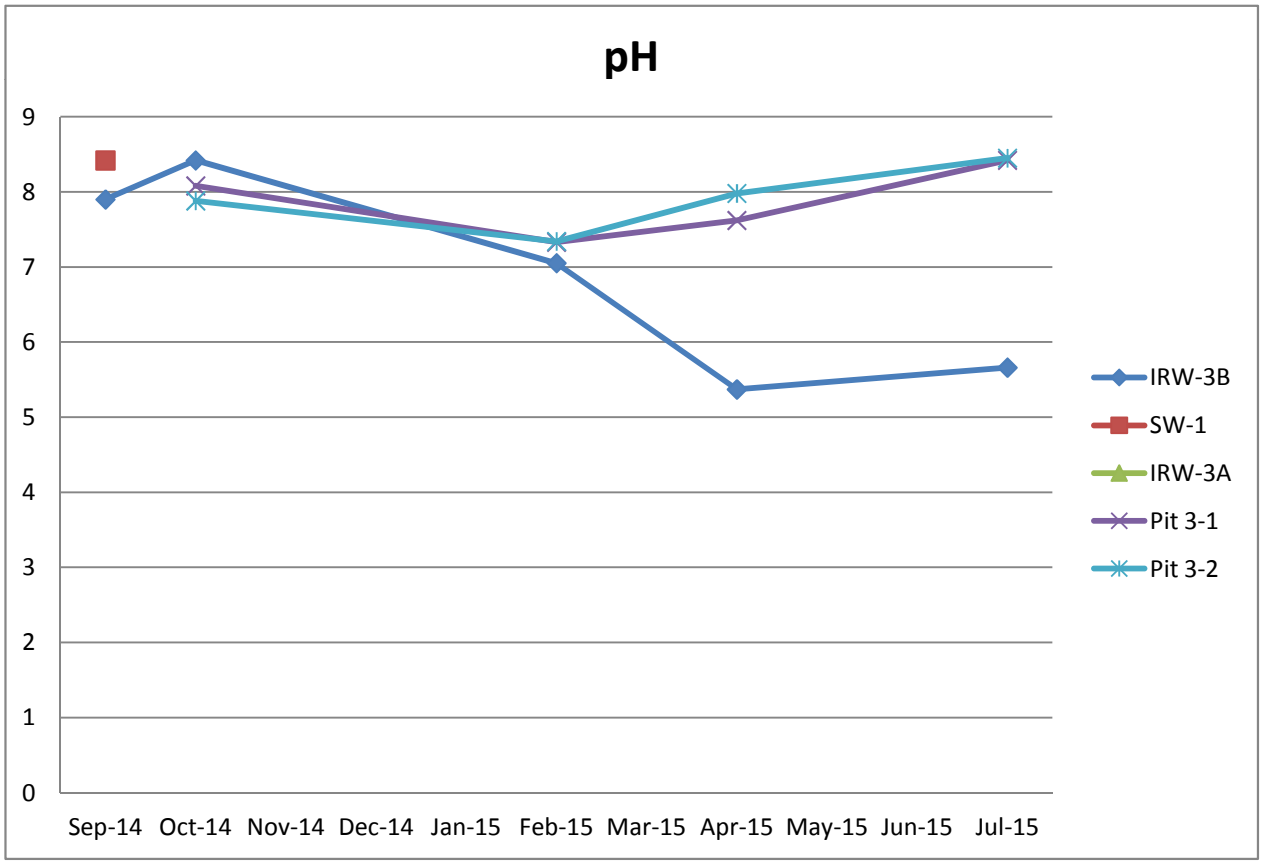
## Historical Graphical Summaries



## Historical Graphical Summaries



# APPENDIX E

# LANDFILL WASTE DISPOSAL

135 S. State College Blvd. Suite 400 Brea, CA 92821 (714) 578-9600

October 14, 2015

California Regional
Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Information Technology Unit

Subject: Waste Discharge Requirements- United Rock Pit 3
1137 Meridian Street
Irwindale, CA 91706
File No. 72-124, Order No.01-131, CI 5801

Pursuant to the General Provisions for Reporting (Section A) of the Monitoring and Reporting Program (File CI 5801) and Section III of the Reporting Conditions, we are respectively submitting our quarterly report.

Please be advised that there was no discharge placed in Pit #3 during the 3rd Quarter of calendar year 2015.

The estimated life of the site is 83 years 0 months.

No purged ground water from monitoring wells is used at the site.

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the 14st day of October 2015 in Brea, California.

Very truly yours,

Ken Barker
Environmental Manager

Cc: Scott Taylor, Alta Environmental
William Tam, City of Irwindale Engineer

Agency:

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**
**LOS ANGELES REGION**

320 West 4th Street, Suite 200
Los Angeles, CA 90013-2343

# Waste Disposal And Groundwater Monitoring Report

## Fourth Quarter 2015

United Rock Products – Pit #3
Irwindale, California
RWQCB File No. 72-124
Under Monitoring & Reporting Program No. CI 5801

**Prepared For:**

United Rock Products Corporation
1137 Meridian Street
Irwindale, CA 91706

Date: January 15, 2015

3777 Long Beach, Blvd
Long Beach, CA 90807
(562) 495-5777 Fax: (562) 495-5877

CONTACT: Charles Liou

Reference: URPC-14-4746

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Appendix A Groundwater Sampling Protocol
Appendix B Analytical Results/Chambers Environmental Field Logs and Chain-of-Custody Forms
Appendix C Groundwater Database
Appendix D Graphical Summaries
Appendix E Landfill Waste Disposal

## 1.0 INTRODUCTION

Alta Environmental (Alta – formerly Justice & Associates [J&A]) was retained by United Rock Products Corporation (URP) to conduct groundwater monitoring and reporting for URP's Pit #3. The purpose of this report is to provide an evaluation of the groundwater monitoring and the estimated average monthly quantities (in cubic yards) and types of materials deposited.

## 2.0 FACILITY DESCRIPTION

URP (Discharger) owns and operates URP's Pit #3 (the Site), a construction aggregate mining pit at 1137 Meridian Street, in Irwindale, California. The site is bounded on the north by the Buena Vista Channel, on the south by Arrow Highway and on the east by Buena Vista Street (Figure 1). The center of the site is located at approximately 34°06'56" N and 117°59'23"W.

The Site includes approximately 110 acres of land and has been mined for sand and gravel by the Discharger and its predecessors since the early 1900s. Ground surface elevation around the pit varies from 406 feet above mean sea level (amsl) at the west edge of the pit to 431 feet amsl at the east edge of the pit.

The majority of the pit bottom has exposed groundwater resulting from the mining operation. The City of Irwindale approved conditional use permit CUP 6-04 in 2004. The CUP permits URP to mine the pit to a maximum depth of 440 feet bgs or until December 31, 2037, whichever comes first. The Site also has a reclamation plan approved in 2004 that states the excavation will be used as a groundwater recharge basin once the material has been depleted. Alternatively, the reclamation plan calls for the pit to be filled or partially filled.

The proposed discharge methods to the pit include backfilling the waste material from the Rock Plant to Pit #3 by means of sluicing and trucking. The sluicing process involves mixing the waste materials (primarily clay and silt) with groundwater that has been used in the mining process and pumping the mixture to various locations at the pit. Water is used in the mining process to wash fine material (clay and silt) off the coarse material (gravel and sand). No chemicals are added in either the mining or the sluicing processes.

Order No. 01-131 is the waste discharge requirements for the disposal of inert wastes into the Site during mine reclamation.

## 3.0 CURRENT MONITORING REQUIREMENTS

The monitoring is done to satisfy the Monitoring and Reporting Program (MRP) requirements of Order 01-131, File 72-124 and CI 5801, which was adopted by the Regional Water Quality Control Board (RWQCB) on September 21, 2001. The MRP requires quarterly groundwater and waste disposal reporting during the first year and semi-annually thereafter. In the event sampling is not performed during those months, substitute sampling shall occur as soon as possible after, and the reason for delay shall be given. The sampling schedule will continue to be semi-annual regardless of the substitute sampling. In addition, each monitoring report submitted to the Regional Board shall include a tabular list of the estimated average quantities of materials deposited at the site each month and the methods of disposal. This report contains the summary of both requirements.

### 3.1. Chronology of Order 01-131, File 72-124 and CI 5801

URP and its predecessors have excavated and processed aggregate from this site since as early as 1910. The majority of the pit has groundwater exposed by mining operations. URP purchased the property and operation in 1988.

The LARWQB adopted WDRs in 1973 for the previous owner, Livingston-Graham, to discharge inert materials to Pit #3. In 1988 the pit was purchased by United Rock Products and the pit is now known as URP Pit #3. New WDR's were adopted in 2001 and the previous order from 1973 was rescinded.

In May 2002, Justice & Associates submitted a Technical Report on behalf of URP to meet the 2001 WDR monitoring requirement. The technical report was approved in July 2002. A Revised Technical Report dated July 2014 was prepared to amend the 2002 report. Changes in the 2014 revised technical report included; revised sampling protocols for down-gradient wells; increasing the depth of up-gradient and down-gradient wells; and a modification to up-gradient and down-gradient monitoring well design.

## 4.0 GROUNDWATER MONITORING

### 4.1. Fourth Quarter 2015

Pursuant to the WDR for Pit #3 (Order 01-131, File 72-124 and CI 5801), water level measurements are to be collected from monitoring wells IRW-1 located at the Rock Plant and IRW-1A and IRW-1B located at Pit #1, and Wells IRW-3A and IRW-3B located at Pit #3 (Figure 1). This well network is to be used to estimate gradient in the vicinity of Pit #3. During well gauging on October 20, 2015, groundwater was detected only in Wells IRW-1 and IRW-3B, no groundwater was detected in Wells IRW-3A, IRW-1A, and IRW-1B. This is likely due to the lowering of the water table resulting from drought conditions in Southern California. To complete the groundwater gradient analysis, measurable groundwater needs to be gauged from at least 3 wells to allow triangulation for the gradient calculation. Therefore, the groundwater gradient was not determined and the groundwater velocity was not calculated.

Fourth Quarter measurements for 2015 from the five groundwater-monitoring wells were collected on October 20, 2015. Table 1 presents the fourth quarter 2015 water level data.

**Table 1**
**Groundwater Monitoring Program for Fourth Quarter 2015**

| Well # | General Well Location from Landfill | Date Measured | Depth to Groundwater (feet) | Total Well Depth (feet bgs) | Groundwater Elevation (feet relative to MSL) | Reference Point Elevation (feet above MSL) |
|---|---|---|---|---|---|---|
| IRW-1 | Cross-Gradient | 10/20/15 | 238.80 | 300.00 | 166.80 | 405.60 |
| IRW-1A | Up-gradient | 10/20/15 | DRY | 196.60 | DRY | 380.94 |
| IRW-1B | Cross-Gradient | 10/20/15 | DRY | 195.30 | DRY | 380.03 |
| IRW-3A | Up-gradient | 10/20/15 | DRY | 249.60 | DRY | 437.27 |
| IRW-3B | Downgradient | 10/20/15 | 232.45 | 250.10 | 174.30 | 406.75 |

### 4.2. Groundwater Velocity and Direction

The groundwater contours for the fourth quarter 2015 were not calculated due to insufficient data discussed above. During the next event, the wells will continue to be monitored and the groundwater gradient and velocity will be calculated if the groundwater level is detected in at least three of the monitoring wells.

### 4.3. Monitoring Methods

The monitoring stations for the quarterly report consist of wells IRW-1, IRW-1A, IRW-1B, IRW-3A and IRW-3B as defined in the Revised Technical Report. Based on the reported groundwater gradient in the upper San Gabriel Basin, it has been determined that these wells will provide required information for compliance with MRP CI-5801.

Chambers Environmental performed the measurements for IRW-1, IRW-1A, IRW-1B, IRW-3A, and IRW-3B. The Monitoring methods used were in accordance with EPA guidelines set forth in the Groundwater Sampling Protocol (Refer to Appendix A). Prior to conducting field measurements, the groundwater level probe was calibrated to ensure accuracy of measurements and cleaned prior to and after each measurement to minimize cross-contamination.

## 5.0 GROUNDWATER SAMPLING

The 2014 Revised Technical Report requires that samples be collected from IRW-3A, the up-gradient well at the Northeast corner of Pit #3. However, because no water was detected in the well, no water samples were collected from IRW-3A. Samples were collected from IRW-3B at the southwest corner of Pit #3. Based on the regional south to southwest flow direction of the groundwater in the vicinity of the Pit #3, and the condition that only native geological material washed with local water will be sluiced back into Pit #3, the approved sampling network for Pit #3 also includes groundwater samples from the standing water in the south end of the pit.

For each monitoring period, one grab groundwater sample is to be collected from both wells and the standing water in the pit. The standing water monitoring will occur as long as there is standing water in the pit. Grab samples of the standing water in the pit will be collected using a stainless steel bailer from a depth of 10 to 15 feet below water surface. Groundwater samples from IRW-3A and IRW-3B are to be collected using a submersible pump or passive sampling methods. The first round of samples were analyzed for the monitoring parameters listed on US EPA Appendix I and II Constituents.

The groundwater samples were analyzed by TestAmerica, which is a State of California Department of Health Services accredited laboratory. This laboratory performed the chemical analyses in accordance with the current EPA guidelines and procedures. Appendix B contains the analytical results and chain-of-custody record for this quarterly report.

5.1. Groundwater Evaluation

A groundwater database presenting all analytical results is located in Appendix C. Table 2 represents a comparative analysis between the analytical results and the water protection standards established for URP Pit #3 as identified in the WDRs.

**Table 2**
**Water Quality Data Summary**
**Fourth Quarter 2015 Sampling Event**

| Constituent | Water Quality Protection Standards | Monitoring Station | | |
|---|---|---|---|---|
| | | Pit 3-1 | Pit 3-2 | IRW-3B |
| Date Sampled | | 10/20/2015 | 10/20/2015 | 10/20/2015 |
| Total Dissolved Solids (TDS) | 450 mg/l | 270 | 270 | 270 |
| Chloride (Cl) | 100 mg/l | 19.0 | 19.0 | 16.0 |
| Sulfate ($SO_4$) | 100 mg/l | 61 | 60 | 49 |
| Nitrate (as ($NO_3$) | 45 mg/l | 0.66 | 0.68 | 0.56 |
| Boron | 0.5 mg/l | 0.14 | 0.13 | 0.12 |
| pH | 6.5 – 8.5 | 7.44* | 7.03* | 6.99* |

*Results from field readings

The sample results for samples collected in October 2015 indicate that standing groundwater in Pit #3 and groundwater collected from the downgradient well IRW-3B currently meets Water Quality Protection Standards for all constituents. The standards are established for this facility by Order No. 01-013 and are based on the water quality objectives for the western area of the main San Gabriel Basin contained in the Basin Plan.

There was an insufficient amount of groundwater in IRW-3A to collect samples for analysis. The low aquifer is likely an effect of the significant drought conditions in Southern California. Therefore, two water column samples were collected from the standing exposed groundwater in the pit. Samples Pit 3-1 and Pit 3-2 have been included within this report to assess compliance with Water Quality Protection Standards.

If there is sufficient groundwater, samples shall be collected from the monitoring wells for the next report. In the event that the well remains dry, alternative sampling options shall be discussed with the LARWQCB.

5.2. Purged Groundwater

Purged groundwater from the monitoring well is used at the Site for dust suppression (within 20-foot radius of each well). No purged ground water was used at the site during the fourth quarter event.

5.3. Sluice Material and Waste Disposal

During October through December 2015 reporting period, no material was placed in Pit #3.

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

Alta conducted a review of the groundwater analytical data for the fourth quarter 2015 report. Based on field observations and analytical results, it appears that deposited waste and current waste disposal practices are not adversely impacting local groundwater quality.

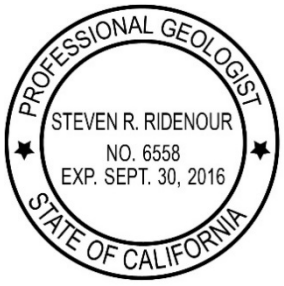
Based on the data collected as required by the sampling and monitoring plan detailed in the Waste Discharge Requirements Order, none of the water quality protection standards listed in Table 2 are elevated above the limits listed in the Order. However, monitoring well IRW-3A was gauged dry and therefore not sampled. In addition, insufficient data was available to determine groundwater gradient and velocity. Providing sufficient water is available in the wells during the next sampling event, the depth to water in all five wells will be measured.

We appreciate the opportunity to provide groundwater monitoring and reporting services. If you have any questions or comments concerning this report, please feel free to contact me at (562) 495-5777.

# 7.0 CERTIFICATION

## 7.1. Professional Certifications

The hydrogeologic information, results of groundwater testing, conclusions and recommendations in this report have been reviewed by of a California-registered professional engineer. This certification of conditions comprises a declaration of his professional judgment. It does not constitute a warranty or guarantee.




Steven R. Ridenour
PG
Senior Project Manager/Senior Geologist III
Alta Environmental

## 8.0 REFERENCES

Justice & Associates, Sully-Miller Irwindale Facility Phase I Environmental Site Assessment, 9-97

Justice & Associates, United Rock Products, Pit #3 & #3 Final Dredge Operation

Spill Prevention Control and Countermeasure Plan, 5-98

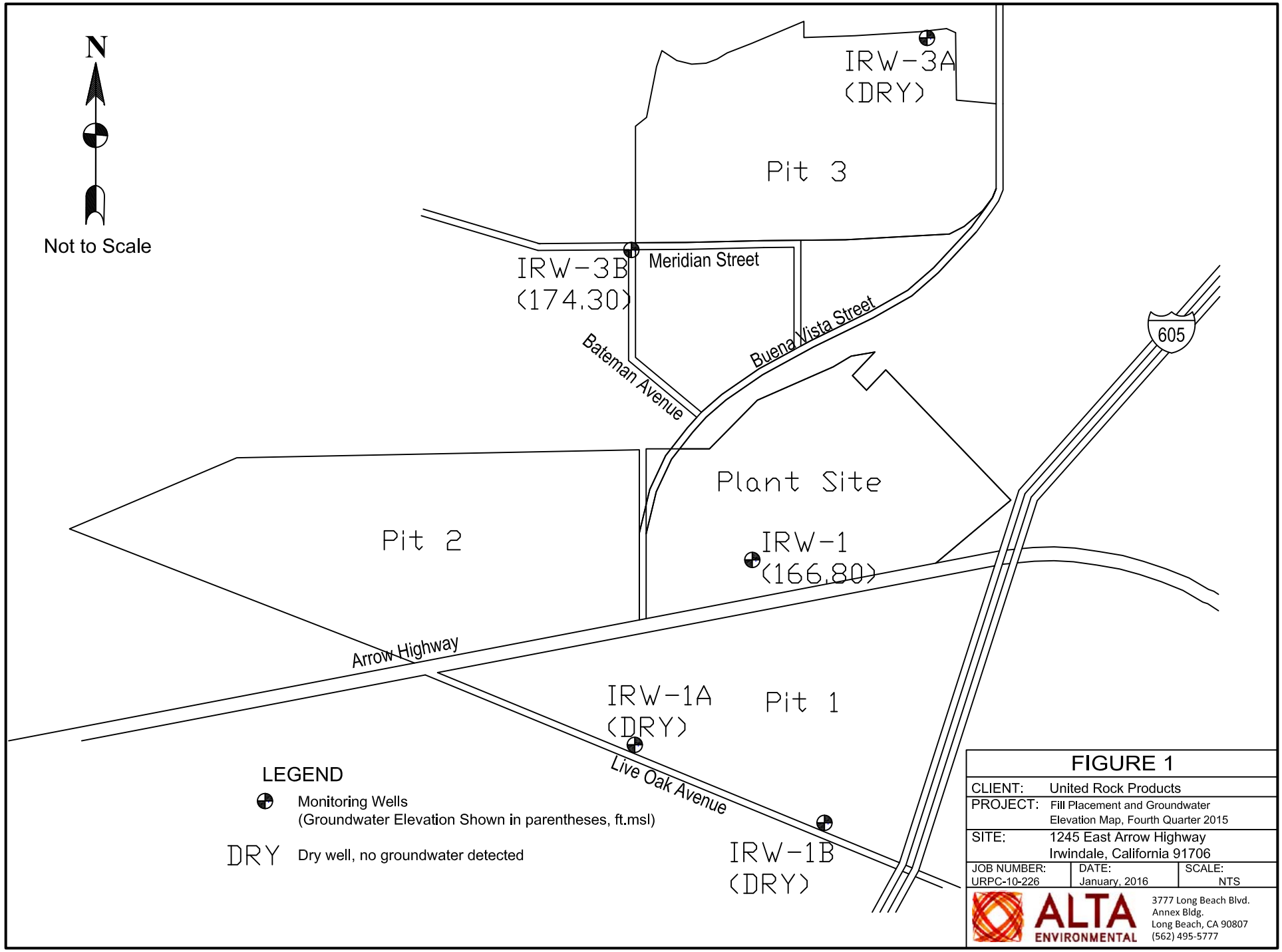
Luhdorff & Scalmanini, Supplemental Groundwater Investigation and Mitigation Monitoring Program, July 2001

Waste Discharge Requirements – United Rock Products – Pit #3 Irwindale, CA (File No. 72-124; Order No. 01-131, CI 5801)

Surface Waters-Field Operations Manual for Lakes USEPA Office of Research and Development EPA/620/R-97/001/June 1997

Technical Guidance Manual for Hydrogeologic Investigations and Groundwater Monitoring, State of Ohio EPA, 1995

# FIGURES




# FIGURE 1

| | |
|---|---|
| CLIENT: | United Rock Products |
| PROJECT: | Fill Placement and Groundwater Elevation Map, Fourth Quarter 2015 |
| SITE: | 1245 East Arrow Highway<br>Irwindale, California 91706 |

| JOB NUMBER: | DATE: | SCALE: |
|---|---|---|
| URPC-10-226 | January, 2016 | NTS |

ALTA ENVIRONMENTAL
3777 Long Beach Blvd.
Annex Bldg.
Long Beach, CA 90807
(562) 495-5777

# APPENDIX A

# GROUNDWATER SAMPLING PROTOCOL

# STANDARD FIELD PROCEDURES FOR MONITORING AND SAMPLING GROUNDWATER MONITORING WELLS AT URP Pit #3

## SEALED WELLS

One or more wells at the site are sealed and have down-hole pumps for discharging groundwater. Down-hole monitoring and sampling equipment cannot be used in those wells. Sealed wells must be monitored, purged and sampled using the down-hole pumps. Purge volume is estimated using historical depth-to-water and depth-to-bottom information. Once water is obtained from the discharge of the down-hole pumps, the procedures for recording water quality readings and for packaging groundwater samples for laboratory analysis are the same as for open wells, below.

## OPEN WELLS

The following standard operating procedures apply to wells that are accessible using down-hole monitoring and sampling equipment.

## DECONTAMINATION OF MONITORING AND SAMPLING EQUIPMENT

All down-hole monitoring and sampling equipment is decontaminated using a non-phosphate detergent solution prior to placing equipment into each well. A triple-rinse procedure is used to clean the equipment. The general triple-rinse decontamination procedure is as follows:

- Wash equipment in the first rinse containing detergent and clean tap water;
- Rinse thoroughly in the third rinse containing clean tap water;
- Rinse in the third rinse containing distilled or deionized water; and
- Allow equipment to air dry prior to next use.

## WELL GAUGING

All wells are gauged using an electronic measuring tape capable of recording depth-to-water to the nearest 0.01 foot. Depth-to-water is measured to a survey mark on the top of each well casing. In the absence of a survey mark, the well is gauged from the north side of the top-of-casing. Each depth-to-water measurement is performed twice to assure accuracy. After measuring the depth-to-water, either the electronic tape or a clean non-electronic tape is lowered to the bottom of the well to obtain a depth-to-bottom reading for each well. All measurements are recorded on standard field forms.

## PRE-PURGE WATER QUALITY MEASUREMENTS

Prior to purging, a small volume of groundwater is purged from each well using a clean PVC or stainless-steel bailer. That water is used to perform field tests for $CO_2$ and alkalinity. A Hatch Digital Titrator Model 16900 or similar field instrument capable of measuring the required parameters is used to obtain field readings. All field readings are recorded on standard field forms.

## WELL PURGING

One casing volume of water is calculated for each well using the depth-to-water and depth-to-bottom field readings and the diameter of the well casing. Using a clean PVC or stainless steel bailer with new string attached, each well is purged of three to five casing volumes of water prior to collecting water samples for laboratory analysis. Water volumes removed from each well are recorded on standard field forms. After each casing volume of water is removed from the well, field water quality parameters are recorded (see below). Upon completion of purging, the water level is allowed to recover to at least 80% of its pre-purge volume prior to sampling. For slow-recharging wells, water samples are collected after two hours if 80% recovery is not achieved.

If prior groundwater analytical results show that the groundwater in a specific well is sufficiently clean, purged groundwater from the well is spread on the ground in the vicinity of the well. If the groundwater is known to contain contaminants above State action levels, the purged water is placed into DOT-approved steel 55-gallon drums.

Drums containing purge water are sealed, appropriately labeled and temporarily stored on site until a licensed hauler is contracted to remove the drums. All drummed purge water is disposed of at a State-licensed water recycling facility.

## WATER QUALITY MEASUREMENTS DURING PURGING

After purging each casing volume of water from each well, field readings are taken of water quality parameters. A Beta Technologies, Inc. Hydac Water Quality Meter or similar instrument is used to record the temperature, electrical conductivity and pH of the groundwater. At least two out of three of those parameters must stabilize to within 10% between the last two readings before a water sample is collected. A minimum of three casing volumes are removed prior to sampling if water quality parameters stabilize. If water quality parameters do not stabilize, groundwater samples are collected after purging a maximum of five casing volumes. All field readings are recorded on standard field forms.

## WATER SAMPLE COLLECTION

A new polypropylene disposable bailer is used to collect the laboratory water samples from each well. Each disposable bailer is discarded after use in one well. Water from the bailer is placed into laboratory-supplied sample containers containing appropriate preservatives for the requested analytic. The bottles are filled, capped and placed in a cooler on ice. All samples collected for laboratory analysis are transported in the chilled cooler to a State-certified laboratory following standard chain-of-custody procedures.

## EXPOSED GROUNDWATER GRAB SAMPLES

A Discrete grab samples shall be collected from the exposed groundwater in the pit, using a stainless steel bailer from the surface. During the life of the WDRs, the shape and size of the lake will change. Consequently, we are not recommending specific points, but will keep the points near the southwest shoreline far enough away from the shore to test the full water column and as far away from each separate point as possible.

# APPENDIX B

# ANALYTICAL RESULTS / CHAMBERS ENVIRONMENTAL FIELD LOGS AND CHAIN-OF-CUSTODY FORMS

ALTA ENVIRONMENTAL

Project Name: United Rock Products

Date: 10/20/15

**Water Level Data Sheet**

Project Number: _____

| Well ID | Time | DTW | Ref Pt. | ~ Elev. | Well TD | | Comments: |
|---|---|---|---|---|---|---|---|
| Yard Well | 11:00 | 238.80 | 405.6 | | | | (IRW-1) |
| IRW-1A | 7:03 | DRY | 380.94 | | | | (Pit-1) |
| IRW-1B | 7:06 | DRY | 380.03 | | | | (Pit 1) |
| IRW-A | 7:12 | DRY | | | 249.6 | | (Pit 3) |
| IRW-B | 7:38 | 232.45 | | | 250.1 | | (Pit 3) |

Ref Pt = Reference Point
DTW = Depth to Water
TD = Total Depth
Elev. = Elevation

**Chambers Environmental Services, Inc**
**Sampling Data Sheet**

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: DWC

Date: 10-20-15

Well ID: IRW-B

**Purge Data**

| (Variable) | 0.2 C | 3-5% | 0.2 u | 20mv | 0.2mg/L | 10% | ML | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | Temp. | E.C.(uS) | pH | ORP | DO | Turbidity | Volume | DTW | Notes |
| Start: 7:58 | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | 232.45 | |
| 8:27 | 22.0 | 464.4 | 7.48 | 152 | 5.65 | 5.01 | 500 | 232.49 | |
| 8:31 | 21.7 | 477.0 | 7.06 | 157 | 5.22 | 4.61 | 900 | 232.50 | |
| 8:34 | 21.7 | 456.4 | 7.05 | 156 | 5.12 | 4.58 | 1200 | 232.50 | |
| 8:37 | 21.8 | 451.6 | 7.00 | 158 | 5.09 | 4.40 | 1500 | 232.49 | |
| 8:40 | 21.8 | 450.9 | 6.99 | 157 | 5.00 | 4.36 | 1800 | 232.50 | |
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| | | | | | | | | | |
| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | ~100 | | | | | | | | |

**Well Data**

| | |
|---|---|
| Bore OD: | 10" |
| Casing ID: | 4" |
| **Well TD:** | 250.1 |
| **D.T.W.:** | 232.45 |
| Ft./ Water: | |

Special Notes for This Well:

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

Purge Pump: BLADDER
Pump Set Time: 6:45
Pump/Inlet Depth (BGS): 248'

Decon:
Triple-Rinse

Total Vol. Purged 1800
Final Temp.: 21.8
Final EC: 450.9
Final pH: 6.99
Final ORP: 157
Final DO: 5.00
Draw Down: 0.05

Sample Start: 8:40
Sample Stop: 8:45
Analyses: Sample Container:
VARIOUS VARIOUS

Sample ID: 1
(If different from above)
DTW @ Sample: 232.50

**Methods:** 1=3 BV sample after 80%.
2= 1 BV and monitor parameters each 0.5 BV.
3=Low-flow.
4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: _____

## *Chambers Environmental Services, Inc*
## Sampling Data Sheet

Date: 10-20-15

Well ID: PIT 3-1

**Purge Data**

| (Variable) | 0.2 C | 3-5% | 0.2 u | 20mv | 0.2mg/L | 10% | ML | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | Temp. | E.C.(uS) | pH | ORP | DO | Turbidity | Volume | DTW | Notes |
| Start: | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | | |
| 10:22 | 26.0 | 390.1 | 7.44 | 118 | | | | | |
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| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

Purge Pump: _____
Pump Set Time: _____
Pump/Inlet Depth (BGS): _____

Decon:
Triple-Rinse

Total Vol. Purged _____
Final Temp.: _____
Final EC: _____
Final pH: _____
Final ORP: _____
Final DO: _____
Draw Down: _____

Sample Start: 10:25
Sample Stop: _____
Analyses: Sample Container:

**Well Data**
Bore OD:
Casing ID:
**Well TD:**
**D.T.W.:**
Ft./ Water:

Special Notes for This Well:

Sample ID: _____
(If different from above)
DTW @ Sample: _____

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

**Methods:** 1=3 BV sample after 80%.
2= 1 BV and monitor parameters each 0.5 BV.
3=Low-flow.
4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: _____

## *Chambers Environmental Services, Inc*
## Sampling Data Sheet

Date: 10-20-15

Well ID: PIT 3-2

**Purge Data**

| (Variable) | 0.2 C | 3-5% | 0.2 u | 20mv | 0.2mg/L | 10% | ML | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | Temp. | E.C.(uS) | pH | ORP | DO | Turbidity | Volume | DTW | Notes |
| Start: | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | | |
| 10:13 | 25.1 | 511.4 | 7.03 | 157 | - | - | - | - | |
| | | | | | | | | | |
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| | | | | | | | | | |
| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

Purge Pump: _____
Pump Set Time: _____
Pump/Inlet Depth (BGS): _____

Decon:
Triple-Rinse

Total Vol. Purged _____
Final Temp.: _____
Final EC: _____
Final pH: _____
Final ORP: _____
Final DO: _____
Draw Down: _____

Sample Start: 10:15
Sample Stop: _____
Analyses: Sample Container:

Sample ID: _____
(If different from above)
DTW @ Sample: _____

**Well Data**
Bore OD:
Casing ID:
**Well TD:**
**D.T.W.:**
Ft./ Water:

Special Notes for This Well:

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

**Methods:** **1**=3 BV sample after 80%.
**2**= 1 BV and monitor parameters each 0.5 BV.
3=Low-flow.
**4**= slow recharge. **5**= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: DWC

## *Chambers Environmental Services, Inc*
## Sampling Data Sheet

Date: 10-20-15

Well ID: YARD WELL (IRW-1)

**Purge Data**

| (Variable) | 0.2 C | 3-5% | 0.2 u | 20mv | 0.2mg/L | 10% | ML | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | Temp. | E.C.(uS) | pH | ORP | DO | Turbidity | Volume | DTW | Notes |
| Start: | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | | |
| 11:19 | 21.8 | 578.6 | 7.27 | 151 | 3.89 | 3.01 | ~ | 238.50 | pump ON |
| | | | | | | | | | |
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| | | | | | | | | | |
| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

Purge Pump: DED.
Pump Set Time: N/A
Pump/Inlet Depth (BGS): N/A

Decon:
Triple-Rinse

Total Vol. Purged
Final Temp.:
Final EC:
Final pH:
Final ORP:
Final DO:
Draw Down:

Sample Start: 11:20
Sample Stop:
Analyses: Sample Container:

**Well Data**
Bore OD:
Casing ID:
**Well TD:**
**D.T.W.:**
Ft./ Water:

Special Notes for This Well:

Sample ID:
(If different from above)
DTW @ Sample:

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

**Methods:** 1=3 BV sample after 80%.
2= 1 BV and monitor parameters each 0.5 BV.
3=Low-flow.
4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: DWC

## *Chambers Environmental Services, Inc*
## Sampling Data Sheet

Date: 10/20/15

Well ID: FIT 2-1

**Purge Data**

| (Variable) | 0.2 C | 3-5% | 0.2 u | 20mv | 0.2mg/L | 10% | ML | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | Temp. | E.C.(uS) | pH | ORP | DO | Turbidity | Volume | DTW | Notes |
| Start: | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | | |
| 12:05 | 25.6 | 286.5 | 7.85 | 107 | - | - | - | - | |
| | | | | | | | | | |
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| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

Purge Pump: _____
Pump Set Time: _____
Pump/Inlet Depth (BGS): _____

Decon:
Triple-Rinse

Total Vol. Purged _____
Final Temp.: _____
Final EC: _____
Final pH: _____
Final ORP: _____
Final DO: _____
Draw Down: _____

Sample Start: 12:10
Sample Stop: _____
Analyses: Sample Container:

**Well Data**
Bore OD:
Casing ID:
**Well TD:**
**D.T.W.:**
Ft./ Water:

Special Notes for This Well:

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

Sample ID: _____
(If different from above)
DTW @ Sample: _____

**Methods:** 1=3 BV sample after 80%.
2= 1 BV and monitor parameters each 0.5 BV.
3=Low-flow.
4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: DWC

## *Chambers Environmental Services, Inc*
## Sampling Data Sheet

Date: 10-20-15

Well ID: PIT 2-2

**Purge Data**

| (Variable) | 0.2 C | 3-5% | 0.2 u | 20mv | 0.2mg/L | 10% | ML | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | Temp. | E.C.(uS) | pH | ORP | DO | Turbidity | Volume | DTW | Notes |
| Start: | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | | |
| 12:08 | 26.4 | 2585 | 7.63 | 109 | – | – | – | – | |
| | | | | | | | | | |
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| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

Purge Pump: _____

Pump Set Time: _____

Pump/Inlet Depth (BGS): _____

Decon:
Triple-Rinse

Total Vol. Purged _____

Final Temp.: _____

Final EC: _____

Final pH: _____

Final ORP: _____

Final DO: _____

Draw Down: _____

Sample Start: 12:10

Sample Stop: _____

Analyses: Sample Container:

**Well Data**

Bore OD:

Casing ID:

**Well TD:**

**D.T.W.:**

Ft./ Water:

Special Notes for This Well:

Sample ID: _____

(If different from above)

DTW @ Sample: _____

**Meters:**

Solinst 12202 Interphase Probe

Oakton 300 Series

Purge Method: 3

**Methods:** **1**=3 BV sample after 80%.
**2**= 1 BV and monitor parameters each 0.5 BV.
3=Low-flow.
**4**= slow recharge. **5**= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

**Irvine**
17461 Derian Ave
Suite 100
Irvine, CA 92614
Tel: (949) 261-1022 / Fax: (949) 260-3297

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**TestAmerica Laboratories, Inc.**

| Client Contact | Project Manager: Ken Barker | Site Contact: Dan Chambers | Date: | COC No: |
|---|---|---|---|---|
| United Rock Products | Tel/Fax: | Lab Contact: D. Roberts | Carrier: Client | ____ of ____ COCs |
| 135 S. State College Blvd. | Analysis Turnaround Time | | | Job No. |
| Brea, CA, 92821 | Work Days (W) ____ | | | |
| Phone: 626-523-1319 | TAT if different from Below ____ | | | SDG No. |
| FAX | ☒ Standard | | | |
| Project Name: Pit No. 3 | ☐ 5 days | | | |
| Site: | ☐ 2 days | | | |
| P.O.#: | ☐ 1 day | | | |

| Sample Identification | Sample Date | Sample Time | Sample Type | Matrix | # of Cont. | Filtered Sample | 8260 LL PCE, Benzene, PCE, TEC, MTBE | 8260 LL Vinyl Chloride | 300 Nitrate, Chloride and Sulfate | 200.7 Cd, Cr, B, Pb and Ni | TDS 2540C | COD 5220 | Conductivity 2510B | Alkalinity 2320B | Free Carbon Dioxide 4500 CO2 C | Sample Specific Notes: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| IZW-B | 10/20/15 | 8:40 | GRAB | W | 6 | N | X | X | X | X | X | X | X | X | X | |
| PIT 3-1 | ↓ | 10:25 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | |
| PIT 3-2 | ↓ | 10:15 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | |

**Preservation Used:** 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

*Possible Hazard Identification*
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant Poison B ☐ Unknown ☒

*Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)*
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

**Special Instructions/QC Requirements & Comments:** Pit 3 Analytes

| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
|---|---|---|---|---|---|
| [signature] | CES, INC. | 10/20/15 14:40 | | | |
| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
| Relinquished by: | Company: | Date/Time: | Received by: [signature] | Company: TAT | Date/Time: 10/20/15 14:40 |

2.7/3.6 IR-77

**Irvine**
17461 Derian Ave
Suite 100
Irvine, CA 92614
Tel: (949) 261-1022 / Fax: (949) 260-3297

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**TestAmerica Laboratories, Inc.**

| Client Contact | Project Manager: Ken Barker | Site Contact: Dan Chambers | Date: | COC No: |
|---|---|---|---|---|
| United Rock Products | Tel/Fax: | Lab Contact: D. Roberts | Carrier: Client | ____ of ____ COCs |
| 135 S. State College Blvd. | Analysis Turnaround Time | | | Job No. |
| Brea, CA, 92821 | Work Days (W) ____ | | | |
| Phone: 626-523-1319 | TAT if different from Below ____ | | | SDG No. |
| FAX | ☒ Standard | | | |
| PIT No. 2 | ☐ 5 days | | | |
| Site: URP IRWINDALE | ☐ 2 days | | | |
| P.O.#: | ☐ 1 day | | | |

| Sample Identification | Sample Date | Sample Time | Sample Type | Matrix | # of Cont. | Filtered Sample | 8260 LL Full list with oxygenates | 200.7 Boron | 300 Nitrate, Chloride and Sulfate | 200.7 Dissolved Cd, Cr, PB and Ni | TDS 2540C | COD 5220 | Conductivity 2510B | 8015 Diesel LL | Sample Specific Notes: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| YARD WELL | 10/20/15 | 11:20 | GRAB | W | 7 | N | X | X | X | X | X | X | X | X | |
| PIT 2-1 | | 12:10 | | | | N | X | X | X | X | X | X | X | X | |
| PIT 2-2 | | 12:20 | | | | N | X | X | X | X | X | X | X | X | |

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

*Possible Hazard Identification*
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

***Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)***
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* ____ *Months*

**Special Instructions/QC Requirements & Comments:** PIT 2

| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
|---|---|---|---|---|---|
| David Clark | CES, INC. | 10/20/15 14:40 | | | |
| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
| Relinquished by: | Company: | Date/Time: | Received by: | Company: TAT | Date/Time: 10/20/15 14:40 |

2.3 / 3.2 IR-77

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-124839-1
Client Project/Site: Pit No. 3

For:
United Rock Products Corp
135 S. State College Blvd
Suite 400
Brea, California 92821

Attn: Ken Barker

*Authorized for release by:*
*10/27/2015 3:35:34 PM*

Danielle Roberts, Senior Project Manager
(949)261-1022
danielle.roberts@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Sample Summary

Client: United Rock Products Corp
Project/Site: Pit No. 3

TestAmerica Job ID: 440-124839-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 440-124839-1 | IRW-B | Water | 10/20/15 08:40 | 10/20/15 14:40 |
| 440-124839-2 | PIT 3-1 | Water | 10/20/15 10:25 | 10/20/15 14:40 |
| 440-124839-3 | PIT 3-2 | Water | 10/20/15 10:15 | 10/20/15 14:40 |

# Case Narrative

Client: United Rock Products Corp
Project/Site: Pit No. 3

TestAmerica Job ID: 440-124839-1

## Job ID: 440-124839-1

### Laboratory: TestAmerica Irvine

**Narrative**

**Job Narrative**
**440-124839-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 10/20/2015 2:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

**GC/MS VOA**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**HPLC/IC**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Metals**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**General Chemistry**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**VOA Prep**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

## Client Sample ID: IRW-B

**Lab Sample ID: 440-124839-1**

**Date Collected: 10/20/15 08:40**
**Date Received: 10/20/15 14:40**

**Matrix: Water**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.50 | | ug/L | | | 10/24/15 18:04 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.50 | | ug/L | | | 10/24/15 18:04 | 1 |
| Tetrachloroethene | ND | | 0.50 | | ug/L | | | 10/24/15 18:04 | 1 |
| Trichloroethene | ND | | 0.50 | | ug/L | | | 10/24/15 18:04 | 1 |
| Vinyl chloride | ND | | 0.50 | | ug/L | | | 10/24/15 18:04 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *115* | | *80 - 128* | | *10/24/15 18:04* | *1* |
| *4-Bromofluorobenzene (Surr)* | *104* | | *80 - 120* | | *10/24/15 18:04* | *1* |
| *Dibromofluoromethane (Surr)* | *116* | | *76 - 132* | | *10/24/15 18:04* | *1* |

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **16** | | 0.50 | | mg/L | | | 10/20/15 19:22 | 1 |
| **Nitrate as N** | **0.56** | | 0.11 | | mg/L | | | 10/20/15 19:22 | 1 |
| **Sulfate** | **49** | | 2.5 | | mg/L | | | 10/20/15 19:39 | 5 |

### Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Boron** | **0.12** | | 0.050 | | mg/L | | 10/23/15 11:41 | 10/25/15 14:34 | 1 |
| Cadmium | ND | | 0.0050 | | mg/L | | 10/23/15 11:41 | 10/25/15 14:34 | 1 |
| Chromium | ND | | 0.0050 | | mg/L | | 10/23/15 11:41 | 10/25/15 14:34 | 1 |
| Nickel | ND | | 0.010 | | mg/L | | 10/23/15 11:41 | 10/25/15 14:34 | 1 |
| Lead | ND | | 0.0050 | | mg/L | | 10/23/15 11:41 | 10/25/15 14:34 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Alkalinity as CaCO3** | **120** | | 4.0 | | mg/L | | | 10/22/15 04:26 | 1 |
| **Bicarbonate Alkalinity as CaCO3** | **120** | | 4.0 | | mg/L | | | 10/22/15 04:26 | 1 |
| Carbonate Alkalinity as CaCO3 | ND | | 4.0 | | mg/L | | | 10/22/15 04:26 | 1 |
| Hydroxide Alkalinity as CaCO3 | ND | | 4.0 | | mg/L | | | 10/22/15 04:26 | 1 |
| **Specific Conductance** | **370** | | 1.0 | | umhos/cm | | | 10/23/15 09:03 | 1 |
| **Resistivity** | **2700** | | 1.0 | | ohm cm | | | 10/23/15 09:03 | 1 |
| **Total Dissolved Solids** | **270** | | 10 | | mg/L | | | 10/23/15 09:03 | 1 |
| **Carbon Dioxide, Free** | **72** | | 2.0 | | mg/L | | | 10/22/15 14:17 | 1 |
| Chemical Oxygen Demand | ND | | 20 | | mg/L | | | 10/22/15 18:56 | 1 |

## Client Sample ID: PIT 3-1

**Lab Sample ID: 440-124839-2**

**Date Collected: 10/20/15 10:25**
**Date Received: 10/20/15 14:40**

**Matrix: Water**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.50 | | ug/L | | | 10/24/15 18:32 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.50 | | ug/L | | | 10/24/15 18:32 | 1 |
| Tetrachloroethene | ND | | 0.50 | | ug/L | | | 10/24/15 18:32 | 1 |
| Trichloroethene | ND | | 0.50 | | ug/L | | | 10/24/15 18:32 | 1 |
| Vinyl chloride | ND | | 0.50 | | ug/L | | | 10/24/15 18:32 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *116* | | *80 - 128* | | *10/24/15 18:32* | *1* |

## Client Sample ID: PIT 3-1

**Date Collected: 10/20/15 10:25**
**Date Received: 10/20/15 14:40**

## Lab Sample ID: 440-124839-2

**Matrix: Water**

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *104* | | *80 - 120* | | *10/24/15 18:32* | *1* |
| *Dibromofluoromethane (Surr)* | *117* | | *76 - 132* | | *10/24/15 18:32* | *1* |

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| **Chloride** | **19** | | 0.50 | mg/L | | | 10/20/15 19:56 | 1 |
| **Nitrate as N** | **0.66** | | 0.11 | mg/L | | | 10/20/15 19:56 | 1 |
| **Sulfate** | **61** | | 2.5 | mg/L | | | 10/20/15 20:13 | 5 |

### Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| **Boron** | **0.14** | | 0.050 | mg/L | | 10/23/15 11:41 | 10/25/15 14:36 | 1 |
| Cadmium | ND | | 0.0050 | mg/L | | 10/23/15 11:41 | 10/25/15 14:36 | 1 |
| Chromium | ND | | 0.0050 | mg/L | | 10/23/15 11:41 | 10/25/15 14:36 | 1 |
| Nickel | ND | | 0.010 | mg/L | | 10/23/15 11:41 | 10/25/15 14:36 | 1 |
| Lead | ND | | 0.0050 | mg/L | | 10/23/15 11:41 | 10/25/15 14:36 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| **Alkalinity as CaCO3** | **98** | | 4.0 | mg/L | | | 10/22/15 04:38 | 1 |
| **Bicarbonate Alkalinity as CaCO3** | **98** | | 4.0 | mg/L | | | 10/22/15 04:38 | 1 |
| Carbonate Alkalinity as CaCO3 | ND | | 4.0 | mg/L | | | 10/22/15 04:38 | 1 |
| Hydroxide Alkalinity as CaCO3 | ND | | 4.0 | mg/L | | | 10/22/15 04:38 | 1 |
| **Specific Conductance** | **370** | | 1.0 | umhos/cm | | | 10/23/15 09:03 | 1 |
| **Resistivity** | **2700** | | 1.0 | ohm cm | | | 10/23/15 09:03 | 1 |
| **Total Dissolved Solids** | **270** | | 10 | mg/L | | | 10/23/15 09:03 | 1 |
| Carbon Dioxide, Free | ND | | 2.0 | mg/L | | | 10/22/15 14:19 | 1 |
| **Chemical Oxygen Demand** | **120** | | 20 | mg/L | | | 10/21/15 19:06 | 1 |

## Client Sample ID: PIT 3-2

**Date Collected: 10/20/15 10:15**
**Date Received: 10/20/15 14:40**

## Lab Sample ID: 440-124839-3

**Matrix: Water**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.50 | ug/L | | | 10/24/15 19:00 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.50 | ug/L | | | 10/24/15 19:00 | 1 |
| Tetrachloroethene | ND | | 0.50 | ug/L | | | 10/24/15 19:00 | 1 |
| Trichloroethene | ND | | 0.50 | ug/L | | | 10/24/15 19:00 | 1 |
| Vinyl chloride | ND | | 0.50 | ug/L | | | 10/24/15 19:00 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *115* | | *80 - 128* | | *10/24/15 19:00* | *1* |
| *4-Bromofluorobenzene (Surr)* | *105* | | *80 - 120* | | *10/24/15 19:00* | *1* |
| *Dibromofluoromethane (Surr)* | *120* | | *76 - 132* | | *10/24/15 19:00* | *1* |

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| **Chloride** | **19** | | 0.50 | mg/L | | | 10/20/15 20:30 | 1 |
| **Nitrate as N** | **0.68** | | 0.11 | mg/L | | | 10/20/15 20:30 | 1 |

Client: United Rock Products Corp
Project/Site: Pit No. 3

TestAmerica Job ID: 440-124839-1

**Client Sample ID: PIT 3-2**
**Date Collected: 10/20/15 10:15**
**Date Received: 10/20/15 14:40**

**Lab Sample ID: 440-124839-3**
**Matrix: Water**

### Method: 300.0 - Anions, Ion Chromatography (Continued)

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Sulfate** | **60** | | 2.5 | | mg/L | | | 10/20/15 20:47 | 5 |

### Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Boron** | **0.13** | | 0.050 | | mg/L | | 10/23/15 11:41 | 10/25/15 14:39 | 1 |
| Cadmium | ND | | 0.0050 | | mg/L | | 10/23/15 11:41 | 10/25/15 14:39 | 1 |
| Chromium | ND | | 0.0050 | | mg/L | | 10/23/15 11:41 | 10/25/15 14:39 | 1 |
| Nickel | ND | | 0.010 | | mg/L | | 10/23/15 11:41 | 10/25/15 14:39 | 1 |
| Lead | ND | | 0.0050 | | mg/L | | 10/23/15 11:41 | 10/25/15 14:39 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Alkalinity as CaCO3** | **98** | | 4.0 | | mg/L | | | 10/22/15 04:45 | 1 |
| **Bicarbonate Alkalinity as CaCO3** | **98** | | 4.0 | | mg/L | | | 10/22/15 04:45 | 1 |
| Carbonate Alkalinity as CaCO3 | ND | | 4.0 | | mg/L | | | 10/22/15 04:45 | 1 |
| Hydroxide Alkalinity as CaCO3 | ND | | 4.0 | | mg/L | | | 10/22/15 04:45 | 1 |
| **Specific Conductance** | **370** | | 1.0 | | umhos/cm | | | 10/26/15 09:21 | 1 |
| **Resistivity** | **2700** | | 1.0 | | ohm cm | | | 10/26/15 09:21 | 1 |
| **Total Dissolved Solids** | **270** | | 10 | | mg/L | | | 10/23/15 09:03 | 1 |
| Carbon Dioxide, Free | ND | | 2.0 | | mg/L | | | 10/22/15 14:19 | 1 |
| **Chemical Oxygen Demand** | **23** | | 20 | | mg/L | | | 10/21/15 19:06 | 1 |

# Method Summary

Client: United Rock Products Corp
Project/Site: Pit No. 3

TestAmerica Job ID: 440-124839-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8260B | Volatile Organic Compounds (GC/MS) | SW846 | TAL IRV |
| 300.0 | Anions, Ion Chromatography | MCAWW | TAL IRV |
| 200.7 Rev 4.4 | Metals (ICP) | EPA | TAL IRV |
| SM 2320B | Alkalinity | SM | TAL IRV |
| SM 2510B | Conductivity, Specific Conductance | SM | TAL IRV |
| SM 2540C | Solids, Total Dissolved (TDS) | SM | TAL IRV |
| SM 4500 CO2 C | Free Carbon Dioxide | SM | TAL IRV |
| SM 5220D | COD | SM | TAL IRV |

**Protocol References:**

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

# Lab Chronicle

Client: United Rock Products Corp
Project/Site: Pit No. 3

TestAmerica Job ID: 440-124839-1

## Client Sample ID: IRW-B
**Date Collected: 10/20/15 08:40**
**Date Received: 10/20/15 14:40**

**Lab Sample ID: 440-124839-1**
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 10 mL | 10 mL | 289105 | 10/24/15 18:04 | TN | TAL IRV |
| Total/NA | Analysis | 300.0 | | 1 | 5 mL | | 288080 | 10/20/15 19:22 | NTN | TAL IRV |
| Total/NA | Analysis | 300.0 | | 1 | 5 mL | | 288081 | 10/20/15 19:22 | NTN | TAL IRV |
| Total/NA | Analysis | 300.0 | | 5 | 5 mL | | 288081 | 10/20/15 19:39 | NTN | TAL IRV |
| Total Recoverable | Prep | 200.2 | | | 25 mL | 25 mL | 288939 | 10/23/15 11:41 | GK | TAL IRV |
| Total Recoverable | Analysis | 200.7 Rev 4.4 | | 1 | 25 mL | 25 mL | 289227 | 10/25/15 14:34 | VS | TAL IRV |
| Total/NA | Analysis | SM 2320B | | 1 | | | 288546 | 10/22/15 04:26 | YZ | TAL IRV |
| Total/NA | Analysis | SM 2510B | | 1 | | | 289323 | 10/23/15 09:03 | XL | TAL IRV |
| Total/NA | Analysis | SM 2540C | | 1 | 100 mL | 100 mL | 288894 | 10/23/15 09:03 | XL | TAL IRV |
| Total/NA | Analysis | SM 4500 CO2 C | | 1 | | | 288677 | 10/22/15 14:17 | SN | TAL IRV |
| Total/NA | Analysis | SM 5220D | | 1 | 0.625 mL | 2.5 mL | 288771 | 10/22/15 18:56 | MSM | TAL IRV |

## Client Sample ID: PIT 3-1
**Date Collected: 10/20/15 10:25**
**Date Received: 10/20/15 14:40**

**Lab Sample ID: 440-124839-2**
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 10 mL | 10 mL | 289105 | 10/24/15 18:32 | TN | TAL IRV |
| Total/NA | Analysis | 300.0 | | 1 | 5 mL | | 288080 | 10/20/15 19:56 | NTN | TAL IRV |
| Total/NA | Analysis | 300.0 | | 1 | 5 mL | | 288081 | 10/20/15 19:56 | NTN | TAL IRV |
| Total/NA | Analysis | 300.0 | | 5 | 5 mL | | 288081 | 10/20/15 20:13 | NTN | TAL IRV |
| Total Recoverable | Prep | 200.2 | | | 25 mL | 25 mL | 288939 | 10/23/15 11:41 | GK | TAL IRV |
| Total Recoverable | Analysis | 200.7 Rev 4.4 | | 1 | 25 mL | 25 mL | 289227 | 10/25/15 14:36 | VS | TAL IRV |
| Total/NA | Analysis | SM 2320B | | 1 | | | 288546 | 10/22/15 04:38 | YZ | TAL IRV |
| Total/NA | Analysis | SM 2510B | | 1 | | | 289323 | 10/23/15 09:03 | XL | TAL IRV |
| Total/NA | Analysis | SM 2540C | | 1 | 100 mL | 100 mL | 288894 | 10/23/15 09:03 | XL | TAL IRV |
| Total/NA | Analysis | SM 4500 CO2 C | | 1 | | | 288678 | 10/22/15 14:19 | SN | TAL IRV |
| Total/NA | Analysis | SM 5220D | | 1 | 0.625 mL | 2.5 mL | 288479 | 10/21/15 19:06 | MSM | TAL IRV |

## Client Sample ID: PIT 3-2
**Date Collected: 10/20/15 10:15**
**Date Received: 10/20/15 14:40**

**Lab Sample ID: 440-124839-3**
**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 10 mL | 10 mL | 289105 | 10/24/15 19:00 | TN | TAL IRV |
| Total/NA | Analysis | 300.0 | | 1 | 5 mL | | 288080 | 10/20/15 20:30 | NTN | TAL IRV |
| Total/NA | Analysis | 300.0 | | 1 | 5 mL | | 288081 | 10/20/15 20:30 | NTN | TAL IRV |
| Total/NA | Analysis | 300.0 | | 5 | 5 mL | | 288081 | 10/20/15 20:47 | NTN | TAL IRV |
| Total Recoverable | Prep | 200.2 | | | 25 mL | 25 mL | 288939 | 10/23/15 11:41 | GK | TAL IRV |
| Total Recoverable | Analysis | 200.7 Rev 4.4 | | 1 | 25 mL | 25 mL | 289227 | 10/25/15 14:39 | VS | TAL IRV |
| Total/NA | Analysis | SM 2320B | | 1 | | | 288546 | 10/22/15 04:45 | YZ | TAL IRV |

# Lab Chronicle

Client: United Rock Products Corp
Project/Site: Pit No. 3

TestAmerica Job ID: 440-124839-1

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | SM 2510B | | 1 | | | 289323 | 10/26/15 09:21 | XL | TAL IRV |
| Total/NA | Analysis | SM 2540C | | 1 | 100 mL | 100 mL | 288894 | 10/23/15 09:03 | XL | TAL IRV |
| Total/NA | Analysis | SM 4500 CO2 C | | 1 | | | 288678 | 10/22/15 14:19 | SN | TAL IRV |
| Total/NA | Analysis | SM 5220D | | 1 | 0.625 mL | 2.5 mL | 288479 | 10/21/15 19:06 | MSM | TAL IRV |

**Laboratory References:**

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 440-289105/5**
**Matrix: Water**
**Analysis Batch: 289105**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.50 | | ug/L | | | 10/24/15 11:07 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.50 | | ug/L | | | 10/24/15 11:07 | 1 |
| Tetrachloroethene | ND | | 0.50 | | ug/L | | | 10/24/15 11:07 | 1 |
| Trichloroethene | ND | | 0.50 | | ug/L | | | 10/24/15 11:07 | 1 |
| Vinyl chloride | ND | | 0.50 | | ug/L | | | 10/24/15 11:07 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *115* | | *80 - 128* | | *10/24/15 11:07* | *1* |
| *4-Bromofluorobenzene (Surr)* | *104* | | *80 - 120* | | *10/24/15 11:07* | *1* |
| *Dibromofluoromethane (Surr)* | *114* | | *76 - 132* | | *10/24/15 11:07* | *1* |

**Lab Sample ID: LCS 440-289105/6**
**Matrix: Water**
**Analysis Batch: 289105**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 25.0 | 28.2 | | ug/L | | 113 | 68 - 130 | | |
| Methyl-t-Butyl Ether (MTBE) | | | 25.0 | 28.0 | | ug/L | | 112 | 63 - 131 | | |
| Tetrachloroethene | | | 25.0 | 27.4 | | ug/L | | 110 | 70 - 130 | | |
| Trichloroethene | | | 25.0 | 27.9 | | ug/L | | 112 | 70 - 130 | | |
| Vinyl chloride | | | 25.0 | 20.9 | | ug/L | | 84 | 59 - 133 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *114* | | *80 - 128* |
| *4-Bromofluorobenzene (Surr)* | *104* | | *80 - 120* |
| *Dibromofluoromethane (Surr)* | *114* | | *76 - 132* |

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 440-288080/4**
**Matrix: Water**
**Analysis Batch: 288080**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Nitrate as N | ND | | 0.11 | | mg/L | | | 10/20/15 16:19 | 1 |

**Lab Sample ID: LCS 440-288080/6**
**Matrix: Water**
**Analysis Batch: 288080**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrate as N | | | 1.13 | 1.18 | | mg/L | | 104 | 90 - 110 | | |

## Method: 300.0 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: MB 440-288081/4**
**Matrix: Water**
**Analysis Batch: 288081**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | ND | | 0.50 | | mg/L | | | 10/20/15 16:19 | 1 |
| Sulfate | ND | | 0.50 | | mg/L | | | 10/20/15 16:19 | 1 |

**Lab Sample ID: LCS 440-288081/6**
**Matrix: Water**
**Analysis Batch: 288081**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | | | 5.00 | 4.52 | | mg/L | | 90 | 90 - 110 | | |
| Sulfate | | | 5.00 | 5.05 | | mg/L | | 101 | 90 - 110 | | |

## Method: 200.7 Rev 4.4 - Metals (ICP)

**Lab Sample ID: MB 440-288939/1-A**
**Matrix: Water**
**Analysis Batch: 289376**

**Client Sample ID: Method Blank**
**Prep Type: Total Recoverable**
**Prep Batch: 288939**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Boron | ND | | 0.050 | | mg/L | | 10/23/15 11:41 | 10/26/15 09:16 | 1 |
| Cadmium | ND | | 0.0050 | | mg/L | | 10/23/15 11:41 | 10/26/15 09:16 | 1 |
| Chromium | ND | | 0.0050 | | mg/L | | 10/23/15 11:41 | 10/26/15 09:16 | 1 |
| Nickel | ND | | 0.010 | | mg/L | | 10/23/15 11:41 | 10/26/15 09:16 | 1 |
| Lead | ND | | 0.0050 | | mg/L | | 10/23/15 11:41 | 10/26/15 09:16 | 1 |

**Lab Sample ID: LCS 440-288939/2-A**
**Matrix: Water**
**Analysis Batch: 289376**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total Recoverable**
**Prep Batch: 288939**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Boron | | | 0.500 | 0.481 | | mg/L | | 96 | 85 - 115 | | |
| Cadmium | | | 0.500 | 0.478 | | mg/L | | 96 | 85 - 115 | | |
| Chromium | | | 0.500 | 0.482 | | mg/L | | 96 | 85 - 115 | | |
| Nickel | | | 0.500 | 0.500 | | mg/L | | 100 | 85 - 115 | | |
| Lead | | | 0.500 | 0.470 | | mg/L | | 94 | 85 - 115 | | |

## Method: SM 2320B - Alkalinity

**Lab Sample ID: MB 440-288546/3**
**Matrix: Water**
**Analysis Batch: 288546**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Alkalinity as CaCO3 | ND | | 4.0 | | mg/L | | | 10/22/15 04:19 | 1 |
| Bicarbonate Alkalinity as CaCO3 | ND | | 4.0 | | mg/L | | | 10/22/15 04:19 | 1 |
| Carbonate Alkalinity as CaCO3 | ND | | 4.0 | | mg/L | | | 10/22/15 04:19 | 1 |
| Hydroxide Alkalinity as CaCO3 | ND | | 4.0 | | mg/L | | | 10/22/15 04:19 | 1 |

## Method: SM 2320B - Alkalinity (Continued)

**Lab Sample ID: LCS 440-288546/2**
**Matrix: Water**
**Analysis Batch: 288546**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Alkalinity as CaCO3 | | | 85.9 | 80.4 | | mg/L | | 94 | 80 - 120 | | |

**Lab Sample ID: 440-124839-1 DU**
**Matrix: Water**
**Analysis Batch: 288546**

**Client Sample ID: IRW-B**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Alkalinity as CaCO3 | 120 | | | 112 | | mg/L | | | | 6 | 20 |
| Bicarbonate Alkalinity as CaCO3 | 120 | | | 112 | | mg/L | | | | 6 | 20 |
| Carbonate Alkalinity as CaCO3 | ND | | | ND | | mg/L | | | | NC | 20 |
| Hydroxide Alkalinity as CaCO3 | ND | | | ND | | mg/L | | | | NC | 20 |

## Method: SM 2510B - Conductivity, Specific Conductance

**Lab Sample ID: MB 440-289323/3**
**Matrix: Water**
**Analysis Batch: 289323**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance | ND | | 1.0 | | umhos/cm | | | 10/23/15 09:03 | 1 |

**Lab Sample ID: LCS 440-289323/4**
**Matrix: Water**
**Analysis Batch: 289323**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance | | | 462 | 456 | | umhos/cm | | 99 | 90 - 110 | | |

## Method: SM 2540C - Solids, Total Dissolved (TDS)

**Lab Sample ID: MB 440-288894/1**
**Matrix: Water**
**Analysis Batch: 288894**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | ND | | 10 | | mg/L | | | 10/23/15 09:03 | 1 |

**Lab Sample ID: LCS 440-288894/2**
**Matrix: Water**
**Analysis Batch: 288894**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | | | 1000 | 1010 | | mg/L | | 101 | 90 - 110 | | |

## Method: SM 4500 CO2 C - Free Carbon Dioxide

**Lab Sample ID: MB 440-288677/1**
**Matrix: Water**
**Analysis Batch: 288677**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbon Dioxide, Free | ND | | 2.0 | | mg/L | | | 10/22/15 14:17 | 1 |

**Lab Sample ID: MB 440-288678/1**
**Matrix: Water**
**Analysis Batch: 288678**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbon Dioxide, Free | ND | | 2.0 | | mg/L | | | 10/22/15 14:19 | 1 |

**Lab Sample ID: 440-124839-2 DU**
**Matrix: Water**
**Analysis Batch: 288678**

**Client Sample ID: PIT 3-1**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon Dioxide, Free | ND | | | ND | | mg/L | | | | NC | 20 |

## Method: SM 5220D - COD

**Lab Sample ID: MB 440-288479/9**
**Matrix: Water**
**Analysis Batch: 288479**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | ND | | 20 | | mg/L | | | 10/21/15 19:05 | 1 |

**Lab Sample ID: LCS 440-288479/10**
**Matrix: Water**
**Analysis Batch: 288479**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | | | 200 | 214 | | mg/L | | 107 | 90 - 110 | | |

**Lab Sample ID: MB 440-288771/9**
**Matrix: Water**
**Analysis Batch: 288771**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | ND | | 20 | | mg/L | | | 10/22/15 18:56 | 1 |

**Lab Sample ID: LCS 440-288771/10**
**Matrix: Water**
**Analysis Batch: 288771**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | | | 200 | 207 | | mg/L | | 104 | 90 - 110 | | |

## Method: SM 5220D - COD (Continued)

**Lab Sample ID: 440-124839-1 MS**
**Matrix: Water**
**Analysis Batch: 288771**

**Client Sample ID: IRW-B**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | ND | | 200 | 187 | | mg/L | | 93 | 70 - 120 | | |

**Lab Sample ID: 440-124839-1 MSD**
**Matrix: Water**
**Analysis Batch: 288771**

**Client Sample ID: IRW-B**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | ND | | 200 | 193 | | mg/L | | 97 | 70 - 120 | 3 | 15 |

# QC Association Summary

Client: United Rock Products Corp
Project/Site: Pit No. 3

TestAmerica Job ID: 440-124839-1

## GC/MS VOA

### Analysis Batch: 289105

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-124839-1 | IRW-B | Total/NA | Water | 8260B | |
| 440-124839-2 | PIT 3-1 | Total/NA | Water | 8260B | |
| 440-124839-3 | PIT 3-2 | Total/NA | Water | 8260B | |
| LCS 440-289105/6 | Lab Control Sample | Total/NA | Water | 8260B | |
| MB 440-289105/5 | Method Blank | Total/NA | Water | 8260B | |

## HPLC/IC

### Analysis Batch: 288080

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-124839-1 | IRW-B | Total/NA | Water | 300.0 | |
| 440-124839-2 | PIT 3-1 | Total/NA | Water | 300.0 | |
| 440-124839-3 | PIT 3-2 | Total/NA | Water | 300.0 | |
| LCS 440-288080/6 | Lab Control Sample | Total/NA | Water | 300.0 | |
| MB 440-288080/4 | Method Blank | Total/NA | Water | 300.0 | |

### Analysis Batch: 288081

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-124839-1 | IRW-B | Total/NA | Water | 300.0 | |
| 440-124839-1 | IRW-B | Total/NA | Water | 300.0 | |
| 440-124839-2 | PIT 3-1 | Total/NA | Water | 300.0 | |
| 440-124839-2 | PIT 3-1 | Total/NA | Water | 300.0 | |
| 440-124839-3 | PIT 3-2 | Total/NA | Water | 300.0 | |
| 440-124839-3 | PIT 3-2 | Total/NA | Water | 300.0 | |
| LCS 440-288081/6 | Lab Control Sample | Total/NA | Water | 300.0 | |
| MB 440-288081/4 | Method Blank | Total/NA | Water | 300.0 | |

## Metals

### Prep Batch: 288939

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-124839-1 | IRW-B | Total Recoverable | Water | 200.2 | |
| 440-124839-2 | PIT 3-1 | Total Recoverable | Water | 200.2 | |
| 440-124839-3 | PIT 3-2 | Total Recoverable | Water | 200.2 | |
| LCS 440-288939/2-A | Lab Control Sample | Total Recoverable | Water | 200.2 | |
| MB 440-288939/1-A | Method Blank | Total Recoverable | Water | 200.2 | |

### Analysis Batch: 289227

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-124839-1 | IRW-B | Total Recoverable | Water | 200.7 Rev 4.4 | 288939 |
| 440-124839-2 | PIT 3-1 | Total Recoverable | Water | 200.7 Rev 4.4 | 288939 |
| 440-124839-3 | PIT 3-2 | Total Recoverable | Water | 200.7 Rev 4.4 | 288939 |

### Analysis Batch: 289376

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| LCS 440-288939/2-A | Lab Control Sample | Total Recoverable | Water | 200.7 Rev 4.4 | 288939 |
| MB 440-288939/1-A | Method Blank | Total Recoverable | Water | 200.7 Rev 4.4 | 288939 |

## General Chemistry

### Analysis Batch: 288479

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-124839-2 | PIT 3-1 | Total/NA | Water | SM 5220D | |
| 440-124839-3 | PIT 3-2 | Total/NA | Water | SM 5220D | |
| LCS 440-288479/10 | Lab Control Sample | Total/NA | Water | SM 5220D | |
| MB 440-288479/9 | Method Blank | Total/NA | Water | SM 5220D | |

### Analysis Batch: 288546

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-124839-1 | IRW-B | Total/NA | Water | SM 2320B | |
| 440-124839-1 DU | IRW-B | Total/NA | Water | SM 2320B | |
| 440-124839-2 | PIT 3-1 | Total/NA | Water | SM 2320B | |
| 440-124839-3 | PIT 3-2 | Total/NA | Water | SM 2320B | |
| LCS 440-288546/2 | Lab Control Sample | Total/NA | Water | SM 2320B | |
| MB 440-288546/3 | Method Blank | Total/NA | Water | SM 2320B | |

### Analysis Batch: 288677

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-124839-1 | IRW-B | Total/NA | Water | SM 4500 CO2 C | |
| MB 440-288677/1 | Method Blank | Total/NA | Water | SM 4500 CO2 C | |

### Analysis Batch: 288678

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-124839-2 | PIT 3-1 | Total/NA | Water | SM 4500 CO2 C | |
| 440-124839-2 DU | PIT 3-1 | Total/NA | Water | SM 4500 CO2 C | |
| 440-124839-3 | PIT 3-2 | Total/NA | Water | SM 4500 CO2 C | |
| MB 440-288678/1 | Method Blank | Total/NA | Water | SM 4500 CO2 C | |

### Analysis Batch: 288771

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-124839-1 | IRW-B | Total/NA | Water | SM 5220D | |
| 440-124839-1 MS | IRW-B | Total/NA | Water | SM 5220D | |
| 440-124839-1 MSD | IRW-B | Total/NA | Water | SM 5220D | |
| LCS 440-288771/10 | Lab Control Sample | Total/NA | Water | SM 5220D | |
| MB 440-288771/9 | Method Blank | Total/NA | Water | SM 5220D | |

### Analysis Batch: 288894

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-124839-1 | IRW-B | Total/NA | Water | SM 2540C | |
| 440-124839-2 | PIT 3-1 | Total/NA | Water | SM 2540C | |
| 440-124839-3 | PIT 3-2 | Total/NA | Water | SM 2540C | |
| LCS 440-288894/2 | Lab Control Sample | Total/NA | Water | SM 2540C | |
| MB 440-288894/1 | Method Blank | Total/NA | Water | SM 2540C | |

### Analysis Batch: 289323

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-124839-1 | IRW-B | Total/NA | Water | SM 2510B | |
| 440-124839-2 | PIT 3-1 | Total/NA | Water | SM 2510B | |
| 440-124839-3 | PIT 3-2 | Total/NA | Water | SM 2510B | |
| LCS 440-289323/4 | Lab Control Sample | Total/NA | Water | SM 2510B | |
| MB 440-289323/3 | Method Blank | Total/NA | Water | SM 2510B | |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Certification Summary

Client: United Rock Products Corp
Project/Site: Pit No. 3

TestAmerica Job ID: 440-124839-1

## Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska | State Program | 10 | CA01531 | 06-30-16 |
| California | LA Cty Sanitation Districts | 9 | 10256 | 01-31-16 * |
| California | State Program | 9 | 2706 | 06-30-16 |
| Guam | State Program | 9 | Cert. No. 12.002r | 01-23-16 |
| Hawaii | State Program | 9 | N/A | 01-29-16 |
| Kansas | NELAP Secondary AB | 7 | E-10420 | 07-31-16 |
| Nevada | State Program | 9 | CA015312007A | 07-31-16 * |
| New Mexico | State Program | 6 | N/A | 01-29-16 |
| Northern Mariana Islands | State Program | 9 | MP0002 | 01-29-16 |
| Oregon | NELAP | 10 | 4005 | 01-29-16 |
| USDA | Federal | | P330-09-00080 | 07-08-18 |

* Certification renewal pending - certification considered valid.

**Irvine**
17461 Derian Ave
Suite 100
Irvine, CA 92614
Tel: (949) 261-1022 / Fax: (949) 260-3297

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**TestAmerica Laboratories, Inc.**

| Client Contact | Project Manager: Ken Barker | Site Contact: Dan Chambers | Date: | COC No: |
|---|---|---|---|---|
| United Rock Products | Tel/Fax: | Lab Contact: D. Roberts | Carrier: Client | ____ of ____ COCs |
| 135 S. State College Blvd. | Analysis Turnaround Time | | | Job No. |
| Brea, CA, 92821 | Work Days (W) ____ | | | |
| Phone: 626-523-1319 | TAT if different from Below ____ | | | SDG No. |
| FAX | ☒ Standard | | | |
| Project Name: Pit No. 3 | ☐ 5 days | | | |
| Site: | ☐ 2 days | | | |
| P.O.#: | ☐ 1 day | | | |

| Sample Identification | Sample Date | Sample Time | Sample Type | Matrix | # of Cont. | Filtered Sample | 8260 LL PCE, Benzene, PCE, TEC, MT | 8260 LL Vinyl Chloride | 300 Nitrate, Chloride and Sulfate | 200.7 Cd, Cr, B, Pb and Ni | TDS 2540C | COD 5220 | Conductivity 2510B | Alkalinity 2320B | Free Carbon Dioxide 4500 CO2 C | Sample Specific Notes: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| IRW-B | 10/20/15 | 8:40 | GRAB | W | 6 | N | X | X | X | X | X | X | X | X | X | |
| Pit 3-1 | ↓ | 10:25 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | |
| Pit 3-2 | ↓ | 10:15 | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | |




**Preservation Used:** 1= Ice, 2= HCl; 3= $H_2SO_4$; 4=$HNO_3$; 5=NaOH; 6= Other ____

*Possible Hazard Identification*
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

*Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)*
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months

**Special Instructions/QC Requirements & Comments:** Pit 3 Analytes

| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
|---|---|---|---|---|---|
| [signature] | CES, INC. | 10/20/15 14:40 | | | |
| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
| | | | | | |
| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
| | | | [signature] | TAT | 10/20/15 14:40 |

2.7 / 3.6 IR-77

# Login Sample Receipt Checklist

Client: United Rock Products Corp

Job Number: 440-124839-1

**Login Number: 124839**
**List Number: 1**
**Creator: Chavez, Yonny 1**

**List Source: TestAmerica Irvine**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# APPENDIX C

# GROUNDWATER DATABASE

## Pit #3 UNITED ROCK PRODUCTS DATABASE

| WATER LEVEL | | GROUNDWATER PARAMETERS | | | | | GENERAL MINERAL (mg/l) | | | | TRACE ELEMENTS | | | | GENERAL CHEMISTRY | | | | | | | ORGANICS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | | See attached organics portion - Note (1) | | | | |
| Sample Point | Date | pH | T(°F) | EC (µmhos/cm) | $CO_2$ (mg/l) | Alk (mg/l) | $SO_4$ | Cl | $NO_3$ | TDS | Ni (µg/l) | Pb (µg/l) | Cd (µg/l) | Cr (µg/l) | COD (mg/l) | OH (mg/l) | TH (mg/l) | $HCO_3$ (mg/l) | $CO_3$ (mg/l) | B (mg/l) | | Benzene (µg/l) | MTBE (µg/l) | TCE (µg/l) | Tetra chloro ethene (µg/l) | Vinyl Chroide (µg/l) |
| IRW-3A | 3-Sep-14 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | | NA | NA | NA | NA | NA |
| IRW-3B | 3-Sep-14 | 7.9 | 81.6 | 397 | 748 | 130 | 41.6 | 15.9 | 0.85 | 210 | <10 | <5 | <5 | <10 | 4 | <5 | 157 | 159 | <5 | 0.204 | | <1 | <1 | <5 | <5 | <5 |
| SW-1 | 3-Sep-14 | 8.42 | 83.84 | 348 | <1 | 76 | 64.5 | 15 | 0.44 | 148 | <10 | <5 | <5 | <10 | 4 | <5 | 144 | 88 | <5 | 0.147 | | <1 | <1 | <5 | <5 | <5 |
| Pit 3-1 | 29-Oct-14 | 8.08 | 74.5 | 388 | <1 | 102 | 63.8 | 16 | 0.88 | 184 | <20 | 7 | <5 | <10 | <4 | <5 | 163 | 125 | <5 | 0.098 | | <1 | <1 | <5 | <5 | <5 |
| Pit 3-2 | 29-Oct-14 | 7.88 | 80.1 | 391 | <1 | 102 | 63.6 | 15.9 | 0.74 | 258 | <20 | 7 | <5 | <10 | <4 | <5 | 159 | 125 | <5 | 0.204 | | <1 | <1 | <5 | <5 | <5 |
| IRW-B | 29-Oct-14 | 8.42 | 83.84 | 348 | <1 | 76 | 39.3 | 15.8 | 1.61 | 200 | <10 | <5 | <5 | <10 | <4 | <5 | 174 | 152 | 44 | 0.082 | | <1 | <1 | <5 | <5 | <5 |
| Pit 3-1 | 25-Feb-15 | 7.33 | 67.82 | 400 | 2 | 107 | 66 | 16 | 0.51 | 205 | <10 | <10 | <10 | <10 | <5 | -- | 160 | 107 | <1 | 0.128 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-2 | 25-Feb-15 | 7.34 | 68.18 | 400 | 1.7 | 104 | 66 | 0.51 | 0.51 | 310 | <10 | <10 | <10 | <10 | <5 | -- | 150 | 104 | <1 | 0.131 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| IRW-B | 25-Feb-15 | 7.05 | 62.6 | 390 | 850 | 107 | 48 | 14 | 0.3 | 250 | <10 | <10 | <10 | <10 | <5 | -- | 150 | 107 | <1 | 0.112 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-1 | 10-Apr-15 | 7.62 | 22.6 | 410 | 1.2 | 110 | -- | -- | -- | 305 | <10 | <10 | <10 | <10 | <5 | -- | 150 | 110 | <1 | 0.089 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-2 | 10-Apr-15 | 7.98 | 22.1 | 410 | 1.2 | 109 | -- | -- | -- | 315 | <10 | <10 | <10 | <10 | <5 | -- | 160 | 109 | <1 | 0.0826 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| IRW-3B | 10-Apr-15 | 5.37 | 19.9 | 380 | 610 | 106 | -- | -- | -- | 300 | <10 | <10 | <10 | <10 | <5 | -- | 150 | 106 | <1 | 0.0713 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-1 | 7-Jul-15 | 8.42 | 79.52 | 400 | <2 | 97 | 54 | 18 | 2.7 | 300 | <10 | <5 | <5 | <5 | <20 | <1.4 | 170 | 120 | <2.4 | 0.083 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-2 | 7-Jul-15 | 8.45 | 79.7 | 400 | <2 | 98 | 56 | 19 | 2.8 | 300 | <10 | <5 | <5 | <5 | <20 | <1.4 | 170 | 120 | <2.4 | 0.084 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| IRW-3B | 7-Jul-15 | 5.66 | 72.14 | 390 | 180 | 110 | 45 | 19 | 2.2 | 290 | <10 | <5 | <5 | <5 | <20 | <1.4 | 170 | 130 | <2.4 | 0.067 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-1 | 20-Oct-15 | 7.44 | 78.8 | 370 | <2 | 98 | 61 | 19 | 0.66 | 270 | <10 | <5 | <5 | <5 | 120 | <4 | -- | 98 | <4 | 0.14 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-2 | 20-Oct-15 | 7.03 | 77.2 | 370 | <2 | 98 | 60 | 19 | 0.68 | 270 | <10 | <5 | <5 | <5 | 23 | <4 | -- | 98 | <4 | 0.13 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| IRW-3B | 20-Oct-15 | 7.48 | 71.6 | 370 | 72 | 120 | 49 | 16 | 0.56 | 270 | <10 | <5 | <5 | <5 | <20 | <4 | -- | 120 | <4 | 0.12 | | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

-- Information not available

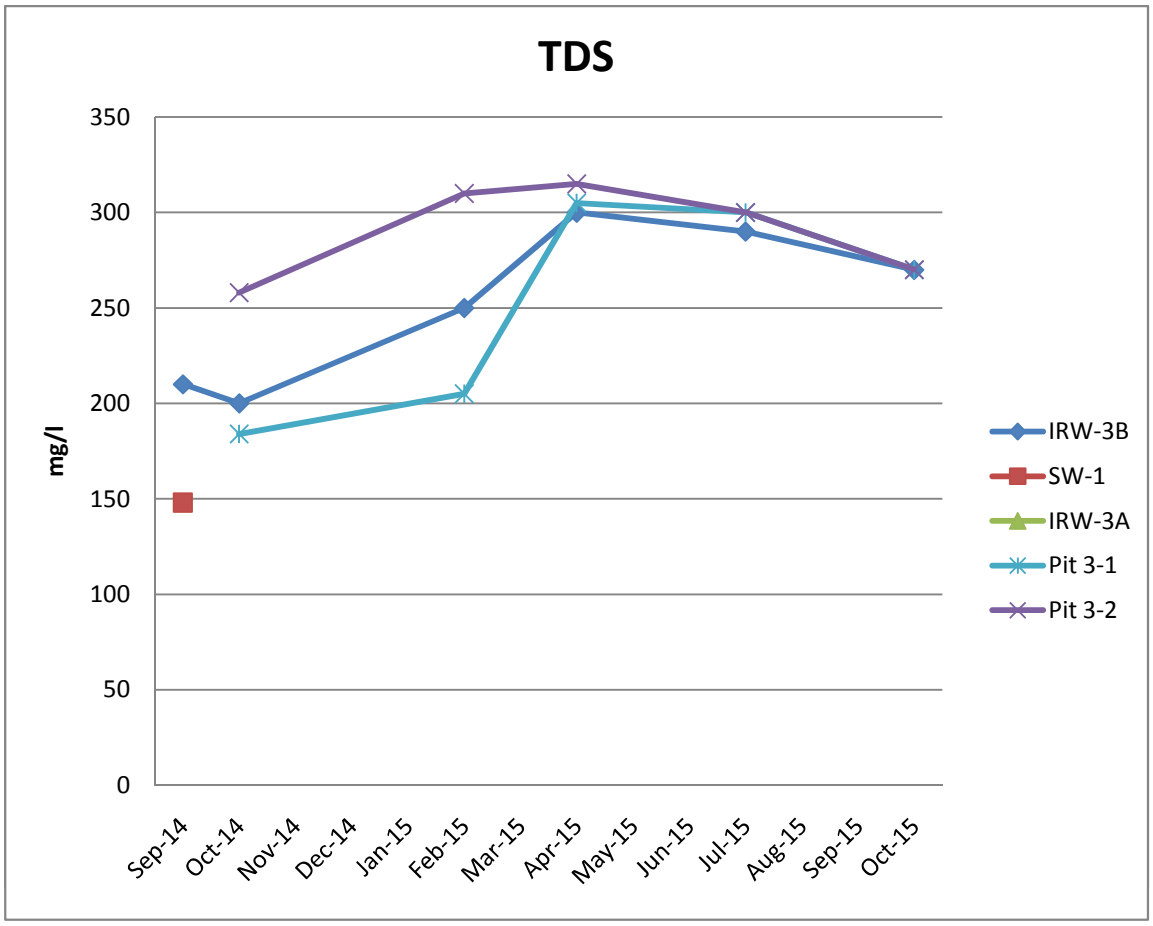
(1) The WDR's required analysis for EPA App. I and II parameters for the first sampling event. Analysis of EPA App. I and II parameters shall be reported in the fourth quarter 2014 report.

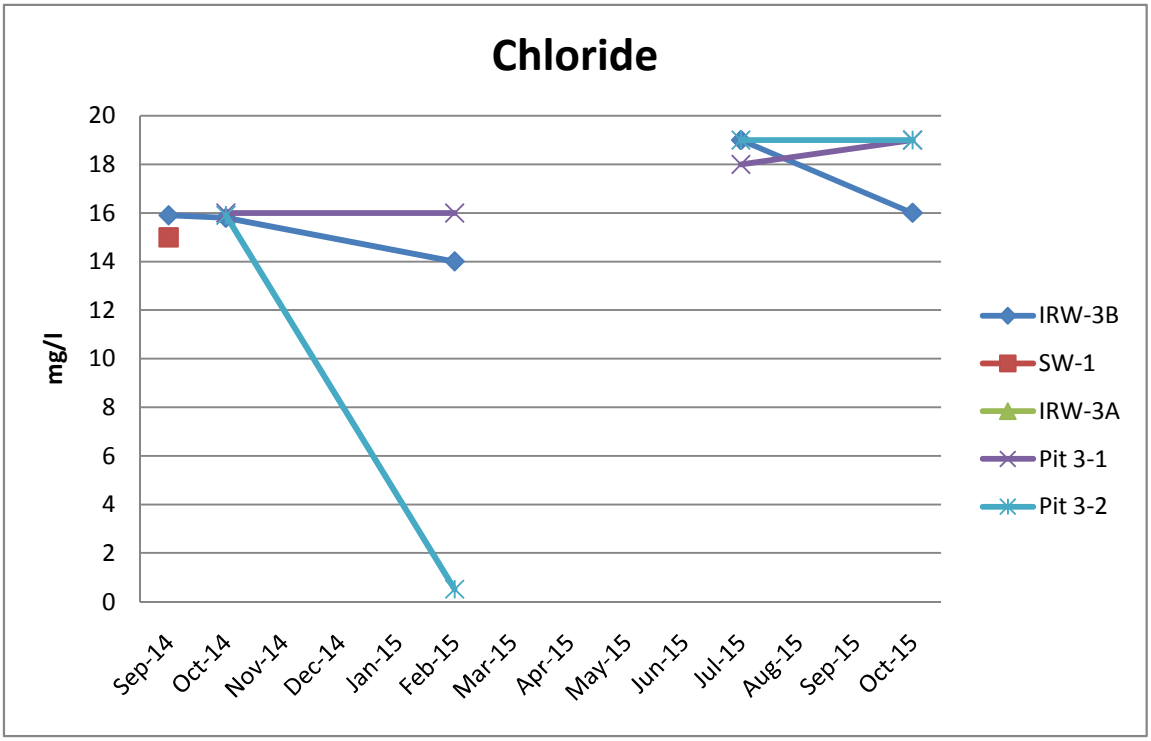
(2) Samples not collected in well

# APPENDIX D

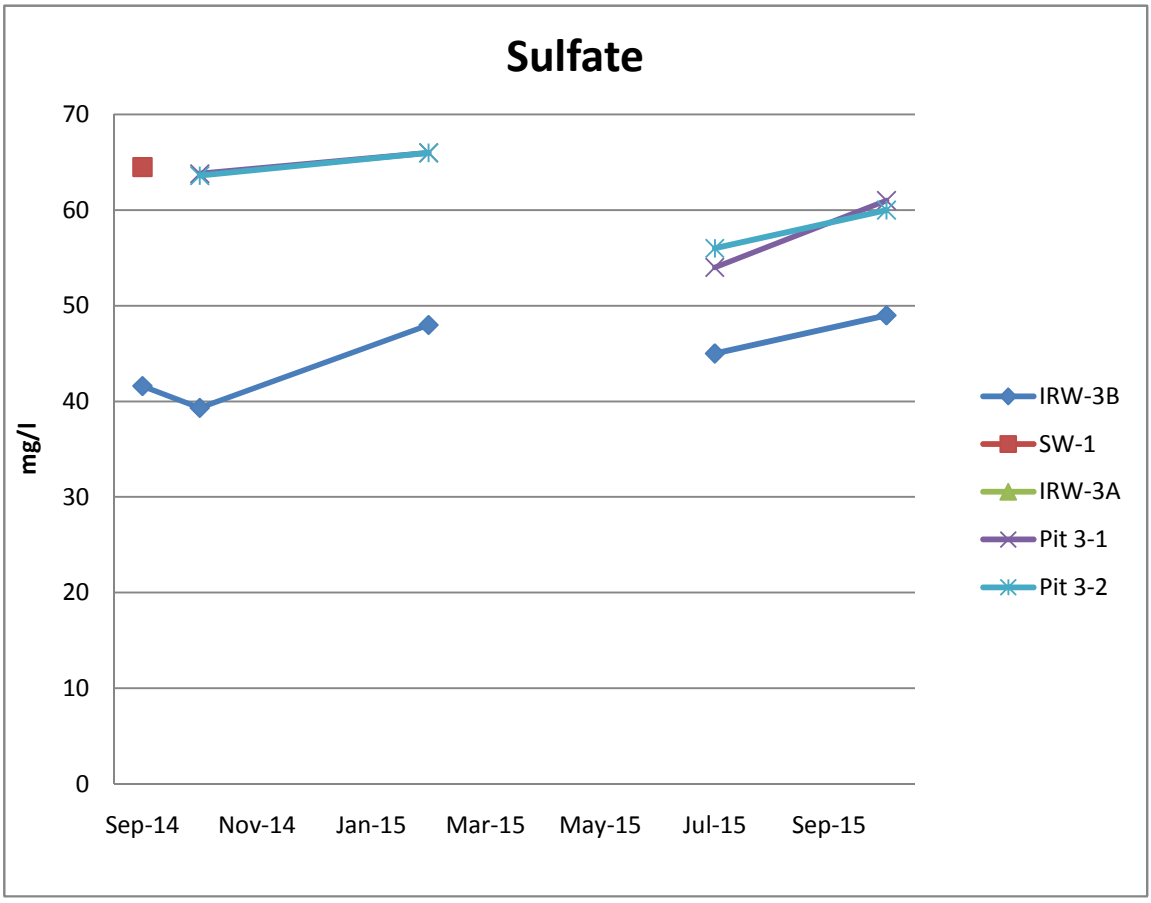
# GRAPHICAL SUMMARIES

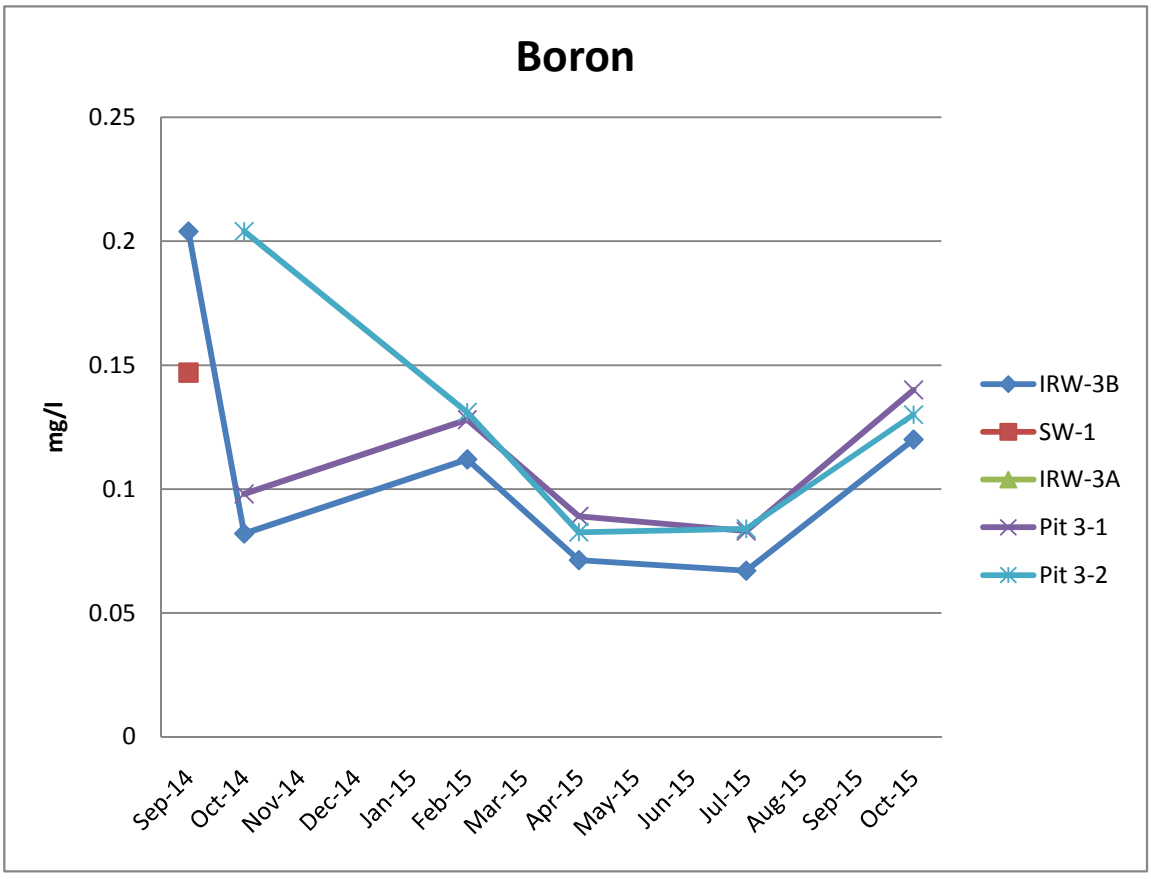
## Historical Graphical Summaries



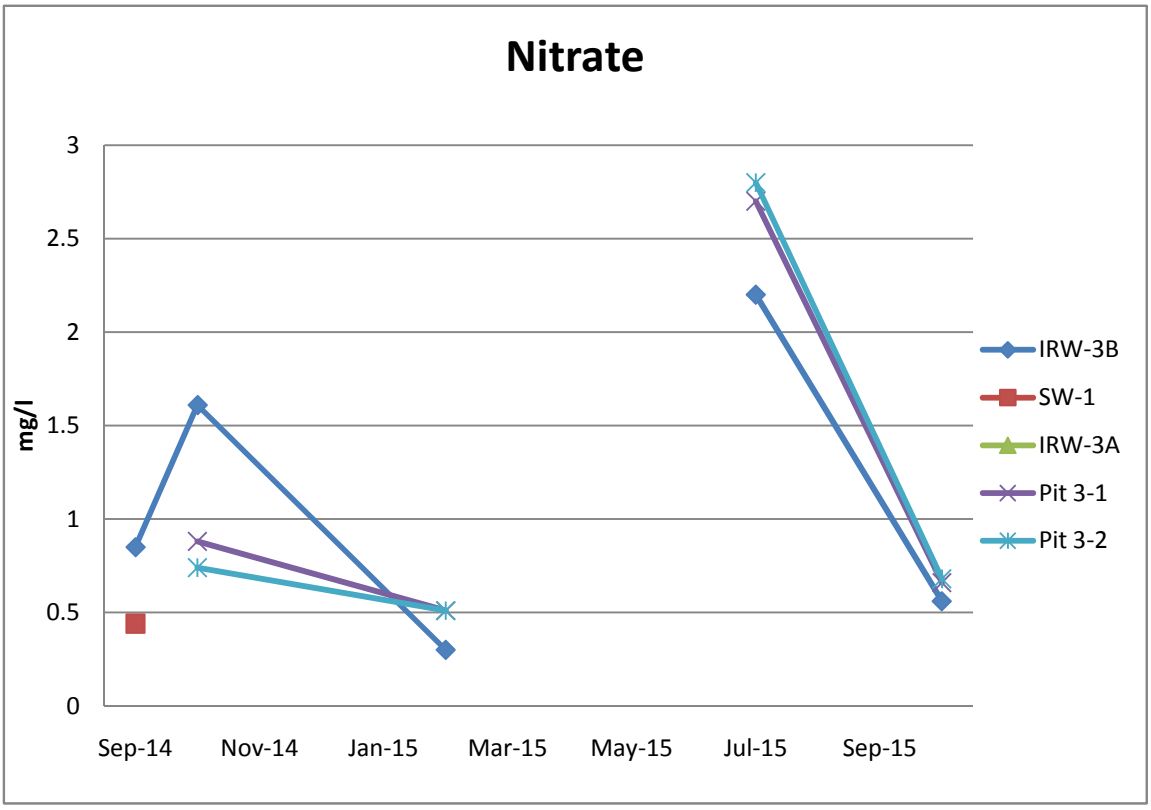



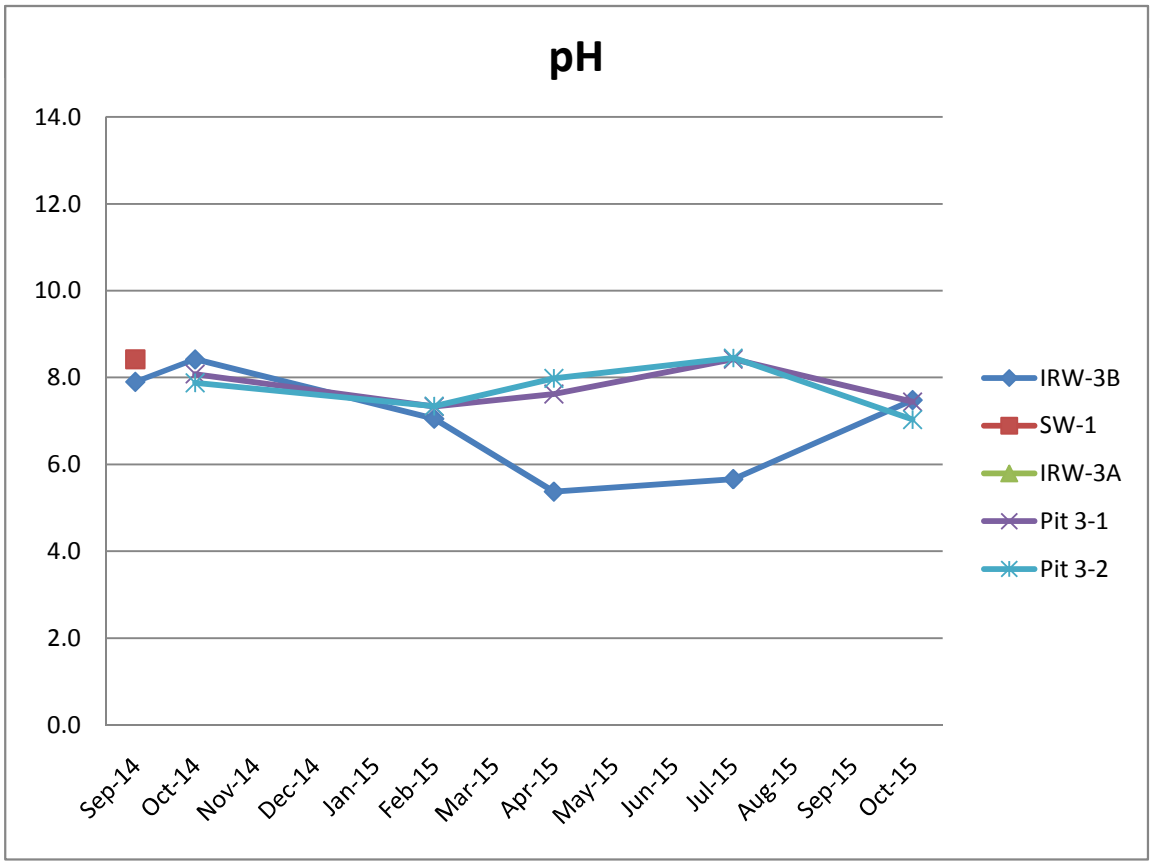
## Historical Graphical Summaries



## Historical Graphical Summaries



# APPENDIX E

# LANDFILL WASTE DISPOSAL

135 S. State College Blvd. Suite 400 Brea, CA 92821 (714) 578-9600

January 6, 2016

California Regional
Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Information Technology Unit

Subject: Waste Discharge Requirements- United Rock Pit 3
1137 Meridian Street
Irwindale, CA 91706
File No. 72-124, Order No.01-131, CI 5801

Pursuant to the General Provisions for Reporting (Section A) of the Monitoring and Reporting Program (File CI 5801) and Section III of the Reporting Conditions, we are respectively submitting our quarterly report.

Please be advised that there was no discharge placed in Pit #3 during the 4th Quarter of calendar year 2015.

The estimated life of the site is 82 years 9 months.

No purged ground water from monitoring wells is used at the site.

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the 6st day of January in Brea, California.

Very truly yours,

/Ken Barker

Ken Barker
Environmental Manager

Cc: Scott Taylor, Alta Environmental
William Tam, City of Irwindale Engineer

July 15, 2016

Mr. Samuel Unger, P.E., Executive Officer
Information Technology Unit
Los Angeles Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, California 90013

**Re: First Semi-Annual 2016 Waste Disposal and Groundwater Monitoring Report, United Rock Products – Pit #3 [RWQCB File No. 72-124, Order No. 01-131, Monitoring and Reporting Program No. CI 5801]**

Dear Mr. Unger:

The hydrogeologic information, results of groundwater testing, conclusions and recommendations in this report have been reviewed by and prepared under the supervision of a California-registered professional geologist. This certification of conditions comprises a declaration of his professional judgment. It does not constitute a warranty or guarantee.

Sincerely,
Amec Foster Wheeler Environment & Infrastructure, Inc.

Eileen Bailiff, PG, CEG
Senior Associate Geologist

PROFESSIONAL GEOLOGIST
EILEEN BAILIFF
No. 2252
Exp. 7/31/17
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

K:\united rock products_2014\WDR\1st Semi-Annual 2016\2016_07_15 Certification Letter Pit 3.docx

Amec Foster Wheeler Environment & Infrastructure, Inc.
121 Innovation Drive, Suite 200
Irvine, CA
USA 92617-3094
Tel (949) 642-0245
Fax (949) 642-4474
www.amecfw.com

Agency:

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**
**LOS ANGELES REGION**

320 West 4th Street, Suite 200
Los Angeles, CA 90013-2343

# Waste Disposal And Groundwater Monitoring Report

## First Semi-Annual 2016

United Rock Products – Pit #3
Irwindale, California
RWQCB File No. 72-124
Under Monitoring & Reporting Program No. CI 5801

**Prepared For:**

United Rock Products Corporation
1137 Meridian Street
Irwindale, CA 91706

Date: June 14, 2016

TAYLOR ENVIRONMENTAL SERVICES, INC.

5500 Bolsa Avenue, Suite 215
Huntington Beach, CA 92649
(714) 587-2595 Fax: (714) 587-2598

CONTACT: Scott Taylor

Reference: UNTRP-16-2009

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## 1.0 INTRODUCTION

Taylor Environmental Services, Inc. was retained by United Rock Products Corporation (URP) to conduct groundwater monitoring and reporting for URP's Pit #3. The purpose of this report is to provide an evaluation of the semi-annual groundwater monitoring results and report the estimated average monthly quantities (in cubic yards) and types of materials deposited.Average monthly quantities and type of materials deposited arereported by URP in Appendix G.

## 2.0 FACILITY DESCRIPTION

URP (Discharger) owns and operates URP's Pit #3 (the Site), a construction aggregate mining pit at 1137 Meridian Street, in Irwindale, California. The site is bounded on the north by Galen St., on the south by Meridian St. and on the east by Buena Vista Street (Figure 1). The center of the site is located at approximately 34°06'56" N and 117°59'23"W.

The Site includes approximately 110 acres of land and has been mined for sand and gravel by the Discharger and its predecessors since the early 1910s. Ground surface elevation around the pit varies from 406 feet above mean sea level (amsl) at the west edge of the pit to 431 feet amsl at the east edge of the pit.

The majority of the pit bottom has exposed groundwater resulting from the mining operation. The City of Irwindale approved conditional use permit CUP 6-04 in 2004. The CUP permits URP to mine the pit to a maximum depth of 440 feet bgs or until December 31, 2037, whichever comes first. The Site also has a reclamation plan approved in 2004 that states the excavation will be used as a groundwater recharge basin once the material has been depleted. Alternatively, the reclamation plan calls for the pit to be filled or partially filled.

The proposed discharge methods to the pit include backfilling the waste material from the Rock Plant to Pit #3 by means of sluicing and trucking. The sluicing process involves mixing the waste materials (primarily clay and silt) with groundwater that has been used in the mining process and pumping the mixture to various locations within the pit. Water is used in the mining process to wash fine material (clay and silt) off the coarse material (gravel and sand). No chemicals are added in either the mining or the sluicing processes.

Order No. 01-131 are the waste discharge requirements for the disposal of inert wastes at the Site during mine reclamation.

## 3.0 CURRENT MONITORING REQUIREMENTS

The monitoring is done to satisfy the Monitoring and Reporting Program (MRP) requirements of Order 01-131, File 72-124 and CI 5801, which was adopted by the California Regional Water Quality Control Board – Los Angeles Region (LARWQCB) on September 21, 2001. The MRP requires quarterly groundwater and waste disposal reporting during the first year and semi-annually thereafter. In the event sampling is not performed during those months, substitute sampling shall occur as soon as possible after, and the reason for delay shall be given. The sampling schedule will continue to be semi-annual regardless of the substitute sampling. In addition, each monitoring report submitted to the LARWQCB shall include a tabular list of the estimated average quantities of materials deposited at the site each month and the methods of disposal. This report contains the summary of both requirements.

### 3.1. Chronology of Order 01-131, File 72-124 and CI 5801

URP and its predecessors have excavated and processed aggregate from this site since as early as 1910. The majority of the pit has groundwater exposed by mining operations. URP purchased the property and operation in 1988.

The LARWQB adopted Waste Discharge Requirements (WDRs) in 1973 for the previous owner, Livingston-Graham, to discharge inert materials to Pit #3. In 1988 the pit was purchased by United Rock Products and the pit is now known as URP Pit #3. New WDRs were adopted in 2001 and the previous order from 1973 was rescinded.

In May 2002, Justice & Associates submitted a Technical Report on behalf of URP to meet the 2001 WDR monitoring requirements. The technical report was approved in July 2002. A Revised Technical Report dated July 2014 was prepared to amend the 2002 report. Changes in the 2014 revised technical report included; revised sampling protocols for down-gradient wells; increasing the depth of up-gradient and down-gradient wells; and a modification to up-gradient and down-gradient monitoring well design.

## 4.0 GROUNDWATER MONITORING

### 4.1. First Semi-Annual 2016

Pursuant to the WDRs for Pit #3 (Order 01-131, File 72-124 and CI 5801), water level measurements are to be collected from monitoring wells IRW-1 located at the Rock Plant and IRW-1A and IRW-1B located at Pit #1, and Wells IRW-3A and IRW-3B located at Pit #3 (Figure 1). This well network is to be used to estimate the groundwater hydraulic gradient in the vicinity of Pit #3.

Water depth in IRW-1 could not be collected due to the sounding tube being blocked. Currently, a plan is being put together to address this issue. It is anticipated that IRW-1 will be able to be sampled for the next monitoring report which will be in October of 2016.

Water was detected only in IRW-3B. No groundwater was detected in Wells IRW-3A, IRW-1A, and IRW-1B. The absence of water in these wells is likely due to the lowering of the water table due to the drought conditions in Southern California. To complete the groundwater gradient analysis, measurable groundwater needs to be gauged from at least 3 wells to allow triangulation for the gradient calculation. Therefore, the groundwater gradient was not determined and the groundwater velocity was not calculated.

Table 1 presents the first semi-annual 2016 water level data.

**Table 1**
**Groundwater Monitoring Program for First Semi-Annual 2016**

| Well # | General Well Location from Landfill | Date Measured | Depth to Groundwater (feet) | Total Well Depth (feet bgs) | Groundwater Elevation (feet relative to MSL) | Reference Point Elevation (feet above MSL) |
|---|---|---|---|---|---|---|
| IRW-1 | Cross-Gradient | 04/19/16 | N/A | 300.00 | N/A | 405.60 |
| IRW-1A | Up-gradient | 04/19/16 | DRY | 196.60 | DRY | 380.94 |
| IRW-1B | Cross-Gradient | 04/19/16 | DRY | 195.30 | DRY | 380.03 |
| IRW-3A | Up-gradient | 04/19/16 | DRY | 249.60 | DRY | 437.27 |
| IRW-3B | Downgradient | 04/19/16 | 228.56 | 250.10 | 178.19 | 406.75 |

N/A = Not Accessible

4.2. Groundwater Velocity and Direction

The groundwater contours for the first semi-annual 2016 were not calculated due to insufficient data discussed above. During the next monitoring event, the wells will continue to be measured and the groundwater gradient and velocity will be calculated if the groundwater is present and can be measured in at least three of the monitoring wells.

4.3. Monitoring Methods

The monitoring stations for the semi-annual report consist of wells IRW-1, IRW-1A, IRW-1B, IRW-3A and IRW-3B as defined in the Revised Technical Report. Based on the reported groundwater gradient in the upper San Gabriel Basin, it has been determined that these wells will provide required information for compliance with MRP CI-5801.

Chambers Environmental performed the measurements and sampling for IRW-1, IRW-1A, IRW-1B, IRW-3A, and IRW-3B. The monitoring methods used were in accordance with EPA guidelines set forth in the Groundwater Sampling Protocol (Refer to Appendix A). Prior to conducting field measurements, the groundwater level probe was calibrated using a fiberglass tape measure to ensure accuracy of measurements and a triple rinse is performed prior to and after each measurement to minimize cross-contamination.

## 5.0 GROUNDWATER SAMPLING

The 2014 Revised Technical Report requires that samples be collected from IRW-3A, the up-gradient well at the northeast corner of Pit #3. However, because no water was detected in the well, no water samples were collected from IRW-3A. Samples were collected from IRW-3B at the southwest corner of Pit #3. Based on the regional south to southwest flow direction of the groundwater in the vicinity of the Pit #3, and the condition that only native geological material washed with local water will be sluiced back into Pit #3, the approved sampling network for Pit #3 also includes collecting groundwater samples from the standing water in the south end of the pit.

For each monitoring period, one grab groundwater sample is to be collected from wells IRW-3A and IRW-3B. Additionally, two grab groundwater samples are to be collected from the standing water in the pit. The standing water monitoring will occur as long as there is standing water in the pit. There was an insufficient groundwater in IRW-3A to collect samples for analysis. The low groundwater level is likely an effect of the significant drought conditions in Southern California. Therefore, one grab sample was collected from IRW-3B and two grab samples were collected from the standing exposed groundwater in the pit. Samples for IRW-3B, Pit 3-1 and Pit 3-2 have been included within this report to assess compliance with Water Quality Protection Standards.

Grab samples of the standing water in the pit were collected using a stainless steel bailer from a depth of 10 to 15 feet below water surface. Groundwater samples from IRW-3B were collected using a bladder pump as described in Appendix A. The first year of sampling was analyzed for the monitoring parameters listed on US EPA Appendix I and II Constituents.

The groundwater samples were analyzed by TestAmerica, which is a State of California Department of Health Services accredited laboratory. This laboratory performed the chemical analyses in accordance with the current EPA guidelines and procedures. Appendix B contains the analytical results and chain-of-custody record for this semi-annual report.

5.1. Groundwater Evaluation

A groundwater database presenting all analytical results is located in Appendix C. Table 2 represents a comparative analysis between the analytical results and the water protection standards established for URP Pit #3 as identified in the WDRs.

**Table 2**
**Monitoring Wells Reults**
**For**
**Water quality Protection Standards**
**First Semi-Annual 2016 Sampling Event**

| Constituent | Water Quality Protection Standards | Monitoring Station | | |
|---|---|---|---|---|
| | | Pit 3-1 | Pit 3-2 | IRW-3B |
| Date Sampled | | 4/19/2016 | 4/19/2016 | 4/19/2016 |
| Total Dissolved Solids (TDS) | 450 mg/l | 220 | 220 | 260 |
| Chloride (Cl) | 100 mg/l | 18.0 | 19.0 | 19.0 |
| Sulfate ($SO_4$) | 100 mg/l | 54 | 55 | 81 |
| Nitrate (as ($NO_3$) | 45 mg/l | 0.35 | 0.21 | 0.61 |
| Boron | 0.5 mg/l | 0.092 | 0.092 | 0.08 |
| pH | 6.5 – 8.5 | 7.05* | 7.32* | 6.79* |

*Results from field readings

The results for samples collected in April 2016 indicate that standing groundwater in Pit #3 and groundwater collected from the downgradient well IRW-3B currently meets Water Quality Protection Standards for all constituents. The standards are established for this facility by Order No. 01-131 and are based on the water quality objectives for the western area of the main San Gabriel Basin contained in the LARWQCB Basin Plan dated June 13, 1994.

If there is sufficient groundwater, samples will be collected from the monitoring wells during the second semi-annual monitoring event. If well IRW-3A remains dry, alternative sampling options shall be discussed with the LARWQCB.

5.2. Purged Groundwater

Following receipt of the analytical results, purged groundwater is used at the Site for dust suppression (within 20-foot radius of each well). No purged ground water was used at the site during the first semi-annual 2016 event.

5.3. Sluice Material and Waste Disposal

During January through June 2016 reporting period, no material was placed in Pit #3.

The Land fill waste disposal information is included in Appendix G

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

TES, Inc. conducted a review of the groundwater analytical data for the first semi-annual 2016 report. Based on field observations and analytical results, it appears that deposited waste and current waste disposal practices are not adversely impacting local groundwater quality.

Based on the data collected as required by the sampling and monitoring plan detailed in the WDRs, none of the sample results exceeded the Water Quality Protection Standards listed in Table 2. However, monitoring well IRW-3A was gauged dry and therefore not sampled. In addition, insufficient data was available to determine groundwater gradient and velocity.

Providing sufficient water is available in the wells during the next sampling event, the depth to water will be measured and groundwater samples collected from all three wells.

We appreciate the opportunity to provide groundwater monitoring and reporting services. If you have any questions or comments concerning this report, please contact Mr. Scott Taylor with TES at (714) 587-2595.

## 7.0 REFERENCES

Justice & Associates, Sully-Miller Irwindale Facility Phase I Environmental Site Assessment, 9-97

Justice & Associates, United Rock Products, Pit #3 & #3 Final Dredge Operation

Spill Prevention Control and Countermeasure Plan, 5-98

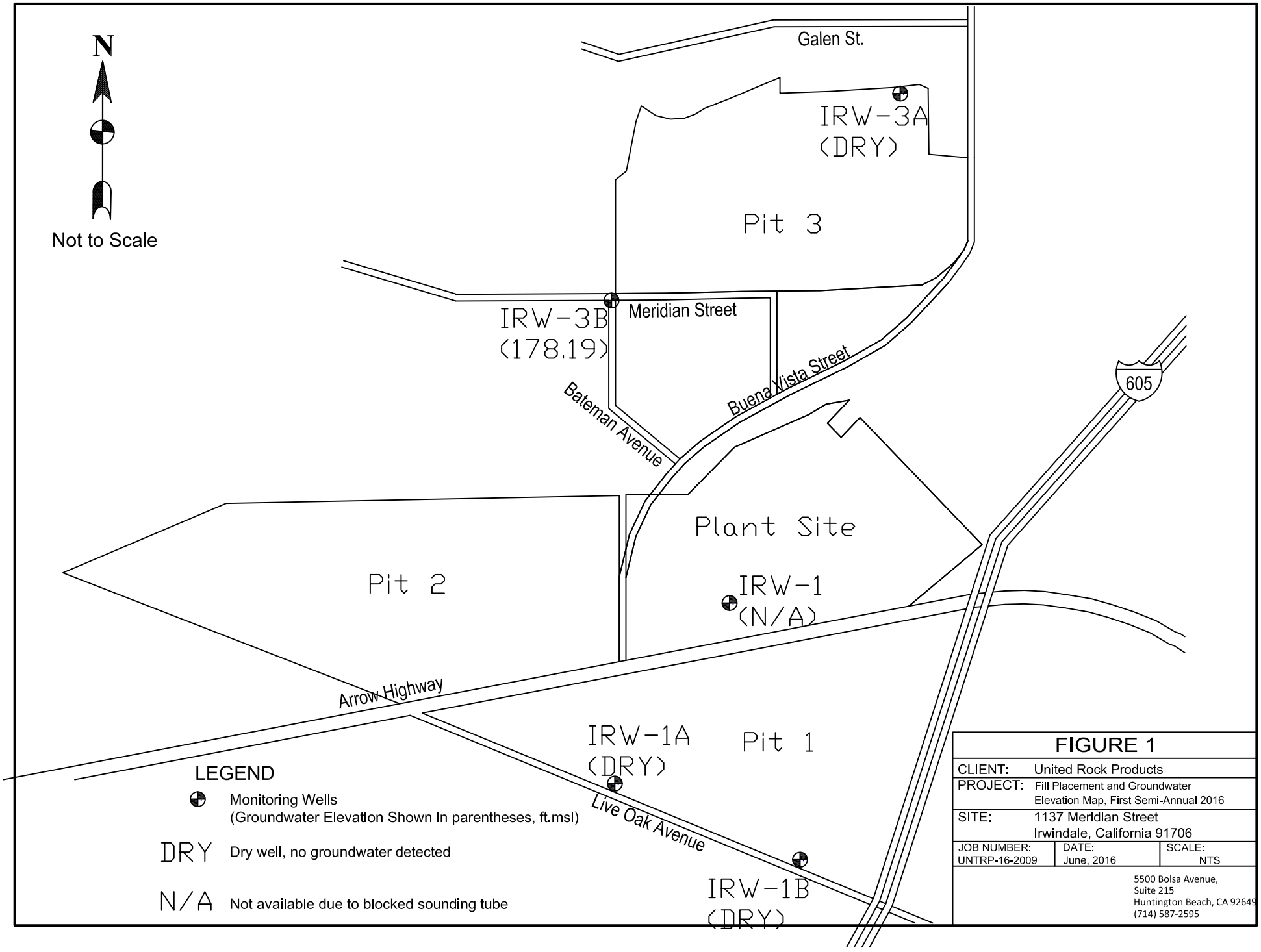
Luhdorff & Scalmanini, Supplemental Groundwater Investigation and Mitigation Monitoring Program, July 2001

Waste Discharge Requirements – United Rock Products – Pit #3 Irwindale, CA (File No. 72-124; Order No. 01-131, CI 5801)

Surface Waters-Field Operations Manual for Lakes USEPA Office of Research and Development EPA/620/R-97/001/June 1997

Technical Guidance Manual for Hydrogeologic Investigations and Groundwater Monitoring, State of Ohio EPA,
Water Quality Control Plan, Los Angeles Region, LARWQCB, 1994

# FIGURES


N
Not to Scale
Galen St.
IRW-3A
(DRY)
Pit 3
IRW-3B
(178.19)
Meridian Street
Bateman Avenue
Buena Vista Street
605
Plant Site
Pit 2
IRW-1
(N/A)
Arrow Highway
IRW-1A
(DRY)
Pit 1
Live Oak Avenue
IRW-1B
(DRY)
LEGEND
Monitoring Wells
(Groundwater Elevation Shown in parentheses, ft.msl)
DRY Dry well, no groundwater detected
N/A Not available due to blocked sounding tube
FIGURE 1
CLIENT: United Rock Products
PROJECT: Fill Placement and Groundwater Elevation Map, First Semi-Annual 2016
SITE: 1137 Meridian Street Irwindale, California 91706
JOB NUMBER: UNTRP-16-2009
DATE: June, 2016
SCALE: NTS
5500 Bolsa Avenue, Suite 215
Huntington Beach, CA 92649
(714) 587-2595

# APPENDIX A

# GROUNDWATER SAMPLING PROTOCOL

# STANDARD FIELD PROCEDURES FOR MONITORING AND SAMPLING GROUNDWATER MONITORING WELLS AT URP Pit #3

## SEALED WELLS

Well IRW-1 at the site is sealed and has a down-hole dedicated surface mounted turbine pump for discharging groundwater. Sealed wells must be monitored, purged and sampled using the existing dedicated pump. IRW-1 also has a sounding tube to collect ground water levels and a dedicated tubing for sampeling at the well. Purge volume is estimated using historical depth-to-water and depth-to-bottom information. Once water is obtained from the discharge of the dedicated pumps, the procedures for recording water quality readings and for packaging groundwater samples for laboratory analysis are the same as for open wells described below.

## OPEN WELLS

The following standard operating procedures apply to wells that are accessible using non-dedicated down-hole monitoring and sampling equipment. Open wells at the site include: IRW-1A, IRW-1B, IRW-3A, and IRW-3B.

## DECONTAMINATION OF MONITORING AND SAMPLING EQUIPMENT

All down-hole monitoring and sampling equipment is decontaminated using a non-phosphate detergent solution prior to placing equipment into each well. A triple-rinse procedure is used to clean the equipment. The general triple-rinse decontamination procedure is as follows:

- Wash equipment in the first rinse containing detergent and clean tap water;
- Rinse thoroughly in the second rinse containing clean tap water;
- Rinse in the third rinse containing distilled or deionized water; and
- Allow equipment to air dry prior to next use.

## WELL GAUGING

All wells are gauged using an ground water level probe capable of recording depth-to-water to the nearest 0.01 foot. Depth-to-water is measured to a survey mark on the top of each well casing. In the absence of a survey mark, the well is gauged from the north side of the top-of-casing. Each depth-to-water measurement is performed twice to assure accuracy. After measuring the depth-to-water, the ground water level probe is lowered to the bottom of the well to obtain a depth-to-bottom reading for each well. All measurements are recorded on standard field forms. After each measurement the tape is triple rinsed to avoid cross contamination.

.

## WELL PURGING

A pneumatic pump with a disposable Teflon bladder is used to purge the well. Using a dedicated tubing, the well is purged of water prior to collecting water samples for laboratory analysis. Water volumes removed from each well are recorded on standard field forms. After the tubing is purged, field water quality parameters are recorded (see below). Upon completion of purging, the water level is allowed to recover to at least 80% of its pre-purge volume prior to sampling. For slow-recharging wells, water samples are collected after two hours if 80% recovery is not achieved.

Purged groundwater is placed into DOT-approved steel 55-gallon drums, appropriately labeled, and temporarily stored on site pending analytical results. If the groundwater analytical results show that the groundwater in a specific well is sufficiently clean, purged groundwater from the well is spread on the ground in the vicinity of the well. If the groundwater is known to contain constituents above State action levels, the drums are taken for off-site disposal by a licensed waste hauler to a State-licensed water recycling facility.

## WATER QUALITY MEASUREMENTS DURING PURGING

After purging each casing volume of water from each well, field readings are taken of water quality parameters. Horiba U-22 is used to record the temperature, electrical conductivity (EC), pH, oxygen reduction potential (ORP), dissolved oxygen (DO), and turbidity of the groundwater. At least two of three of those parameters must stabilize to within 10% between the last two readings before a water sample is collected. Micropurging is being done using dedicated tubing and a pneumatic pump with a disposable bladder. All field readings are recorded on standard field forms.

## WATER SAMPLE COLLECTION

Dedicated tubing is used to collect samples the well and a pneumatic pump with a disposable bladder. Each disposable bladder is discarded after use in one well. Water from the bladder is placed into laboratory-supplied sample containers containing appropriate preservatives for the requested analytic. The bottles are filled, capped and placed in a cooler on ice. All samples collected for laboratory analysis are transported in the chilled cooler to a State-certified laboratory following standard chain-of-custody procedures.

## EXPOSED GROUNDWATER GRAB SAMPLES

A Discrete grab sample shall be collected from the exposed groundwater in the pit at a depth of 10 to 15 feet below water surface using a stainless steel bailer from the surface. During the life of the WDRs, the shape and size of the lake will change. Consequently, we are not recommending specific points, but will keep the points near the southwest shoreline far enough away from the shore to test the full water column and as far away from each separate point as possible.

# APPENDIX B

# ANALYTICAL RESULTS / CHAMBERS ENVIRONMENTAL FIELD LOGS AND CHAIN-OF-CUSTODY FORMS

Project Name: United Rock Products

Date: 4-19-16

**Water Level Data Sheet**

Project Number: _____

| Well ID | Time | DTW | Ref Pt. | ~ Elev. | Well TD | | Comments: |
|---|---|---|---|---|---|---|---|
| Yard Well | 11:30 | N/A | 405.6 | | | | (IRW-1) BLOCKED SOUNDING TUBE. |
| IRW-1A | 13:20 | DRY | 380.94 | | 195 | | (Pit-1) |
| IRW-1B | 13:30 | DRY | 380.03 | | 195 | | (Pit 1) |
| IRW-A | 7:30 | DRY | – | – | 249.6 | | (Pit 3) |
| IRW-B | 8:10 | 228.56 | – | – | 250.1 | | (Pit 3) |

Ref Pt = Reference Point
DTW = Depth to Water
TD = Total Depth
Elev. = Elevation

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: DWC

## *Chambers Environmental Services, Inc*
## Sampling Data Sheet

Date: 4-19-16

Well ID: IRW-13

**Purge Data**

| (Variable) Time | 0.2 C Temp. | 3-5% E.C.(uS) | 0.2 u pH | 20mv ORP | 0.2mg/L DO | 10% Turbidity | ML Volume | DTW | Notes |
|---|---|---|---|---|---|---|---|---|---|
| Start: 8:31 | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | 228.56 | |
| 9:08 | 23.3 | 775.2 | 7.07 | 60 | 5.87 | 8.51 | 500 | 228.60 | |
| 9:12 | 23.2 | 516.4 | 6.97 | 72 | 5.57 | 11.78 | 900 | 228.62 | |
| 9:15 | 23.1 | 510.6 | 6.80 | 79 | 5.40 | 11.90 | 1200 | 228.62 | |
| 9:18 | 23.0 | 509.2 | 6.79 | 81 | 5.39 | 11.91 | 1500 | 228.62 | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| Stop: 9:45 | | | | | | | | | |
| Rate: (ML/Min.) | ~100 | | | | | | | | |

**Well Data**

| | |
|---|---|
| Bore OD: | 10" |
| Casing ID: | 4" |
| **Well TD:** | 250.1 |
| **D.T.W.:** | 228.56 |
| Ft./ Water: | |

Special Notes for This Well:

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

Purge Pump: BLADDER
Pump Set Time: 8:00
Pump/Inlet Depth (BGS): 248'

Decon:
Triple-Rinse

Total Vol. Purged 1500
Final Temp.: 23.0
Final EC: 509.2
Final pH: 6.79
Final ORP: 81
Final DO: 5.39
Draw Down: 0.06

Sample Start: 9:20
Sample Stop: 9:45
Analyses: VARIOUS
Sample Container: 8 (VARIOUS

Sample ID: /
(If different from above)
DTW @ Sample: 228.62

**Methods:** 1=3 BV sample after 80%.
2= 1 BV and monitor parameters each 0.5 BV.
3=Low-flow.
4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: DWC

## *Chambers Environmental Services, Inc*
## Sampling Data Sheet

Date: 4/19/16

~~Well~~ ID: PIT 3-1

**Purge Data**

| (Variable) | 0.2 C | 3-5% | 0.2 u | 20mv | 0.2mg/L | 10% | ML | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | Temp. | E.C.(uS) | pH | ORP | DO | Turbidity | Volume | DTW | Notes |
| Start: | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | | |
| 10:20 | 25.5 | 729.6 | 7.05 | 27 | - | - | - | - | |
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| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

Purge Pump: _____
Pump Set Time: _____
Pump/Inlet Depth (BGS): _____

Decon:
Triple-Rinse

Total Vol. Purged _____
Final Temp.: _____
Final EC: _____
Final pH: _____
Final ORP: _____
Final DO: _____
Draw Down: _____

Sample Start: 10:20
Sample Stop: _____
Analyses: Sample Container:

Sample ID: _____
(If different from above)
DTW @ Sample: _____

**Well Data**
Bore OD:
Casing ID:
**Well TD:**
**D.T.W.:**
Ft./ Water:

Special Notes for This Well:

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

**Methods:** 1=3 BV sample after 80%.
2= 1 BV and monitor parameters each 0.5 BV.
3=Low-flow.
4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: DWC

## *Chambers Environmental Services, Inc*
## Sampling Data Sheet

Date: 04/19/16

~~Well~~ ID: PIT 3-2

**Purge Data**

| (Variable) | 0.2 C | 3-5% | 0.2 u | 20mv | 0.2mg/L | 10% | ML | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | Temp. | E.C.(uS) | pH | ORP | DO | Turbidity | Volume | DTW | Notes |
| Start: | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | | |
| 10:41 | 25.0 | 462.2 | 7.32 | 14 | - | - | - | - | |
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| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

Purge Pump: _____
Pump Set Time: _____
Pump/Inlet Depth (BGS): _____

Decon:
Triple-Rinse

Total Vol. Purged _____
Final Temp.: _____
Final EC: _____
Final pH: _____
Final ORP: _____
Final DO: _____
Draw Down: _____

Sample Start: 10:41
Sample Stop: _____
Analyses: Sample Container:

Sample ID: _____
(If different from above)
DTW @ Sample: _____

**Well Data**
Bore OD:
Casing ID:
**Well TD:**
**D.T.W.:**
Ft./ Water:

Special Notes for This Well:

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

**Methods:** 1=3 BV sample after 80%.
2= 1 BV and monitor parameters each 0.5 BV.
3=Low-flow.
4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: DWC

## *Chambers Environmental Services, Inc*
## Sampling Data Sheet

Date: 04/19/16

~~Well~~ ID: PIT 2-1

**Purge Data**

| (Variable) | 0.2 C | 3-5% | 0.2 u | 20mv | 0.2mg/L | 10% | ML | | |
|---|---|---|---|---|---|---|---|---|---|
| Time | Temp. | E.C.(uS) | pH | ORP | DO | Turbidity | Volume | DTW | Notes |
| Start: | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | | |
| 12:30 | 26.5 | 288.9 | 7.32 | 533 | | | | | |
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| | | | | | | | | | |
| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

Purge Pump: _____
Pump Set Time: _____
Pump/Inlet Depth (BGS): _____

Decon:
Triple-Rinse

Total Vol. Purged _____
Final Temp.: _____
Final EC: _____
Final pH: _____
Final ORP: _____
Final DO: _____
Draw Down: _____

Sample Start: 12:30
Sample Stop: _____
Analyses: Sample Container:

Sample ID: _____
(If different from above)
DTW @ Sample: _____

**Well Data**
Bore OD:
Casing ID:
**Well TD:**
**D.T.W.:**
Ft./ Water:

Special Notes for This Well:

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

**Methods:** 1=3 BV sample after 80%.
2= 1 BV and monitor parameters each 0.5 BV.
3=Low-flow.
4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: DWC

## *Chambers Environmental Services, Inc*
## Sampling Data Sheet

Date: 4/19/16

Well ID: PIT 2-2

**Purge Data**

| (Variable) Time | 0.2 C Temp. | 3-5% E.C.(uS) | 0.2 u pH | 20mv ORP | 0.2mg/L DO | 10% Turbidity | ML Volume | DTW | Notes |
|---|---|---|---|---|---|---|---|---|---|
| Start: | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | | |
| 12:50 | 26.6 | 293.8 | 7.28 | 526 | | | | | |
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| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

**Well Data**
Bore OD:
Casing ID:
**Well TD:**
**D.T.W.:**
Ft./ Water:

Special Notes for This Well:

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

Purge Pump:
Pump Set Time:
Pump/Inlet Depth (BGS):

Decon:
Triple-Rinse

Total Vol. Purged
Final Temp.:
Final EC:
Final pH:
Final ORP:
Final DO:
Draw Down:

Sample Start: 12:50
Sample Stop:
Analyses: Sample Container:

Sample ID:
(If different from above)
DTW @ Sample:

**Methods:** 1=3 BV sample after 80%.
2= 1 BV and monitor parameters each 0.5 BV.
3=Low-flow.
4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

Site: United Rock Products

Site Address: Irwindale, CA

Sampler: DWC

## *Chambers Environmental Services, Inc*
## Sampling Data Sheet

Date: 04/19/16

Well ID: YARD WELL

**Purge Data**

| (Variable) Time | 0.2 C Temp. | 3-5% E.C.(uS) | 0.2 u pH | 20mv ORP | 0.2mg/L DO | 10% Turbidity | ML Volume | DTW | Notes |
|---|---|---|---|---|---|---|---|---|---|
| Start: | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | ~~~~~~ | | |
| 11:50 | 22.6 | 736.2 | 7.01 | 54 | 3.98 | 4.11 | - | - | |
| | | | | | | | | | |
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| | | | | | | | | | |
| Stop: | | | | | | | | | |
| Rate: (ML/Min.) | | | | | | | | | |

Purge Pump: _____
Pump Set Time: _____
Pump/Inlet Depth (BGS): _____

Decon:
Triple-Rinse

Total Vol. Purged _____
Final Temp.: _____
Final EC: _____
Final pH: _____
Final ORP: _____
Final DO: _____
Draw Down: _____

Sample Start: _____
Sample Stop: _____
Analyses: Sample Container: 9

Sample ID: _____
(If different from above)
DTW @ Sample: _____

**Well Data**
Bore OD:
Casing ID:
**Well TD:**
**D.T.W.:**
Ft./ Water:

Special Notes for This Well:

**Meters:**
Solinst 12202 Interphase Probe
Oakton 300 Series

Purge Method: 3

**Methods:** 1=3 BV sample after 80%.
2= 1 BV and monitor parameters each 0.5 BV.
3=Low-flow.
4= slow recharge. 5= non-purge.



4510 Mt. Henry Ave.,
San Diego CA 92107

**Irvine**
17461 Derian Ave
Suite 100
Irvine, CA 92614
Tel: (949) 261-1022 / Fax: (949) 260-3297

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**TestAmerica Laboratories, Inc.**

| Client Contact | Project Manager: Ken Barker | Site Contact: Dan Chambers | Date: 4-19-16 | COC No: |
|---|---|---|---|---|
| United Rock Products | Tel/Fax: | Lab Contact: D. Roberts | Carrier: Client | 1 of 1 COCs |
| 135 S. State College Blvd. | Analysis Turnaround Time | | | Job No. |
| Brea, CA, 92821 | Work Days (W) ____ | | | |
| Phone: 626-523-1319 | TAT if different from Below ____ | | | SDG No. |
| FAX | ☒ Standard | | | |
| Project: United Rock Products Irwindale : Sully-Miller | ☐ 5 days | | | |
| Site: Pit 3 | ☐ 2 days | | | |
| P.O.#: | ☐ 1 day | | | |

| Sample Identification | Sample Date | Sample Time | Sample Type | Matrix | # of Cont. | Filtered Sample | 8260 LL PCE, Benzene, PCE, TEC, MT | 8260 LL Vinyl Chloride | 300 Nitrate, Chloride and Sulfate | 200.7 Cd, Cr, B, Pb and Ni | TDS 2540C | COD 5220 | Conductivity 2510B | Alkalinity 2320B | Free Carbon Dioxide 4500 CO2 C | Sample Specific Notes: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| IRW-B | 4/19/16 | 9:20 | GW | W | 8 | N | X | X | X | X | X | X | X | X | X | |
| PIT 3-1 | ↓ | 10:20 | ↓ | ↓ | ↓ | ↓ | X | X | X | X | X | X | X | X | X | |
| PIT 3-2 | ↓ | 10:41 | ↓ | ↓ | ↓ | ↓ | X | X | X | X | X | X | X | X | X | |

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 1, 2, 4, 5

*Possible Hazard Identification*
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant Poison B ☐ Unknown ☐

*Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)*
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

**Special Instructions/QC Requirements & Comments: Pit 3 Analytes**

| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
|---|---|---|---|---|---|
| [signature] | CES, INC | 4-19-16 14:55 | [signature] | TA-I | 4-19-16 14:55 |
| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |

4.5 / 4.3 f.
4.7 IR-77

**Irvine**
17461 Derian Ave
Suite 100
Irvine, CA 92614
Tel: (949) 261-1022 / Fax: (949) 260-3297

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**TestAmerica Laboratories, Inc.**

| Client Contact | Project Manager: Ken Barker | Site Contact: Dan Chambers | Date: 4-19-16 | COC No: |
|---|---|---|---|---|
| United Rock Products | Tel/Fax: | Lab Contact: D. Roberts | Carrier: Client | 1 of 1 COCs |
| 135 S. State College Blvd. | Analysis Turnaround Time | | | Job No. |
| Brea, CA, 92821 | Work Days (W) ____ | | | |
| Phone: 626-523-1319 | TAT if different from Below ____ | | | |
| FAX | ☒ Standard | | | SDG No. |
| Project: United Rock Products Irwindale: Sully-Miller | ☐ 5 days | | | |
| Site: Pit 2 | ☐ 2 days | | | |
| P.O.#: | ☐ 1 day | | | |

| Sample Identification | Sample Date | Sample Time | Sample Type | Matrix | # of Cont. | Filtered Sample | 8260 LL Full list with oxygenates | 200.7 Boron | 300 Nitrate, Chloride and Sulfate | 200.7 Dissolved Cd, Cr, PB and Ni | TDS 2540C | COD 5220 | Conductivity 2510B | 8015 Diesel LL | Sample Specific Notes: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| YARD WELL | 4/19/16 | 11:50 | GW | W | 9 | N | X | X | X | X | X | X | X | X | |
| PIT 2-1 | ↓ | 12:30 | ↓ | ↓ | ↓ | ↓ | X | X | X | X | X | X | X | X | |
| PIT 2-2 | ↓ | 12:50 | ↓ | ↓ | ↓ | ↓ | X | X | X | X | X | X | X | X | |

**Preservation Used:** 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 1, 2, 4, 5

***Possible Hazard Identification***
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

***Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)***
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

**Special Instructions/QC Requirements & Comments:** Pit 2 Analytes

| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
|---|---|---|---|---|---|
| Dan Chambers | CES, INC | 4-19-16 14:55 | [signature] | TAI | 4/19/16 14:55 |
| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |

10.4 10.3 JR 77
on ice

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-144805-1
Client Project/Site: United Rock Products Irwindale

For:
United Rock Products Corp
135 S. State College Blvd
Suite 400
Brea, California 92821

Attn: Ken Barker

*Authorized for release by:*
*4/28/2016 4:07:50 PM*

Danielle Roberts, Senior Project Manager
(949)261-1022
danielle.roberts@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Sample Summary

Client: United Rock Products Corp
Project/Site: United Rock Products Irwindale

TestAmerica Job ID: 440-144805-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 440-144805-1 | IRW-B | Water | 04/19/16 09:20 | 04/19/16 14:55 |
| 440-144805-2 | PIT 3-1 | Water | 04/19/16 10:20 | 04/19/16 14:55 |
| 440-144805-3 | PIT 3-2 | Water | 04/19/16 10:41 | 04/19/16 14:55 |

# Case Narrative

Client: United Rock Products Corp
Project/Site: United Rock Products Irwindale

TestAmerica Job ID: 440-144805-1

## Job ID: 440-144805-1

### Laboratory: TestAmerica Irvine

**Narrative**

**Job Narrative**
**440-144805-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 4/19/2016 2:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 6.2º C.

**GC/MS VOA**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**HPLC/IC**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Metals**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**General Chemistry**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**VOA Prep**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

## Client Sample ID: IRW-B

**Lab Sample ID: 440-144805-1**

**Date Collected: 04/19/16 09:20**

**Matrix: Water**

**Date Received: 04/19/16 14:55**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.50 | | ug/L | | | 04/24/16 14:52 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.50 | | ug/L | | | 04/24/16 14:52 | 1 |
| Tetrachloroethene | ND | | 0.50 | | ug/L | | | 04/24/16 14:52 | 1 |
| Trichloroethene | ND | | 0.50 | | ug/L | | | 04/24/16 14:52 | 1 |
| Vinyl chloride | ND | | 0.50 | | ug/L | | | 04/24/16 14:52 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *108* | | *80 - 128* | | *04/24/16 14:52* | *1* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *80 - 120* | | *04/24/16 14:52* | *1* |
| *Dibromofluoromethane (Surr)* | *109* | | *76 - 132* | | *04/24/16 14:52* | *1* |

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Chloride** | **19** | | 2.5 | | mg/L | | | 04/19/16 17:55 | 5 |
| **Nitrate as N** | **0.61** | | 0.11 | | mg/L | | | 04/19/16 17:41 | 1 |
| **Sulfate** | **81** | | 2.5 | | mg/L | | | 04/19/16 17:55 | 5 |

### Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Boron** | **0.080** | | 0.050 | | mg/L | | 04/21/16 10:10 | 04/23/16 12:26 | 1 |
| Cadmium | ND | | 0.0050 | | mg/L | | 04/21/16 10:10 | 04/23/16 12:26 | 1 |
| Chromium | ND | | 0.0050 | | mg/L | | 04/21/16 10:10 | 04/23/16 12:26 | 1 |
| Nickel | ND | | 0.010 | | mg/L | | 04/21/16 10:10 | 04/23/16 12:26 | 1 |
| Lead | ND | | 0.0050 | | mg/L | | 04/21/16 10:10 | 04/23/16 12:26 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Alkalinity as CaCO3** | **92** | | 4.0 | | mg/L | | | 04/23/16 08:16 | 1 |
| **Bicarbonate Alkalinity as CaCO3** | **92** | | 4.0 | | mg/L | | | 04/23/16 08:16 | 1 |
| Carbonate Alkalinity as CaCO3 | ND | | 4.0 | | mg/L | | | 04/23/16 08:16 | 1 |
| Hydroxide Alkalinity as CaCO3 | ND | | 4.0 | | mg/L | | | 04/23/16 08:16 | 1 |
| **Specific Conductance** | **420** | | 1.0 | | umhos/cm | | | 04/25/16 10:07 | 1 |
| **Resistivity** | **2400** | | 1.0 | | ohm cm | | | 04/25/16 10:07 | 1 |
| **Total Dissolved Solids** | **260** | | 10 | | mg/L | | | 04/22/16 15:57 | 1 |
| **Carbon Dioxide, Free** | **320** | | 2.0 | | mg/L | | | 04/19/16 19:44 | 1 |
| Chemical Oxygen Demand | ND | | 20 | | mg/L | | | 04/20/16 17:49 | 1 |

## Client Sample ID: PIT 3-1

**Lab Sample ID: 440-144805-2**

**Date Collected: 04/19/16 10:20**

**Matrix: Water**

**Date Received: 04/19/16 14:55**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.50 | | ug/L | | | 04/24/16 15:21 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.50 | | ug/L | | | 04/24/16 15:21 | 1 |
| Tetrachloroethene | ND | | 0.50 | | ug/L | | | 04/24/16 15:21 | 1 |
| Trichloroethene | ND | | 0.50 | | ug/L | | | 04/24/16 15:21 | 1 |
| Vinyl chloride | ND | | 0.50 | | ug/L | | | 04/24/16 15:21 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *110* | | *80 - 128* | | *04/24/16 15:21* | *1* |

## Client Sample ID: PIT 3-1

**Date Collected: 04/19/16 10:20**
**Date Received: 04/19/16 14:55**

## Lab Sample ID: 440-144805-2

**Matrix: Water**

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *4-Bromofluorobenzene (Surr)* | *105* | | *80 - 120* | | *04/24/16 15:21* | *1* |
| *Dibromofluoromethane (Surr)* | *109* | | *76 - 132* | | *04/24/16 15:21* | *1* |

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| **Chloride** | **18** | | 0.50 | mg/L | | | 04/19/16 18:09 | 1 |
| **Nitrate as N** | **0.35** | | 0.11 | mg/L | | | 04/19/16 18:09 | 1 |
| **Sulfate** | **54** | | 2.5 | mg/L | | | 04/19/16 18:23 | 5 |

### Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| **Boron** | **0.092** | | 0.050 | mg/L | | 04/21/16 10:10 | 04/23/16 12:44 | 1 |
| Cadmium | ND | | 0.0050 | mg/L | | 04/21/16 10:10 | 04/23/16 12:44 | 1 |
| Chromium | ND | | 0.0050 | mg/L | | 04/21/16 10:10 | 04/23/16 12:44 | 1 |
| Nickel | ND | | 0.010 | mg/L | | 04/21/16 10:10 | 04/23/16 12:44 | 1 |
| Lead | ND | | 0.0050 | mg/L | | 04/21/16 10:10 | 04/23/16 12:44 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| **Alkalinity as CaCO3** | **88** | | 4.0 | mg/L | | | 04/23/16 08:27 | 1 |
| **Bicarbonate Alkalinity as CaCO3** | **88** | | 4.0 | mg/L | | | 04/23/16 08:27 | 1 |
| Carbonate Alkalinity as CaCO3 | ND | | 4.0 | mg/L | | | 04/23/16 08:27 | 1 |
| Hydroxide Alkalinity as CaCO3 | ND | | 4.0 | mg/L | | | 04/23/16 08:27 | 1 |
| **Specific Conductance** | **330** | | 1.0 | umhos/cm | | | 04/25/16 10:07 | 1 |
| **Resistivity** | **3000** | | 1.0 | ohm cm | | | 04/25/16 10:07 | 1 |
| **Total Dissolved Solids** | **220** | | 10 | mg/L | | | 04/22/16 15:57 | 1 |
| Carbon Dioxide, Free | ND | | 2.0 | mg/L | | | 04/19/16 19:44 | 1 |
| Chemical Oxygen Demand | ND | | 20 | mg/L | | | 04/20/16 17:49 | 1 |

## Client Sample ID: PIT 3-2

**Date Collected: 04/19/16 10:41**
**Date Received: 04/19/16 14:55**

## Lab Sample ID: 440-144805-3

**Matrix: Water**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.50 | ug/L | | | 04/24/16 15:51 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.50 | ug/L | | | 04/24/16 15:51 | 1 |
| Tetrachloroethene | ND | | 0.50 | ug/L | | | 04/24/16 15:51 | 1 |
| Trichloroethene | ND | | 0.50 | ug/L | | | 04/24/16 15:51 | 1 |
| Vinyl chloride | ND | | 0.50 | ug/L | | | 04/24/16 15:51 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *107* | | *80 - 128* | | *04/24/16 15:51* | *1* |
| *4-Bromofluorobenzene (Surr)* | *106* | | *80 - 120* | | *04/24/16 15:51* | *1* |
| *Dibromofluoromethane (Surr)* | *111* | | *76 - 132* | | *04/24/16 15:51* | *1* |

### Method: 300.0 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|
| **Chloride** | **19** | | 0.50 | mg/L | | | 04/19/16 18:37 | 1 |
| **Nitrate as N** | **0.21** | | 0.11 | mg/L | | | 04/19/16 18:37 | 1 |

## Client Sample ID: PIT 3-2

**Date Collected: 04/19/16 10:41**
**Date Received: 04/19/16 14:55**

## Lab Sample ID: 440-144805-3

**Matrix: Water**

### Method: 300.0 - Anions, Ion Chromatography (Continued)

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Sulfate** | **55** | | 2.5 | | mg/L | | | 04/19/16 18:51 | 5 |

### Method: 200.7 Rev 4.4 - Metals (ICP) - Total Recoverable

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Boron** | **0.092** | | 0.050 | | mg/L | | 04/21/16 10:10 | 04/23/16 12:46 | 1 |
| Cadmium | ND | | 0.0050 | | mg/L | | 04/21/16 10:10 | 04/23/16 12:46 | 1 |
| Chromium | ND | | 0.0050 | | mg/L | | 04/21/16 10:10 | 04/23/16 12:46 | 1 |
| Nickel | ND | | 0.010 | | mg/L | | 04/21/16 10:10 | 04/23/16 12:46 | 1 |
| Lead | ND | | 0.0050 | | mg/L | | 04/21/16 10:10 | 04/23/16 12:46 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Alkalinity as CaCO3** | **76** | | 4.0 | | mg/L | | | 04/23/16 08:35 | 1 |
| **Bicarbonate Alkalinity as CaCO3** | **70** | | 4.0 | | mg/L | | | 04/23/16 08:35 | 1 |
| **Carbonate Alkalinity as CaCO3** | **5.7** | | 4.0 | | mg/L | | | 04/23/16 08:35 | 1 |
| Hydroxide Alkalinity as CaCO3 | ND | | 4.0 | | mg/L | | | 04/23/16 08:35 | 1 |
| **Specific Conductance** | **330** | | 1.0 | | umhos/cm | | | 04/25/16 10:07 | 1 |
| **Resistivity** | **3000** | | 1.0 | | ohm cm | | | 04/25/16 10:07 | 1 |
| **Total Dissolved Solids** | **220** | | 10 | | mg/L | | | 04/22/16 15:57 | 1 |
| Carbon Dioxide, Free | ND | | 2.0 | | mg/L | | | 04/19/16 19:44 | 1 |
| Chemical Oxygen Demand | ND | | 20 | | mg/L | | | 04/20/16 17:49 | 1 |

# Method Summary

Client: United Rock Products Corp
Project/Site: United Rock Products Irwindale

TestAmerica Job ID: 440-144805-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8260B | Volatile Organic Compounds (GC/MS) | SW846 | TAL IRV |
| 300.0 | Anions, Ion Chromatography | MCAWW | TAL IRV |
| 200.7 Rev 4.4 | Metals (ICP) | EPA | TAL IRV |
| SM 2320B | Alkalinity | SM | TAL IRV |
| SM 2510B | Conductivity, Specific Conductance | SM | TAL IRV |
| SM 2540C | Solids, Total Dissolved (TDS) | SM | TAL IRV |
| SM 4500 CO2 C | Free Carbon Dioxide | SM | TAL IRV |
| SM 5220D | COD | SM | TAL IRV |

**Protocol References:**

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

# Lab Chronicle

Client: United Rock Products Corp
Project/Site: United Rock Products Irwindale

TestAmerica Job ID: 440-144805-1

## Client Sample ID: IRW-B

**Lab Sample ID: 440-144805-1**

**Date Collected: 04/19/16 09:20**

**Matrix: Water**

**Date Received: 04/19/16 14:55**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 10 mL | 10 mL | 326152 | 04/24/16 14:52 | TN | TAL IRV |
| Total/NA | Analysis | 300.0 | | 1 | 5 mL | | 325145 | 04/19/16 17:41 | NTN | TAL IRV |
| Total/NA | Analysis | 300.0 | | 5 | 5 mL | | 325146 | 04/19/16 17:55 | NTN | TAL IRV |
| Total Recoverable | Prep | 200.2 | | | 25 mL | 25 mL | 325694 | 04/21/16 10:10 | Q1N | TAL IRV |
| Total Recoverable | Analysis | 200.7 Rev 4.4 | | 1 | 25 mL | 25 mL | 326126 | 04/23/16 12:26 | VS | TAL IRV |
| Total/NA | Analysis | SM 2320B | | 1 | | | 326124 | 04/23/16 08:16 | YZ | TAL IRV |
| Total/NA | Analysis | SM 2510B | | 1 | | | 326248 | 04/25/16 10:07 | XL | TAL IRV |
| Total/NA | Analysis | SM 2540C | | 1 | 100 mL | 100 mL | 326016 | 04/22/16 15:57 | XL | TAL IRV |
| Total/NA | Analysis | SM 4500 CO2 C | | 1 | | | 325263 | 04/19/16 19:44 | SN | TAL IRV |
| Total/NA | Analysis | SM 5220D | | 1 | 0.625 mL | 2.5 mL | 325575 | 04/20/16 17:49 | MSM | TAL IRV |

## Client Sample ID: PIT 3-1

**Lab Sample ID: 440-144805-2**

**Date Collected: 04/19/16 10:20**

**Matrix: Water**

**Date Received: 04/19/16 14:55**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 10 mL | 10 mL | 326152 | 04/24/16 15:21 | TN | TAL IRV |
| Total/NA | Analysis | 300.0 | | 1 | 5 mL | | 325145 | 04/19/16 18:09 | NTN | TAL IRV |
| Total/NA | Analysis | 300.0 | | 1 | 5 mL | | 325146 | 04/19/16 18:09 | NTN | TAL IRV |
| Total/NA | Analysis | 300.0 | | 5 | 5 mL | | 325146 | 04/19/16 18:23 | NTN | TAL IRV |
| Total Recoverable | Prep | 200.2 | | | 25 mL | 25 mL | 325694 | 04/21/16 10:10 | Q1N | TAL IRV |
| Total Recoverable | Analysis | 200.7 Rev 4.4 | | 1 | 25 mL | 25 mL | 326126 | 04/23/16 12:44 | VS | TAL IRV |
| Total/NA | Analysis | SM 2320B | | 1 | | | 326124 | 04/23/16 08:27 | YZ | TAL IRV |
| Total/NA | Analysis | SM 2510B | | 1 | | | 326248 | 04/25/16 10:07 | XL | TAL IRV |
| Total/NA | Analysis | SM 2540C | | 1 | 100 mL | 100 mL | 326016 | 04/22/16 15:57 | XL | TAL IRV |
| Total/NA | Analysis | SM 4500 CO2 C | | 1 | | | 325263 | 04/19/16 19:44 | SN | TAL IRV |
| Total/NA | Analysis | SM 5220D | | 1 | 0.625 mL | 2.5 mL | 325575 | 04/20/16 17:49 | MSM | TAL IRV |

## Client Sample ID: PIT 3-2

**Lab Sample ID: 440-144805-3**

**Date Collected: 04/19/16 10:41**

**Matrix: Water**

**Date Received: 04/19/16 14:55**

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 10 mL | 10 mL | 326152 | 04/24/16 15:51 | TN | TAL IRV |
| Total/NA | Analysis | 300.0 | | 1 | 5 mL | | 325145 | 04/19/16 18:37 | NTN | TAL IRV |
| Total/NA | Analysis | 300.0 | | 1 | 5 mL | | 325146 | 04/19/16 18:37 | NTN | TAL IRV |
| Total/NA | Analysis | 300.0 | | 5 | 5 mL | | 325146 | 04/19/16 18:51 | NTN | TAL IRV |
| Total Recoverable | Prep | 200.2 | | | 25 mL | 25 mL | 325694 | 04/21/16 10:10 | Q1N | TAL IRV |
| Total Recoverable | Analysis | 200.7 Rev 4.4 | | 1 | 25 mL | 25 mL | 326126 | 04/23/16 12:46 | VS | TAL IRV |
| Total/NA | Analysis | SM 2320B | | 1 | | | 326124 | 04/23/16 08:35 | YZ | TAL IRV |
| Total/NA | Analysis | SM 2510B | | 1 | | | 326248 | 04/25/16 10:07 | XL | TAL IRV |

# Lab Chronicle

Client: United Rock Products Corp
Project/Site: United Rock Products Irwindale

TestAmerica Job ID: 440-144805-1

| Prep Type | Batch Type | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | SM 2540C | | 1 | 100 mL | 100 mL | 326016 | 04/22/16 15:57 | XL | TAL IRV |
| Total/NA | Analysis | SM 4500 CO2 C | | 1 | | | 325263 | 04/19/16 19:44 | SN | TAL IRV |
| Total/NA | Analysis | SM 5220D | | 1 | 0.625 mL | 2.5 mL | 325575 | 04/20/16 17:49 | MSM | TAL IRV |

**Laboratory References:**

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

## Method: 8260B - Volatile Organic Compounds (GC/MS)

### Lab Sample ID: MB 440-326152/5
**Matrix: Water**
**Analysis Batch: 326152**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | ND | | 0.50 | | ug/L | | | 04/24/16 08:56 | 1 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 0.50 | | ug/L | | | 04/24/16 08:56 | 1 |
| Tetrachloroethene | ND | | 0.50 | | ug/L | | | 04/24/16 08:56 | 1 |
| Trichloroethene | ND | | 0.50 | | ug/L | | | 04/24/16 08:56 | 1 |
| Vinyl chloride | ND | | 0.50 | | ug/L | | | 04/24/16 08:56 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Toluene-d8 (Surr)* | *110* | | *80 - 128* | | *04/24/16 08:56* | *1* |
| *4-Bromofluorobenzene (Surr)* | *105* | | *80 - 120* | | *04/24/16 08:56* | *1* |
| *Dibromofluoromethane (Surr)* | *108* | | *76 - 132* | | *04/24/16 08:56* | *1* |

### Lab Sample ID: LCS 440-326152/6
**Matrix: Water**
**Analysis Batch: 326152**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | | | 25.0 | 25.0 | | ug/L | | 100 | 68 - 130 | | |
| Methyl-t-Butyl Ether (MTBE) | | | 25.0 | 27.5 | | ug/L | | 110 | 63 - 131 | | |
| Tetrachloroethene | | | 25.0 | 23.5 | | ug/L | | 94 | 70 - 130 | | |
| Trichloroethene | | | 25.0 | 26.0 | | ug/L | | 104 | 70 - 130 | | |
| Vinyl chloride | | | 25.0 | 22.5 | | ug/L | | 90 | 59 - 133 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *103* | | *80 - 128* |
| *4-Bromofluorobenzene (Surr)* | *104* | | *80 - 120* |
| *Dibromofluoromethane (Surr)* | *107* | | *76 - 132* |

### Lab Sample ID: 440-144638-A-9 MS
**Matrix: Water**
**Analysis Batch: 326152**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 460 | E | 50.0 | 457 | E 4 | ug/L | | -10 | 66 - 130 | | |
| Methyl-t-Butyl Ether (MTBE) | ND | | 50.0 | 58.1 | | ug/L | | 116 | 70 - 130 | | |
| Tetrachloroethene | ND | | 50.0 | 49.1 | | ug/L | | 98 | 70 - 137 | | |
| Trichloroethene | ND | | 50.0 | 53.3 | | ug/L | | 107 | 70 - 130 | | |
| Vinyl chloride | ND | | 50.0 | 45.6 | | ug/L | | 91 | 50 - 137 | | |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *102* | | *80 - 128* |
| *4-Bromofluorobenzene (Surr)* | *105* | | *80 - 120* |
| *Dibromofluoromethane (Surr)* | *99* | | *76 - 132* |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 440-144638-A-9 MSD**
**Matrix: Water**
**Analysis Batch: 326152**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 460 | E | 50.0 | 433 | E 4 | ug/L | | -58 | 66 - 130 | 5 | 20 |
| Methyl-t-Butyl Ether (MTBE) | ND | | 50.0 | 56.9 | | ug/L | | 114 | 70 - 130 | 2 | 25 |
| Tetrachloroethene | ND | | 50.0 | 50.5 | | ug/L | | 101 | 70 - 137 | 3 | 20 |
| Trichloroethene | ND | | 50.0 | 53.9 | | ug/L | | 108 | 70 - 130 | 1 | 20 |
| Vinyl chloride | ND | | 50.0 | 43.1 | | ug/L | | 86 | 50 - 137 | 6 | 30 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *Toluene-d8 (Surr)* | *103* | | *80 - 128* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *80 - 120* |
| *Dibromofluoromethane (Surr)* | *97* | | *76 - 132* |

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 440-325145/4**
**Matrix: Water**
**Analysis Batch: 325145**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Nitrate as N | ND | | 0.11 | | mg/L | | | 04/19/16 12:24 | 1 |

**Lab Sample ID: LCS 440-325145/2**
**Matrix: Water**
**Analysis Batch: 325145**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Nitrate as N | 1.13 | 1.16 | | mg/L | | 103 | 90 - 110 |

**Lab Sample ID: 440-144776-H-1 MS**
**Matrix: Water**
**Analysis Batch: 325145**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Nitrate as N | ND | | 11.3 | 13.3 | | mg/L | | 118 | 80 - 120 |

**Lab Sample ID: 440-144776-H-1 MSD**
**Matrix: Water**
**Analysis Batch: 325145**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nitrate as N | ND | | 11.3 | 13.5 | | mg/L | | 120 | 80 - 120 | 2 | 20 |

**Lab Sample ID: MB 440-325146/4**
**Matrix: Water**
**Analysis Batch: 325146**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | ND | | 0.50 | | mg/L | | | 04/19/16 12:24 | 1 |
| Sulfate | ND | | 0.50 | | mg/L | | | 04/19/16 12:24 | 1 |

## Method: 300.0 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: LCS 440-325146/2**
**Matrix: Water**
**Analysis Batch: 325146**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Chloride | 5.00 | 5.07 | | mg/L | | 101 | 90 - 110 |
| Sulfate | 5.00 | 4.98 | | mg/L | | 100 | 90 - 110 |

**Lab Sample ID: 440-144776-H-1 MS**
**Matrix: Water**
**Analysis Batch: 325146**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Chloride | 82 | F1 | 50.0 | 120 | F1 | mg/L | | 76 | 80 - 120 |
| Sulfate | 680 | | 50.0 | 732 | 4 | mg/L | | 108 | 80 - 120 |

**Lab Sample ID: 440-144776-H-1 MSD**
**Matrix: Water**
**Analysis Batch: 325146**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloride | 82 | F1 | 50.0 | 124 | | mg/L | | 84 | 80 - 120 | 3 | 20 |
| Sulfate | 680 | | 50.0 | 687 | 4 | mg/L | | 18 | 80 - 120 | 6 | 20 |

## Method: 200.7 Rev 4.4 - Metals (ICP)

**Lab Sample ID: MB 440-325694/1-A**
**Matrix: Water**
**Analysis Batch: 326126**

**Client Sample ID: Method Blank**
**Prep Type: Total Recoverable**
**Prep Batch: 325694**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Boron | ND | | 0.050 | | mg/L | | 04/21/16 10:10 | 04/23/16 11:33 | 1 |
| Cadmium | ND | | 0.0050 | | mg/L | | 04/21/16 10:10 | 04/23/16 11:33 | 1 |
| Chromium | ND | | 0.0050 | | mg/L | | 04/21/16 10:10 | 04/23/16 11:33 | 1 |
| Nickel | ND | | 0.010 | | mg/L | | 04/21/16 10:10 | 04/23/16 11:33 | 1 |
| Lead | ND | | 0.0050 | | mg/L | | 04/21/16 10:10 | 04/23/16 11:33 | 1 |

**Lab Sample ID: LCS 440-325694/2-A**
**Matrix: Water**
**Analysis Batch: 326126**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total Recoverable**
**Prep Batch: 325694**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Boron | 0.500 | 0.481 | | mg/L | | 96 | 85 - 115 |
| Cadmium | 0.500 | 0.505 | | mg/L | | 101 | 85 - 115 |
| Chromium | 0.500 | 0.522 | | mg/L | | 104 | 85 - 115 |
| Nickel | 0.500 | 0.529 | | mg/L | | 106 | 85 - 115 |
| Lead | 0.500 | 0.508 | | mg/L | | 102 | 85 - 115 |

**Lab Sample ID: 440-144787-A-3-B MS**
**Matrix: Water**
**Analysis Batch: 326126**

**Client Sample ID: Matrix Spike**
**Prep Type: Total Recoverable**
**Prep Batch: 325694**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Boron | 0.60 | | 0.500 | 1.01 | | mg/L | | 82 | 70 - 130 |

## Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

**Lab Sample ID: 440-144787-A-3-B MS**
**Matrix: Water**
**Analysis Batch: 326126**

**Client Sample ID: Matrix Spike**
**Prep Type: Total Recoverable**
**Prep Batch: 325694**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | ND | | 0.500 | 0.474 | | mg/L | | 95 | 70 - 130 |
| Chromium | ND | | 0.500 | 0.501 | | mg/L | | 100 | 70 - 130 |
| Nickel | ND | | 0.500 | 0.484 | | mg/L | | 97 | 70 - 130 |
| Lead | ND | | 0.500 | 0.483 | | mg/L | | 96 | 70 - 130 |

**Lab Sample ID: 440-144787-A-3-C MSD**
**Matrix: Water**
**Analysis Batch: 326126**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total Recoverable**
**Prep Batch: 325694**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Boron | 0.60 | | 0.500 | 1.08 | | mg/L | | 96 | 70 - 130 | 7 | 20 |
| Cadmium | ND | | 0.500 | 0.500 | | mg/L | | 100 | 70 - 130 | 5 | 20 |
| Chromium | ND | | 0.500 | 0.522 | | mg/L | | 104 | 70 - 130 | 4 | 20 |
| Nickel | ND | | 0.500 | 0.504 | | mg/L | | 101 | 70 - 130 | 4 | 20 |
| Lead | ND | | 0.500 | 0.501 | | mg/L | | 100 | 70 - 130 | 4 | 20 |

## Method: SM 2320B - Alkalinity

**Lab Sample ID: MB 440-326124/3**
**Matrix: Water**
**Analysis Batch: 326124**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Alkalinity as CaCO3 | ND | | 4.0 | | mg/L | | | 04/23/16 05:35 | 1 |
| Bicarbonate Alkalinity as CaCO3 | ND | | 4.0 | | mg/L | | | 04/23/16 05:35 | 1 |
| Carbonate Alkalinity as CaCO3 | ND | | 4.0 | | mg/L | | | 04/23/16 05:35 | 1 |
| Hydroxide Alkalinity as CaCO3 | ND | | 4.0 | | mg/L | | | 04/23/16 05:35 | 1 |

**Lab Sample ID: LCS 440-326124/2**
**Matrix: Water**
**Analysis Batch: 326124**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Alkalinity as CaCO3 | | | 74.7 | 73.6 | | mg/L | | 99 | 80 - 120 |

**Lab Sample ID: 440-145087-A-2 DU**
**Matrix: Water**
**Analysis Batch: 326124**

**Client Sample ID: Duplicate**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Alkalinity as CaCO3 | 220 | | | 222 | | mg/L | | | | 0.05 | 20 |
| Bicarbonate Alkalinity as CaCO3 | 220 | | | 222 | | mg/L | | | | 0.05 | 20 |
| Carbonate Alkalinity as CaCO3 | ND | | | ND | | mg/L | | | | NC | 20 |
| Hydroxide Alkalinity as CaCO3 | ND | | | ND | | mg/L | | | | NC | 20 |

## Method: SM 2510B - Conductivity, Specific Conductance

**Lab Sample ID: MB 440-326248/3**
**Matrix: Water**
**Analysis Batch: 326248**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance | ND | | 1.0 | | umhos/cm | | | 04/25/16 09:00 | 1 |

**Lab Sample ID: LCS 440-326248/4**
**Matrix: Water**
**Analysis Batch: 326248**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance | | | 1060 | 1070 | | umhos/cm | | 101 | 90 - 110 | | |

**Lab Sample ID: 440-144710-A-1 DU**
**Matrix: Water**
**Analysis Batch: 326248**

**Client Sample ID: Duplicate**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Specific Conductance | 330 | | | 340 | | umhos/cm | | | | 3 | 5 |
| Resistivity | 3000 | | | 2940 | | ohm cm | | | | 3 | 5 |

## Method: SM 2540C - Solids, Total Dissolved (TDS)

**Lab Sample ID: MB 440-326016/1**
**Matrix: Water**
**Analysis Batch: 326016**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | ND | | 10 | | mg/L | | | 04/22/16 15:57 | 1 |

**Lab Sample ID: LCS 440-326016/2**
**Matrix: Water**
**Analysis Batch: 326016**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | | | 1000 | 976 | | mg/L | | 98 | 90 - 110 | | |

**Lab Sample ID: 440-144933-C-1 DU**
**Matrix: Water**
**Analysis Batch: 326016**

**Client Sample ID: Duplicate**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Dissolved Solids | 5800 | | | 6010 | | mg/L | | | | 3 | 5 |

## Method: SM 4500 CO2 C - Free Carbon Dioxide

**Lab Sample ID: MB 440-325263/1**
**Matrix: Water**
**Analysis Batch: 325263**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbon Dioxide, Free | ND | | 2.0 | | mg/L | | | 04/19/16 15:47 | 1 |

## Method: SM 4500 CO2 C - Free Carbon Dioxide (Continued)

**Lab Sample ID: 440-144805-1 DU**
**Matrix: Water**
**Analysis Batch: 325263**

**Client Sample ID: IRW-B**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon Dioxide, Free | 320 | | | 370 | | mg/L | | | | 15 | 20 |

## Method: SM 5220D - COD

**Lab Sample ID: MB 440-325575/9**
**Matrix: Water**
**Analysis Batch: 325575**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | ND | | 20 | | mg/L | | | 04/20/16 17:49 | 1 |

**Lab Sample ID: LCS 440-325575/10**
**Matrix: Water**
**Analysis Batch: 325575**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | | | 200 | 201 | | mg/L | | 100 | 90 - 110 | | |

**Lab Sample ID: 440-144805-1 MS**
**Matrix: Water**
**Analysis Batch: 325575**

**Client Sample ID: IRW-B**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | ND | | 200 | 203 | | mg/L | | 101 | 70 - 120 | | |

**Lab Sample ID: 440-144805-1 MSD**
**Matrix: Water**
**Analysis Batch: 325575**

**Client Sample ID: IRW-B**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Chemical Oxygen Demand | ND | | 200 | 203 | | mg/L | | 101 | 70 - 120 | 0 | 15 |

## GC/MS VOA

### Analysis Batch: 326152

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-144638-A-9 MS | Matrix Spike | Total/NA | Water | 8260B | |
| 440-144638-A-9 MSD | Matrix Spike Duplicate | Total/NA | Water | 8260B | |
| 440-144805-1 | IRW-B | Total/NA | Water | 8260B | |
| 440-144805-2 | PIT 3-1 | Total/NA | Water | 8260B | |
| 440-144805-3 | PIT 3-2 | Total/NA | Water | 8260B | |
| LCS 440-326152/6 | Lab Control Sample | Total/NA | Water | 8260B | |
| MB 440-326152/5 | Method Blank | Total/NA | Water | 8260B | |

## HPLC/IC

### Analysis Batch: 325145

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-144776-H-1 MS | Matrix Spike | Total/NA | Water | 300.0 | |
| 440-144776-H-1 MSD | Matrix Spike Duplicate | Total/NA | Water | 300.0 | |
| 440-144805-1 | IRW-B | Total/NA | Water | 300.0 | |
| 440-144805-2 | PIT 3-1 | Total/NA | Water | 300.0 | |
| 440-144805-3 | PIT 3-2 | Total/NA | Water | 300.0 | |
| LCS 440-325145/2 | Lab Control Sample | Total/NA | Water | 300.0 | |
| MB 440-325145/4 | Method Blank | Total/NA | Water | 300.0 | |

### Analysis Batch: 325146

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-144776-H-1 MS | Matrix Spike | Total/NA | Water | 300.0 | |
| 440-144776-H-1 MSD | Matrix Spike Duplicate | Total/NA | Water | 300.0 | |
| 440-144805-1 | IRW-B | Total/NA | Water | 300.0 | |
| 440-144805-2 | PIT 3-1 | Total/NA | Water | 300.0 | |
| 440-144805-2 | PIT 3-1 | Total/NA | Water | 300.0 | |
| 440-144805-3 | PIT 3-2 | Total/NA | Water | 300.0 | |
| 440-144805-3 | PIT 3-2 | Total/NA | Water | 300.0 | |
| LCS 440-325146/2 | Lab Control Sample | Total/NA | Water | 300.0 | |
| MB 440-325146/4 | Method Blank | Total/NA | Water | 300.0 | |

## Metals

### Prep Batch: 325694

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-144787-A-3-B MS | Matrix Spike | Total Recoverable | Water | 200.2 | |
| 440-144787-A-3-C MSD | Matrix Spike Duplicate | Total Recoverable | Water | 200.2 | |
| 440-144805-1 | IRW-B | Total Recoverable | Water | 200.2 | |
| 440-144805-2 | PIT 3-1 | Total Recoverable | Water | 200.2 | |
| 440-144805-3 | PIT 3-2 | Total Recoverable | Water | 200.2 | |
| LCS 440-325694/2-A | Lab Control Sample | Total Recoverable | Water | 200.2 | |
| MB 440-325694/1-A | Method Blank | Total Recoverable | Water | 200.2 | |

### Analysis Batch: 326126

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-144787-A-3-B MS | Matrix Spike | Total Recoverable | Water | 200.7 Rev 4.4 | 325694 |
| 440-144787-A-3-C MSD | Matrix Spike Duplicate | Total Recoverable | Water | 200.7 Rev 4.4 | 325694 |
| 440-144805-1 | IRW-B | Total Recoverable | Water | 200.7 Rev 4.4 | 325694 |
| 440-144805-2 | PIT 3-1 | Total Recoverable | Water | 200.7 Rev 4.4 | 325694 |

## Metals (Continued)

### Analysis Batch: 326126 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-144805-3 | PIT 3-2 | Total Recoverable | Water | 200.7 Rev 4.4 | 325694 |
| LCS 440-325694/2-A | Lab Control Sample | Total Recoverable | Water | 200.7 Rev 4.4 | 325694 |
| MB 440-325694/1-A | Method Blank | Total Recoverable | Water | 200.7 Rev 4.4 | 325694 |

## General Chemistry

### Analysis Batch: 325263

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-144805-1 | IRW-B | Total/NA | Water | SM 4500 CO2 C | |
| 440-144805-1 DU | IRW-B | Total/NA | Water | SM 4500 CO2 C | |
| 440-144805-2 | PIT 3-1 | Total/NA | Water | SM 4500 CO2 C | |
| 440-144805-3 | PIT 3-2 | Total/NA | Water | SM 4500 CO2 C | |
| MB 440-325263/1 | Method Blank | Total/NA | Water | SM 4500 CO2 C | |

### Analysis Batch: 325575

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-144805-1 | IRW-B | Total/NA | Water | SM 5220D | |
| 440-144805-1 MS | IRW-B | Total/NA | Water | SM 5220D | |
| 440-144805-1 MSD | IRW-B | Total/NA | Water | SM 5220D | |
| 440-144805-2 | PIT 3-1 | Total/NA | Water | SM 5220D | |
| 440-144805-3 | PIT 3-2 | Total/NA | Water | SM 5220D | |
| LCS 440-325575/10 | Lab Control Sample | Total/NA | Water | SM 5220D | |
| MB 440-325575/9 | Method Blank | Total/NA | Water | SM 5220D | |

### Analysis Batch: 326016

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-144805-1 | IRW-B | Total/NA | Water | SM 2540C | |
| 440-144805-2 | PIT 3-1 | Total/NA | Water | SM 2540C | |
| 440-144805-3 | PIT 3-2 | Total/NA | Water | SM 2540C | |
| 440-144933-C-1 DU | Duplicate | Total/NA | Water | SM 2540C | |
| LCS 440-326016/2 | Lab Control Sample | Total/NA | Water | SM 2540C | |
| MB 440-326016/1 | Method Blank | Total/NA | Water | SM 2540C | |

### Analysis Batch: 326124

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-144805-1 | IRW-B | Total/NA | Water | SM 2320B | |
| 440-144805-2 | PIT 3-1 | Total/NA | Water | SM 2320B | |
| 440-144805-3 | PIT 3-2 | Total/NA | Water | SM 2320B | |
| 440-145087-A-2 DU | Duplicate | Total/NA | Water | SM 2320B | |
| LCS 440-326124/2 | Lab Control Sample | Total/NA | Water | SM 2320B | |
| MB 440-326124/3 | Method Blank | Total/NA | Water | SM 2320B | |

### Analysis Batch: 326248

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 440-144710-A-1 DU | Duplicate | Total/NA | Water | SM 2510B | |
| 440-144805-1 | IRW-B | Total/NA | Water | SM 2510B | |
| 440-144805-2 | PIT 3-1 | Total/NA | Water | SM 2510B | |
| 440-144805-3 | PIT 3-2 | Total/NA | Water | SM 2510B | |
| LCS 440-326248/4 | Lab Control Sample | Total/NA | Water | SM 2510B | |
| MB 440-326248/3 | Method Blank | Total/NA | Water | SM 2510B | |

## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description |
|---|---|
| 4 | MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable. |
| E | Result exceeded calibration range. |

### HPLC/IC

| Qualifier | Qualifier Description |
|---|---|
| F1 | MS and/or MSD Recovery is outside acceptance limits. |
| 4 | MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Certification Summary

Client: United Rock Products Corp
Project/Site: United Rock Products Irwindale

TestAmerica Job ID: 440-144805-1

## Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska | State Program | 10 | CA01531 | 06-30-16 |
| Arizona | State Program | 9 | AZ0671 | 10-13-16 |
| California | LA Cty Sanitation Districts | 9 | 10256 | 01-31-17 * |
| California | State Program | 9 | CA ELAP 2706 | 06-30-16 |
| Guam | State Program | 9 | Cert. No. 12.002r | 01-23-17 |
| Hawaii | State Program | 9 | N/A | 01-29-17 |
| Kansas | NELAP Secondary AB | 7 | E-10420 | 07-31-16 |
| Nevada | State Program | 9 | CA015312016-2 | 07-31-16 |
| New Mexico | State Program | 6 | N/A | 01-29-17 |
| Northern Mariana Islands | State Program | 9 | MP0002 | 01-29-16 * |
| Oregon | NELAP | 10 | 4028 | 01-29-17 |
| USDA | Federal | | P330-09-00080 | 07-08-18 |
| Washington | State Program | 10 | C900 | 09-03-16 |

* Certification renewal pending - certification considered valid.

**Irvine**
17461 Derian Ave
Suite 100
Irvine, CA 92614
Tel: (949) 261-1022 / Fax: (949) 260-3297

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**TestAmerica Laboratories, Inc.**

| Client Contact | Project Manager: Ken Barker | Site Contact: Dan Chambers | Date: 4-19-16 | COC No: |
|---|---|---|---|---|
| United Rock Products | Tel/Fax: | Lab Contact: D. Roberts | Carrier: Client | 1 of 1 COCs |
| 135 S. State College Blvd. | Analysis Turnaround Time | | | Job No. |
| Brea, CA, 92821 | Work Days (W) ____ | | | |
| Phone: 626-523-1319 | TAT if different from Below _____ | | | |
| FAX | ☒ Standard | | | SDG No. |
| Project: United Rock Products Irwindale : Sully-Miller | ☐ 5 days | | | |
| Site: Pit 3 | ☐ 2 days | | | |
| P.O.#: | ☐ 1 day | | | |

| Sample Identification | Sample Date | Sample Time | Sample Type | Matrix | # of Cont. | Filtered Sample | 8260 LL PCE, Benzene, PCE, TEC, MT | 8260 LL Vinyl Chloride | 300 Nitrate, Chloride and Sulfate | 200.7 Cd, Cr, B, Pb and Ni | TDS 2540C | COD 5220 | Conductivity 2510B | Alkalinity 2320B | Free Carbon Dioxide 4500 CO2 C | Sample Specific Notes: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| IRW-B | 4/19/16 | 9:20 | GW | W | 8 | N | X | X | X | X | X | X | X | X | X | |
| PIT 3-1 | ↓ | 10:20 | ↓ | ↓ | ↓ | ↓ | X | X | X | X | X | X | X | X | X | |
| PIT 3-2 | ↓ | 10:41 | ↓ | ↓ | ↓ | ↓ | X | X | X | X | X | X | X | X | X | |

440-144805 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 1, 2, 4, 5

*Possible Hazard Identification*
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* *Poison B* ☐ *Unknown* ☐

***Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)***
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

**Special Instructions/QC Requirements & Comments: Pit 3 Analytes**

| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
|---|---|---|---|---|---|
| [signature] | CES, INC | 4-19-16 14:55 | [signature] | TA.Y | 4-19-16 14:55 |
| | | | | | |
| | | | | | |

4.5 / ~~4.3~~ 4.7 IR 77

4/19/16



4/28/2016

# Login Sample Receipt Checklist

Client: United Rock Products Corp

Job Number: 440-144805-1

**Login Number: 144805**
**List Number: 1**
**Creator: Escalante, Maria I**

**List Source: TestAmerica Irvine**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

# APPENDIX C

# GROUNDWATER DATABASE

## Pit #3 UNITED ROCK PRODUCTS DATABASE

| WATER LEVEL | | GROUNDWATER PARAMETERS | | | | | GENERAL MINERAL (mg/l) | | | | TRACE ELEMENTS | | | | GENERAL CHEMISTRY | | | | | | ORGANICS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | See attached organics portion - Note (1) | | | | |
| Sample Point | Date | pH | T(°F) | EC (µmhos/cm) | $CO_2$ (mg/l) | Alk (mg/l) | $SO_4$ | Cl | $NO_3$ | TDS | Ni (µg/l) | Pb (µg/l) | Cd (µg/l) | Cr (µg/l) | COD (mg/l) | OH (mg/l) | TH (mg/l) | $HCO_3$ (mg/l) | $CO_3$ (mg/l) | B (mg/l) | Benzene (µg/l) | MTBE (µg/l) | TCE (µg/l) | Tetra chloro ethene (µg/l) | Vinyl Chroide (µg/l) |
| IRW-3A | 3-Sep-14 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | Note 2 | NA | NA | NA | NA | NA |
| IRW-3B | 3-Sep-14 | 7.9 | 81.6 | 397 | 748 | 130 | 41.6 | 15.9 | 0.85 | 210 | <10 | <5 | <5 | <10 | 4 | <5 | 157 | 159 | <5 | 0.204 | <1 | <1 | <5 | <5 | <5 |
| SW-1 | 3-Sep-14 | 8.42 | 83.84 | 348 | <1 | 76 | 64.5 | 15 | 0.44 | 148 | <10 | <5 | <5 | <10 | 4 | <5 | 144 | 88 | <5 | 0.147 | <1 | <1 | <5 | <5 | <5 |
| Pit 3-1 | 29-Oct-14 | 8.08 | 74.5 | 388 | <1 | 102 | 63.8 | 16 | 0.88 | 184 | <20 | 7 | <5 | <10 | <4 | <5 | 163 | 125 | <5 | 0.098 | <1 | <1 | <5 | <5 | <5 |
| Pit 3-2 | 29-Oct-14 | 7.88 | 80.1 | 391 | <1 | 102 | 63.6 | 15.9 | 0.74 | 258 | <20 | 7 | <5 | <10 | <4 | <5 | 159 | 125 | <5 | 0.204 | <1 | <1 | <5 | <5 | <5 |
| IRW-B | 29-Oct-14 | 8.42 | 83.84 | 348 | <1 | 76 | 39.3 | 15.8 | 1.61 | 200 | <10 | <5 | <5 | <10 | <4 | <5 | 174 | 152 | 44 | 0.082 | <1 | <1 | <5 | <5 | <5 |
| Pit 3-1 | 25-Feb-15 | 7.33 | 67.82 | 400 | 2 | 107 | 66 | 16 | 0.51 | 205 | <10 | <10 | <10 | <10 | <5 | -- | 160 | 107 | <1 | 0.128 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-2 | 25-Feb-15 | 7.34 | 68.18 | 400 | 1.7 | 104 | 66 | 0.51 | 0.51 | 310 | <10 | <10 | <10 | <10 | <5 | -- | 150 | 104 | <1 | 0.131 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| IRW-B | 25-Feb-15 | 7.05 | 62.6 | 390 | 850 | 107 | 48 | 14 | 0.3 | 250 | <10 | <10 | <10 | <10 | <5 | -- | 150 | 107 | <1 | 0.112 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-1 | 10-Apr-15 | 7.62 | 22.6 | 410 | 1.2 | 110 | -- | -- | -- | 305 | <10 | <10 | <10 | <10 | <5 | -- | 150 | 110 | <1 | 0.089 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-2 | 10-Apr-15 | 7.98 | 22.1 | 410 | 1.2 | 109 | -- | -- | -- | 315 | <10 | <10 | <10 | <10 | <5 | -- | 160 | 109 | <1 | 0.0826 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| IRW-3B | 10-Apr-15 | 5.37 | 19.9 | 380 | 610 | 106 | -- | -- | -- | 300 | <10 | <10 | <10 | <10 | <5 | -- | 150 | 106 | <1 | 0.0713 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-1 | 7-Jul-15 | 8.42 | 79.52 | 400 | <2 | 97 | 54 | 18 | 2.7 | 300 | <10 | <5 | <5 | <5 | <20 | <1.4 | 170 | 120 | <2.4 | 0.083 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-2 | 7-Jul-15 | 8.45 | 79.7 | 400 | <2 | 98 | 56 | 19 | 2.8 | 300 | <10 | <5 | <5 | <5 | <20 | <1.4 | 170 | 120 | <2.4 | 0.084 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| IRW-3B | 7-Jul-15 | 5.66 | 72.14 | 390 | 180 | 110 | 45 | 19 | 2.2 | 290 | <10 | <5 | <5 | <5 | <20 | <1.4 | 170 | 130 | <2.4 | 0.067 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-1 | 20-Oct-15 | 7.44 | 78.8 | 370 | <2 | 98 | 61 | 19 | 0.66 | 270 | <10 | <5 | <5 | <5 | 120 | <4 | -- | 98 | <4 | 0.14 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-2 | 20-Oct-15 | 7.03 | 77.2 | 370 | <2 | 98 | 60 | 19 | 0.68 | 270 | <10 | <5 | <5 | <5 | 23 | <4 | -- | 98 | <4 | 0.13 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| IRW-3B | 20-Oct-15 | 7.48 | 71.6 | 370 | 72 | 120 | 49 | 16 | 0.56 | 270 | <10 | <5 | <5 | <5 | <20 | <4 | -- | 120 | <4 | 0.12 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-1 | 19-Apr-16 | 7.05 | 77.9 | 330 | <2 | 88 | 54 | 18 | 0.35 | 220 | <10 | <5 | <5 | <5 | <20 | <4 | -- | 88 | <4 | 0.092 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| Pit 3-2 | 19-Apr-16 | 7.32 | 77.0 | 330 | <2 | 76 | 55 | 19 | 0.21 | 220 | <10 | <5 | <5 | <5 | <20 | <4 | -- | 70 | 5.7 | 0.092 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| IRW-3B | 19-Apr-16 | 6.79 | 73.4 | 420 | 320 | 92 | 81 | 19 | 0.61 | 260 | <10 | <5 | <5 | <5 | <20 | <4 | -- | 92 | <4 | 0.08 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

-- Information not available

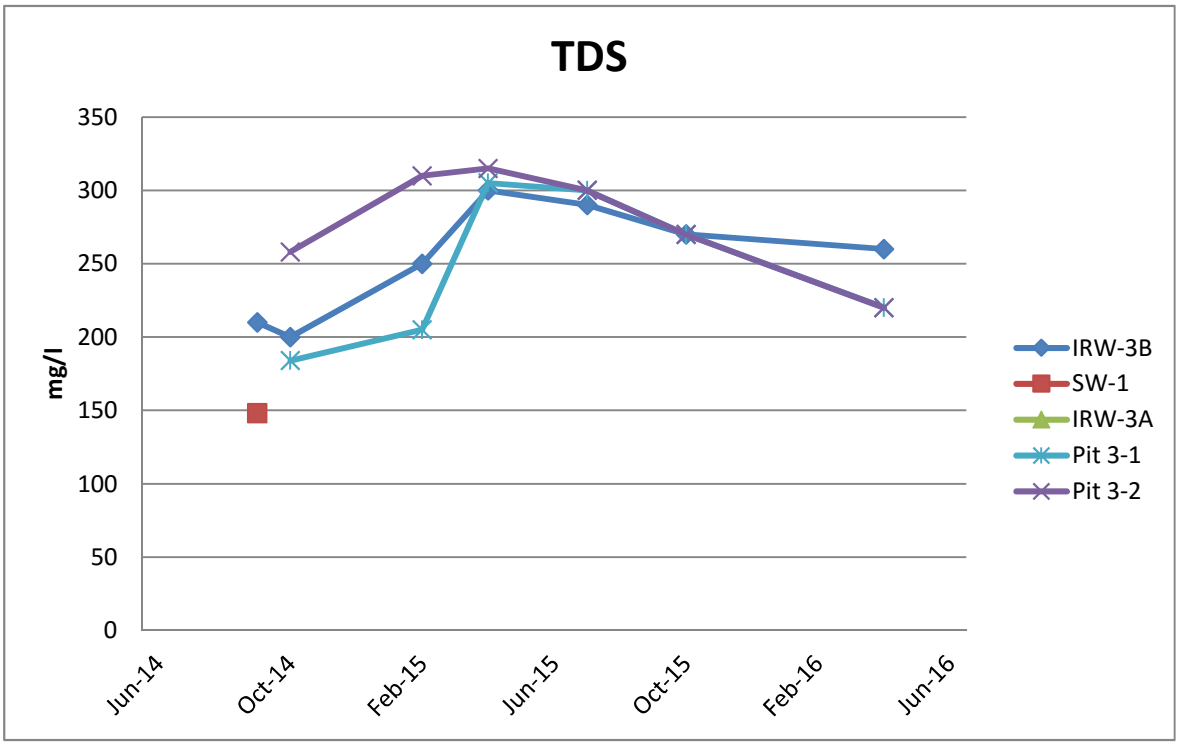
(1) The WDR's required analysis for EPA App. I and II parameters for the first sampling event. Analysis of EPA App. I and II parameters shall be reported in the fourth quarter 2014 report.

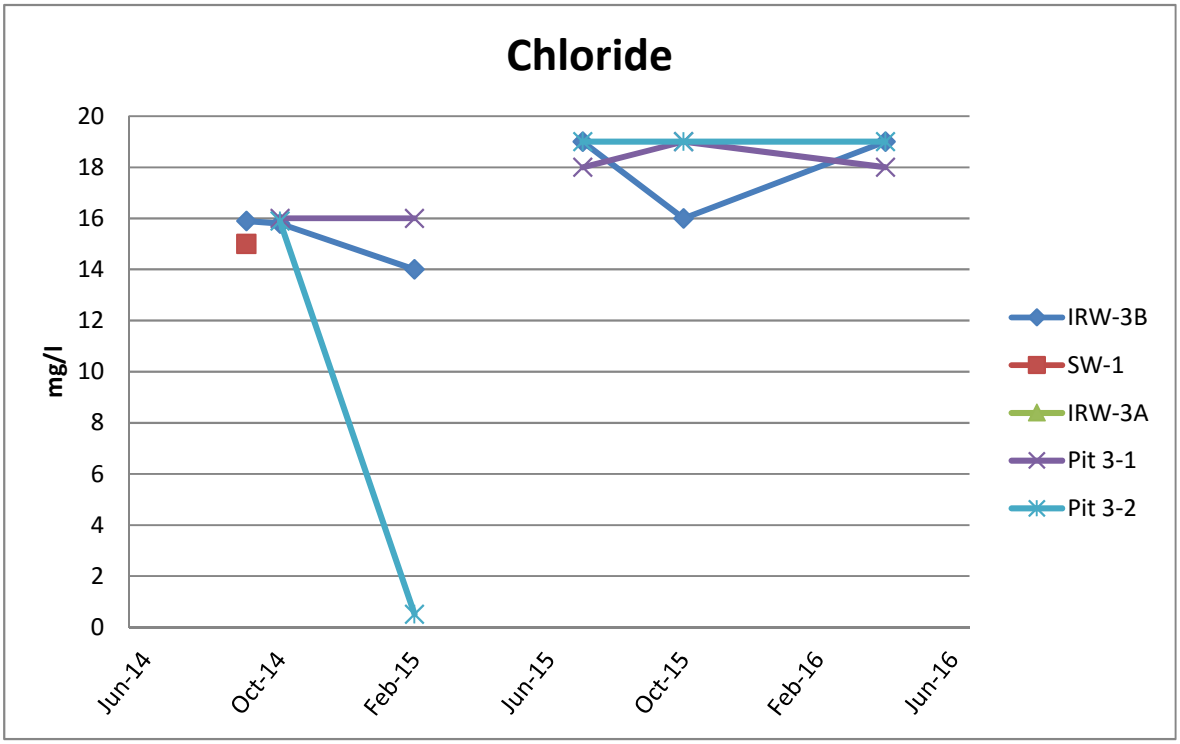
(2) Samples not collected in well

# APPENDIX D

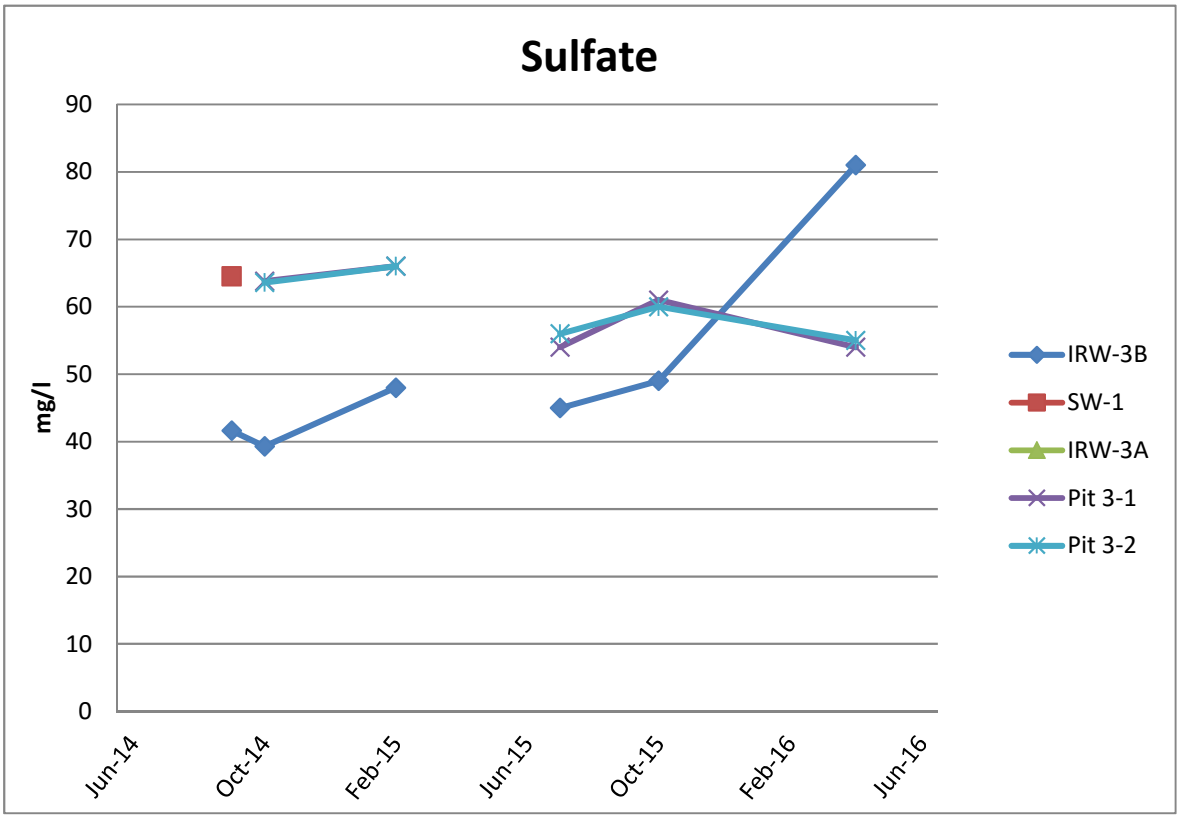
# GRAPHICAL SUMMARIES

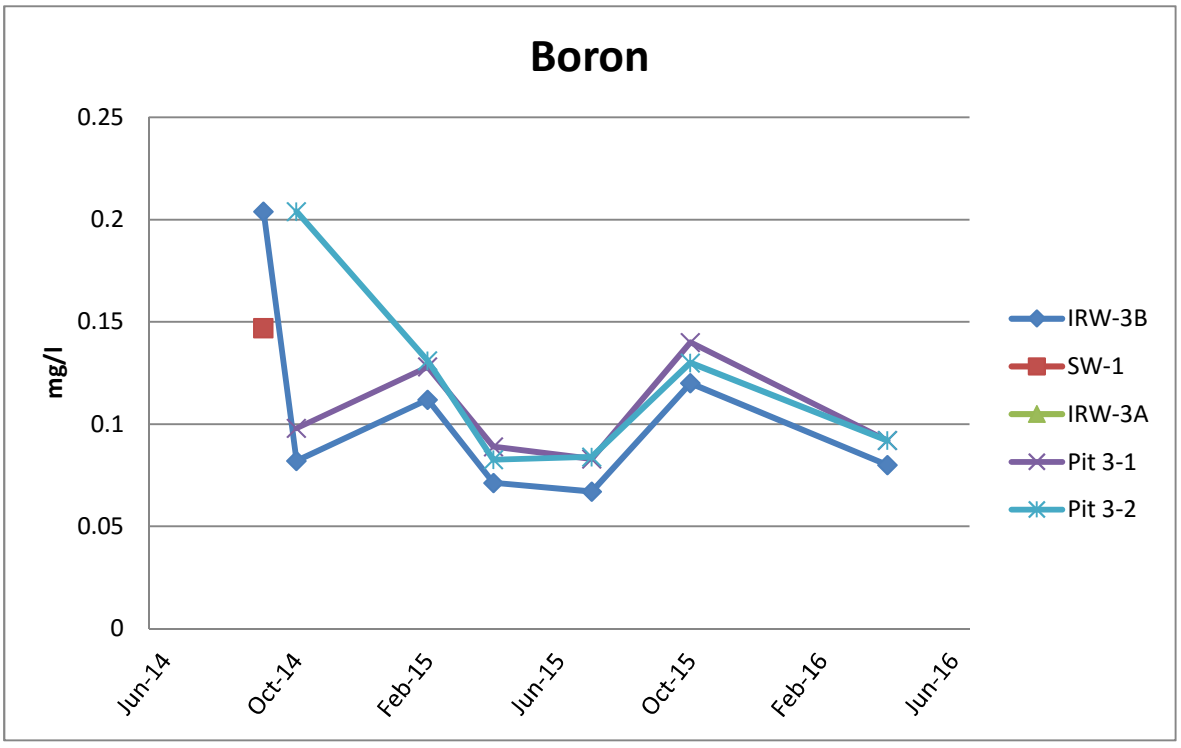
## Graphical Summaries 2016



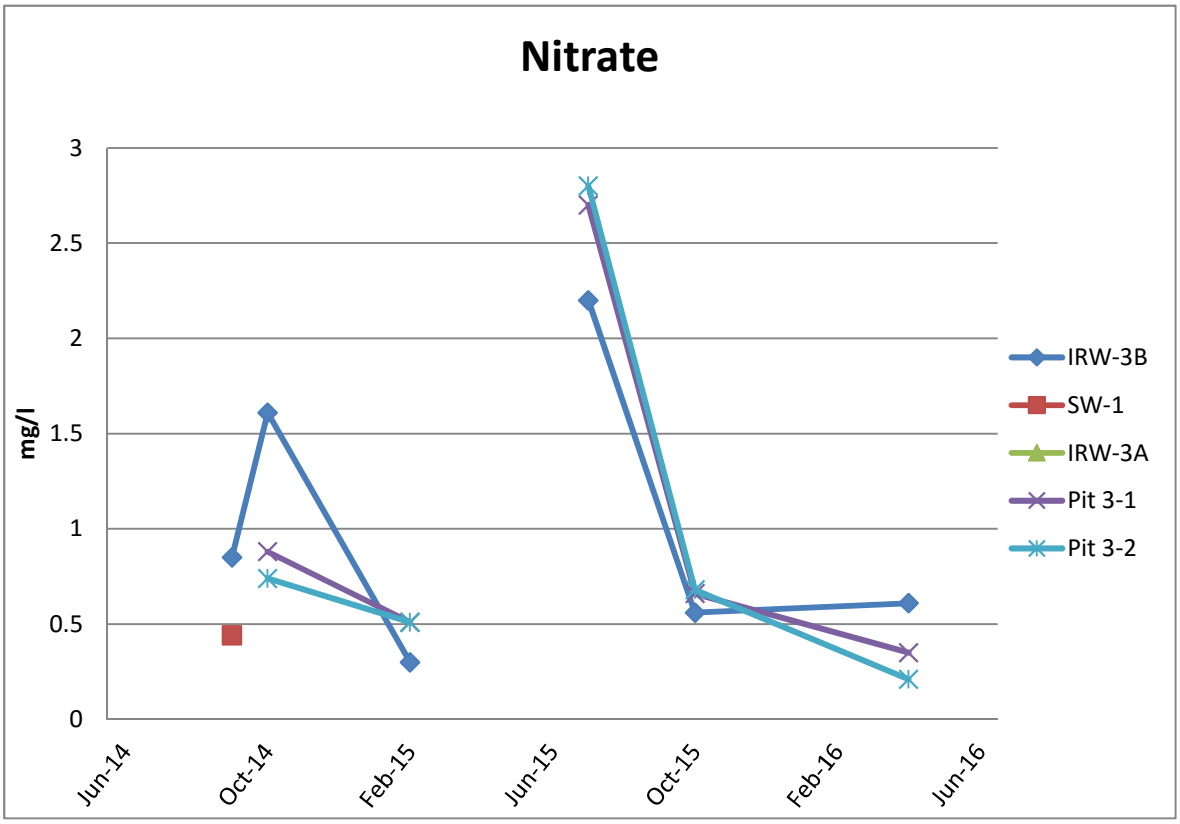



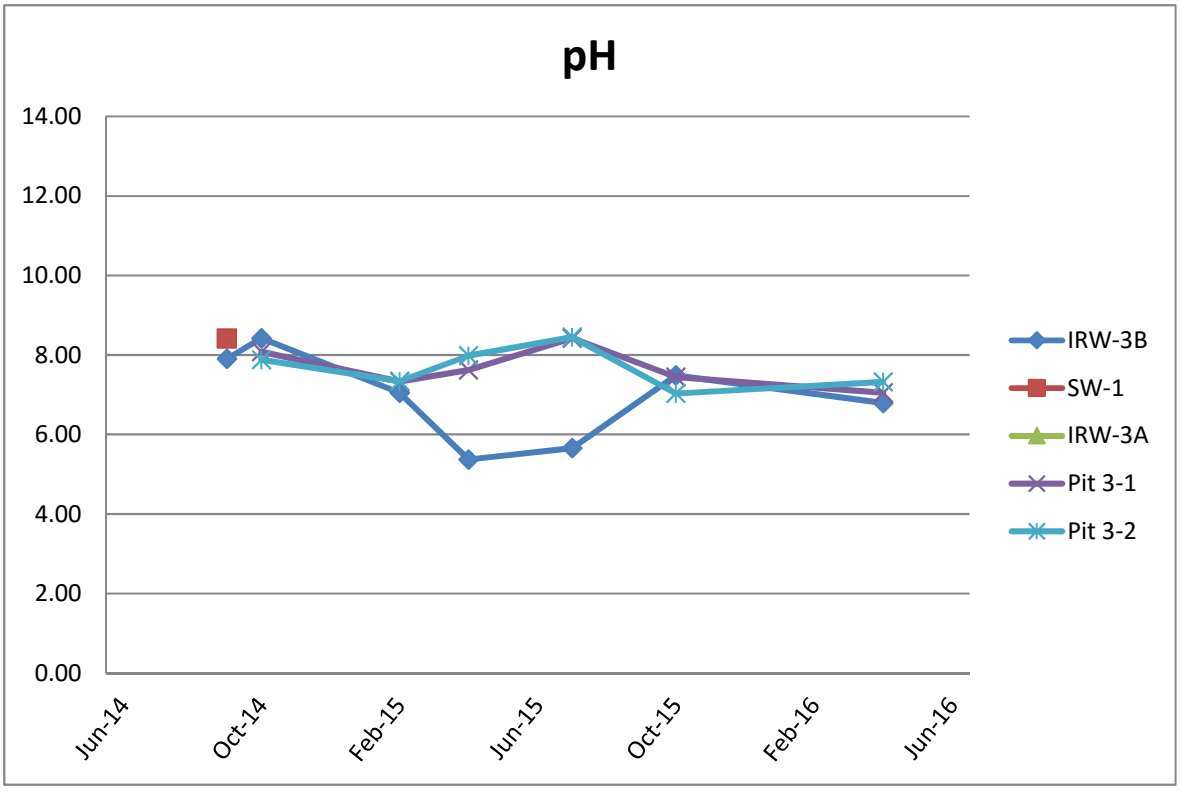
## Graphical Summaries 2016



## Graphical Summaries 2016



# APPENDIX E

# LANDFILL WASTE DISPOSAL

135 S. State College Blvd. Suite 400 Brea, CA 92821 (714) 578-9600

July 7, 2016

California Regional
Water Quality Control Board
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Information Technology Unit

Subject: Waste Discharge Requirements- United Rock Pit 3
1137 Meridian Street
Irwindale, CA 91706
File No. 72-124, Order No.01-131, CI 5801

Pursuant to the General Provisions for Reporting (Section A) of the Monitoring and Reporting Program (File CI 5801) and Section III of the Reporting Conditions, we are respectively submitting our semiannual report.

Please be advised that there was no discharge placed in Pit #3 during the 1st half of calendar year 2016.

The estimated life of the site is 82 years 6 months.

No purged ground water from monitoring wells is used at the site.

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

Executed on the 7th day of January in Brea, California.

Very truly yours,

Ken Barker

Ken Barker
Environmental Manager

Cc: Scott Taylor, Taylor Environmental Services
William Tam, City of Irwindale Engineer

# RWQCB – Water Quality Lab Data

# Associated Laboratories

*806 N. Batavia - Orange, CA 92868*
*Tel (714)771-6900 Fax (714)538-1209*
*www.associatedlabs.com*
*Info@associatedlabs.com*


ACCREDITED IN ACCORDANCE WITH nelac 04232CA

Client: United Rock Products
Address: 135 S. State College Blvd.
Suite #400
Brea, CA 92821
Attn: Ken Barker

Lab Request: 336414
Report Date: 02/24/2014
Date Received: 02/14/2014
Client ID: 12535

Comments: Pit 3

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 336414-001 | #1 Pit 3 |
| 336414-002 | #2 Pit 3 |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.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*TESTING & CONSULTING*
*Chemical*
*Microbiological*
*Environmental*

**Matrix:** Water | **Client:** United Rock Products | **Collector:** Client
**Sampled:** 02/14/2014 12:10 | **Site:**
**Sample #:** 336414-001 | **Client Sample #:** #1 Pit 3 | **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1144006 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 02/18/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 02/18/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 02/18/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *130* | *60-140* | |

**Matrix:** Water | **Client:** United Rock Products | **Collector:** Client
**Sampled:** 02/14/2014 12:20 | **Site:**
**Sample #:** 336414-002 | **Client Sample #:** #2 Pit 3 | **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1144006 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 02/18/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 02/18/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 02/18/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *105* | *60-140* | |

| QCBatchID: QC1144006 | Analyst: lytagas | Method: EPA 8015B |
|---|---|---|
| Matrix: Water | Analyzed: 02/18/2014 | Instrument: SVOA-GC (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1144006MB1** | | | | | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | |
| TPH Diesel | ND | mg/L | | 0.1 | |
| TPH Motor Oil | ND | mg/L | | 0.3 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | | LCS | LCSD | | %Rec | RPD | |
| **QC1144006LCS1, QC1144006LCSD1** | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 0.70 | 0.88 | mg/L | 70 | 88 | 23 | 57-122 | 30 | |

# Notes and Definitions

| | |
|---|---|
| **B** | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| **C** | Laboratory Contamination. |
| **D** | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| **DF** | Dilution Factor |
| **DW** | Sample result is calculated on a dry weigh basis |
| **J** | Reported value is estimated |
| **L** | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| **M** | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| **MDL** | Method Detection Limit |
| **NC** | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| **ND** | Analyte was not detected or was less than the detection limit. |
| **P** | Sample was received without proper preservation according to EPA guidelines. |
| **Q1** | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| **Q2** | Analyte calibration was not verified and the result was estimated and reported with qualifier. |
| **Q3** | Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier. |
| **RDL** | Reporting Detection Limit |
| **S** | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| **T** | Sample was extracted/analyzed past the holding time. |
| **T2** | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |
| **TIC** | Tentatively Identified Compounds |

ASSOCIATED LABORATORIES
806 North Batavia – Orange, California 92868 – 714-771-6900 FAX 714-538-1209

# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: UNITED ROCK PROD. Project: PIT 3
Date Received: 2/19/19 Sampler's Name: (Yes) No
Sample temperature: 19 °C
Sample(s) received in cooler: Yes (No) (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ____ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam
____ Paper ✓ None ___ Other _____
Cooler Temperature: _____

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| **Section 3** | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | — | | |
| Were custody seals present? | | | — |
| If Yes – were they intact? | | | — |
| Were all samples sealed in plastic bags? | — | | |
| Did all samples arrive intact? If no, indicate below. | — | | |
| Did all bottle labels agree with COC? (ID, dates and times) | — | | |
| Were correct containers used for the tests required? | — | | |
| Was a sufficient amount of sample sent for tests indicated? | — | | |
| Was there headspace in VOA vials? | | | — |
| Were the containers labeled with correct preservatives? | | | — |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | — |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments

**Section 5**
Was Project Manager notified of discrepancies: Y / N N/A
Project Manager's response: _____

Completed By: _____ Date: 2/19/19

**ASSOCIATED LABORATORIES**
806 North Batavia ▪ Orange, CA 92868
Phone: (714) 771-6900 ▪ Fax: (714) 771-9933

# Chain of Custody Record

Lab Job No. 33604414
Page _____ of _____

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: _____ 48 Hours: _____ 24 Hours: _____

| CUSTOMER INFORMATION | | PROJECT INFORMATION | |
|---|---|---|---|
| COMPANY: United Rock Products | | PROJECT NAME: Pit 3 | |
| SEND REPORT TO: Ken Barker | | NUMBER: | |
| EMAIL: Ken.Barker@Scally-Miller.com | | ADDRESS: | |
| ADDRESS: 135 S. State College Blvd #400 Brea, CA 92821 | | P.O. #: | |
| PHONE: | FAX: | SAMPLED BY: Ken Barker | |

| | Sample ID | Date | Time | Matrix | Container Number/Size | Pres. | ANALYSIS REQUEST 8015 Comb C Carbon Range | Test Instructions & Comments |
|---|---|---|---|---|---|---|---|---|
| 1 | ~~#1~~ Pit 3 | 2/14/14 | 12:10 | W | 1 L | | X | |
| 2 | #2 Pit 3 | 2/14/14 | 12:20 | W | 1 L | | X | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |

Total No. of Samples: 2 Method of Shipment:

Preservative: (1) = Ice 2 = HCl 3 = $HNO_3$ 4 = $H_2SO_4$ 5 = NaOH 6 = Other

| Relinquished by 1. | Received By: 1. | Relinquished by 2. | Received By: 2. | Relinquished by 3. | Received By: 3. |
|---|---|---|---|---|---|
| Ken Barker | | | | | |
| Signature: Ken Barker | Signature: | Signature: | Signature: | Signature: | Signature: |
| Printed Name: Ken Barker | Printed Name: | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| Date: 2/14/14 Time: 13:44 | Date: 2/14/14 Time: 13:45 | Date: Time: | Date: Time: | Date: Time: | Date: Time: |

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

**Associated Laboratories**
*806 N. Batavia - Orange, CA 92868*
*Tel (714)771-6900 Fax (714)538-1209*
*www.associatedlabs.com*
*Info@associatedlabs.com*

ACCREDITED IN ACCORDANCE WITH nelac 04232CA

Client: United Rock Products
Address: 135 S. State College Blvd.
Suite #400
Brea, CA 92821
Attn: Ken Barker

Lab Request: 336121
Report Date: 02/24/2014
Date Received: 02/10/2014
Client ID: 12535

Comments: Pit #3

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 336121-001 | #1 Pit 3 |
| 336121-002 | #2 Pit 3 |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

John Gozanna Jr

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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*TESTING & CONSULTING*
*Chemical*
*Microbiological*
*Environmental*

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 02/10/2014 11:45 **Site:**
**Sample #:** 336121-001 **Client Sample #:** #1 Pit 3 **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1143828 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 02/12/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 02/12/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 02/12/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *95* | *60-140* | |

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 02/10/2014 11:55 **Site:**
**Sample #:** 336121-002 **Client Sample #:** #2 Pit 3 **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1143828 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 02/12/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 02/12/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 02/12/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *90* | *60-140* | |

| QCBatchID: QC1143828 | Analyst: lytagas | Method: EPA 8015B |
|---|---|---|
| Matrix: Water | Analyzed: 02/12/2014 | Instrument: SVOA-GC (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1143828MB1** | | | | | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | |
| TPH Diesel | ND | mg/L | | 0.1 | |
| TPH Motor Oil | ND | mg/L | | 0.3 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | | LCS | LCSD | | %Rec | RPD | |
| **QC1143828LCS1, QC1143828LCSD1** | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 0.88 | 0.75 | mg/L | 88 | 75 | 16 | 57-122 | 30 | |

# Notes and Definitions

| | |
|---|---|
| B | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| C | Laboratory Contamination. |
| D | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| DF | Dilution Factor |
| DW | Sample result is calculated on a dry weigh basis |
| J | Reported value is estimated |
| L | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| M | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| MDL | Method Detection Limit |
| NC | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| ND | Analyte was not detected or was less than the detection limit. |
| P | Sample was received without proper preservation according to EPA guidelines. |
| Q1 | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| Q2 | Analyte calibration was not verified and the result was estimated and reported with qualifier. |
| Q3 | Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier. |
| RDL | Reporting Detection Limit |
| S | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| T | Sample was extracted/analyzed past the holding time. |
| T2 | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |
| TIC | Tentatively Identified Compounds |

ASSOCIATED LABORATORIES
806 North Batavia – Orange, California 92868 – 714-771-6900 FAX 714-538-1209

# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: United Rock Prod. Project: P,T#3
Date Received: 2-10-14
Sample temperature: 13.5C
Sampler's Name: ~~Yes~~ No
Sample(s) received in cooler: Yes (No) (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ____ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam
____ Paper ____None ___ Other_____
Cooler Temperature: _____

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| **Section 3** | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | ✓ | | |
| Were custody seals present? | | ✓ | |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | ✓ | | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ✓ | | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | | ✓ |
| Were the containers labeled with correct preservatives? | | | ✓ |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | ✓ |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments

**Section 5**
Was Project Manager notified of discrepancies: Y / N N/A
Project Manager's response: _____

Completed By: M. Elliott Date: 2/10/14

**ASSOCIATED LABORATORIES**
806 North Batavia ▪ Orange, CA 92868
Phone: (714) 771-6900 ▪ Fax: (714) 771-9933

# Chain of Custody Record

Lab Job No. 336121
Page _____ of _____

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: _____ 48 Hours: _____ 24 Hours: _____

| CUSTOMER INFORMATION | PROJECT INFORMATION |
|---|---|
| COMPANY: United Rock Products | PROJECT NAME: Pit #3 |
| SEND REPORT TO: Ken Barker | NUMBER: |
| EMAIL: Ken.Barker@Scally-Miller.com | ADDRESS: |
| ADDRESS: 135 S. State College Blvd. #400 | |
| Brea, CA 92821-5819 | P.O. #: |
| PHONE: 626-523-7319 FAX: | SAMPLED BY: Ken Barker |

| | Sample ID | Date | Time | Matrix | Container Number/Size | Pres. | ANALYSIS REQUEST 8015 - Full Carbon Range | Test Instructions & Comments |
|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 1 | | | |
| 2 | #1 Pit 3 | 2/10/14 | 11:45 | W | 1-1L | 1 | X | |
| 3 | #2 Pit 3 | 2/10/14 | 11:55 | W | 1-1L | 1 | X | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |

Total No. of Samples: 2 Method of Shipment: Drop off Preservative: (1) = Ice 2 = HCl 3 = $HNO_3$ 4 = $H_2SO_4$ 5 = NaOH 6 = Other

| Relinquished by 1. | Received By: 1. | Relinquished by 2. | Received By: 2. | Relinquished by 3. | Received By: 3. |
|---|---|---|---|---|---|
| Signature: Ken Barker | Signature: | Signature: | Signature: | Signature: | Signature: |
| Printed Name: Ken Barker | Printed Name: | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| Date: 2/10/14 Time: | Date: 2/10/14 Time: 1347 | Date: Time: | Date: Time: | Date: Time: | Date: Time: |

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

**Associated Laboratories**
*806 N. Batavia - Orange, CA 92868*
*Tel (714)771-6900 Fax (714)538-1209*
*www.associatedlabs.com*
*Info@associatedlabs.com*

ACCREDITED IN ACCORDANCE WITH nelac
04232CA

Client: United Rock Products
Address: 135 S. State College Blvd.
Suite #400
Brea, CA 92821
Attn: Ken Barker

Lab Request: 336558
Report Date: 02/27/2014
Date Received: 02/19/2014
Client ID: 12535

Comments: Pit 3

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 336558-001 | #1 Pit 3 |
| 336558-002 | #2 Pit 3 |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

John Yozamura Jr

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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*TESTING & CONSULTING*
*Chemical*
*Microbiological*
*Environmental*

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 02/19/2014 09:10 **Site:**
**Sample #:** 336558-001 **Client Sample #:** #1 Pit 3 **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1144137 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 02/21/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 02/21/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 02/21/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *75* | *60-140* | |

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 02/19/2014 09:20 **Site:**
**Sample #:** 336558-002 **Client Sample #:** #2 Pit 3 **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1144137 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 02/21/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 02/21/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 02/21/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *95* | *60-140* | |

| QCBatchID: QC1144137 | Analyst: lytagas | Method: EPA 8015B |
|---|---|---|
| Matrix: Water | Analyzed: 02/21/2014 | Instrument: SVOA-GC (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1144137MB1** | | | | | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | |
| TPH Diesel | ND | mg/L | | 0.1 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | | LCS | LCSD | | %Rec | RPD | |
| **QC1144137LCS1, QC1144137LCSD1** | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 0.78 | 0.62 | mg/L | 78 | 62 | 23 | 57-122 | 30 | |

# Notes and Definitions

| | |
|---|---|
| **B** | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| **C** | Laboratory Contamination. |
| **D** | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| **DF** | Dilution Factor |
| **DW** | Sample result is calculated on a dry weigh basis |
| **J** | Reported value is estimated |
| **L** | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| **M** | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| **MDL** | Method Detection Limit |
| **NC** | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| **ND** | Analyte was not detected or was less than the detection limit. |
| **P** | Sample was received without proper preservation according to EPA guidelines. |
| **Q1** | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| **Q2** | Analyte calibration was not verified and the result was estimated and reported with qualifier. |
| **Q3** | Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier. |
| **RDL** | Reporting Detection Limit |
| **S** | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| **T** | Sample was extracted/analyzed past the holding time. |
| **T2** | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |
| **TIC** | Tentatively Identified Compounds |

ASSOCIATED LABORATORIES
806 North Batavia – Orange, California 92868 – 714-771-6900 FAX 714-538-1209

# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: United Rock Prod. Project: Pit 3
Date Received: 2-19-14 Sampler's Name: (Yes) No
Sample temperature: 15.5c
Sample(s) received in cooler: Yes (No) (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ____ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam
____ Paper ____None ___ Other_____
Cooler Temperature: _____

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| **Section 3** | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | ✓ | | |
| Were custody seals present? | | ✓ | |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | ✓ | | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ✓ | | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | | ✓ |
| Were the containers labeled with correct preservatives? | | | ✓ |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | ✓ |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments

**Section 5**
Was Project Manager notified of discrepancies: Y / N N/A
Project Manager's response: _____

Completed By: M. Elbert Date: 2/19/14

**ASSOCIATED LABORATORIES**
806 North Batavia ▪ Orange, CA 92868
Phone: (714) 771-6900 ▪ Fax: (714) 771-9933

# Chain of Custody Record

Lab Job No. 336558
Page _____ of _____

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: _____ 48 Hours: _____ 24 Hours: _____

| CUSTOMER INFORMATION | | PROJECT INFORMATION | |
|---|---|---|---|
| COMPANY: United Rock Products | | PROJECT NAME: Pit 3 | |
| SEND REPORT TO: Ken Barker | | NUMBER: | |
| EMAIL: Ken.Barker@SullyMiller.com | | ADDRESS: | |
| ADDRESS: 1350 State College Blvd Ste 210 | | P.O. #: | |
| Brea, CA 92821-5819 | | SAMPLED BY: Ken Barker | |
| PHONE: 626 523 1319 | FAX: | | |

| | Sample ID | Date | Time | Matrix | Container Number/Size | Pres. | ANALYSIS REQUEST: 8015 Full Carbon Range | | | | | | | | | Test Instructions & Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | #1 Pit 3 | 2/19/14 | 9:10 | | 1 L | | X | | | | | | | | | |
| 2 | #2 Pit 3 | 2/19/14 | 9:20 | | 1 L | | X | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | |

Total No. of Samples: 2 Method of Shipment: Drop OFF Preservative: (1) = Ice 2 = HCl 3 = $HNO_3$ 4 = $H_2SO_4$ 5 = NaOH 6 = Other

| Relinquished by 1. | Received By: 1. | Relinquished by 2. | Received By: 2. | Relinquished by 3. | Received By: 3. |
|---|---|---|---|---|---|
| Ken Barker | | | | | |
| Signature: Ken Barker | Signature: | Signature: | Signature: | Signature: | Signature: |
| Printed Name: Ken Barker | Printed Name: | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| Date: 2/19/14 Time: 11:53 | Date: 2/19/14 Time: 11:53 | Date: Time: | Date: Time: | Date: Time: | Date: Time: |

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

**Associated Laboratories**
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*Tel (714)771-6900 Fax (714)538-1209*
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*Info@associatedlabs.com*

ACCREDITED IN ACCORDANCE WITH nelac
04232CA

Client: United Rock Products
Address: 135 S. State College Blvd.
Suite #400
Brea, CA 92821
Attn: Ken Barker

Lab Request: 336907
Report Date: 03/11/2014
Date Received: 02/26/2014
Client ID: 12535

Comments: Pit 3

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 336907-001 | Pit 3 #1 Dredge |
| 336907-002 | Pit 3 #2 S.W. Shore |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

John Yozamp

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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*TESTING & CONSULTING*
*Chemical*
*Microbiological*
*Environmental*

**Matrix:** Water | **Client:** United Rock Products | **Collector:** Client
**Sampled:** 02/26/2014 10:15 | **Site:**
**Sample #:** 336907-001 | **Client Sample #:** Pit 3 #1 Dredge | **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1144323 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 02/28/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 02/28/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 02/28/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *80* | *60-140* | |

**Matrix:** Water | **Client:** United Rock Products | **Collector:** Client
**Sampled:** 02/26/2014 10:25 | **Site:**
**Sample #:** 336907-002 | **Client Sample #:** Pit 3 #2 S.W. Shore | **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1144323 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 02/28/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 02/28/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 02/28/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *125* | *60-140* | |

QCBatchID: QC1144323 Analyst: lytagas Method: EPA 8015B

Matrix: Water Analyzed: 02/28/2014 Instrument: SVOA-GC (group)

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1144323MB1** | | | | | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | |
| TPH (C13 to C22) | ND | mg/L | | 0.2 | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | |
| TPH (C23 to C40) | ND | mg/L | | 0.3 | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | |
| TPH (C6 to C12) | ND | mg/L | | 0.2 | |
| TPH Diesel | ND | mg/L | | 0.1 | |
| TPH Motor Oil | ND | mg/L | | 0.3 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | | LCS | LCSD | | %Rec | RPD | |
| **QC1144323LCS1, QC1144323LCSD1** | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 0.61 | 0.77 | mg/L | 61 | 77 | 23 | 57-122 | 30 | |

# Notes and Definitions

| | |
|---|---|
| **B** | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| **C** | Laboratory Contamination. |
| **D** | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| **DF** | Dilution Factor |
| **DW** | Sample result is calculated on a dry weigh basis |
| **J** | Reported value is estimated |
| **L** | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| **M** | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| **MDL** | Method Detection Limit |
| **NC** | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| **ND** | Analyte was not detected or was less than the detection limit. |
| **P** | Sample was received without proper preservation according to EPA guidelines. |
| **Q1** | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| **Q2** | Analyte calibration was not verified and the result was estimated and reported with qualifier. |
| **Q3** | Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier. |
| **RDL** | Reporting Detection Limit |
| **S** | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| **T** | Sample was extracted/analyzed past the holding time. |
| **T2** | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |
| **TIC** | Tentatively Identified Compounds |

ASSOCIATED LABORATORIES
806 North Batavia – Orange, California 92868 – 714-771-6900 FAX 714-538-1209

# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: United Rock Project: Pit 3
Date Received: 2-26-14 Sampler's Name: (Yes) No
Sample temperature: _____
Sample(s) received in cooler: (Yes) No (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ____ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam
____ Paper ____None ___ Other_____
Cooler Temperature:_____

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| **Section 3** | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | ✓ | | |
| Were custody seals present? | | ✓ | |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | | ✓ | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ✓ | | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | | ✓ |
| Were the containers labeled with correct preservatives? | | | ✓ |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | ✓ |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments

**Section 5**
Was Project Manager notified of discrepancies: Y / N N/A
Project Manager's response:_____

Completed By: M. Gabriel Date: 2/26/14

**ASSOCIATED LABORATORIES**
806 North Batavia ▪ Orange, CA 92868
Phone: (714) 771-6900 ▪ Fax: (714) 771-9933

# Chain of Custody Record

Lab Job No. 336907
Page _____ of _____

| CUSTOMER INFORMATION | | PROJECT INFORMATION | |
|---|---|---|---|
| COMPANY: United Rock Products | | PROJECT NAME: Pit 3 | |
| SEND REPORT TO: Ken Barker | | NUMBER: | |
| EMAIL: Ken.Barker@sully-miller.com | | ADDRESS: | |
| ADDRESS: 135 S. State College Blvd #400 | | | |
| Brea, CA | | P.O. #: | |
| PHONE: 626 523 1319 | FAX: | SAMPLED BY: | |

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: _____ 48 Hours: _____ 24 Hours: _____

| | Sample ID | Date | Time | Matrix | Container Number/Size | Pres. | ANALYSIS REQUEST: 8015 Full Carbon Range | Test Instructions & Comments |
|---|---|---|---|---|---|---|---|---|
| 1 | Pit 3 #1 Dredge | 2/26/14 | 10:15 | | 1 L | | X | |
| 2 | Pit 3 #2 S.W. Shore | 2/26/14 | 10:25 | | 1 L | | X | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
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| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |

Total No. of Samples: 2 Method of Shipment: Drop off Preservative: (1) = Ice 2 = HCl 3 = $HNO_3$ 4 = $H_2SO_4$ 5 = NaOH 6 = Other

| Relinquished by 1. | Received By: 1. | Relinquished by 2. | Received By: 2. | Relinquished by 3. | Received By: 3. |
|---|---|---|---|---|---|
| Ken Barker | | | | | |
| Signature: Ken Barker | Signature: | Signature: | Signature: | Signature: | Signature: |
| Printed Name: Ken Barker | Printed Name: | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| Date: 2/26/14 Time: 11:42AM | Date: 2/26/14 Time: 11:42 | Date: Time: | Date: Time: | Date: Time: | Date: Time: |

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

**Associated Laboratories**
*806 N. Batavia - Orange, CA 92868*
*Tel (714)771-6900 Fax (714)538-1209*
*www.associatedlabs.com*
*Info@associatedlabs.com*

ACCREDITED IN ACCORDANCE WITH nelac
04232CA

Client: United Rock Products
Address: 135 S. State College Blvd.
Suite #400
Brea, CA 92821
Attn: Ken Barker

Lab Request: 337534
Report Date: 03/19/2014
Date Received: 03/05/2014
Client ID: 12535

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 337534-001 | #1 Predge |
| 337534-002 | #2 S.W. Shore |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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*TESTING & CONSULTING*
*Chemical*
*Microbiological*
*Environmental*

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 03/05/2014 09:30 **Site:**
**Sample #:** 337534-001 **Client Sample #:** #1 Predge **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Method: EPA 8015 NELAC | Prep Method: EPA 3535A | | | | | QCBatchID: | QC1144720 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 03/12/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 03/12/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 03/12/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *65* | *60-140* | |

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 03/05/2014 09:40 **Site:**
**Sample #:** 337534-002 **Client Sample #:** #2 S.W. Shore **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| Method: EPA 8015 NELAC | Prep Method: EPA 3535A | | | | | QCBatchID: | QC1144720 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 03/12/14 | lyt | |
| TPH (C10 to C22) | **0.24** | 1 | 0.2 | mg/L | 03/12/14 | lyt | |
| TPH (C22 to C36) | **0.56** | 1 | 0.3 | mg/L | 03/12/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *80* | *60-140* | |

| QCBatchID: QC1144720 | Analyst: lytagas | Method: EPA 8015B |
|---|---|---|
| Matrix: Water | Analyzed: 03/12/2014 | Instrument: SVOA-GC (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1144720MB1** | | | | | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | |
| TPH Diesel | ND | mg/L | | 0.1 | |
| TPH Motor Oil | ND | mg/L | | 0.3 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount LCS | Spike Amount LCSD | Spike Result LCS | Spike Result LCSD | Units | Recoveries LCS | Recoveries LCSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1144720LCS1, QC1144720LCSD1** | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 0.62 | 0.58 | mg/L | 62 | 58 | 7 | 57-122 | 30 | |

# Notes and Definitions

| | |
|---|---|
| B | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| BQ1 | No valid test replicates. Result may be greater. Best result was reported with qualifier. Sample toxicity possible. |
| BQ2 | No valid test replicates. |
| BQ3 | Minimum DO is less than 1.0 mg/L. Result may be greater and reported with qualifier. |
| C | Laboratory Contamination. |
| D | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| DF | Dilution Factor |
| DW | Sample result is calculated on a dry weigh basis |
| J | Reported value is estimated |
| L | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| M | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| MDL | Method Detection Limit |
| NC | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| ND | Analyte was not detected or was less than the detection limit. |
| P | Sample was received without proper preservation according to EPA guidelines. |
| Q1 | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| Q2 | Analyte calibration was not verified and the result was estimated and reported with qualifier. |
| Q3 | Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier. |
| RDL | Reporting Detection Limit |
| S | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| T | Sample was extracted/analyzed past the holding time. |
| T2 | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |
| TIC | Tentatively Identified Compounds |

ASSOCIATED LABORATORIES
806 North Batavia – Orange, California 92868 – 714-771-6900 FAX 714-538-1209

# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: United Rock Prod. Project: _____
Date Received: 3-5-14 Sampler's Name: ~~Yes~~ No
Sample temperature: _____
Sample(s) received in cooler: Yes (No) (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ____ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam
____ Paper ____None ___ Other_____
Cooler Temperature:_____

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| **Section 3** | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | ✓ | | |
| Were custody seals present? | | ✓ | |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | ✓ | | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ✓ | | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | | ✓ |
| Were the containers labeled with correct preservatives? | | | ✓ |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | ✓ |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments

**Section 5**
Was Project Manager notified of discrepancies: Y / N N/A
Project Manager's response:_____

Completed By: M. Albert Date: 3/5/14

**ASSOCIATED LABORATORIES**
806 North Batavia ▪ Orange, CA 92868
Phone: (714) 771-6900 ▪ Fax: (714) 771-9933

# Chain of Custody Record

Lab Job No. 337534
Page 1 of 1

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: ____ 48 Hours: ____ 24 Hours: ____

| CUSTOMER INFORMATION | PROJECT INFORMATION |
|---|---|
| COMPANY United Rock Products | PROJECT NAME: |
| SEND REPORT TO: Ken Barker | NUMBER: |
| EMAIL: Ken.Barker@Sully-Miller.com | ADDRESS: |
| ADDRESS: 135 S. State College Blvd #400 Brea, CA 92821-5819 | P.O. #: |
| PHONE: 826 523 1319 FAX: | SAMPLED BY: Ken Barker |

| | Sample ID | Date | Time | Matrix | Container Number/Size | Pres. | ANALYSIS REQUEST 8015 ~~Cold~~ Full Carbon Range | | | | | | | | | | Test Instructions & Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | #1 Predge | 3/5/2014 | 9:30 | W | 1 L | | X | | | | | | | | | | |
| 2 | #2 S.W. Shore | 3/5/2014 | 9:40 | W | 1 L | | X | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | |

Total No. of Samples: 2 Method of Shipment: Dropoff Preservative: 1 = Ice 2 = HCl 3 = $HNO_3$ 4 = $H_2SO_4$ 5 = NaOH 6 = Other

| Relinquished by 1. | Received By: 1. | Relinquished by 2. | Received By: 2. | Relinquished by 3. | Received By: 3. |
|---|---|---|---|---|---|
| Ken Barker | | | | | |
| Signature: Ken Barker | Signature: M. Eckert | Signature: | Signature: | Signature: | Signature: |
| Printed Name: Ken Barker | Printed Name: | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| Date: 3/5/14 Time: 11:36 | Date: 3/5/14 Time: 11:36 | Date: Time: | Date: Time: | Date: Time: | Date: Time: |

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

**Associated Laboratories**
*806 N. Batavia - Orange, CA 92868*
*Tel (714)771-6900 Fax (714)538-1209*
*www.associatedlabs.com*
*Info@associatedlabs.com*

ACCREDITED IN ACCORDANCE WITH nelac 04232CA

Client: United Rock Products
Address: 135 S. State College Blvd.
Suite #400
Brea, CA 92821
Attn: Ken Barker

Lab Request: 337872
Report Date: 03/25/2014
Date Received: 03/12/2014
Client ID: 12535

Comments: Pit 3

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 337872-001 | Dredge Sample 1 |
| 337872-002 | Shore S.W. Sample 2 |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

John Yozamma Jr

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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*TESTING & CONSULTING*
*Chemical*
*Microbiological*
*Environmental*

| | | |
|---|---|---|
| **Matrix:** Water | **Client:** United Rock Products | **Collector:** Client |
| **Sampled:** 03/12/2014 09:15 | **Site:** | |
| **Sample #:** 337872-001 | **Client Sample #:** Dredge Sample 1 | **Sample Type:** |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1144720 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 03/14/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 03/14/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 03/14/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *100* | *60-140* | |

| | | |
|---|---|---|
| **Matrix:** Water | **Client:** United Rock Products | **Collector:** Client |
| **Sampled:** 03/12/2014 09:25 | **Site:** | |
| **Sample #:** 337872-002 | **Client Sample #:** Shore S.W. Sample 2 | **Sample Type:** |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1144720 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 03/14/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 03/14/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 03/14/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *95* | *60-140* | |

| QCBatchID: QC1144720 | Analyst: lytagas | Method: EPA 8015B |
|---|---|---|
| Matrix: Water | Analyzed: 03/12/2014 | Instrument: SVOA-GC (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1144720MB1** | | | | | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | |
| TPH Diesel | ND | mg/L | | 0.1 | |
| TPH Motor Oil | ND | mg/L | | 0.3 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | | LCS | LCSD | | %Rec | RPD | |
| **QC1144720LCS1, QC1144720LCSD1** | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 0.62 | 0.58 | mg/L | 62 | 58 | 7 | 57-122 | 30 | |

# Notes and Definitions

| | |
|---|---|
| B | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| BQ1 | No valid test replicates. Result may be greater. Best result was reported with qualifier. Sample toxicity possible. |
| BQ2 | No valid test replicates. |
| BQ3 | Minimum DO is less than 1.0 mg/L. Result may be greater and reported with qualifier. |
| C | Laboratory Contamination. |
| D | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| DF | Dilution Factor |
| DW | Sample result is calculated on a dry weigh basis |
| J | Reported value is estimated |
| L | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| M | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| MDL | Method Detection Limit |
| NC | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| ND | Analyte was not detected or was less than the detection limit. |
| P | Sample was received without proper preservation according to EPA guidelines. |
| Q1 | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| Q2 | Analyte calibration was not verified and the result was estimated and reported with qualifier. |
| Q3 | Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier. |
| RDL | Reporting Detection Limit |
| S | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| T | Sample was extracted/analyzed past the holding time. |
| T2 | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |
| TIC | Tentatively Identified Compounds |

ASSOCIATED LABORATORIES
806 North Batavia – Orange, California 92868 – 714-771-6900 FAX 714-538-1209

# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: UNITED ROCK PRODUCTS Project: PIT 3
Date Received: 3/12/14 Sampler's Name: Yes (No)
Sample temperature: _____
Sample(s) received in cooler: Yes (No) (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ____ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam
____ Paper ____None ___ Other_____
Cooler Temperature: _____

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| **Section 3** | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | ✓ | | |
| Were custody seals present? | | ✓ | |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | | ✓ | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ✓ | | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | | ✓ |
| Were the containers labeled with correct preservatives? | | | ✓ |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | ✓ |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments

**Section 5**
Was Project Manager notified of discrepancies: Y / N N/A
Project Manager's response: _____

Completed By: _____ Date: 3/12/14

**ASSOCIATED LABORATORIES**
806 North Batavia ▪ Orange, CA 92868
Phone: (714) 771-6900 ▪ Fax: (714) 771-9933

# Chain of Custody Record

Lab Job No. 337872
Page 1 of 1

| CUSTOMER INFORMATION | | PROJECT INFORMATION | |
|---|---|---|---|
| COMPANY | United Rock Products | PROJECT NAME: | Pit 3 |
| SEND REPORT TO: | Ken Barker | NUMBER: | |
| EMAIL: | Ken.Barker@Sully-Miller.com | ADDRESS: | |
| ADDRESS: | 1351 S. Cola College Blvd, #400 Brea, CA 92821 | P.O. #: | |
| PHONE: | 626 573 1314 FAX: | SAMPLED BY: | |

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: ____ 48 Hours: ____ 24 Hours: ____

| | Sample ID | Date | Time | Matrix | Container Number/Size | Pres. | ANALYSIS REQUEST: X BDL5 Full Conv Dump | Test Instructions & Comments |
|---|---|---|---|---|---|---|---|---|
| 1 | Dredge Sample 1 | 3/12/14 | 9:15 | W | 1 L | | X | |
| 2 | Shore S.W. Sample 2 | 3/12/14 | 9:25 | W. | 1 L | | X | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |

Total No. of Samples: 2 Method of Shipment: Hand Delivery Preservative: (1) Ice 2 =HCl 3 =$HNO_3$ 4 =$H_2SO_4$ 5 =NaOH 6 =Other

| Relinquished by 1. | Received By: 1. | Relinquished by 2. | Received By: 2. | Relinquished by 3. | Received By: 3. |
|---|---|---|---|---|---|
| Signature: Ken Barker | Signature: ZAIN | Signature: | Signature: | Signature: | Signature: |
| Printed Name: Ken Barker | Printed Name: ZAIN | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| Date: 3/12/14 Time: 1307 | Date: 3/12/14 Time: 1307 | Date: Time: | Date: Time: | Date: Time: | Date: Time: |

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

# Associated Laboratories

*806 N. Batavia - Orange, CA 92868*
*Tel (714)771-6900 Fax (714)538-1209*
*www.associatedlabs.com*
*Info@associatedlabs.com*


ACCREDITED IN ACCORDANCE WITH nelac
04232CA

Client: United Rock Products
Address: 135 S. State College Blvd.
Suite #400
Brea, CA 92821
Attn: Ken Barker

Lab Request: 338196
Report Date: 04/03/2014
Date Received: 03/19/2014
Client ID: 12535

Comments: Pit 3

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 338196-001 | Dredge Sample #1 |
| 338196-002 | Shore S.W. Sample #2 |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.


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*TESTING & CONSULTING*
*Chemical*
*Microbiological*
*Environmental*

**Matrix:** Water | **Client:** United Rock Products | **Collector:** Client
**Sampled:** 03/19/2014 14:10 | **Site:**
**Sample #:** 338196-001 | **Client Sample #:** Dredge Sample #1 | **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1144973 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 03/21/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 03/21/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 03/21/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *120* | *60-140* | |

**Matrix:** Water | **Client:** United Rock Products | **Collector:** Client
**Sampled:** 03/19/2014 14:15 | **Site:**
**Sample #:** 338196-002 | **Client Sample #:** Shore S.W. Sample #2 | **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1144973 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 03/21/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 03/21/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 03/21/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *130* | *60-140* | |

| QCBatchID: QC1144973 | Analyst: lytagas | Method: EPA 8015B |
|---|---|---|
| Matrix: Water | Analyzed: 03/21/2014 | Instrument: SVOA-GC (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1144973MB1** | | | | | |
| Stoddard Solvent | ND | mg/L | | 0.3 | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | |
| TPH Diesel | ND | mg/L | | 0.1 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | | LCS | LCSD | | %Rec | RPD | |
| **QC1144973LCS1, QC1144973LCSD1** | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 0.85 | 0.72 | mg/L | 85 | 72 | 17 | 57-122 | 30 | |

# Notes and Definitions

| | |
|---|---|
| **B** | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| **BQ1** | No valid test replicates. Result may be greater. Best result was reported with qualifier. Sample toxicity possible. |
| **BQ2** | No valid test replicates. |
| **BQ3** | Minimum DO is less than 1.0 mg/L. Result may be greater and reported with qualifier. |
| **C** | Laboratory Contamination. |
| **D** | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| **DF** | Dilution Factor |
| **DW** | Sample result is calculated on a dry weigh basis |
| **J** | Reported value is estimated |
| **L** | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| **M** | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| **MDL** | Method Detection Limit |
| **NC** | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| **ND** | Analyte was not detected or was less than the detection limit. |
| **P** | Sample was received without proper preservation according to EPA guidelines. |
| **Q1** | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| **Q2** | Analyte calibration was not verified and the result was estimated and reported with qualifier. |
| **Q3** | Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier. |
| **Q4** | Analyte result out of calibration range and was reported with qualifier |
| **RDL** | Reporting Detection Limit |
| **S** | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| **T** | Sample was extracted/analyzed past the holding time. |
| **T2** | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |
| **TIC** | Tentatively Identified Compounds |

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# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: United Rock Prod. Project: Pit 3
Date Received: 3-19-14 Sampler's Name: (Yes) No
Sample temperature: _____
Sample(s) received in cooler: Yes (No) (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ____ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam
____ Paper ____ None ___ Other _____
Cooler Temperature: _____

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| **Section 3** | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | ✓ | | |
| Were custody seals present? | | ✓ | |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | ✓ | | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ✓ | | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | | ✓ |
| Were the containers labeled with correct preservatives? | | | ✓ |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | ✓ |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments

**Section 5**
Was Project Manager notified of discrepancies: Y / N N/A
Project Manager's response: _____

Completed By: M. Ebert Date: 3/19/14

**ASSOCIATED LABORATORIES**
806 North Batavia ▪ Orange, CA 92868
Phone: (714) 771-6900 ▪ Fax: (714) 771-9933

# Chain of Custody Record

Lab Job No. 338196
Page 1 of 1

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: ____ 48 Hours: ____ 24 Hours: ____

| CUSTOMER INFORMATION | | PROJECT INFORMATION | |
|---|---|---|---|
| COMPANY: United Rock Products | | PROJECT NAME: Pit 3 | |
| SEND REPORT TO: Ken Barker | | NUMBER: | |
| EMAIL: Ken.Barker@sally-miller.com | | ADDRESS: | |
| ADDRESS: 135 S. State College Blvd #1000 | | | |
| | | P.O. #: | |
| PHONE: 6265231319 | FAX: | SAMPLED BY: Ken Barker | |

| | Sample ID | Date | Time | Matrix | Container Number/Size | Pres. | ANALYSIS REQUEST: 8015 Full Carbon Range | Test Instructions & Comments |
|---|---|---|---|---|---|---|---|---|
| 1 | Dredge Sample #1 | 3/19/14 | 2:10 | w | 1 L | | + | |
| 2 | Shore S.W. Sample #2 | 3/19/14 | 2:15 | w | 1 L | | + | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
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| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |

Total No. of Samples: 2 Method of Shipment: Hand Delivered Preservative: (1)=Ice 2=HCl 3=$HNO_3$ 4=$H_2SO_4$ 5=NaOH 6=Other

| Relinquished by 1. | Received By: 1. | Relinquished by 2. | Received By: 2. | Relinquished by 3. | Received By: 3. |
|---|---|---|---|---|---|
| Ken Barker | | | | | |
| Signature: Ken Barker | Signature: | Signature: | Signature: | Signature: | Signature: |
| Printed Name: Ken Barker | Printed Name: | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| Date: 3/19/14 Time: 15:25 | Date: 3/19/14 Time: 15:25 | Date: Time: | Date: Time: | Date: Time: | Date: Time: |

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

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*Tel (714)771-6900 Fax (714)538-1209*
*www.associatedlabs.com*
*Info@associatedlabs.com*

ACCREDITED IN ACCORDANCE WITH nelac
04232CA

Client: United Rock Products
Address: 135 S. State College Blvd.
Suite #400
Brea, CA 92821
Attn: Ken Barker

Lab Request: 338418
Report Date: 04/08/2014
Date Received: 03/25/2014
Client ID: 12535

Comments: Pit 3

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 338418-001 | Sample 1 Dredge |
| 338418-002 | Sample 2 S.W Shore |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

John Yozzanna Jr

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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*Chemical*
*Microbiological*
*Environmental*

| | | | | | |
|---|---|---|---|---|---|
| **Matrix:** Water | **Client:** United Rock Products | | | **Collector:** Client | |
| **Sampled:** 03/25/2014 08:15 | **Site:** | | | | |
| **Sample #:** 338418-001 | **Client Sample #:** Sample 1 Dredge | | | **Sample Type:** | |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1145101 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 04/02/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 04/02/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 04/02/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *100* | *60-140* | |

| | | | | | |
|---|---|---|---|---|---|
| **Matrix:** Water | **Client:** United Rock Products | | | **Collector:** Client | |
| **Sampled:** 03/25/2014 08:25 | **Site:** | | | | |
| **Sample #:** 338418-002 | **Client Sample #:** Sample 2 S.W Shore | | | **Sample Type:** | |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1145101 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 04/02/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 04/02/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 04/02/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *110* | *60-140* | |

| QCBatchID: QC1145101 | Analyst: lytagas | Method: EPA 8015B |
|---|---|---|
| Matrix: Water | Analyzed: 03/27/2014 | Instrument: SVOA-GC (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1145101MB1** | | | | | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | |
| TPH Diesel | ND | mg/L | | 0.1 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | | LCS | LCSD | | %Rec | RPD | |
| **QC1145101LCS1, QC1145101LCSD1** | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 0.89 | 0.70 | mg/L | 89 | 70 | 24 | 57-122 | 30 | |

# Notes and Definitions

| | |
|---|---|
| B | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| BQ1 | No valid test replicates. Result may be greater. Best result was reported with qualifier. Sample toxicity possible. |
| BQ2 | No valid test replicates. |
| BQ3 | Minimum DO is less than 1.0 mg/L. Result may be greater and reported with qualifier. |
| C | Laboratory Contamination. |
| D | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| DF | Dilution Factor |
| DW | Sample result is calculated on a dry weigh basis |
| J | Reported value is estimated |
| L | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| M | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| MDL | Method Detection Limit |
| NC | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| ND | Analyte was not detected or was less than the detection limit. |
| P | Sample was received without proper preservation according to EPA guidelines. |
| Q1 | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| Q2 | Analyte calibration was not verified and the result was estimated and reported with qualifier. |
| Q3 | Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier. |
| Q4 | Analyte result out of calibration range and was reported with qualifier |
| RDL | Reporting Detection Limit |
| S | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| T | Sample was extracted/analyzed past the holding time. |
| T2 | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |
| TIC | Tentatively Identified Compounds |

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# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: UNITED ROCK PROD. Project: PIT 3
Date Received: 3/25/14 Sampler's Name: (Yes) No
Sample temperature: 15°C
Sample(s) received in cooler: Yes (No) (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ____ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam
____ Paper ✓ None ___ Other _____
Cooler Temperature: _____

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| **Section 3** | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | ✓ | | |
| Were custody seals present? | | | ✓ |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | ✓ | | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ✓ | | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | | ✓ |
| Were the containers labeled with correct preservatives? | | | ✓ |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | ✓ |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments

**Section 5**
Was Project Manager notified of discrepancies: Y / N N/A
Project Manager's response: _____

Completed By: _____ Date: 3/25/14

**ASSOCIATED LABORATORIES**
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Phone: (714) 771-6900 ▪ Fax: (714) 771-9933

# Chain of Custody Record

Lab Job No. 338418
Page 1 of 1

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: _____ 48 Hours: _____ 24 Hours: _____

| CUSTOMER INFORMATION | | PROJECT INFORMATION | |
|---|---|---|---|
| COMPANY: United Rock Products | | PROJECT NAME: Pad 3 | |
| SEND REPORT TO: Ken Barber | | NUMBER: | |
| EMAIL: Ken.Barber@Sully-Miller.com | | ADDRESS: | |
| ADDRESS: 135 S. State College Blvd #400 | | P.O. #: | |
| PHONE: 626 523 1319 | FAX: | SAMPLED BY: Ken Barber | |

| | Sample ID | Date | Time | Matrix | Container Number/Size | Pres. | ANALYSIS REQUEST: 8015 Fuel/Taylor Range | Test Instructions & Comments |
|---|---|---|---|---|---|---|---|---|
| 1 | Sample 1 Dredge | 3/25/14 | 8:15 | W | 1 L | | X | |
| 2 | Sample 2 S.W. Shore | 3/25/14 | 8:25 | W | 1 L | | X | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
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| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |

Total No. of Samples: 2 Method of Shipment: Hand Delivered Preservative: (1)=Ice 2 =HCl 3 =$HNO_3$ 4 =$H_2SO_4$ 5 =NaOH 6 =Other

| Relinquished by 1. | Received By: 1. | Relinquished by 2. | Received By: 2. | Relinquished by 3. | Received By: 3. |
|---|---|---|---|---|---|
| Ken Barber | | | | | |
| Signature: Ken Barber | Signature: | Signature: | Signature: | Signature: | Signature: |
| Printed Name: | Printed Name: AMCAF | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| Date: 3/25/14 Time: 10:40 | Date: 3/25/14 Time: 10:40 | Date: Time: | Date: Time: | Date: Time: | Date: Time: |

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

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ACCREDITED IN ACCORDANCE WITH nelac
04232CA

Client: United Rock Products
Address: 135 S. State College Blvd.
Suite #400
Brea, CA 92821
Attn: Ken Barker

Lab Request: 338790
Report Date: 04/14/2014
Date Received: 04/02/2014
Client ID: 12535

Comments: Pit 3

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 338790-001 | Sample 1 Dredge |
| 338790-002 | Sample 2 SW Shore |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

John Yogaratnam Jr.

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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*Microbiological*
*Environmental*

| | | | |
|---|---|---|---|
| **Matrix:** Water | **Client:** United Rock Products | **Collector:** Client | |
| **Sampled:** 04/02/2014 09:30 | **Site:** | | |
| **Sample #:** 338790-001 | **Client Sample #:** Sample 1 Dredge | **Sample Type:** | |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3535A | | | | | QCBatchID: | QC1145372 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 04/03/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 04/03/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 04/03/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *60* | *60-140* | |

| | | | | | |
|---|---|---|---|---|---|
| **Matrix:** Water | **Client:** United Rock Products | | | **Collector:** Client | |
| **Sampled:** 04/02/2014 09:45 | **Site:** | | | | |
| **Sample #:** 338790-002 | **Client Sample #:** Sample 2 SW Shore | | | **Sample Type:** | |

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3535A | | | | | QCBatchID: | QC1145372 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 04/03/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 04/03/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 04/03/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *110* | *60-140* | |

QCBatchID: QC1145372 | Analyst: lytagas | Method: EPA 8015B
Matrix: Water | Analyzed: 04/03/2014 | Instrument: SVOA-GC (group)

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1145372MB1** | | | | | |
| Hydraulic Oil | ND | mg/L | | 0.3 | |
| Stoddard Solvent | ND | mg/L | | 0.3 | |
| TPH (>C32) | ND | mg/L | | 0.3 | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | |
| TPH (C10 to C28) | ND | mg/L | | 0.2 | |
| TPH (C12 to C28) | ND | mg/L | | 0.2 | |
| TPH (C13 to C22) | ND | mg/L | | 0.2 | |
| TPH (C13 to C23) | ND | mg/L | | 0.2 | |
| TPH (C17 to C36) | ND | mg/L | | 0.3 | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | |
| TPH (C23 to C32) | ND | mg/L | | 0.3 | |
| TPH (C23 to C40) | ND | mg/L | | 0.3 | |
| TPH (C28 to C36) | ND | mg/L | | 0.3 | |
| TPH (C28 to C40) | ND | mg/L | | 0.3 | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | |
| TPH (C6 to C12) | ND | mg/L | | 0.2 | |
| TPH (C6 to C8) | ND | mg/L | | 0.2 | |
| TPH (C9 to C16) | ND | mg/L | | 0.2 | |
| TPH Diesel | ND | mg/L | | 0.1 | |
| TPH Gasoline | ND | mg/L | | 0.2 | |
| TPH Jet Fuel 4 | ND | mg/L | | 0.3 | |
| TPH Jet Fuel 5 | ND | mg/L | | 0.3 | |
| TPH Jet Fuel 8 | ND | mg/L | | 0.3 | |
| TPH Jet Fuel A | ND | mg/L | | 0.3 | |
| TPH Motor Oil | ND | mg/L | | 0.3 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount LCS | Spike Amount LCSD | Spike Result LCS | Spike Result LCSD | Units | Recoveries LCS | Recoveries LCSD | RPD | Limits %Rec | Limits RPD | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **QC1145372LCS1, QC1145372LCSD1** | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 0.78 | 0.60 | mg/L | 78 | 60 | 26 | 57-122 | 30 | |

# Notes and Definitions

| | |
|---|---|
| B | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| BQ1 | No valid test replicates. Result may be greater. Best result was reported with qualifier. Sample toxicity possible. |
| BQ2 | No valid test replicates. |
| BQ3 | Minimum DO is less than 1.0 mg/L. Result may be greater and reported with qualifier. |
| C | Laboratory Contamination. |
| D | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| DF | Dilution Factor |
| DW | Sample result is calculated on a dry weigh basis |
| J | Reported value is estimated |
| L | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| M | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| MDL | Method Detection Limit |
| NC | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| ND | Analyte was not detected or was less than the detection limit. |
| P | Sample was received without proper preservation according to EPA guidelines. |
| Q1 | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| Q2 | Analyte calibration was not verified and the result was estimated and reported with qualifier. |
| Q3 | Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier. |
| Q4 | Analyte result out of calibration range and was reported with qualifier |
| RDL | Reporting Detection Limit |
| S | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| T | Sample was extracted/analyzed past the holding time. |
| T2 | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |
| TIC | Tentatively Identified Compounds |

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# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: United Rock Prod. Project: Pit 3
Date Received: 4-2-14 Sampler's Name: (Yes) No
Sample temperature: _____
Sample(s) received in cooler: (Yes) No (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ✓ Ice ___ Ice Packs ___ Bubble Wrap ___ Styrofoam
___ Paper ___ None ___ Other _____
Cooler Temperature: 6 °C

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| Section 3 | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | ✓ | | |
| Were custody seals present? | | ✓ | |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | ✓ | | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ✓ | | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | | ✓ |
| Were the containers labeled with correct preservatives? | | | ✓ |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | ✓ |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments

**Section 5**
Was Project Manager notified of discrepancies: Y / N N/A
Project Manager's response: _____

Completed By: M. Ehret Date: 4/2/14

**ASSOCIATED LABORATORIES**
806 North Batavia ▪ Orange, CA 92868
Phone: (714) 771-6900 ▪ Fax: (714) 771-9933

# Chain of Custody Record

Lab Job No. 338790
Page _____ of _____

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: _____ 48 Hours: _____ 24 Hours: _____

| CUSTOMER INFORMATION | PROJECT INFORMATION |
|---|---|
| COMPANY: United Rock Products | PROJECT NAME: Pit 3 |
| SEND REPORT TO: Ken Barker | NUMBER: |
| EMAIL: Ken.Barker@sully-miller.com | ADDRESS: |
| ADDRESS: 135 S. State College Blvd #400 | P.O. #: |
| PHONE: 626 5231314 FAX: | SAMPLED BY: Ken Barker |

| | Sample ID | Date | Time | Matrix | Container Number/Size | Pres. | ANALYSIS REQUEST: 8015 Full Carbon Range | Test Instructions & Comments |
|---|---|---|---|---|---|---|---|---|
| 1 | Sample 1 Dredge | 4/2/14 | 9:30 | W | 1L | | X | |
| 2 | Sample 2 SW Stone | 4/2/14 | 9:45 | W | 1L | | X | |
| 3 | | | | | | | | |
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| 14 | | | | | | | | |
| 15 | | | | | | | | |

Total No. of Samples: 2 Method of Shipment: Hand Delivered Preservative: (1) Ice 2 =HCl 3 =$HNO_3$ 4 =$H_2SO_4$ 5 =NaOH 6 =Other

| Relinquished by 1. | Received By: 1. | Relinquished by 2. | Received By: 2. | Relinquished by 3. | Received By: 3. |
|---|---|---|---|---|---|
| Ken Barker | Dan Chambers | | | | |
| Signature: Ken Barker | Signature: Dan Chambers | Signature: | Signature: | Signature: | Signature: |
| Printed Name: Ken Barker | Printed Name: Dan Chambers | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| Date: 4/2/14 Time: 10:15 | Date: 4/2/14 Time: 10:15 | Date: 4/2/14 Time: 13:24 | Date: Time: | Date: Time: | Date: Time: |

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

# Associated Laboratories

*806 N. Batavia - Orange, CA 92868*
*Tel (714)771-6900 Fax (714)538-1209*
*www.associatedlabs.com*
*Info@associatedlabs.com*


ACCREDITED IN ACCORDANCE WITH nelac 04232CA

Client: United Rock Products
Address: 135 S. State College Blvd.
Suite #400
Brea, CA 92821
Attn: Ken Barker

Lab Request: 339203
Report Date: 04/21/2014
Date Received: 04/09/2014
Client ID: 12535

Comments: Pit 3

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

| Sample # | Client Sample ID |
|---|---|
| 339203-001 | Sample 1 Dredge |
| 339203-002 | Sample 2 S.W. Shore |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Nina Prasad
President

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.


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*TESTING & CONSULTING*
*Chemical*
*Microbiological*
*Environmental*

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 04/09/2014 10:30 **Site:**
**Sample #:** 339203-001 **Client Sample #:** Sample 1 Dredge **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1145584 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 04/11/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 04/11/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 04/11/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *100* | *60-140* | |

**Matrix:** Water **Client:** United Rock Products **Collector:** Client
**Sampled:** 04/09/2014 10:35 **Site:**
**Sample #:** 339203-002 **Client Sample #:** Sample 2 S.W. Shore **Sample Type:**

| Analyte | Result | DF | RDL | Units | Analyzed | By | Notes |
|---|---|---|---|---|---|---|---|
| **Method:** EPA 8015 *NELAC* | **Prep Method:** EPA 3535A | | | | | **QCBatchID:** | QC1145584 |
| TPH (C6 to C10) | ND | 1 | 0.2 | mg/L | 04/11/14 | lyt | |
| TPH (C10 to C22) | ND | 1 | 0.2 | mg/L | 04/11/14 | lyt | |
| TPH (C22 to C36) | ND | 1 | 0.3 | mg/L | 04/11/14 | lyt | |

| Analyte | % Recovery | Limits | Notes |
|---|---|---|---|
| *Triacontane (SUR)* | *130* | *60-140* | |

| QCBatchID: QC1145584 | Analyst: lytagas | Method: EPA 8015B |
|---|---|---|
| Matrix: Water | Analyzed: 04/11/2014 | Instrument: SVOA-GC (group) |

## Blank Summary

| Analyte | Blank Result | Units | | RDL | Notes |
|---|---|---|---|---|---|
| **QC1145584MB1** | | | | | |
| TPH (C10 to C22) | ND | mg/L | | 0.2 | |
| TPH (C22 to C36) | ND | mg/L | | 0.3 | |
| TPH (C6 to C10) | ND | mg/L | | 0.2 | |
| TPH Diesel | ND | mg/L | | 0.1 | |
| TPH Gasoline | ND | mg/L | | 0.2 | |
| TPH Motor Oil | ND | mg/L | | 0.3 | |

## Lab Control Spike/ Lab Control Spike Duplicate Summary

| Analyte | Spike Amount | | Spike Result | | Units | Recoveries | | RPD | Limits | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | LCS | LCSD | | LCS | LCSD | | %Rec | RPD | |
| **QC1145584LCS1, QC1145584LCSD1** | | | | | | | | | | | |
| TPH Diesel | 1 | 1 | 0.85 | 0.90 | mg/L | 85 | 90 | 6 | 57-122 | 30 | |

# Notes and Definitions

| | |
|---|---|
| B | Analyte was present in an associated method blank. Associated sample data was reported with qualifier. |
| BQ1 | No valid test replicates. Result may be greater. Best result was reported with qualifier. Sample toxicity possible. |
| BQ2 | No valid test replicates. |
| BQ3 | Minimum DO is less than 1.0 mg/L. Result may be greater and reported with qualifier. |
| C | Laboratory Contamination. |
| D | The sample duplicate RPD was not within control limits, the sample data was reported without further clarification. |
| DF | Dilution Factor |
| DW | Sample result is calculated on a dry weigh basis |
| J | Reported value is estimated |
| L | The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier. |
| M | The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification. |
| MDL | Method Detection Limit |
| NC | The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply. |
| ND | Analyte was not detected or was less than the detection limit. |
| P | Sample was received without proper preservation according to EPA guidelines. |
| Q1 | Analyte Calibration Verification exceeds criteria and the result was reported with qualifier. |
| Q2 | Analyte calibration was not verified and the result was estimated and reported with qualifier. |
| Q3 | Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier. |
| Q4 | Analyte result out of calibration range and was reported with qualifier |
| RDL | Reporting Detection Limit |
| S | The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification. |
| T | Sample was extracted/analyzed past the holding time. |
| T2 | Sample was analyzed ASAP but received and analyzed past the 15 minute holding time. |
| TIC | Tentatively Identified Compounds |

ASSOCIATED LABORATORIES
806 North Batavia – Orange, California 92868 – 714-771-6900 FAX 714-538-1209

# SAMPLE ACCEPTANCE CHECKLIST

**Section 1**
Client: United Rock Prod. Project: Pit 3
Date Received: 04-09-14 Sampler's Name: (Yes) No
Sample temperature: _____
Sample(s) received in cooler: Yes (No) (Skip Section 2)
Shipping Information: _____

**Section 2**
Was the cooler packed with: ____ Ice ____ Ice Packs ___ Bubble Wrap ___ Styrofoam
____ Paper ____None ___ Other_____
Cooler Temperature: _____

*(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice )*

| Section 3 | YES | NO | N/A |
|---|---|---|---|
| Was a COC received? | ✓ | | |
| Is it properly completed? (IDs, sampling date and time, signature, test) | ✓ | | |
| Were custody seals present? | | ✓ | |
| If Yes – were they intact? | | | ✓ |
| Were all samples sealed in plastic bags? | ✓ | | |
| Did all samples arrive intact? If no, indicate below. | ✓ | | |
| Did all bottle labels agree with COC? (ID, dates and times) | ✓ | | |
| Were correct containers used for the tests required? | ✓ | | |
| Was a sufficient amount of sample sent for tests indicated? | ✓ | | |
| Was there headspace in VOA vials? | | | ✓ |
| Were the containers labeled with correct preservatives? | | | ✓ |
| Was total residual chlorine measured (Fish Bioassay samples only)? * | | | ✓ |

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

**Section 4**
Explanations/Comments

**Section 5**
Was Project Manager notified of discrepancies: Y / N N/A
Project Manager's response: _____

Completed By: M. Elbert Date: 04/09/14

**ASSOCIATED LABORATORIES**
806 North Batavia ▪ Orange, CA 92868
Phone: (714) 771-6900 ▪ Fax: (714) 771-9933

# Chain of Custody Record

Lab Job No. 339203
Page _____ of _____

REQUIRED TURN AROUND TIME: Standard: X
72 Hours: _____ 48 Hours: _____ 24 Hours: _____

| CUSTOMER INFORMATION | PROJECT INFORMATION |
|---|---|
| COMPANY: Chusted Rock Products | PROJECT NAME: Pit 3 |
| SEND REPORT TO: * Ken.Barker@Sully-Miller.com | NUMBER: |
| EMAIL: Ken Barker | ADDRESS: |
| ADDRESS: 1355, State College Blvd | |
| | P.O. #: |
| PHONE: 6465231319 FAX: | SAMPLED BY: Ken Barker |

| | Sample ID | Date | Time | Matrix | Container Number/Size | Pres. | ANALYSIS REQUEST: 8015 Full Carbon Range | Test Instructions & Comments |
|---|---|---|---|---|---|---|---|---|
| 1 | Sample 1 Predge | 4/9/14 | 10:30 | W | 1L | | X | |
| 2 | Sample 2 S.W. Shore | 4/9/14 | 10:35 | W | 1L | | X | |
| 3 | | | | | | | | |
| 4 | | | | | | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| 8 | | | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |
| 11 | | | | | | | | |
| 12 | | | | | | | | |
| 13 | | | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |

Total No. of Samples: 2 Method of Shipment: Hand Delivery Preservative: (1) = Ice 2 = HCl 3 = $HNO_3$ 4 = $H_2SO_4$ 5 = NaOH 6 = Other

| Relinquished by 1. | Received By: 1. | Relinquished by 2. | Received By: 2. | Relinquished by 3. | Received By: 3. |
|---|---|---|---|---|---|
| Ken Barker | | | | | |
| Signature: Ken Barker | Signature: | Signature: | Signature: | Signature: | Signature: |
| Printed Name: Ken Barker | Printed Name: | Printed Name: | Printed Name: | Printed Name: | Printed Name: |
| Date: 4/9/14 Time: 14:55 | Date: 04/09/14 Time: 14:55 | Date: Time: | Date: Time: | Date: Time: | Date: Time: |

Distribution: White - Laboratory Canary - Laboratory Pink - Project/Account Manager Goldenrod - Sampler/Originator

# RWQCB – Request for Exemption from SWAT

72-124

LAW ENVIRONMENTAL, INC.
3420 N. SAN FERNANDO BLVD.
SUITE 200
BURBANK, CALIFORNIA 91504
818-848-0214
(FAX 818-848-1674)

89 FEB 21 PM 1:17

February 16, 1989

Regional Water Quality Control Board
Los Angeles Region
107 South Broadway, Suite 4027
Los Angeles, California 90012

Project No. 58-9502
RWQCB File No. 72-124

Attention: Mrs. Leha Tran

Madame:

**REQUEST FOR EXEMPTION FROM SWAT**
Livingston-Graham-~~Duarte Site~~ Irwindale
Irwindale, California

At the request of our client, Livingston-Graham, Inc., this letter is to request an exemption from the Solid Waste Water Quality Assessment Test (SWAT) for the "Livingston-Graham-~~Duarte~~ Irwindale" inactive inert waste disposal site. The exemption is requested because records indicate that Livingston-Graham disposed far less than 50,000 cubic yards of inert waste on the site.

According to the SWAT Ranking list, the site is in Rank 4 and a SWAT Proposal was due on January 1, 1989. We apologize for the delay in requesting this exemption, but it was unavoidable because of the extensive research needed to determine the age, status, disposal history, and owners/operators of this inactive site. Our research included a review of RWQCB and Los Angeles County Department of Health Services files, interviews with Livingston-Graham and Blue Diamond Materials personnel, and a site reconnaissance.

Livingston-Graham disposed about 4,156 tons (2,445 cubic yards) of inert waste on the northeast portion of the site in 1973 and early 1974, but none before or after that time according to monitoring reports dated 1973 to 1985 which are attached. All waste disposal permits were issued to, and are in the name of, Livingston-Graham. Livingston-Graham had control of the property from at least 1972 until 1986 when Blue Diamond Materials assumed control. The site was sold to United Rock Products on January 6, 1989.

There is additional fill on the site, but it is our understanding that the fill was emplaced in 1986 or 1987 by the City of Irwindale, with verbal permission from Blue Diamond Materials, to stabilize the embankment along Buena Vista Street so that the street could be reconstructed. This fill is on the eastern side of the site and we understand that before the fill was emplaced, slope erosion on the eastern side of the gravel pit was affecting the stability of Buena Vista Street. The fill consists of an unknown quantity of earth and rock, with some concrete and asphalt fragments. The location of the road stabilization fill emplaced by the City in 1986-87, and the inert waste deposited by Livingston-Graham in 1973-74, are shown on Plate 1, Location Map.

Information on the site is listed in Table 1.

## TABLE 1

## SITE INFORMATION: LIVINGSTON-GRAHAM-DUARTE SITE

| | |
|---|---|
| SITE NAME: | Livingston-Graham-Duarte |
| RWQCB FILE NO: | 72-124 (CI File 5801) |
| WASTE DISCHARGE REQUIREMENTS RWQCB ORDER NO: | 73-20 |
| SWIS NO.: | 19-AA-0020 |
| INDUSTRIAL WASTE DISPOSAL PERMIT: | No. 5016 City of Irwindale |
| LEASEHOLDER/ OPERATOR 1972-1986: | Livingston-Graham, Inc.<br>16080 Arrow Highway<br>Irwindale, California 91706-0943 |
| LEASEHOLDER/ OWNER 1986-1988: | Blue Diamond Materials |
| PRESENT OWNER | United Rock Products<br>As of January 6, 1989 |
| SITE LOCATION: | Southeast portion of Section 36, Township 1 North, Range 11 West, S.B.B.&M. City of Irwindale, Los Angeles County |
| SITE ADDRESS: | 1137 East Meridian Street<br>Irwindale, California<br>(Site probably was originally within the City of Duarte, hence its name) |
| DISPOSAL/FILL HISTORY: | 1) 4,156 tons of inert waste disposed of 1973 to early 1974 by Livingston-Graham.<br><br>2) Road stabilization fill emplaced 1986 or 1987 by City of Irwindale with permission from Blue Diamond Materials. |
| STATUS: | Inactive site; only inert waste accepted. |

We hope this letter provides sufficient information for you to grant an exemption from the SWAT for the site, and that you will provide Livingston-Graham a brief letter to that effect. If you have any questions regarding this letter, please call Joan Lundy of Law Environmental at (818) 848-0214, or Mr. Harry Smith of Livingston-Graham at (818) 960-5471.

Respectfully submitted,

**LAW ENVIRONMENTAL, INC.**

by Joan Lundy
Joan L. Lundy, C.E.G. 1381
Project Hydrogeologist

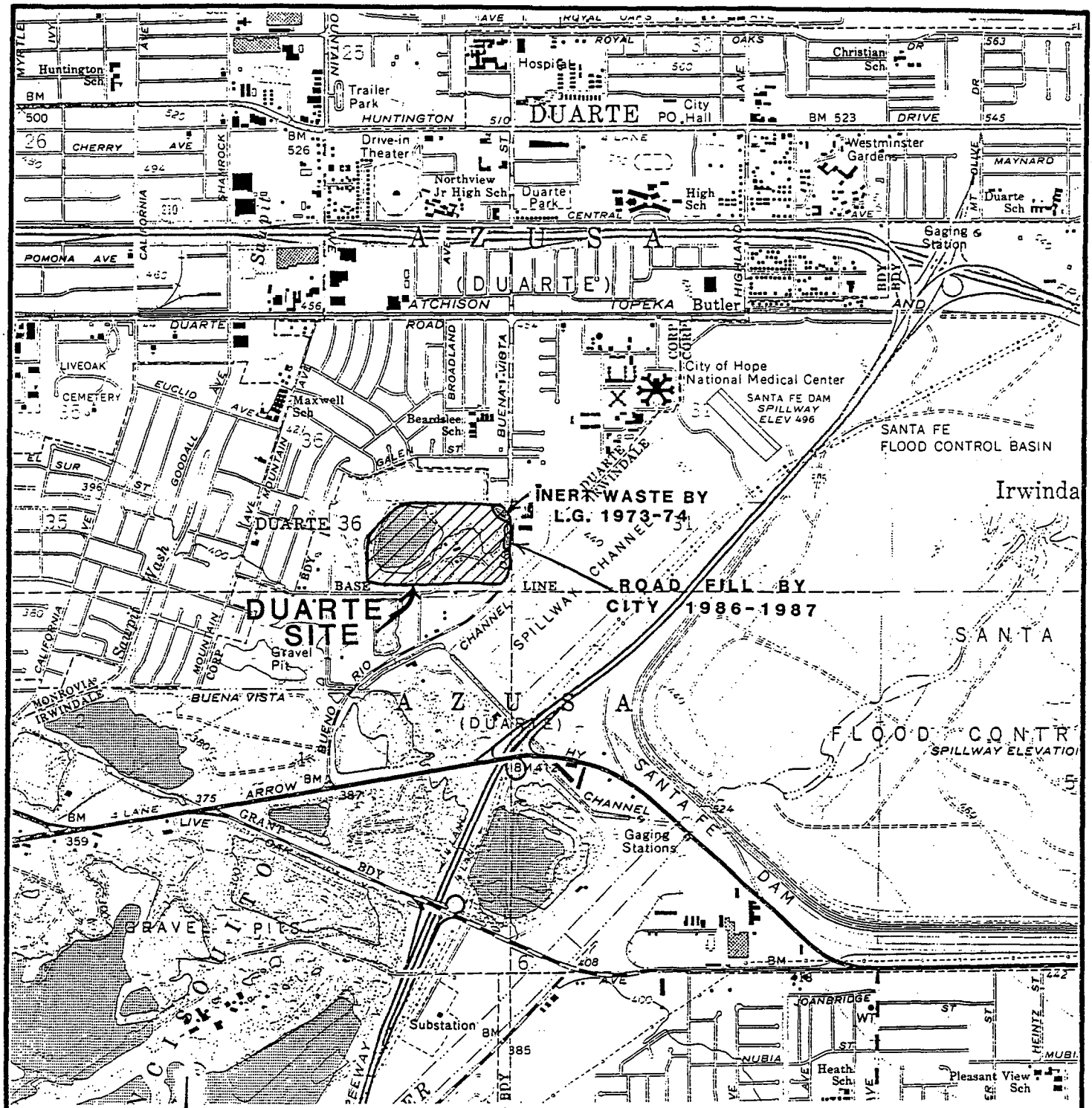
by Glenn A Brown
Glenn A. Brown, C.E.G. 3
Senior Vice President

JLL/gla/9502.ltr
Attachment

cc: Livingston-Graham
Attn: Mr. Harry Smith

Blue Diamond Materials
Attn: Mr. Bob Munro

City of Irwindale
Attn: Mr. Carlos Alvarado




BASE MAP FROM U.S. GEOLOGICAL SURVEY 7.5 MINUTE AZUSA, 1972 AND BALDWIN PARK, 1981 QUADRANGLES

# LOCATION MAP

LAW ENVIRONMENTAL, INC.

PROJECT No. 58-9502 DATE 2/15/89 PROJ. MGR. _____ DFTR. M.G.

# MONITORING REPORTS

# 1973 TO 1985

Livingston-Graham

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

September 6, 1973

Irwindale City Engineer
City of Irwindale
California

Reference: City of Irwindale Industrial Waste Disposal Permit.
Permit No.: 5016
File No.: 1-740-3S
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)

Gentlemen:

On enclosed contour map is bench mark and coordinates for proposed fill control at Livingston-Graham Duarte Plant, 1137 Meridian St., Irwindale, California.

By truck count, to date, 2380 tons of broken concrete block (Class 3, Type E or 2.105) fill has been dumped over north end of existing fill.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 6th day of September, 1973 at Irwindale, California.

_____ Signature

_____ Title

# Livingston-Graham

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

December 17, 1973

Irwindale City Engineer
City of Irwindale
California

Reference: City of Irwindale Industrial Waste Disposal Permit.
Permit No.: 5016
File No.: 1-740-3S
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)

Gentlemen:

On enclosed contour map is bench mark and coordinates for proposed fill control at Livingston-Graham Duarte Plant, 1137 Meridian St., Irwindale, California.

By truck count, during the months of September, October and November, 1973, 1,312 tons of broken concrete block (Class 3, Type E or 2.105) fill has been dumped over north end of existing fill.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 17th day of December, 1973 at Irwindale, California.

D. L. Grattan Signature

Exec. Vice Pres. Title

# Livingston-Graham Inc.

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

March 4, 1974

Irwindale City Engineer
City of Irwindale
California

Reference: City of Irwindale Industrial Waste Disposal Permit.
Permit No.: 5016
File No.: 1-740-3S
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)

Gentlemen:

By truck count, during the months of December, 1973, January and February, 1974 - 464 tons of broken concrete blocks (Class 3, Type E or 2.105) fill has been dumped over the north end of existing fill.

From time permit was issued to date there has not been enough fill increase to make any material difference on contour map.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the first day of March, 1974 at Irwindale, California.

_____
Signature

_____
Title

EM:hs

# Livingston-Graham Inc.

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811


May 2, 1974

Division Engineer
Project Planning and Pollution Control Division
Department of County Engineer
County of Los Angeles

Attention: Mr. Gordon Marion

Gentlemen:

Reference is made to your letter to us dated April 30, 1974 and my telephone conversation with Mr. Gordon Marion, of your office, on May 2, 1974 concerning the proported failure of Livingston-Graham to file quarterly reports as required by the conditions of Industrial Waste Disposal Permit No. 5016, issued by your office to our company for property located at 1137 Meridian Street, Irwindale, California.

As I indicated to Mr. Marion in our telephone conversation, our company has been filing the required reports but they have been directed to the City Engineer in the City of Irwindale. I have made copies of the reports that have been filed to date and they are enclosed with this letter. In the future, we will send your office a copy of the quarterly reports.

Sincerely yours,

LIVINGSTON-GRAHAM

Gene R. Block
Property Manager

GRB:hs

Enc.

# Livingston-Graham Inc.

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

May 31, 1974

Division Engineer
Project Planning and Pollution Control Division
Department of County Engineers
County of Los Angeles, Ca.

Attention: Mr. Gordon Marion:

Reference: City of Irwindale Industrial Waste Disposal Permit
Permit No.: 5016
File No.: 1-740-3 S
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)

Gentlemen:

There has been no fill placed in this permit location during the months of March, April and May of 1974.

Enclosed is portion of contour map covering the permit area. Because of the small amount of material placed under this permit, I have not updated the map and submitted volume calculations. However, red hatching shows where material was placed.

Subject to your approval, I will not revise map and calculate volumes until a material difference in contour is apparent.

I declare, under penalty of perjury that the foregoing is true and correct.

Executed on the 31st day of May, 1974, at Irwindale, California.

Sincerely yours,

LIVINGSTON-GRAHAM

E. Misenhimer
Chief Engineer

EM:hs

_____
Signature

_____
Executive Vice President

Livingston-Graham

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

September 5, 1974

Division Engineer
Project Planning and Pollution Control Division
Department of County Engineers
County of Los Angeles, Ca.

Attention: Mr. Gordon Marion:

Reference: City of Irwindale Industrial Waste Disposal Permit
Permit No. : 5016
File No. : 1-740-3 S
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)

Gentlemen:

There has been no fill placed in this permit location during the months of June, July and August of 1974.

Because of the small amount of material placed under this permit, I have not updated the map and submitted volume calculations.

Subject to your approval, I will not revise map and calculate volumes until a material difference in contour is apparent.

I declare, under penalty of perjury that the foregoing is true and correct.

Executed on the 31st day of May, 1974, at Irwindale, California.

Sincerely yours,

LIVINGSTON-GRAHAM

J. W. Watkins
Executive Vice President

JWW:hs

Gene Black

# Livingston-Graham

5500 North Peck Road, El Monte, California 91734
telephones 681-7101 • 358-1811

September 5, 1974

Division Engineer
Project Planning and Pollution Control Division
Department of County Engineers
County of Los Angeles, Ca.

Attention: Mr. Gordon Marion:

Reference: City of Irwindale Industrial Waste Disposal Permit
Permit No. : 5016
File No. : 1-740-3 S
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)

Gentlemen:

There has been no fill placed in this permit location during the months of June, July and August of 1974.

Because of the small amount of material placed under this permit, I have not updated the map and submitted volume calculations.

Subject to your approval, I will not revise map and calculate volumes until a material difference in contour is apparent.

I declare, under penalty of perjury that the foregoing is true and correct.

Executed on the 31st day of May, 1974, at Irwindale, California.

Sincerely yours,

LIVINGSTON-GRAHAM

J. W. Watkins
Executive Vice President

JWW:hs

December 3, 1974

Division Engineer
Project Planning and Pollution Control Division
Department of County Engineers
County of Los Angeles, Ca.

Attention: Mr. Gordon Marion:

Reference: City of Irwindale Industrial Waste Disposal Permit
Permit No.: 5016
File No.: 1-70-3 S
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)

Gentlemen:

There has been no fill placed in this permit location during the months of September, October and November of 1974.

Because of the small amount of material placed under this permit, I have not updated the map and submitted volume calculations.

Subject to your approval, I will not revise map and calculate volumes until a material difference in contour is apparent.

I declare, under penalty of perjury that the foregoing is true and correct.

Executed on the 31st day of May, 1974, at Irwindale, California.

Sincerely yours,

LIVINGSTON-GRAHAM

J. W. Watkins
Executive Vice President

JWW:hs

February 28, 1975

Division Engineer
Project Planning and Pollution Control Division
Department of County Engineers
County of Los Angeles, Ca.

Attention: Mr. Gordon Marion

Reference: City of Irwindale Industrial Waste Disposal Permit
Permit No.: 5016
File: 1-740-3 S
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)

Gentlemen:

Repeating last quarter, there has been no fill placed in this permit location during the months of December, 1974, January and February, 1975.

Because of the small amount of material placed under this permit, I have not updated the map and submitted volume calculations.

Subject to your approval, I will not revise map and calculate volumes until a material difference in contour is apparent.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 28th day of February, 1975, at Irwindale, California.

Sincerely yours,

LIVINGSTON-GRAHAM

J. W. Watkins
Executive Vice President

JWW:hs
cc: City of Irwindale

June 2, 1975

Mr. Chas. G. Brisley, Jr.
Division Engineer
Project Planning and Pollution Control Division
Department of County Engineers
County of Los Angeles
108 W. 2nd Street
Los Angeles, Ca. 90012

Attention: Mr. Gordon Marion

Reference: City of Irwindale Industrial Waste Disposal Permit
Permit No.: 5016
File: 1-740-3 S
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)

Gentlemen:

Repeating last quarter, there has been no fill placed in this permit location during the months of March, April and May, 1975.

Because of the small amount of material placed under this permit, I have not updated the map and submitted volume calculations.

Subject to your approval, I will not revise map and calculate volumes until a material difference in contour is apparent.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 2nd day of June, 1975, at Irwindale, California.

Sincerely yours,

LIVINGSTON-GRAHAM

J. W. Watkins
Executive Vice President

JWW:hs
cc: City of Irwindale

September 16, 1975

Mr. Chas. G. Brisley, Jr.
Division Engineer
Project Planning and Pollution Control Division
Department of County Engineers
County of Los Angeles
108 West 2nd Street
Los Angeles, California 90012

Attention: Mr. Gordon Marion

Reference: City of Irwindale Industrial Waste Disposal Permit
Permit No.: 5016
File: 1-740-3 S
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)

Gentlemen:

Repeating last quarter, there has been no fill placed in this permit location during the months of June, July and August, 1975.

An updated contour map is attached.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 16th day of September, 1975, at Irwindale, California.

Sincerely yours,

LIVINGSTON-GRAHAM

J. W. Watkins
Executive Vice President

JWW:mgt

Enclosure: Contour Map

cc: City of Irwindale

November 20, 1975

Mr. Chas. G. Brisley, Jr.
Division Engineer
Project Planning and Pollution
Control Division
Department of County Engineers
County of Los Angeles
108 West 2nd Street
Los Angeles, California 90012

Attention: Mr. Gordon Marion

Reference: City of Irwindale Industrial Waste Disposal Permit
Permit No: 5016
File: 1-740-3 S
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)

Gentlemen:

Repeating last quarter, there has been no fill placed in this permit location during the months of September, October and November, 1975.

An updated contour map is attached.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 20th day of November, 1975, at Irwindale, California.

Sincerely yours,

LIVINGSTON-GRAHAM

J. W. Watkins
Executive Vice President

JWW:mst
Enclosure: Contour Map
cc: City of Irwindale

January 16, 1976

California Regional Water Quality
Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Re: Waste Discharge Requirements
Livingston-Graham, Inc.
(File 72-124)

Gentlemen:

Reference is made to my telephone conversation with Mr. Dave Larson, of your office, on January 12, 1976, concerning the proported failure of Livingston-Graham to file quarterly reports to your office.

As I indicated to Mr. Larson, our Company has been filing the required reports but they have been directed to the Los Angeles County Pollution Control Division and the City of Irwindale. I have made copies of the reports that have been filed to date, and they are enclosed along with an up to date contour map.

In the future, we will send your office a copy of the quarterly reports.

Sincerely,

William J. Rider
Assistant Chief Engineer
Materials

WJR:mst

Enclosure

cc: W. F. Quillin, L-G

February 19, 1976

California Regional Water Quality
Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Re: Waste Discharge Requirements
Livingston-Graham, Inc.
(File 72-124)

Gentlemen:

Repeating last quarter, there has been no fill placed in this permit location during the months of December, 1975, January and February 1976.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 23rd day of February, 1976, at Irwindale, California.

Sincerely yours,

LIVINGSTON-GRAHAM

J. W. Watkins
Executive Vice President

WJR:mst

May 28, 1976

Mr. Charles G. Brisley, Jr.
Division Engineer
Project Planning and Pollution Control Division
Department of County Engineers
County of Los Angeles
108 West 2nd Street
Los Angeles, CA 90012

Attention: Mr. Gordon Marion

Reference: City of Irwindale Industrial Waste Disposal Permit
Permit No. 5016
File: 1-740-38
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)

Gentlemen:

Repeating last quarter, there has been no fill placed in this permit location during the months of March, April and May, 1976.

An updated contour map is attached.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 28th day of May, 1976, at Irwindale, California.

Sincerely yours,

LIVINGSTON-GRAHAM

A. R. Dyck
Vice President,
Administration

ARD/cl
Enclosure: Contour Map

cc: City of Irwindale

May 28, 1976

California Regional Water Quality Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, CA 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham, Inc.
(File 72-124)

Gentlemen:

Repeating last quarter, there has been no fill placed in this permit location during the months of March, April and May, 1976.

The current lease on the Disposal Site expires in the year 1986.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 28th day of May, 1976, at Irwindale, California.

Sincerely yours,

LIVINGSTON-GRAHAM

A. R. Dyck
Vice President,
Administration

ARD/cl

# Livingston-Graham

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

September 14, 1976

California Regional Water Quality Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124)

Gentlemen:

Repeating last quarter, there has been no fill placed in this permit location during the months of June, July and August.

The current lease on the Disposal Site expires in the year 1986.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 14th day of September, 1976, at Irwindale, California.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:amd

# Livingston-Graham

Ready Mixed Concrete • Rock • Sand and Gravel

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811


December 1, 1976

California Regional Water Quality Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124)

Gentlemen:

Repeating last quarter, there has been no fill placed in this permit location during the months of September, October and November.

The current lease on the Disposal Site expires in the year 1986.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 1st day of December, 1976, at Irwindale, California.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:amd

# Livingston-Graham

Ready Mixed Concrete • Rock • Sand & Gravel

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811


January 3, 1977

Mr. Charles G. Brisley, Jr., Division Engineer
Project Planning and Pollution Control Division
Department of County Engineers
County of Los Angeles
108 West 2nd Street
Los Angeles, California 90012

Attention: Mr. Gordon Marion

Reference: City of Irwindale Industrial Waste Disposal Permit
Permit No. 5016
File: I-740-35
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)
Annual Summary Report

Dear Sir:

As shown on the quarterly reports, there has been no material deposited in the disposal site during the calendar year 1976.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on the 3rd day of January 1977, at Irwindale, California.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JW:ad

cc: City of Irwindale
Irwindale City Engineer

# Livingston-Graham

Ready Mixed Concrete • Rock • Sand and Gravel

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811


March 3, 1977

Mr. Charles G. Brisley, Jr., Division Engineer
Project Planning and Pollution Control Division
Department of County Engineers
County of Los Angeles
108 West 2nd Street
Los Angeles, California 90012

Attention: Mr. Gordon Marion

Reference: City of Irwindale Industrial Waste Disposal Permit
Permit No. 5016
File: I-740-3S
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)

Dear Sir:

Repeating last quarter, there has been no fill placed in this permit location during the months of December 1976, January and February, 1977.

An updated contour map is attached.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 3rd day of March, 1977, at Irwindale, California.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:amd

Enclosure

cc: City of Irwindale
Irwindale City Engineer

# Livingston-Graham

Ready-Mixed Concrete • Rock • Sand and Gravel

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811


June 20, 1977

Mr. Charles G. Brisley, Jr., Division Engineer
Project Planning and Pollution Control Division
Department of County Engineers
County of Los Angeles
108 West 2nd Street
Los Angeles, California 90012

Attention: Mr. Gordon Marion

Reference: City of Irwindale Industrial Waste Disposal Permit
Permit No. 5016
File: I-740-3S
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)

Dear Sir:

Repeating last quarter, there has been no fill placed in this permit location during the months of March, April and May, 1977.

An updated contour map is attached.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 20th day of June, 1977, at Irwindale, California.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:amd

Enclosures

cc: City of Irwindale
City Engineer

Livingston-Graham

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

September 28, 1977

Mr. Charles G. Brisley, Jr., Division Engineer
Project Planning and Pollution Control Division
Department of County Engineers
County of Los Angeles
108 West 2nd Street
Los Angeles, California 90012

Attention: Mr. Gordon Marion

Reference: City of Irwindale Industrial Waste Disposal Permit
Permit No. 5016
File: I-740-3S
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)

Dear Sir:

Repeating last quarter, there has been no fill placed in this permit location during the months of June, July and August, 1977.

An updated contour map is attached.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 28th day of September, 1977, at Irwindale, California.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:amd

Enclosures

cc: City of Irwindale
City Engineer

Livingston-Graham

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

December 5, 1977

California Regional Water Quality Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124)

Gentlemen:

Repeating last quarter, there has been no fill placed in this permit location during the months of September, October and November, 1977.

The current lease on the Disposal Site expires in the year 1986.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 5th day of December, 1977,

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:amd

# Livingston-Graham

5500 North Peck Road, El Monte, California 91734
telephones 681-7101 • 358-1811

January 5, 1978

California Regional Water Quality Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124)
Annual Summary Report

Gentlemen:

As shown on the quarterly reports, there has been no material deposited in the disposal site during the calendar year 1977.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 5th day of January, 1978, at Irwindale, California.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:amd

Livingston-Graham

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

January 5, 1978

Mr. Charles G. Brisley, Jr., Division Engineer
Project Planning and Pollution Control Division
Department of County Engineers
County of Los Angeles
108 West 2nd Street
Los Angeles, California 90012

Attention: Mr. Gordon Marion

Reference: City of Irwindale Industrial Waste Disposal Permit
Permit No. 5016
File: I-740-35
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)
Annual Summary Report

Dear Sir:

As shown on the quarterly reports, there has been no material deposited in the disposal site during the calendar year 1977.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on the 5th day of January, 1978, at Irwindale, California.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:amd

cc: Irwindale City Engineer

Livingston-Graham

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

March 14, 1978

California Regional Water Quality Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124)

Gentlemen:

Repeating last quarter, there has been no fill placed in this permit location during the months of December, 1977, January and February, 1978.

The current lease on the Disposal Site expires in the year 1986.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 14th day of March, 1978.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:amd

Livingston-Graham

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

March 14, 1978

Mr. Charles G. Brisley, Jr., Division Engineer
Project Planning and Pollution Control Division
Department of County Engineers
County of Los Angeles
108 West 2nd Street
Los Angeles, California 90012

Attention: Mr. Gordon Marion

Reference: City of Irwindale Industrial Waste Disposal Permit
Permit No. 5016
File: I-740-3S
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)

Dear Sir:

Repeating last quarter, there has been no fill placed in this permit location during the months of December, 1977, January and February, 1978.

An updated contour map is attached.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 14th day of March, 1978, at Irwindale, California.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:amd

Enclosures

cc: City of Irwindale
City Engineer

Livingston-Graham

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

June 13, 1978

Mr. Charles G. Brisley, Jr., Division Engineer
Project Planning and Pollution Control Division
Department of County Engineers
County of Los Angeles
108 West 2nd Street
Los Angeles, California 90012

Attention: Mr. Gordon Marion

Reference: City of Irwindale Industrial Waste Disposal Permit
Permit No. 5016
File: I-740-3S
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)

Dear Sir:

Repeating last quarter, there has been no fill placed in this permit location during the months of March, April and May, 1978.

An updated contour map is attached.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 13th day of June, 1978, at Irwindale, California.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:amd

Enclosures

cc: City of Irwindale
City Engineer

Dusie

# Livingston-Graham

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

June 13, 1978

California Regional Water Quality Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124)

Gentlemen:

Repeating last quarter, there has been no fill placed in this permit location during the months of March, April and May, 1978.

The current lease on the Disposal Site expires in the year 1986.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 13th day of June, 1978.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:amd

Livingston-Graham

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

September 15, 1978

Mr. Charles G. Brisley, Jr., Division Engineer
Project Planning and Pollution Control Division
Department of County Engineers
County of Los Angeles
108 West 2nd Street
Los Angeles, California 90012

Attention: Mr. Gordon Marion

Reference: City of Irwindale Industrial Waste Disposal Permit
Permit No. 5016
File: I-740-3S
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)

Dear Sir:

Repeating last quarter, there has been no fill placed in this permit location during the months of June, July and August, 1978.

An updated contour map is attached.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 15th day of September, 1978, at Irwindale, California.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:RE:ad

Enclosures

cc: City of Irwindale, City Engineer

Livingston-Graham

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

December 27, 1978

California Regional Water Quality Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124)

Gentlemen:

Repeating last quarter, there has been no fill placed in this permit location during the months of September, October and November, 1978.

The current lease on the Disposal Site expires in the year 1986.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 27th day of December, 1978.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

amd

cc: United California Bank
Mr. Anthony Badeaux, Real Estate Department
Post Office Box 3667
Los Angeles, CA 90051

Livingston-Graham

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

December 27, 1978

Mr. Charles G. Brisley, Jr., Division Engineer
Project Planning and Pollution Control Division
Department of County Engineers
County of Los Angeles
108 West 2nd Street
Los Angeles, California 90012

Attention: Mr. Gordon Marion

Reference: City of Irwindale Industrial Waste Disposal Permit
Permit No. 5016
File: I-740-3S
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)

Dear Sir:

Repeating last quarter, there has been no fill placed in this permit location during the months of September, October and November, 1978.

An updated contour map is attached.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 27th day of December, 1978, at Irwindale, California.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

amd

Enclosures

cc: City of Irwindale, City Engineer

# Livingston-Graham

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

**Livingston-Graham Tri-City Concrete**
**13550 Live Oak Ave.**
**Irwindale, CA 91706**

January 2, 1979

Mr. Charles G. Brisley, Jr.
Division Engineer
County of Los Angeles
Department of County Engineer
Sanitation Division
550 South Vermont Avenue
Los Angeles, California 90020

**)ivision Engineer**
**ı Control Division**

ATTENTION: Mr. Gordon Marion

FIRST CLASS MAIL

Reference: City of Irwindale Industrial Waste Disposal Permit
Permit No. 5016
File: I-740-35
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)
Annual Summary Report

Dear Sir:

As shown on the quarterly reports, there has been no material deposited in the disposal site during the calendar year 1978.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on this 2nd day of January, 1979, at Irwindale, California.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:amd

cc: Irwindale City Engineer

Livingston-Graham

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

January 2, 1979

California Regional Water Quality Control Board
Los Angeles Region
107 South Broadway, Room 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124)
Annual Summary Report

Gentlemen:

As shown on the quarterly reports, there has been no material deposited in the disposal site during the calendar year 1978.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 2nd day of January, 1979, at Irwindale, California.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:amd

Livingston-Graham

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

March 1, 1979

Mr. Charles G. Brisley, Jr., Division Engineer
County of Los Angeles, Department of County Engineer
Sanitation Division
550 South Vermont Avenue
Los Angeles, California 90020

Attention: Mr. Gordon Marion

Reference: City of Irwindale Industrial Waste Disposal Permit
Permit No. 5016
File: I-740-3S
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)

Dear Sir:

Repeating last quarter, there has been no fill placed in this permit location during the months of December, 1978, January and February, 1979.

An updated contour map is attached.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on this 2nd day of March, 1979, at Irwindale, California.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

amd

Enclosures

cc: City of Irwindale, City Engineer

Livingston-Graham

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

March 1, 1979

California Regional Water Quality Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124)

Gentlemen:

Repeating last quarter, there has been ~~on~~ no fill placed in this permit location during the months of December, 1978, January and February, 1979.

The current lease on the Disposal Site expires in the year 1986.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 2nd day of March, 1979.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

amd

cc: United California Bank

Livingston-Graham

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

June 12, 1979

California Regional Water Quality Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124)

Gentlemen:

Repeating last quarter, there has been no fill placed in this permit location during the months of March, April, and May, 1979.

The current lease on the Disposal Site expires in the year 1986.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 12th day of June, 1979.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

amd

cc: Arlene Beaucaire
c/o Gerald A. Collier

Livingston-Graham

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

June 12, 1979

Mr. Charles G. Brisley, Jr., Division Engineer
County of Los Angeles, Department of County Engineer
Sanitation Division
550 South Vermont Avenue
Los Angeles, California 90020

Attention: Mr. Gordon Marion

Reference: City of Irwindale Industrial Waste Disposal Permit
Permit No. 5016
File: I-740-3S
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)

Dear Sir:

Repeating last quarter, there has been no fill placed in this permit location during the months of March, April, and May, 1979.

An updated countour map is attached.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on this 12th day of June, 1979, at Irwindale, California.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

amd

Enclosures

cc: City of Irwindale, City Engineer

Livingston-Graham

Rock, Sand and Gravel

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

September 11, 1979

Mr. Charles G. Brisley, Jr., Division Engineer
County of Los Angeles, Department of County Engineer
Sanitation Division
550 South Vermont Avenue
Los Angeles, California 90020

Attention: Mr. Gordon Marion

Reference: City of Irwindale Industrial Waste Disposal Permit
Permit No. 5016
File: I-740-3S
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)

Dear Sir:

Repeating last quarter, there has been no fill placed in this permit location during the months of June, July and August, 1979.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on this 11th day of September, 1979, at Irwindale, California.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:RE:amd

Enclosures

cc: City of Irwindale, City Engineer

Livingston-Graham

Rock • Sand and Gravel

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

September 11, 1979

California Regional Water Quality Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124)

Gentlemen:

Repeating last quarter, there has been no fill placed in this permit location during the months of June, July and August, 1979.

The current lease on the Disposal Site expires in the year 1986.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 11th day of September, 1979.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:RE:ad

cc: Arlene Beaucaire
c/o Gerald A. Collier

Livingston-Graham

5500 North Peck Road, El Monte, California 91734

telephones 681-7101 • 358-1811

December 18, 1979

California Regional Water Quality Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124)

Gentlemen:

Repeating last quarter, there has been no fill placed in this permit location during the months of September, October and November, 1979.

The current lease on the Disposal Site expires in the year 1986.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 18th day of December, 1979.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:RE:ad

cc: Arlene Beaucaire
c/o Gerald A. Collier

# Livingston-Graham

13550 Live Oak Avenue, Irwindale, California 91706
Telephones 681-7101 • 358-1811

March 6, 1980

Mr. Charles G. [illegible]
California Regional Water Quality Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124)

Gentlemen:

Repeating last quarter, there has been no fill placed in this permit location during the months of December 1979 and January, February, 1980.

The current lease on the Disposal Site expires in the year 1986.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on the 6th day of March, 1980.

Very truly yours,

A. R. Dyck
Vice President, Administration

ARD:RE:ad

cc: Arlene Beaucaire
c/o Gerald A. Collier

# Livingston-Graham

13550 Live Oak Avenue, Irwindale, Califo
Telephones 681-7101

March 6, 1

Mr. Charles G. Brisley, Jr., Division Engineer
County of Los Angeles, Department of County Engineer
Sanitation Division
550 South Vermont Avenue
Los Angeles, California 90020

Attention: Mr. Gordon Marion

Reference: City of Irwindale Industrial Waste Disposal Permit
Permit No. 5016
File: I-740-3S
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)

Dear Sir:

Repeating last quarter, there has been no fill placed in this permit location during the months of December 1979, January and February, 1980.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on this 6th day of March, 1980, at Irwindale, California.

Very truly yours,

A. R. Dyck
Vice President, Administration

ARD:RE:ad

cc: City of Irwindale, City Engineer

# Livingston-Graham

16080 East Arrow Highway
~~13550 Live Oak Avenue~~, Irwindale, California 91706

Telephones 681-7101 • 358-1811


June 30, 1980

California Regional Water Quality Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124)

Gentlemen:

Repeating last quarter, there has been no fill placed in this permit location during the months of March, April, May 1980.

The current lease on the Disposal Site expires in the year 1986.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on this 30th day of June, 1980.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:TD:ad

# Livingston-Graham

16080 East Arrow Highway
Irwindale, California 9170
960-54
Telephones 681-7101 •


September 4, 1980

Mr. Charles G. Brisley, Jr., Division Engineer
County of Los Angeles, Department of County Engineer
Sanitation Division
550 South Vermont Avenue
Los Angeles, California 90020

Attention: Mr. Gordon Marion

Reference: City of Irwindale Industrial Waste Disposal Permit
Permit No. 5016
File: I-740-3S
Date: June 26, 1973

California Regional Water Quality Control Board
Los Angeles Region (File 72-124)

Dear Sir:

Repeating last quarter, there has been no fill placed in this permit location during the months of June, July, August, 1980.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on this 4th day of September, 1980, at Irwindale, California.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:GTD:amd

cc: City of Irwindale, City Engineer

# Livingston-Graham

16080 East Arrow Highway
[illegible], Irwindale, California 91706
Telephones 681-7101 • 960-5471

September 4, 1980

California Regional Water Quality Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 900122

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124)

Gentlemen:

Repeating last quarter, there has been no fill placed in this permit location during the months of June, July, August, 1980.

The current lease on the Disposal Site expires in the year 1986.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on this 4th day of September, 1980.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:GTD:amd

cc: R. Munro, Blue Diamond Materials

# Livingston-Graham

13550 Live Oak Avenue, Irwindale, California 91706

Telephones 681-7101 • 358-1811


February 27, 1981

California Regional Water Quality Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124)

Gentlemen:

Repeating last quarter, there has been no fill placed in this permit location during the months of December 1980, January, February, 1981.

The current lease on the Disposal Site expires in the year 1986.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on this 27th day of February, 1981.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:TD:ad

Livingston-Graham

16080 Arrow Highway, Irwindale, California 91706

Telephones (213) 681-7101 • 960-5471

March 10, 1982

California Regional Water Quality Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124) Duarte

Gentlemen:

Repeating last quarter, there has been no fill placed in this permit location during the months of December, 1981, January and February, 1982.

The current lease on the disposal site expires in the year 1986.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on this 10th day of March, 1982.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:TD:ad

Livingston-Graham

16080 Arrow Highway, Irwindale, California 91706

Telephones (213) 681-7101 • 960-5471

September 15, 1982

California Regional Water Quality Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124) Duarte

Gentlemen:

Repeating last quarter, there has been no fill placed in this permit location during the months of June, July and August, 1982.

The current lease on the disposal site expires in the year 1986.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on this 15th day of September, 1982.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

TD:ad

Livingston-Graham

16080 Arrow Highway, Irwindale, California 91706
Telephones (213) 681-7101 • 960-5471

January 7, 1983

California Regional Water
Quality Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124) Duarte

Gentlemen:

Please be advised that there has been no fill placed in this permit location during the months of September, October, November, December, 1982.

The current lease on the disposal site expires in the year 1986.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on this 7th day of January, 1983.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:JSW:amd

Livingston-Graham

16080 Arrow Highway, Irwindale, California 91706

Telephones (213) 681-7101 • 960-5471

June 8, 1983

California Regional Water
Quality Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124) Duarte

Gentlemen:

Please be advised that there has been no fill placed in this permit location during the months of January, February, March, April and May, 1983.

The current lease on the disposal site expires in the year 1986.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on this 7th day of June, 1983.

Very truly yours,

J. W. Watkins
Executive Vice President
and General Manager

JWW:JSW:amd

Livingston-Graham

16080 Arrow Highway, Irwindale, California 91706

Telephones (213) 681-7101 • 960-5471

October 19, 1983

California Regional Water
Quality Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124) Duarte

Gentlemen:

Please be advised that there has been no fill placed in this permit location during the months of June, July, August and September, 1983.

The current lease on the disposal site expires in the year 1986.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed on this 19th day of October, 1983.

Very truly yours,

James S. Wall
Property Manager

JSW:amd

# Livingston-Graham, Inc.

16080 Arrow Highway, Irwindale, California 91706-0943

Telephones 681-7101 • 960-5471


January 4, 1984

California Regional Water
Quality Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124) Duarte

Gentlemen:

Please be advised that there was no fill placed in this permit location during October, November and December, 1983.

The current lease on the disposal site expires in the year 1986.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed this 4th day of January, 1984.

Very truly yours,

James S. Wall
Property Manager

JSW:amd

# Livingston-Graham, Inc.

16080 Arrow Highway, Irwindale, California 91706-0943
Telephones 681-7101 • 960-5471


April 5, 1984

California Regional Water
Quality Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124) Duarte

Gentlemen:

Please be advised that there was no fill placed in this permit location during January, February and March, 1984.

The current lease on the disposal site expires in the year 1985.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed this 5th day of April, 1984.

Very truly yours,

James S. Wall
Property Manager

JSW:amp

# Livingston-Graham, Inc.

16080 Arrow Highway, Irwindale, California 91706
Telephones 681-7101 • 960-


July 6, 1984

California Regional Water
Quality Control Board
Los Angeles Region
107 South Broadway, Suite 9026
Los Angeles, California 90012

Attention: Mr. Raymond M. Hertel
Executive Officer

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124) Duarte

Gentlemen:

Please be advised that there was no fill placed in this permit location during April, May, and June, 1984.

The current lease on the disposal site expires in the year 1985.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed this 6th day of July, 1984.

Very truly yours,

James S. Wall
Property Manager

JSW:amp

# Livingston-Graham, Inc.

16080 Arrow Highway, Irwindale, California 91706-0943

Telephones 681-7101 • 960-5471


October 2, 1984

California Regional Water
Quality Control Board
Los Angeles Region
107 South Broadway, Suite ~~3026~~ 407
Los Angeles, California 90012

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124) Duarte

Gentlemen:

Please be advised that there was no fill placed in this permit location during July, August, and September, 1984.

The current lease on the disposal site expires in the year 1985.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed this 2nd day of October, 1984.

Very truly yours,

James S. Wall
Property Manager

JSW:amp

# Livingston-Graham, Inc.

16080 Arrow Highway, Irwindale, California 91706-0943
Telephones 681-7101 • 960-5471


January 7, 1985

California Regional Water
Quality Control Board
Los Angeles Region
107 South Broadway, Suite 407
Los Angeles, California 90012

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124) Duarte

Gentlemen:

Please be advised that there was no fill placed in this permit location during October, November and December, 1984.

The current lease on the disposal site expires in the year 1985.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed this 7th day of January, 1985.

Very truly yours,

James S. Wall
Property Manager

JSW:amp

# Livingston-Graham, Inc.

16080 Arrow Highway, Irwindale, California 91706-0943

Telephones 681-7101 • 960-5471


April 3, 1985

California Regional Water
Quality Control Board
Los Angeles Region
107 South Broadway, Suite 407
Los Angeles, California 90012

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124) Duarte

Gentlemen:

Please be advised that there was no fill placed in this permit location during January, February, and March, 1985.

The current lease on the disposal site expires May 18, 1985.

All wastes deposited within site to date are Class III, in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed this 3rd day of April, 1985.

Very truly yours,

James S. Wall
Property Manager

JSW:amp

# Livingston-Graham, Inc.

16080 Arrow Highway, Irwindale, California 91706-0943

Telephones 681-7101 • 960-5471


May 9, 1985

California Regional Water
Quality Control Board
Los Angeles Region
107 South Broadway, Suite 407
Los Angeles, Caolifornia 90012

Reference: Waste Discharge Requirements
Livingston-Graham
(File 72-124) Duarte

Gentlemen:

Please be advised that there has been no fill placed in this location since February, 1974. Also, since the current lease on this site expires May 18, 1985, we now request that this permit be terminated effective this date.

All wastes deposited in this site to date are Class III in compliance with the requirements of the California Regional Water Quality Control Board.

I declare, under penalty of perjury, that the foregoing is true and correct.

Executed this 9th day of May, 1985.

Very truly yours,

James S. Wall
Property Manager

JSW:amp

# RWQCB – WDR Requirements

Winston H. Hickox
*Secretary for Environmental Protection*

# California Regional Water Quality Control Board

## Los Angeles Region

Over 50 Years Serving Coastal Los Angeles and Ventura Counties
Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: http://www.swrcb.ca.gov/rwqcb4

Gray Davis
*Governor*

September 25, 2001

Mr. Arnold Brink, Operational Manager
United Rock Products Corporation
1245 E. Arrow Highway
Irwindale, CA 91706

Dear Mr. Brink:

**WASTE DISCHARGE REQUIREMENTS – UNITED ROCK PRODUCTS CORPORATION, PIT NO. 3 INERT LANDFILL, IRWINDALE, CALIFORNIA (FILE NO. 72-124; ORDER NO. 01-131, CI 5801)**

Reference is made to our letter of August 3, 2001, which transmitted a copy of revised tentative waste discharge requirements for the subject site.

Pursuant to Division 7 of the California Water Code, this Regional Board at a public hearing held on September 19, 2001, reviewed the tentative requirements, considered all factors in the case, and adopted Order No. 01-131 (copy attached) relative to this landfill.

All monitoring reports should be sent to the Regional Board, Attention: Information Technology Unit. Please reference all technical and monitoring reports to our Compliance File No. CI-5801. We would appreciate it if you would not combine other reports, such as progress or technical, with your monitoring reports but would submit each type of report as a separate document.

If you have any questions or need additional information, please contact Dr. Wen Yang at (213) 576-6795.

Sincerely your,

Rodney H. Nelson

RODNEY H. NELSON, Chief
Landfills Unit

Enclosure

cc: See mailing list

**Mailing List:**

Joe Mello, Land Disposal Program, State Water Resource Control Board
Michael Lauffer, Office of Chief Counsel, State Water Resources Control Board
Robert Sams, Los Angeles Region Water Quality Control Board
Peter Janicki, California Integrated Waste Management Board
Dan Meister, Department of Toxic Substance Control (Glendale)
Virginia Maloles, Los Angeles County, DHS
Cindy Chen, Los Angeles County, DHS
Rod Posada, City of Irwindale
Carol Williams, Main San Gabriel Basin Watermaster
Chad Blais, Stetson Engineers, Inc.
G. Thomas Davis, Justice & Associates

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

**ORDER NO. 01-131**

**WASTE DISCHARGE REQUIREMENTS**
**For**
**UNITED ROCK PRODUCTS CORPORATION**
**(Pit No. 3 Inert Landfill)**
**File No. 72-124**

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board), finds:

1. United Rock Products Corporation (URP, hereafter "discharger") owns and operates the URP Pit No. 3 (formerly Livingston-Graham Duarte Plant or Livingston-Graham Irwindale Site), a sand and gravel mining pit located in the SE¼ of Section 36, T1N, R11W, S.B.B.&M., at 1137 Meridian Street, Irwindale, California. The center of the site is located at approximately 34°07'25"N and 117°58'52"W (Figure 1).

2. URP Pit No. 3 consists of approximately 110 acres and currently has a maximum depth of about 220 feet below ground surface. Ground surface elevation varies from 406 feet above mean sea level (amsl) at the west edge of the pit to 431 feet amsl at the east edge of the pit. The City of Irwindale has approved a conditional use permit (92-CUP) that permits URP to mine the pit to a maximum depth of 275 feet below ground surface. The City has also approved a Reclamation Plan that states that the site will be backfilled, if required by law, to a minimum elevation of 334 feet amsl (Figure 2).

3. URP also operates two similar aggregate mining pits (URP Pit No. 1 and URP Pit No. 2) and a rock plant at the vicinity of Pit No. 3 (Figure 3). The rock plant has been utilized to process and stockpile materials extracted from the three pits. Non-saleable processed materials from the rock plant (native geological materials) have been backfilled to the three pits, including Pit No. 3.

4. This Regional Board adopted Order No. 73-32 on April 12, 1973, which contains Waste Discharge Requirements for Livingston-Graham, Inc., to discharge inert solid wastes at the site. The operation and ownership of the site were transferred to URP in 1988 and the site has been referred as URP Pit No. 3 since then. As the current owner and operator of the facility, URP is responsible for complying with the requirements of the WDRs.

5. No inert solid waste has been discharged at the site since at least 1988, except for native geological materials that are generated by mining activities at the site. URP plans to start backfilling the pit using inert solid waste from offsite within the next ten years.

6. Section 20230(a) of California Code of Regulations (CCR), title 27, defines that "*Inert waste is that subset of solid waste that does not contain hazardous waste or soluble*

*pollutants at concentrations in excess of applicable water quality objectives, and does not contain significant quantities of decomposable waste."*

7. Section 20230(c) of CCR, title 27, provides that the Regional Board can prescribe individual or general WDRs for discharges of inert wastes.

8. The California Water Code (CWC), section 13263, provides that all requirements shall be reviewed periodically and, upon such review, may be revised by the Regional Board.

9. The discharger has filed a Report of Waste Discharge in accordance with the California Water Code for updated waste discharge requirements for the disposal of inert wastes.

10. URP Pit No. 3 is about half a mile from the Santa Fe Dam and within one mile of the San Gabriel River. The area behind the dam and the unlined river channel are used for groundwater spreading/recharge.

11. URP Pit No. 3 overlies a major drinking water aquifer in the Main San Gabriel Basin in the Los Angeles-San Gabriel Hydrologic Area. Aquifers within the basin are comprised primarily of coarse sand and gravel. The historical high water level at the site is 324 feet amsl. Recent groundwater level at the site varies between 250 to 290 feet amsl, depending on the season of the year and the nearby groundwater spreading activities. The direction of groundwater flow at the site is generally to the southwest and south and groundwater flow velocities have been measured at 6.82 to 7.20 feet/day at the vicinity of the site.

12. The majority of the pit bottom is occupied by groundwater that has been exposed by aggregate mining operations.

13. The Regional Board adopted a revised Water Quality Control Plan for the Los Angeles Region on June 13, 1994. The Plan contains beneficial uses and water quality objectives for groundwater in the Main San Gabriel Basin. Beneficial uses of the groundwater in the Main San Gabriel Basin include municipal, agricultural, and industrial services and process supply. The requirements contained in this Order, as they are met, will be in conformance with the goals of the Water Quality Control Plan.

14. The revision of these waste discharge requirements is exempt from the provisions of the California Environmental Quality Act (Public Resource Code 21100 et seq.) as an existing facility pursuant to title 14, California Code of Regulations, Chapter 3, section 15301.

The Regional Board has notified the discharger and interested agencies and persons of its intent to adopt waste discharge requirements for this discharge, and has provided them with an opportunity to submit their written views and recommendations.

The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge and to the tentative requirements.

**IT IS HEREBY ORDERED**, that United Rock Products Corporation (the discharger) shall comply with the following:

A. Discharge Specifications

1. Wastes disposed of at this site shall be limited to inert wastes only such as, but not limited to:

   a. Inert mining wastes, including native geological materials generated by URP's aggregate mining activities at or in the vicinity of Pit No. 3
   b. Uncontaminated soil, rock, and gravel
   c. Broken concrete
   d. Bricks
   e. Glass and Ceramics
   f. Inert plastics
   g. Broken asphalt paving fragments (asphalt shall not be dumped into standing water nor shall it be placed below the highest anticipated groundwater elevation)
   h. Shredded tires (shredded tires shall not be dumped into standing water nor shall they be placed below the highest anticipated groundwater elevation)

2. The discharger shall remove and relocate at a legal point of disposal any wastes that are discharged in violation of these requirements. For the purpose of these requirements, a legal point of disposal is defined as one for which Waste Discharge Requirements have been established by a California Regional Water Quality Control Board, and is in full compliance therewith.

3. Adequate facilities shall be provided to divert storm water away from the facility and from areas where any potential pollutants are stored. The discharger must develop and implement, within 90 days from the adoption of this Order, a Stormwater Pollution Prevention Plan (SWPPP) in accordance with Attachment "A", which is incorporated herein and made part of this Order.

B. Prohibitions:

1. No hazardous wastes, designated wastes, or liquid wastes shall be deposited at this disposal site.

2. Non-hazardous solid wastes (decomposable organic refuse such as, but not necessarily limited to, ordinary household and commercial refuse, tin cans, metals, paper and paper products, plasterboard, cloth and clothing, wood and wood products, lawn clippings, sod, shrubbery, hair, hide, bones, dead animals, roofing paper, tar paper, unquenched ashes mixed with refuse, market refuse, garbage, etc.) shall not be deposited at this site.

3. No materials of a toxic nature such as insecticides, poisons, or radioactive materials, shall be deposited at this site.

4. No asbestos or asbestos products shall be deposited at this site.

5. Wastes deposited at this site shall be confined thereto, and shall not be permitted to enter drainage ditches or watercourses.

6. Erosion of deposited materials by surface flow shall be prevented.

7. Neither the discharge nor any treatment of wastes shall cause pollution or nuisance.

C. Water Quality Protection Standards

In accordance with Title 27, California Code of Regulations, Section 20390, the following groundwater quality protection standards are established for this facility:

| Parameter | Units | Water Quality Protection Standard* |
|---|---|---|
| Total dissolved solids | mg/L | 450. |
| Sulfate | mg/L | 100. |
| Chloride | mg/L | 100. |
| Boron | mg/L | 0.5 |

* Based on the water quality objectives for the western area of the Main San Gabriel Basin contained in the Basin Plan.

Water quality protection standards may be modified by the Board based on more recent or complete groundwater monitoring data, changes in background water quality, or for any other valid reason.

D. Provisions

1. The discharger shall develop a workplan acceptable to the Executive Officer that describes the locations and construction details of a groundwater (including exposed groundwater in Pit No. 3) monitoring network that will adequately detect any release to groundwater from this disposal site. This workplan must be submitted to the Executive Officer within ninety (90) days after adoption of this Order, and must include the following:

   a. A map depicting the locations of the ground water monitoring wells and a rationale for their number and spatial distribution.

b. Drawings and data depicting construction details of the proposed ground water monitoring network. These must include:

– casing, borehole diameters and method of drilling;
– casing materials to be used;
– depth of each hole;
– size, length, and position of screen;
– nature and emplacement of filter pack and rationale for them;
– depth, composition, and emplacement of seals; and
– method and timetable for well development.

The discharger shall start groundwater monitoring at least one year prior to receiving any inert wastes other than native geological materials generated by URP's mining activities at the vicinity of the site.

2. The discharger shall use the statistical procedures contained in CCR title 27, section 20415(e)(7), to determine if there is a statistically significant increase for any background indicator parameter. Upon approval of the Executive Officer, alternative statistical procedures may be used.

3. In the event that a statistically significant increase is observed for any background indicator parameter, the discharger shall establish an evaluation program in accordance with CCR title 27, section 20415(e)(9), unless such a program has already been submitted.

4. If evaluation monitoring determines that there is a statistically significant increase in the water quality protection standard (background indicator parameters as listed in Section II.B. of Monitoring and Reporting Program No. 5801), then the discharger shall institute a corrective action monitoring program in accordance with CCR title 27, section 20415(e)(10).

5. The discharger shall take any and all necessary measures to prevent unauthorized disposal of wastes at this site by instituting a waste load-checking program. A waste load-checking program, including a QA/QC program proposed by the discharger to ensure compliance, must be submitted to the Executive Officer for approval at least ninety (90) days before the facility can receive any inert wastes other than native geological materials generated by URP's mining activities at the vicinity of the site. As a minimum, the load-checking program shall include the following:

a. A computer tracking system at the entrance of the landfill: The system shall determine and record whether the source of the material is residential or non-residential. If the material is non-residential, the source type, such as gas station, industrial, commercial, etc., must be evaluated by the discharger's personnel. If it is determined that the material may contain significant chemical contamination, it will

be necessary to refuse the waste load or hold the truck for further information or chemical analysis. The computer tracking system shall issue a weighmaster ticket (in English and Spanish). The truck driver must sign the weighmaster ticket certifying that the waste load does not contain contaminant levels that are hazardous or represent a significant threat to groundwater.

b. Prior approval form: Prior to receiving any soil volume greater than 750 cubic yards from a single excavation project or for projects that start out small and eventually exceed the 750 cubic yards limit, a prior approval form must be filed by the hauler and landfill personnel. The hauler must supply information of the soil material such as the source (residential or non-residential), quantity, chemical content, and delivery date. The hauler must sign the form acknowledging that "*...the hauler stipulates that to the best of his or her knowledge hazardous levels of contaminants do not exist in the waste.*" Landfill personnel must approve the acceptance of the material and record the approval number, who from the landfill approved acceptance of the material, general and detailed information regarding the location within the landfill where the material will be placed, and the dates of placement.

c. Personnel training: Personnel at the gate and the dumping areas of the landfill must be trained to ensure the discharger's compliance concerning acceptable and unacceptable materials as provided in this Order.

6. The discharger shall provide an updated annual survey of all fill areas including boundaries, elevations, and keys to permanent monuments. The results shall be included in the annual report submitted to the Regional Board.

7. The discharger shall maintain copies of this Order and the waste load-checking program at the site so as to be available at all times to personnel operating the site.

8. The discharger shall file with this Regional Board a report of any material change or proposed change in the character, location, boundaries or quantity of this waste discharge at least 120 days prior to the date of such proposed change.

9. In the event of any change in name of operator or in control or ownership of land or waste disposal facilities owned or controlled by the discharger, the discharger shall:

   a. Notify this Regional Board in writing of such a change; and
   b. Notify the succeeding owner or operator by letter, a copy of which shall be filed with this Regional Board, of the existence of this order.

10. Ninety (90) days prior to cessation of disposal operations at this site, the discharger shall submit a technical report to the Regional Board describing the methods and controls to be used to assure protection of the quality of receiving waters during final operations and with any proposed subsequent use of the land. Such methods and controls shall comply

with the foregoing technical report and the waste discharge requirements. The report shall be prepared under the direct supervision of a California-registered geologist or engineer, or a California-certified engineering geologist.

11. This Regional Board considers the current property owner, URP, to have continuing responsibility for correcting any problems which may arise in the future, whether the site is then owned and operated by URP or not.

12. These requirements do not exempt the operator of this waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility, and they leave unaffected any further restraint on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.

13. In accordance with Water Code Section 13263(g), these requirements shall not create a vested right to continue to discharge. All discharges of waste into the waters of the State are privileges, not rights, and are subject to rescission or modification.

14. In accordance with Section 13267 of the California Water Code, the discharger shall furnish, under penalty of perjury, technical monitoring program reports; such reports shall be submitted in accordance with specifications prepared by the Executive Officer, which specifications are subject to periodic revisions as may be warranted.

15. This Order includes the attached "Standard Provisions Applicable to Waste Discharge Requirements" (Attachment "W"). If there is any conflict between provisions stated hereinbefore and the attached "Standard Provisions Applicable to Waste Discharge Requirements", those provisions attached hereinbefore prevail.

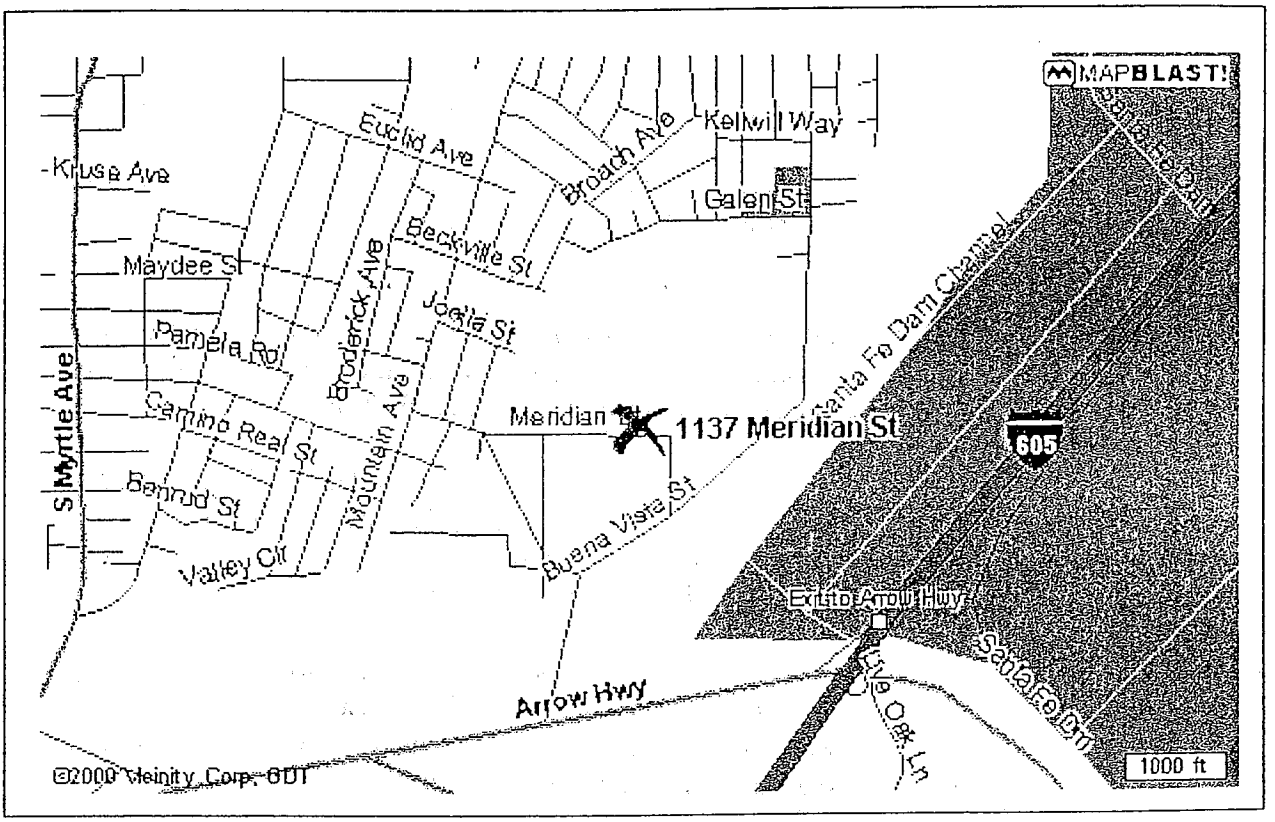
16. In accordance with Section 13263 of the California Water Code, these requirements are subject to periodic review and revision by this Regional Board.

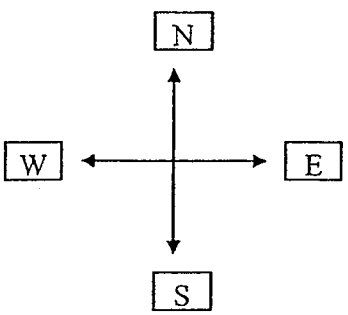
17. Order No. 73-32 adopted by the Regional Board on April 12, 1973, is hereby rescinded.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region on September 19, 2001.

Dennis A. Dickerson
Executive Officer

Figure 1



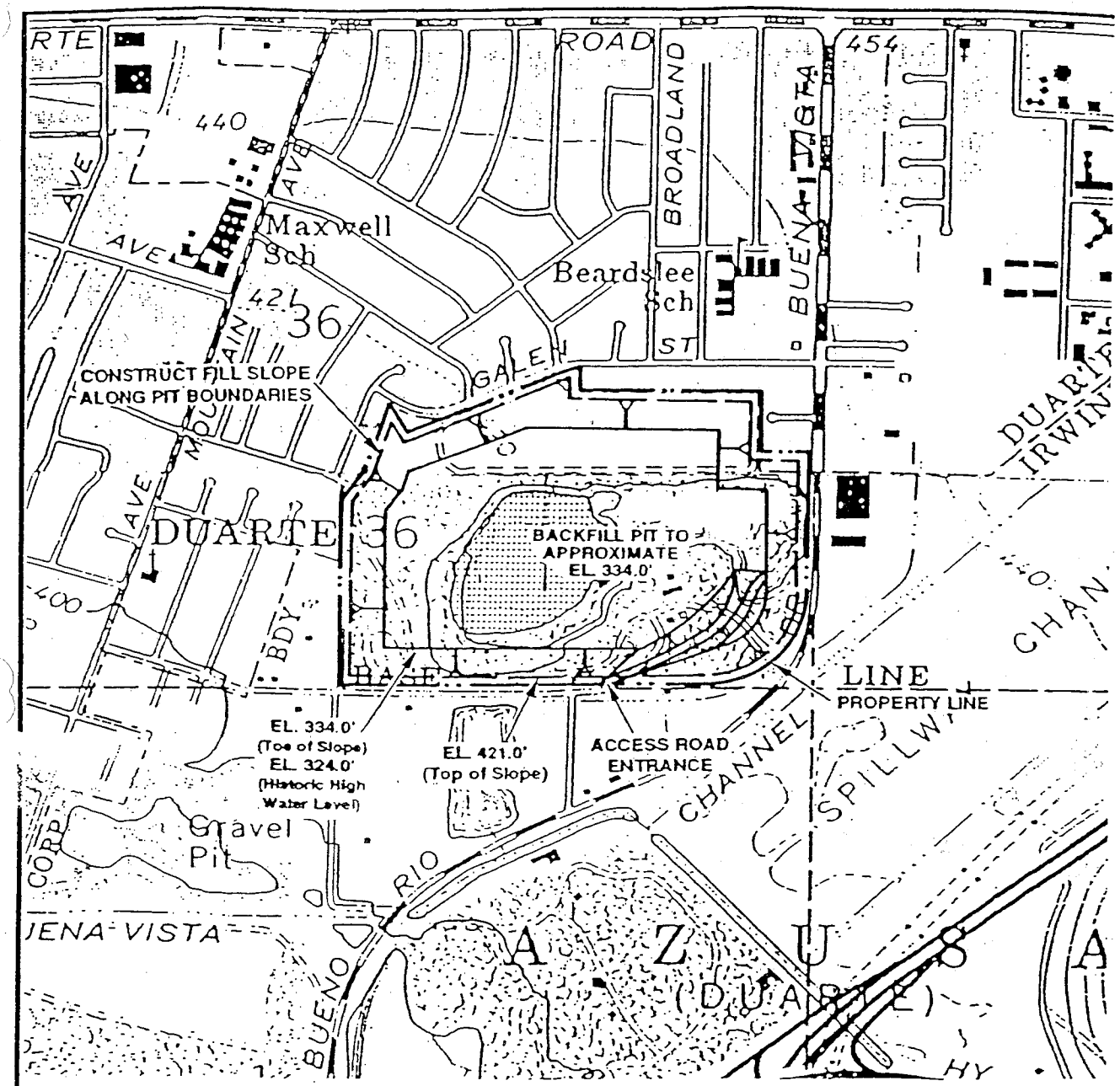




**Justice** & *Associates*
801 Pacific Coast Highway, Suite 200
Seal Beach, CA 90740
(562) 799-6111 Fax (562) 799-6119

**Site Area Map**

United Rock Products Corporation
1137 Meridian Street, Duarte, CA 91010

Figure 2




2000 1000 0 2000

Approximate Scale In Feet

N

Justice & Associates
801 Pacific Coast Hwy. Ste. 200 Seal Beach, Ca. 90740
Phone 562 799-6111 Fax 562 799-6119

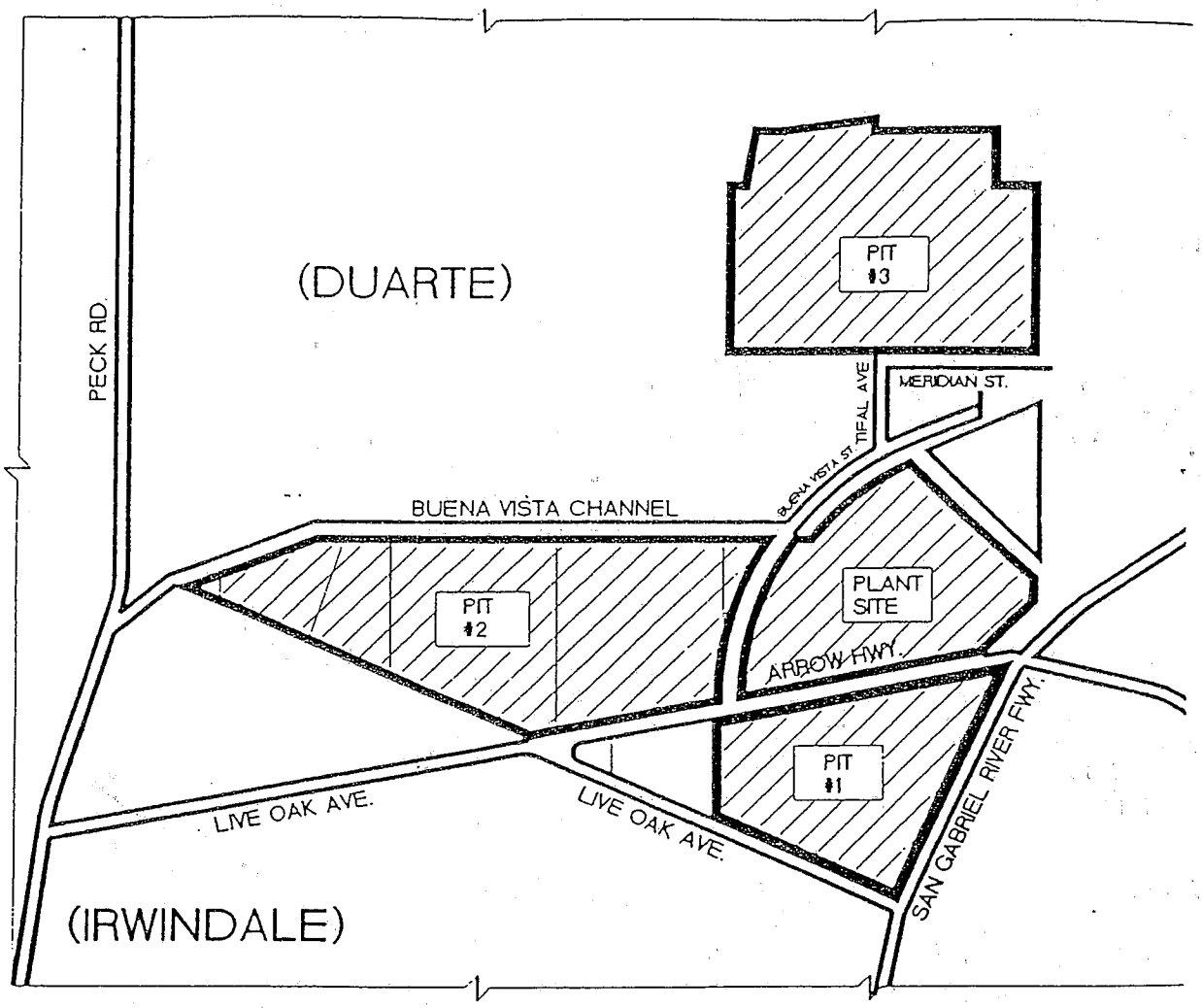
| DESCRIPTION | United Rock Products<br>Detail Site Map Pit #3 | | | |
|---|---|---|---|---|
| JOB NO. | CADCODE | DRAWN BY: | DATE | DWG. NO. |
| C-6891 | C-6891 | | 2/08/01 | C-6891 |

NOTE:
Pit Floor To Be Graded @ 2% Slope To Southwest Corner Of Site With 2: 1 Side Slopes.

REFERENCE: USGS 7.5 Minute Series Topographic Maps, "Azusa, Calif." 1972 and "Baldwin Park, Calif." 1981, Photorevised Quadrangles.

Dames & Moore

Figure 3




0 500 1

SCALE IN FEET

| | | | |
|---|---|---|---|
| Developed By: MLR | Drawn By: LA | SITE MAP | Drawing Number |
| Approved By: SHL | Date: 08-13-93 | UNITED ROCK PRODUCTS<br>1245 E. ARROW HWY.<br>IRWINDALE, CA. | MONTGOMERY WATSON |
| Reference By: | | | |
| Revisions: | Project No. | | |

WATSON INC. M&B95

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, LOS ANGELES REGION

## MONITORING AND REPORTING PROGRAM NO. CI 5801
## for
## UNITED ROCK PRODUCTS CORPORATION
## (Pit No. 3 Inert Landfill)
## (Order No. 01-131)
## (File No. 72-124)

United Rock Products Corporation (hereafter "discharger") shall implement this Monitoring and Reporting Program (MRP) at the first quarter immediately following adoption of this Order. The first monitoring report under this program is due by January 15, 2002.

### I. Reporting

A. All monitoring reports must be addressed to the Regional Board, Attention: Information Technology Unit. The reporting period and the compliance file number (CI 5801) must be clearly displayed on the title page to facilitate routing to the appropriate staff and file.

B. Monitoring reports shall be submitted by the dates in the following schedule:

| Reporting Period | Report Due |
|---|---|
| January - March | April 15 |
| April - June | July 15 |
| July - September | October 15 |
| October - December | January 15 |

B. The quarterly reports shall include both groundwater monitoring data as required in Section II and the waste disposal information as required in Section III of this MRP. The results of the facility's load-checking program shall also be reported in each monitoring report. The October-December report shall include a summary of the data obtained during the year.

C. In the event that hazardous or other unacceptable wastes are detected, the Regional Board shall be notified by telephone or facsimile within 24 hours and by writing within 7 days. The type, source, and final disposition of those wastes shall also be reported.

D. The Regional Board is developing a database management system that, when it becomes fully operational, may require the discharger to submit the monitoring reports electronically.

E. If the discharger performs analyses for any parameter more frequently than required by this Program, using approved analytical methods, the results shall be included in the monitoring report.

F. The discharger may submit additional data to the Regional Board not required by this Program in order to simplify reporting to other agencies.

G. The discharger shall retain records of all monitoring information, including all calibration and maintenance records regarding monitoring instrumentation, and copies of all data submitted to regulatory agencies, for a period of at least five years. This period may be extended by request of the Regional Board at any time, and shall be extended during the course of any unresolved litigation regarding all or any part of the entire disposal site.

## II. Groundwater Monitoring

A. The discharger shall submit a groundwater monitoring plans to the Regional Board as required in Provision No. D.1. of Order No. 01-131.

B. All groundwater monitoring stations must be sampled, quarterly during the first year of monitoring and semi-annually thereafter, for the following indicator parameters:

| Parameter | Units |
|---|---|
| pH | pH units |
| Electrical conductivity | umhos/cm |
| Alkalinity | mg/l |
| Bicarbonate (as $HCO_3$) | mg/l |
| Carbonate (as $CO_3$) | mg/l |
| Carbon dioxide | mg/l |
| Chemical oxygen demand | mg/l |
| Total hardness (as $CaCO_3$) | mg/l |
| Total dissolved solids | mg/l |
| Nitrates | mg/l |
| Chloride | mg/l |
| Sulfate | mg/l |
| Boron | mg/l |
| Cadmium | µg/l |
| Chromium | µg/l |
| Lead | µg/l |
| Nickel | µg/l |
| Benzene | µg/l |
| PCE (perchloroethylene) | µg/l |
| TCE (trichloroethylene) | µg/l |
| MTBE(Methyl t-butyl ether) | µg/l |
| Vinyl chloride | µg/l |

In addition, the first quarter's analyses shall include determinations for all U.S. EPA Appendix I and II Constituents (Attachment 1).

C. Quarterly sampling shall be performed during the months of January, April, July, and October. Semi-annual sampling shall be performed during the months of April and October. In the event sampling is not performed as above because of unforeseen circumstances, substitute sampling shall be performed as soon as possible after these times, and the reason for the delay shall also be given

D. The groundwater-monitoring program, once started, is to be continued even during periods when no wastes are deposited at the disposal site, and throughout the active life of the disposal site.

E. All chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services Environmental Laboratory Accreditation Program, or approved by the Executive Officer. Laboratory analyses must follow methods approved by the United States Environmental Protection Agency (EPA), and the laboratory must meet EPA Quality Assurance/Quality Control criteria.

F. For any analyses performed for which no procedure is specified in the EPA guidelines, or in this Order, the constituent or parameter analyzed, and the method or procedure used, must be specified in the report.

G. Analytical data reported as "less than" shall be reported as less than a numeric value, or below the limit of detection, for that particular analytical method.

H. All analytical samples obtained for this Program shall be grab samples.

I. The monitoring report must also include the following:

1. Sampling protocol and analytical methods used;

2. If any required samples were omitted during the reporting period, a statement to that effect shall be made and reasons given for any omission;

3. Groundwater elevations measured to the nearest 0.01 foot relative to mean sea level. The velocity and direction of ground water flow under the disposal site shall be determined after each monitoring event and reported;

4. For any monitored waste parameter which is listed as such by the EPA or by the State of California, the discharger shall compare such data to the most stringent allowable concentrations under all existing Federal and State regulations;

5. An evaluation of the results of the testing signed by a California registered geologist or professional engineer.

## III. Waste Disposal Reporting

A. The first report to the Regional Board shall include a map of the site indicating the areas that are currently being filled.

B. A report containing the following information shall be filed with this Regional Board for each calendar quarter:

1. A tabular list of the estimated average monthly quantities (in cubic yards) and types of materials deposited each month (including native geological materials generated by mining activities).

2. The areas of the site where wastes were deposited. If a new area has been started, submit another map of the site and indicate the new areas being filled and any recently completed areas.

3. An estimate of the remaining life of the site in years and months.

4. A certification that all wastes deposited were in compliance with the Regional Board's requirements and that no wastes have been deposited outside of the boundaries of the site as specified in the Regional Board's requirements.

5. If purged groundwater from the monitoring wells is used at the site, the total volume, and areas of usage shall also be reported.

Ordered by: _____
Dennis A. Dickerson
Executive Officer

Date: September 19, 2001

# Los Angeles County Department of Public Works (LACDPW)





# Online File Review

Industrial Waste / Underground Storage Tanks / Stormwater

Back

*Click on the file number(s) below to review the scanned documents for the requested site address. If the file number(s) is greyed out and you are unable to click on the file number(s), scanned documents are not available at this time.*
***Please Note:*** *All documents have not been uploaded to this webpage. If additional information is needed please contact our public counter at:*

***Public Counter***
***Phone:*** *626-458-3517*
***Hours:*** *Monday-Thursday 7am – 5pm*
***Location:*** *900 S. Fremont Ave. Annex Bldg 3rd Floor*
*Alhambra, CA 91803*

| FILE# | SITE ADDRESS | FILE NAME | STAT | TYPE |
|---|---|---|---|---|
| 000733-I00740 | 1137 MERIDIAN ST DUARTE 91010 | LIVINGSTON-GRAHAM INC | CLOS | I |

Back





# Online File Review

Industrial Waste / Underground Storage Tanks / Stormwater

Back

You searched the following address:

Street Number: 2151 Street Name: Buena Vista

**Our office does not have any records (related to industrial waste/underground storage tanks/stormwater) for the requested site address.**

Please double check the spelling of the street name or search a different address. Both street number and street name must be exact and spelled correctly as they appear for the facility on file. Do not include street direction prefix (i.e. N, S, E, W, etc...) or suffix (i.e. ST, AVE, RD, BLVD, etc...) unless they appear in the street name (i.e. AVENUE K, AVENIDA CESAR CHAVEZ, 10TH ST EAST, CROSSROADS PKWY N, etc...). Do not include any extra spaces after the street number or after the street name.

Back

# Leighton Consulting, Inc.

A LEIGHTON GROUP COMPANY

September 13, 2016

Los Angeles County Department of Public Works
Environmental Programs Division
900 Fremont Ave.
Alhambra, CA
FACSIMILE: (626) 458-3569
Phone: (626) 458-3517

Subject: **File Review**

Leighton Consulting, Inc. (Leighton Consulting) is requesting information for the property located at:

No file

- **1137 Meridian Street, Irwindale, CA 91706**

We are requesting any information concerning hazardous waste/materials, underground storage tanks, leaking underground storage tanks cleanup, inspections, violations, or any other environmental sensitive spills, responses or concerns. Thank you for your assistance.

Sincerely
LEIGHTON CONSULTING, INC.

Meredith Church

Meredith Church
Associate Geologist
949-681-4208 (phone)
949-250-1114 (fax)
mchurch@leightongroup.com

F.C. Dist. Form 106 2M 2-30 Sheet 1

# LOS ANGELES COUNTY
# FLOOD CONTROL DISTRICT
## HYDROGRAPHIC DEPARTMENT
## WELL DATA

Location and description 1200' E. of Buena Vista, 2640' S. of A.T. & S.F.

Description of reference point Top of ½" nipple on air line 3' above grd. - Air line 236'

R. P. elev. above sea level 448 Datum U.S.G.S.

How determined L.A.C.F.C.D. S.G.V.P.A.

R. P. elev. above, ~~below~~, ground 3.0'

Owner Monrovia Acres Water Co. Monrovia Mutual

Use Irr.

Capacity of well

Depth of well 145'

Size of well 14" Type

Power used

Type of motor, engine Make HP

Type of pump Make

Capacity of pump

Year drilled or dug Driller

Depth to water when drilled

Salinity of water

Temperature of water

Artesian when drilled Yes No

Artesian on date Yes No

Well Numbers

D.W.R. #C-282 c-

DWR 1N/10W-31N01

F.C. Well No. 4227

Stunden could not find Apr 1954, even after considerable search.
Spillway grading may have destroyed it. DASr 12-9-54 a/c Dwr Leve.

**LOG OF WELL No.....**

Drilled by.....ROSCOE MOSS.....

Date drilled.....JAN '52.....

Depth from ground surface.....

Struck water at.....202'.....ft. from ground.

Water rose to.....ft. from ground.

| FROM | TO | CLASSIFICATION OF MATERIALS |
|---|---|---|
| 0 | 318 | GRAVEL & BOULDERS |
| 318 | 322 | SANDY CLAY |
| 312 | 382 | SAND, GRAVEL, & BOULDERS |
| 382 | 385 | SANDY CLAY |
| 385 | 600 | SAND & GRAVEL |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

PERFORATIONS: 500 - 388'
382 - 324'
318 - 300'

76W348 10S REV. 0-49 SHEET 1

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
HYDRAULIC DIVISION

Calif. American Water Co. WELL DATA

Owner: ~~Duarte Domestic Water Co.,~~ 1101 S. Oak Ave., Duarte — Elliott 87164

Location and Description: # 2006 Buena Vista Ave, 1200' Sof Duarte Road; 1250'± S. 440' E of Buena Vista Ave. 400 E

Use: Public Supply

Elev. of average grd. at well: ~~4475'±~~ ~~446.0~~ U. S. G. S. Datum

Elev. of grd. adjacent to well: _____ U. S. G. S. Datum

Water surface reference points:

(a) From 1-23-53 To _____ Elev. 450.0 How det. Topo.
Description: Lower edge of slanted 2" pipe on W. side, 2.0' above floor & 2.5' above nat. ground.

(b) From 10-8-65 To _____ Elev. 450.0 How det. Rel to R.P.(a)
Description: Airgage, 2.5' above grd

(c) From 6-3-75 To _____ Elev. 450.4 How det. Rel. to RP(a)
Description: Top of 2" 'Tee' fitting on slanted 2" pipe 2.16' above floor & 2.86' above nat grnd.

(d) From _____ To _____ Elev. _____ How det. _____
Description: _____

Type of well: _____ Size 20"

Original depth: 600' Soundings: _____

Pumping equipment: Fairbanks-Morse

Power used: 300 H.P. Electric

Capacity: 1500 g.p.m. Drawdown: _____

Date drilled: Jan. 1952 By Roscoe Moss Co.

Artesian characteristics: _____

Quality of water: _____

Remarks: Tested 15hrs at 4300 g.p.m.

(over)

Well Numbers
Owner
D.W.R. No. 1W/10W-31M1
Loc
D.W.R.
F.C. 4227A

LOG OF WELL NO. 4227A

| FROM | TO | CLASSIFICATION OF MATERIALS | FROM | TO | CLASSIFICATION OF MATERIALS |
|---|---|---|---|---|---|
| 0 | 318 | Gravel and Boulders | | | |
| 318 | 322 | Sandy clay | | | |
| 322 | 382 | Sand, gravel & boulders | | | |
| 382 | 385 | Sandy clay | | | |
| 385 | 600 | Sand & gravel | | | |

Perforations 300'-318', 324'-382', 388'-500'

300'-318'; 324-382; 388-588 -DWR

Struck water at

Water level before perf. 202' after perf. 202'

Remarks Well Log & other data in confidential well log file

(over)

76W348 106 REV. Ø2-55

SHEET 1

# LOS ANGELES COUNTY
# FLOOD CONTROL DISTRICT
## HYDRAULIC DIVISION
## WELL DATA

Owner: Arrow Rock Company
1137 Meridian St, Duarte

Location and Description:
430' N. of Meridian St.;
670' E. of Tifal Ave.;
12' N. and 65' E. of Well 4227C

Use: None – 11-19-57 Industrial (Rock Crusher) - 4-17-61

Elev. of average grd. at well: 424±' U. S. G. S. Datum

Elev. of grd. adjacent to well: U. S. G. S. Datum

Water surface reference points:

(a) From 11-19-57 To Elev. 425.7' How det. Topo.
Description: Top of capped casing, 1.7' above ground.

(b) From 4-17-61 To Elev. 425.5 How det. Topo.
Description: Top of 2" pipe, 1.5' above grd.

(c) From 4-80 To Elev. 424.0 How det. Rel. to R.P.(A)
Description: Capped @ grd. Surface

(d) From To Elev. How det.
Description:

Type of well: Size

Original depth: Soundings:

Pumping equipment: None 11-19-57 Fairbanks - Bank #5642150 G.E. 125HP Motor 4-17-61

Power used: Elec.

Capacity: Drawdown:

Date drilled: By

Artesian characteristics:

Quality of water:

Remarks: Data from field - JH 11-19-57

(over)

Well Numbers

Owner

D. W. R. No. 11/11W-36R1

D. W. R. Loc.

F. C. 4227B

LOG OF WELL NO. 4227B

| FROM | TO | CLASSIFICATION OF MATERIALS | FROM | TO | CLASSIFICATION OF MATERIALS |
|---|---|---|---|---|---|
| | | | | | |

Perforations

Struck water at

Water level before perf. after perf.

Remarks Well log & other data in confidential well log files 11-8-57.

(over)

4227B

TRIPLICATE
File Original, Duplicate and Triplicate with the
**DIVISION OF WATER RESOURCES**
P. O. BOX 1079
SACRAMENTO 5, CALIFORNIA

# WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA—DEPARTMENT OF PUBLIC WORKS

## DIVISION OF WATER RESOURCES

*Do Not Fill In*

~~State~~ Well No. FC 42278

4-57-12

Other Well No.

Region

(1) DRILLER: (person, firm, or corporation)

Name **Roscoe Moss Company**

Address **4360 Worth Street**

**Los Angeles, Calif.**

OWNER:

Name **Arrow Rock Company**

Address **1137 Meridian Street,**

**Duarte, Calif**

(2) Proposed Use (*Check*)

| | | | |
|---|---|---|---|
| Domestic | ☐ | Industrial | ☒ |
| Irrigation | ☐ | Test Well | ☐ |
| Municipal | ☐ | Other | ☐ |

Equipment

| | |
|---|---|
| Rotary | ☐ |
| Cable | ☒ |
| Dug Well | ☐ |
| Other | ☐ |

(3) CASING:

**300** ft. of **18** in **8** ~~xx~~ ga. casing **and** left in well

" " " " " " " "

" " " " " " " "

" " " " " " " "

" " " " " " " "

Type and size of shoe or well ring

(4) PERFORATIONS:

Type of perforator used **Moss Hydraulic**

Perforated **296** ft. to **230** ft. **8** holes per **4** in.

" " " " " " "

" " " " " " "

" " " " " " "

" " " " " " "

" " " " " " "

" " " " " " "

" " " " " " "

" " " " " " "

" " " " " " "

Diameter of perforations **1/4** in., length **2-1/2** in.

(5) WATER LEVELS:

Was electric log made of well? ☐ Yes ☐ No If yes, attach copy.

Depth at which water was first found **216** ft.

Standing level before perforating **216** ft.

Standing level after perforating **188** ft.

Note your observation of any change in water level while drilling

Was a surface sanitary seal provided?

(6) WELL PUMPING TEST:

Capacity gal./min. ft. draw down

Was well gravel packed?

Were any strata sealed against pollution?

Temperature Was a chemical analysis made? Attach copy

If abandoned was well capped?

(7) TYPE OF WORK (*check*):

New well ☒ Reconditioning of well ☐

Deepening existing well ☐

(8) LOCATION OF WELL:

County **Los Angeles**

R. F. D. or Street No. **1137 Meridian Street, Duarte, California.**

(9) WELL LOG:

Total depth of well **300** ft.

Formation: Mention size of water gravel—

**0** ft. to **300** ft. **Sand and gravel**

" " " "

" " " "

" " " "

76W348 106 REV. Gb 2-55

SHEET 1

# LOS ANGELES COUNTY
# FLOOD CONTROL DISTRICT
## HYDRAULIC DIVISION
## WELL DATA

Owner: Arrow Rock Co.
#1137 Meridian St; Duarte

Location and Description:
418' N. of Meridian St.;
605' E. of Tifal Ave.;
12' S. and 65' W. of Well #4227B

Use: Gravel Plant None-Capped & buried-4-17-61

Elev. of average grd. at well: 424±' U. S. G. S. Datum

Elev. of grd. adjacent to well: U. S. G. S. Datum

Water surface reference points:

(a) From 11-19-57 To Elev. 424.5' How det. Topo
Description: 1" hole in pump base, N. side, 0.5' above ground.

(b) From To Elev. How det.
Description:

(c) From To Elev. How det.
Description:

(d) From To Elev. How det.
Description:

Type of well: Size 10"

Original depth: 219 Soundings: Removed 4-17-61

Pumping equipment: Pomona Turbine 100 H.P.

Power used:

Capacity: Drawdown:

Date drilled: By

Artesian characteristics:

Quality of water:

Remarks: Data from field - J. Holleron 11-19-57

(over)

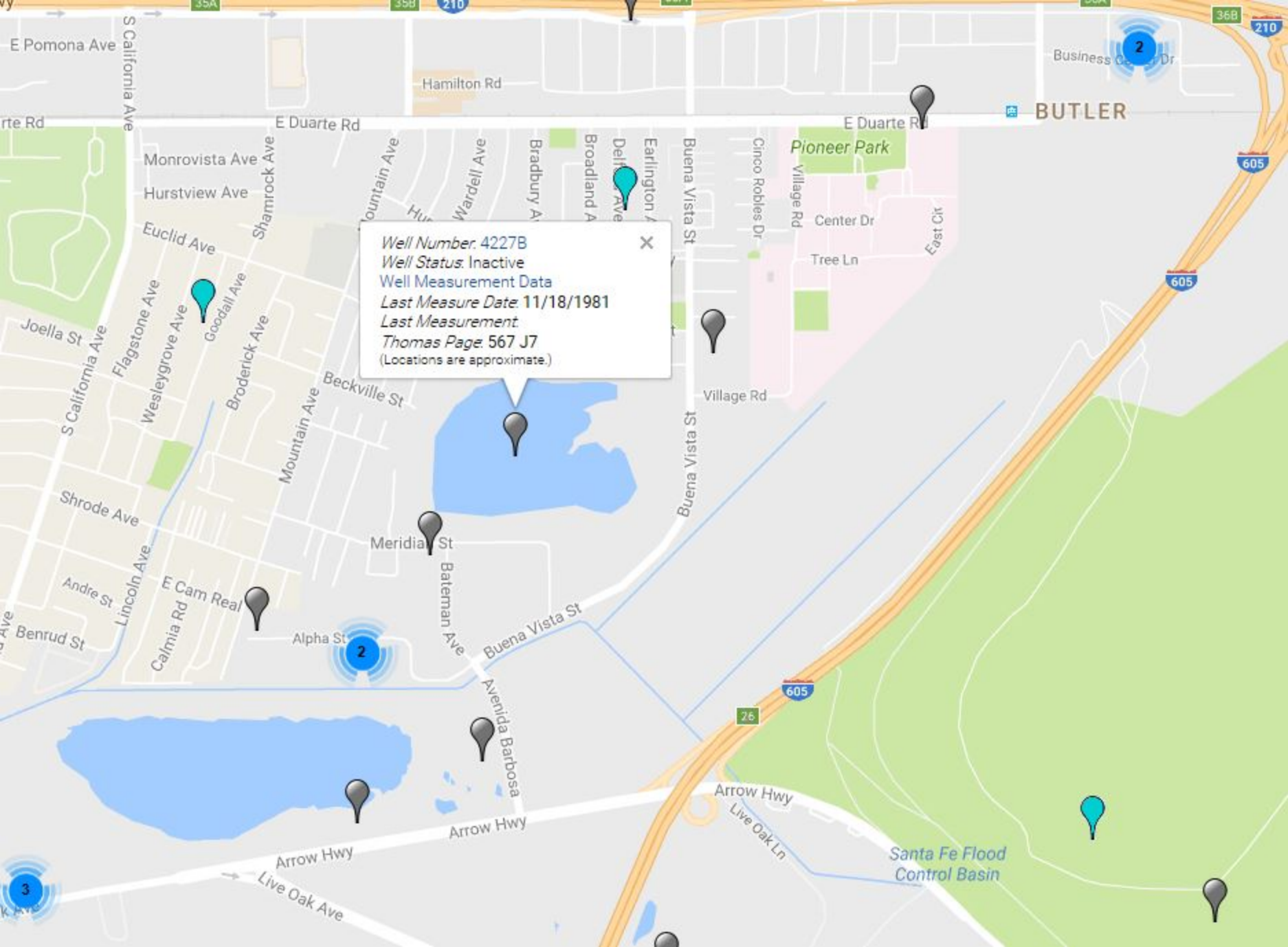
Well Numbers

Owner

D. W. R. No. 11/11 WL 36 R2

D. W. R. Loc.

F.C. 4227C


Well Number: 4227B
Well Status: Inactive
Well Measurement Data
Last Measure Date: 11/18/1981
Last Measurement:
Thomas Page: 567 J7
(Locations are approximate.)
E Pomona Ave
S California Ave
Hamilton Rd
E Duarte Rd
BUTLER
Pioneer Park
Monrovista Ave
Hurstview Ave
Euclid Ave
Shamrock Ave
Bradbury Ave
Broadland Ave
Earlington Ave
Buena Vista St
Cinco Robles Dr
Village Rd
Center Dr
Tree Ln
East Cir
Joella St
Flagstone Ave
Wesleygrove Ave
Goodall Ave
Broderick Ave
Mountain Ave
Beckville St
Shrode Ave
Meridian St
Bateman Ave
Andre St
Lincoln Ave
E Cam Real
Calmia Rd
Benrud St
Alpha St
Avenida Barbosa
Arrow Hwy
Live Oak Ln
Live Oak Ave
Santa Fe Flood Control Basin
210
605
26
2
3

# Historical Well Measurement Data

EXPORT

Well ID: 4227B State #: 1N11W36R01 RP Elev:424

High Measure: 222.20 ON 11/16/1977
Low Measure: 112.50 ON 04/21/1969

| Measure Date | RP to WS (Depth) | Water Surface Elevation |
|---|---|---|
| 11/18/1981 | | |
| 04/14/1981 | | |
| 11/13/1980 | 162.70 | 261.30 |
| 05/19/1980 | 117 | 307 |
| 12/17/1979 | 176.20 | 247.80 |
| 04/18/1979 | 138.10 | 285.90 |
| 11/21/1978 | 164 | 260 |
| 04/12/1978 | 166.80 | 257.20 |
| 11/16/1977 | 223.70 | 200.30 |
| 04/13/1977 | 214 | 210 |
| 10/28/1976 | 217.50 | 206.50 |
| 04/20/1976 | 204.50 | 219.50 |
| 11/04/1975 | 206.80 | 217.20 |
| 04/01/1975 | 197.90 | 226.10 |
| 11/01/1974 | 208.20 | 215.80 |
| 04/29/1974 | 183.70 | 240.30 |
| 04/02/1974 | | |
| 11/05/1973 | 193.10 | 230.90 |

| | | |
|---|---|---|
| 11/13/1972 | 203.80 | 220.20 |
| 04/06/1972 | 185.80 | 238.20 |
| 11/22/1971 | 185.50 | 238.50 |
| 11/02/1971 | | |
| 04/18/1971 | 166.50 | 257.50 |
| 11/22/1970 | 171.30 | 252.70 |
| 04/25/1970 | 147 | 277 |
| 11/16/1969 | 147.80 | 276.20 |
| 04/21/1969 | 114 | 310 |
| 11/12/1968 | 171.70 | 252.30 |
| 04/08/1968 | 149.50 | 274.50 |
| 12/18/1967 | 126 | 298 |
| 05/06/1967 | 130.10 | 293.90 |
| 11/16/1966 | 197.10 | 226.90 |
| 04/09/1966 | 168.50 | 255.50 |
| 11/06/1965 | 219.60 | 204.40 |
| 04/24/1965 | 215.80 | 208.20 |
| 11/21/1964 | 217.40 | 206.60 |
| 04/11/1964 | 207.40 | 216.60 |
| 11/23/1963 | 205.80 | 218.20 |
| 04/06/1963 | 194.70 | 229.30 |
| 11/17/1962 | 190.60 | 233.40 |
| 04/21/1962 | 181.30 | 242.70 |
| 12/05/1961 | 205.20 | 218.80 |
| 04/17/1961 | 203.70 | 220.30 |

# Los Angles County Public Health Investigations (LACPHI)

COUNTY OF LOS ANGELES
**Public Health**

CYNTHIA A. HARDING, M.P.H.
Interim Director

JEFFREY D. GUNZENHAUSER, M.D., M.P.H.
Interim Health Officer

**Public Health Investigation Administration**
LEOLA MERCADEL
Chief, Public Health Investigation

5555 Ferguson Drive, Suite 120-04
Commerce, California 90022
TEL (323) 890-7801 • FAX (323) 728-0217

www.publichealth.lacounty.gov

BOARD OF SUPERVISORS

Hilda Solis
First District

Mark Ridley-Thomas
Second District

Sheila Kuehl
Third District

Don Knabe
Fourth District

Michael D. Antonovich
Fifth District

September 19, 2016

LEIGHTON GROUP
Meredith Church
17781 Cowan
Irvine, CA 92706

**RE:** 1137 MERIDIAN ST, IRWINDAL, CA 91706

I, the undersigned, being the Custodian or the Keeper of Records, certify that a thorough search for the records you requested was carried out under my direction and control.

**This search revealed no records.**

It should be understood that this does not mean that the records you requested do not exist. It is possible that such records may be misfiled; exist under another spelling, another name, or under another classification. However, with the information furnished to our office, and to the best of our knowledge, no records were located.

If you have any questions regarding your request, please contact our office at (323) 890-7806.

Sincerely,

Sebrena Williams, Deputy Health Officer
Public Health Investigation

COR ID No.166082

COUNTY OF LOS ANGELES
Public Health

CYNTHIA A. HARDING, M.P.H.
Interim Director

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Third District

Don Knabe
Fourth District

Michael D. Antonovich
Fifth District

September 20, 2016

MEREDITH CHURCH
17781 COWAN
IRVINE, CA 92706

**SUBJECT: LETTER OF NO RECORD FOR CAL ARP 2151 BUENA VISTA STREET DUARTE CA 91010**

I, the undersigned, being the Custodian of Records, certify that a thorough search of our files, carried out under my direction and control, revealed no records as named in your request for records.

It is to be understood that this does not mean that records do not exist under another spelling, another name, or under another classification, but that with the information furnished our office, and to the best of our knowledge, no such records exist in our files.

Sincerely,

Christian Sten, Deputy Health Officer
Public Health Investigation

COR ID No. 166287

Request - NO Records
Revised 3/15/13

COUNTY OF LOS ANGELES
Public Health

CYNTHIA A. HARDING, M.P.H.
Interim Director

JEFFREY D. GUNZENHAUSER, M.D., M.P.H.
Interim Health Officer

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Second District

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Third District

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Fourth District

Michael D. Antonovich
Fifth District

September 26, 2016

LEIGHTON GROUP
Meredith Church
17781 Cowan
Irvine, CA 92706

**RE:** 2151 BUENA VISTA ST, DUARTE, CA 91010

I, the undersigned, being the Custodian or the Keeper of Records, certify that a thorough search for the records you requested was carried out under my direction and control.

**This search revealed no records.**

It should be understood that this does not mean that the records you requested do not exist. It is possible that such records may be misfiled; exist under another spelling, another name, or under another classification. However, with the information furnished to our office, and to the best of our knowledge, no records were located.

If you have any questions regarding your request, please contact our office at (323) 890-7806.

Sincerely,

Christian Sten, Deputy Health Officer
Public Health Investigation

COR ID No.166285

COUNTY OF LOS ANGELES
Public Health

CYNTHIA A. HARDING, M.P.H.
Interim Director

JEFFREY D. GUNZENHAUSER, M.D., M.P.H.
Interim Health Officer

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BOARD OF SUPERVISORS

Hilda Solis
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Second District

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Third District

Don Knabe
Fourth District

Michael D. Antonovich
Fifth District

October 11, 2016

MERIDETH CHURCH
17781 COWAN
IRVINE, CA 92706

**SUBJECT: 2151 Buena Vista Street, Duarte, CA. 91001**

I, the undersigned, being the Custodian of Records, certify that a thorough search of our files, carried out under my direction and control, revealed no records as named in your request for records.

It is to be understood that this does not mean that records do not exist under another spelling, another name, or under another classification, but that with the information furnished our office, and to the best of our knowledge, no such records exist in our files.

Sincerely,

Sebrena Williams, Deputy Health Officer
Public Health Investigation

COR ID No. 166283

Request - NO Records
Revised 3/15/13

# Los Angeles County Sanitation District (LACSD)

## Meredith Church

**From:** Hamilton, Charlene <CHamilton@lacsd.org>
**Sent:** Tuesday, September 13, 2016 7:41 AM
**To:** Meredith Church
**Subject:** File search

No files found for 1137 Meridian, Irwindale.

CHARLENE HAMILTON | Information Technology Clerk Industrial Waste Section | 562.908.4288 x2929
**SANITATION DISTRICTS OF LOS ANGELES COUNTY** | 1955 Workman Mill Rd, Whittier, CA 90601
*Converting Waste Into Resources* | www.LACSD.org

# PUBLIC RECORDS REQUEST FORM

**ATTENTION REQUESTOR**: To fulfill your request for records, please fill out this form completely, and identify specifically the type of records you are requesting. Requests must reasonably describe identifiable records prepared, owned, used, or retained by the Sanitation Districts.

## REQUESTOR INFORMATION

| | |
|---|---|
| Name: Becky Steever | Date: 9/13/16 |
| Company: Leighton | |
| Mailing Address: 17781 Cowan | |
| City: Irvine | State: CA Zip Code: 92614 |
| Phone Number: 949-302-8495 | Fax Number (optional): |
| Email Address (recommended): BSteever@leightongroup.com | |

## REQUESTED RECORDS

*Please clearly describe each requested record or document (use additional copies of this form, as necessary)**

| | | |
|---|---|---|
| - any/all enviromatal records for 2151 Buena Vista Street, Duarte, CA 91010 | | |
| Time Period of Document Requested | From: inception | To: present |

9/21/16

| | | |
|---|---|---|
| No records found. | | |
| Time Period of Document Requested | From: | To: |

cc: PJ.

| | | |
|---|---|---|
| | | |
| Time Period of Document Requested | From: | To: |

* *Requests that are not specific and focused will be returned for more information. If requested, the Sanitation Districts will assist you in making focused and effective requests for identifiable records. The Sanitation Districts will not create new documents or records in response to a request.*

*Signature of Requestor*

*Submit requests by mail, email or fax to:*

*Records Administrator*
*County Sanitation Districts of Los Angeles County*
*P.O. Box 4998*
*Whittier, CA 90607-4998*
*records_administrator@lacsd.org*
*Fax (562) 699-5422*

| Office Use Only: |
|---|
| Date request received: |
| Date initial response issued: |
| Date request was closed: |

SEP 21 '16 AM 7:20

DOC # 3879848

DOC # 1503368

Smith L.

# City of Irwindale Public Works Department (IPW)

# IPW – Draft Reclamation Plan and EIR, May 2004

# DRAFT

# United Rock Quarry and Reclamation Plan

# Environmental Impact Report

# SCH# 2003101088

# May 3, 2004



Prepared For:

City of IRWINDALE

Prepared By:

GREYSTONE®

City of
IRWINDALE

April 26, 2004

Ms. Terry Roberts
Director, State Clearinghouse
Office of Planning and Research
P.O. Box 3044
Sacramento, California 95812-3044

RE: Request for Shortened Clearinghouse Review (SCH # 2003101088) for an EIR

Dear Ms. Roberts:

The City of Irwindale (City) formally requests a shortened Clearinghouse review of the United Rock Quarry and Reclamation Plan Draft EIR from 45-days to 30-days.

The CEQA §21091(e)(1) and (e)(2) allow for shortened review periods of not less than 30 days for an EIR under certain circumstances. Pursuant to CEQA Appendix K, Criterion 1 of *Criteria for Shortened Clearinghouse Review,* the City requests that a shortened review period be granted due to the City because the City is operating under an extension of the one-year period for completion of an EIR and would not otherwise be able to complete the EIR within the extended period.

There are no Responsible Agencies for this proposed Project. The City has determined that the Proposed Project will not have statewide, regional, or areawide significance as defined in CEQA Guidelines §15206.

Accompanying this letter is also a *Shortened Review Request Form* for your review and use.

Sincerely,

Vicente Mas
Acting Planning Director
City of Irwindale

5050 N. Irwindale Avenue, Irwindale, California 91706
(626) 430-2208 Fx: (626) 962-2018

# Shortened Review Request Form

Form E

(To be filled out and signed by the Lead Agency and submitted with DEIR or Negative Declaration to SCH)

To: State Clearinghouse
P.O. Box 3044
Sacramento, CA 95812-3044

From: City of Irwindale
Lead Agency:
5050 North Irwindale Avenue
Address
Irwindale, CA 91706
Phone #: ( 626 ) 430-2209

SCH # 2003101088

Contact: Vicente Mas

Project Title: United Rock Quarry and Reclamation Plan EIR

Project Location: Irwindale (City) Los Angeles (County)

Explain "exceptional circumstances" (CEQA, Section 15205(d)) for requesting a shortened review:

Per CEQA Guidelines Appendix K, Criteria 1 the City of Irwindale requests a shortened Clearinghouse review. The City, as a lead agency, is operating under an extension of the one-year period for completion of the EIR and would not otherwise be able to complete the EIR within the extended period if the shortened review period is not granted.

List responsible and trustee state agencies, as well as any agencies that have commented on the project (Indicate whether the Responsible and Trustee Agencies have granted approval for this shortened review):

None

As designated representative for the lead agency, I verify, in their behalf, that there is no "statewide, regional, or areawide significance" to this project.

Length of review being requested: 30 days

04/26/2003
Today's Date

Mr. Vicente Mas
Print Name

Vicente L. Mas
Signature

Revised January 2004

Form A

**Notice of Completion & Environmental Document Transmittal**

*Mail to:* State Clearinghouse, PO Box 3044, Sacramento, CA 95812-3044 916/445-0613

SCH # 2003101088

**Project Title:** United Rock Quarry and Reclamation Plan EIR

Lead Agency: City of Irwindale — Contact Person: Paula Kelly

Mailing Address: 5050 North Irwindale Avenue — Phone: (626) 430-2209

City: Irwindale — Zip: 91706 — County: Los Angeles

**Project Location:**

County: Los Angeles — City/Nearest Community: Irwindale

Cross Streets: Arrow Highway/Buena Vista St/I-605 — Zip Code: 91706 — Total Acres: 295

Assessor's Parcel No. — Section: — Twp. — Range: — Base:

Within 2 Miles: State Hwy #: I-605 — Waterways: San Gabriel River

Airports: — Railways: — Schools:

**Document Type:**

CEQA: ☐ NOP ☐ Early Cons ☐ Neg Dec ☒ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) ☐ Other

NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI

Other: ☐ Joint Document ☐ Final Document ☐ Other

**Local Action Type:**

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan

☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan

☐ Rezone ☐ Prezone ☒ Use Permit ☐ Land Division (Subdivision, etc.)

☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☐ Other

**Development Type:**

☐ Residential: *Units* *Acres*

☐ Office: *Sq.ft.* *Acres* *Employees*

☐ Commercial: *Sq.ft.* *Acres* *Employees*

☐ Industrial: *Sq.ft.* *Acres* *Employees*

☐ Educational

☐ Recreational

☐ Water Facilities: *Type* *MGD*

☐ Transportation: *Type*

☒ Mining: *Mineral* Aggregate

☐ Power: *Type* *Watts*

☐ Waste Treatment: *Type*

☐ Hazardous Waste: *Type*

☐ Other

**Funding** (approx.): Federal $ 0 — State $ 0 — Total $ 0

**Project Issues Discussed in Document:**

☐ Aesthetic/Visual
☐ Agricultural Land
☒ Air Quality
☐ Archeological/Historical
☐ Coastal Zone
☒ Drainage/Absorption
☐ Economic/Jobs
☐ Fiscal
☐ Flood Plain/Flooding
☐ Forest Land/Fire Hazard
☒ Geologic/Seismic
☒ Minerals
☒ Noise
☐ Population/Housing Balance
☒ Public Services/Facilities
☐ Recreation/Parks
☒ Schools/Universities
☐ Septic Systems
☐ Sewer Capacity
☒ Soil Erosion/Compaction/Grading
☐ Solid Waste
☒ Toxic/Hazardous
☒ Traffic/Circulation
☐ Vegetation
☒ Water Quality
☒ Water Supply/Groundwater
☐ Wetland/Riparian
☐ Wildlife
☒ Growth Inducing
☒ Landuse
☒ Cumulative Effects
☐ Other

**Present Land Use/Zoning/General Plan Designation:**

Sand & Gravel Quarry, processing plan/Q(Quarry) and M-2 (Heavy Industrial) Zoning / Industrial Land Use Designation

**Project Description:**

United proposes to modify its mining operations and reclamation plans for its activities in Quarries 2 and 3 in the City of Irwindale. United has applied for a CUP to modify its operations and the duration of mining activities, and has submitted new reclamation plans. The project also includes merging the un-mined portion of Quarry 4 that is now located to the east of the newly constructed Buena Vista Street with the existing Quarry 2 (increasing boundary of Quarry 2 by approximately 25 acres and decreasing boundary of Quarry 4); extending the permitted quarry depth in Quarry 2 to between approximately 410 and 450 below ground surface (bgs), and extending the allowable depth in Quarry 3 to between 490 and 500 bgs, or mining both Quarries until December 31, 2020.

## Reviewing Agencies Checklist

Form A, continued

**KEY**
**S** = Document sent by lead agency
**X** = Document sent by SCH
✓ = Suggested distribution

S **Resources Agency**
____Boating & Waterways
____Coastal Commission
____Coastal Conservancy
____Colorado River Board
X Conservation
____Fish & Game
____Forestry & Fire Protection
X Office of Historic Preservation
X Parks & Recreation
____Reclamation Board
____S.F. Bay Conservation & Development Commission
X Water Resources (DWR)

**Business, Transportation & Housing**
____Aeronautics
X California Highway Patrol
X CALTRANS District # 7
____Department of Transportation Planning (headquarters)
____Housing & Community Development

____**Food & Agriculture**

**Health & Welfare**
____Health Services

**State & Consumer Services**
____General Services
____OLA (Schools)

**Environmental Protection Agency**
X Air Resources Board
____California Waste Management Board
____SWRCB: Clean Water Grants
____SWRCB: Delta Unit
X SWRCB: Water Quality
____SWRCB: Water Rights
S Regional WQCB # 4 ( Los Angeles )

**Youth & Adult Corrections**
____Corrections

**Independent Commissions & Offices**
____Energy Commission
X Native American Heritage Commission
____Public Utilities Commission
____Santa Monica Mountains Conservancy
X State Lands Commission
____Tahoe Regional Planning Agency

S Other San Gabriel River Watermaster

S Other U.S. Army Corps of Engineers

---

**Public Review Period** (to be filled in by lead agency)

Starting Date May 3, 2004 Ending Date June 2, 2004

Signature _____ Date May , 2004

---

**Lead Agency** (Complete if applicable):
Consulting Firm: Greystone Environmental Consultants
Address: 5050 North Irwindale Avenue
City/State/Zip: Irwindale, CA 91706
Contact: Paula Kelly
Phone: ( 626) 430-2209

**Applicant:** United Rock Products Corp.
Address: 1245 East Arrow Highway
City/State/Zip: Irwindale, CA 91706
Phone: (____) _____

**For SCH Use Only:**
Date Received at SCH _____
Date Review Starts _____
Date to Agencies _____
Date to SCH _____
**Clearance Date** _____
*Notes:*

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## INTRODUCTION

The City of Irwindale (City) has prepared this Draft Environmental Impact Report (EIR) to provide the public, governmental agencies, and other interested parties with information about the potential environmental effects of changes being proposed to the operations and reclamation plans of quarries owned and operated by United Rock Products Corporation. The quarries are located in the City of Irwindale which is located in Los Angeles County, California. The proposed changes to United Rock's operations and the proposed change in duration of mining activities, reclamation of the quarries and post-reclamation land development constitute a "project" under the California Environmental Quality Act (CEQA) because it requires discretionary approval by the City. The City is the Lead Agency under CEQA.

This EIR was prepared in compliance with CEQA of 1970 (Public Resources Code [PRC] §§ 21000 *et seq.*), and the CEQA Guidelines (California Code of Regulations (CCR), Title 14, §§ 15000 *et seq.*). As described in CEQA Guidelines §15121(a), an EIR is a public information document that assesses potential environmental impacts of a proposed project and identifies mitigation measures and alternatives to the project that could reduce or avoid adverse environmental impacts. CEQA requires that State and local government agencies consider the environmental consequences of projects over which they have discretionary authority. It is not the purpose of the EIR to recommend approval or denial of a project. Rather, an EIR serves to provide full disclosure of potential environmental impacts of a proposed project for review and consideration by the Lead Agency.

## OVERVIEW OF THE PROPOSED PROJECT

The United Rock Products Corporation (United Rock) has submitted an application to the City for modification No. 2-02 to CUP No. 92-3, CUP No. 97-1, and Modification No. 2-01 to CUP 92-3. United Rock seeks to increase the allowable mining depth in Quarries No. 2 and 3, extend the duration of mining activities in both of these quarries, and has submitted new reclamation plans for Quarries No. 2 and 3. The Proposed Project also includes merging the previously un-mined western portion of Quarry No. 4 that is now located to the west of the newly constructed Buena Vista Street with the existing Quarry No. 2. This will increase the boundary of Quarry No. 2 by approximately 24.63-acres and decrease the boundary of Quarry No. 4 by the same acreage. Collectively, these activities (described in full detail in Section 2 of this Draft EIR), represent the Proposed Project.

Currently Quarry No. 1 is under reclamation as an inert landfill. Reclamation backfilling is occurring at an average rate of 1.2 million tons per year (MTY) and is expected to continue at this rate until reclamation is complete in approximately 2020. Because no changes are proposed for Quarry No. 1, it is not included as part of the Proposed Project in this Draft EIR.

The existing CUP (issued by Los Angeles County in 1947) is anticipated to remain in effect for Quarry No. 4/ Production Plant. No relocation or change in the nature or location of uses and activities within the Quarry is anticipated. Because no changes are proposed for the production operations at Quarry No. 4, and because it operates under a previously granted entitlement, it is not included as part of the Proposed Project in this Draft EIR.

However, a portion of Quarry No. 4 under the existing Buena Vista Street will become a part of Quarry No. 2 when the street is vacated by the City. This activity is included as part of the Proposed Project in this Draft EIR.

It should be recognized that the Proposed Project is somewhat exceptional given the long-term duration of the mining, reclamation and post-reclamation phases and activities that are anticipated to occur after approximately the year 2100 or beyond. The City has determined and evaluated the potential environmental impacts of the Proposed Project in this Draft EIR based on best available data and the abilities and limitations of current impact assessment practices, recognizing that potential effects of future activities and land uses decades in the future necessarily exceeds the limits of reasonable forecasting and is too speculative to warrant detailed analysis. It is further assumed that all future post-reclamation phases of development will be subject to subsequent discretionary approvals and therefore will be subject to the requirements of CEQA.

The primary goals and objectives for the Proposed Project are to allow for:

- Continued mining operations at Quarries No. 2 and 3;
- Reclamation of the Quarries to provide future opportunities for land redevelopment and/or resource management that are compatible with surrounding land uses; and
- Post-reclamation uses that are consistent with City General Plan land use designations and land use policies.

## Quarry No. 1

Quarry No. 1 is not part of the Proposed Project as no change is being proposed for this Quarry and there is currently no discretionary action or approval before the City. The reclamation process of this quarry will continue until reclamation is complete in about 2018. The Reclamation Plan for Quarry 1 has been revised to backfill the pit to street level rather than to 10 feet above the historic high water level as previously provided for.

## Quarry No. 2

The alignment of the existing Buena Vista Street will be vacated by the City making additional acreage available for mining as part of Quarry No. 2. The conveyor belt will be upgraded and materials will continue to be transported to the plant via the conveyor belt. The permitted maximum depth is proposed to be 410 feet. Mining is expected to cease and reclamation will be initiated in approximately 2018. - 10 10

## Quarry No. 3

Limited surface mining will continue, and, upon completion of mining activities in Quarry No. 2, clamshell dredge mining would start in Quarry No. 3. Excavation of Quarry No. 3 would continue until approximately the year 2035, at which time reclamation would begin. The maximum permitted depth is proposed to be 440 feet.

## Quarry No. 4/Production Plant

Quarry No. 4/Production Plant and processing plant and related operations would remain until the completion of mining at Quarries No. 2 and 3. The Production Plant operates under its own entitlement (a CUP granted by Los Angeles County in 1947). No relocation or change in the nature or location of uses and activities within the Quarry is anticipated. Because no changes are proposed for the production operations at Quarry No. 4, and because it operates under a previously granted entitlement, it is not included as part of the Proposed Project in this Draft EIR.

However, a portion of Quarry No. 4 (24.63 acres) under the existing Buena Vista Street will become a part of Quarry No. 2 when the street is vacated by the City. This activity is included as part of the Proposed Project in this Draft EIR.

# ALTERNATIVES

The CEQA Guidelines §15126.6 require that an EIR describe and evaluate the comparative merits of a range of alternatives to the project that could feasibly attain most of the objectives of the project but would avoid or substantially lessen significant effects. An EIR is not required to consider alternatives which are infeasible, however, Section §15126.6(b) specifies that the EIR shall evaluate alternatives capable of avoiding or substantially lessening significant effects of the project even if these alternatives could impede to some degree attainment of project objectives, or impose additional costs.

The alternatives evaluated in this Draft EIR were identified based on 1) input from the City, 2) input from the project Applicant, (3) input provided by the NOP commenting agencies, and (4) identified environmental impacts of the Proposed Project.

The alternatives to the Proposed Project that are evaluated in Section 5 of this Draft EIR include:

- No Project Alternative
- Extended Mining and Open Space Alternative – Quarries No. 2 and 3 as reclamation
- Extended Mining and Groundwater Recharge Basin Alternative – Quarry No. 3 as reclamation
- Extended Mining and Reduced Intensity Post-Reclamation Alternative – Quarries No. 2 and 3 as reclamation

- Extended Mining and Industrial-Commercial Alternative – Quarries No. 2 and 3 as reclamation

## AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

The following issues were identified in the scoping process for this Proposed Project. Potential environmental issues include:

- Air Quality – Extension of the duration of mining operations along with the subsequent reclamation and development of the quarry sites could generate emissions or dust that may have a significant effect on local and /or regional air quality.
- Geology and Soils – The continued excavation of materials could affect surrounding land uses including residences as a result of slope stability issues related to mineral extraction.
- Hydrology and Drainage – Quarry No. 2 currently excavates materials below the water table where the San Gabriel Groundwater Basin, a listed Superfund site, is encountered. This is also expected to occur when underwater excavation is initiated in Quarry No. 3.
- Land Use – Post-reclamation land development of the former quarries has the potential to result in adverse impacts to surrounding communities or conflict with approved land use plans.
- Noise – Current mining, future reclamation and post-reclamation land development could generate increased noise levels adversely effecting surrounding sensitive receptors.
- Public Health and Safety/Hazardous Materials – Continued mining and new development would increase the risk of the public to the exposure to hazardous materials or other safety issues.
- Public Services and Utilities – Continued mining or future development could adversely effect the provision of police, fire or educational services or negatively impact local utility service.
- Traffic/Circulation – That current traffic and future traffic generated by mining, reclamation and post reclamation development would adversely affect the local road system by increasing local and regional traffic generation for roadway segments and roadway intersections.

## SUMMARY OF POTENTIAL IMPACTS AND MITIGATION MEASURES

This Draft EIR describes the potentially significant adverse environmental impacts that would reasonably be expected to occur with implementation of the Proposed Project. The Draft EIR contains a list of mitigation measures that would reduce potential project-related significant impacts. **Table ES-1** below presents a listing by resource area of the proposed mitigation measures contained in Section 3 of this Draft EIR.

## Table ES-1
## Recommended Mitigation Measures

| Resource Area & Potential Impacts | Recommended Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|
| **Air Quality:**<br><br>Potential for fugitive dust and emissions contributing to local non-attainment for CO, NO, SO, and $PM_{10}$ | The following mitigation measures are recommended as best management practices (BMPs) during mining operations, reclamation, and post-reclamation phases of the Proposed Project to reduce tailpipe exhaust emissions of CO, NOx, SOx, and PM10, and fugitive dust.<br><br>The following mitigation measures are recommended as best management practices to reduce fugitive dust and tailpipe exhaust emissions of CO, $NO_x$, $SO_x$, and $PM_{10}$ throughout various stages of the project.<br><br>*Operation:*<br><br>• Heavy-duty diesel trucks shall be properly tuned and maintained to manufacturers' specifications to ensure minimum emissions under normal operations.<br>• Vehicles hauling dirt or fill shall comply with CHP requirements and all applicable rules and regulations.<br>• Vehicle speeds on site shall be limited to 15 mph.<br><br>In addition to the above, the following specific measures have already been agreed to by United Rock as part of settlement of the Notice of Violation #P34396 issued by SCAQMD based on ambient upwind/downwind tests conducted by SCAQMD pursuant to Rule 403.<br><br>• Purchase and operate a Tymco vacuum sweeper to reduce and prevent trackout onto Arrow Highway.<br>• Operate a full-time water truck onsite to water all unpaved roads inside the property.<br>• Improve dust controls on transfer points.<br>• Monitor and control dust from storage piles.<br>• Operate a wash rack for drivers to wet down material before leaving facility.<br>• Operate a wheel washer to remove soil from vehicle tires as needed.<br>• Purchase and install a second clean track for the landfill quarry.<br><br>*Reclamation:*<br><br>• Heavy-duty diesel trucks and other mobile equipment shall be properly tuned and maintained to manufacturers' specifications to ensure minimum emissions under normal operations.<br>• Apply water or chemical dust suppressants to unstabilized disturbed areas and/or unpaved roadways in sufficient quantity and frequency to maintain a stabilized surface; minimum of three times per day on days with no precipitation. | Less than Significant |

## Table ES-1
## Recommended Mitigation Measures

| Resource Area & Potential Impacts | Recommended Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|
| **Air Quality** *(continued)* | Water or water-based chemical additives shall be used in such quantities to control dust on areas with extensive traffic including unpaved surfaces.<br>• Vehicles hauling dirt or fill shall comply with California Highway Patrol (CHP) requirements and all applicable rules and regulations.<br>• Vehicle speeds on site shall be limited to 15 mph.<br>• Continue to operate a vacuum sweeper to reduce and prevent trackout onto Arrow Highway.<br>• Operate a full-time water truck onsite to water all unpaved roads inside the property.<br>• Improve dust controls on transfer points.<br>• Monitor and control dust from storage piles.<br>• Operate a wheel washer to remove soil from vehicle tires as needed.<br>• Purchase and install a second clean track for the landfill quarry.<br>***Post-Reclamation Construction:***<br>• Heavy-duty diesel trucks and other mobile equipment shall be properly tuned and maintained to manufacturers' specifications to ensure minimum emissions under normal operations.<br>• Apply water or chemical dust suppressants to unstabilized disturbed areas nd/or unpaved roadways in sufficient quantity and frequency to maintain a stabilized surface; minimum of three times per day on days with no precipitation.<br>• Water or water-based chemical additives shall be used in such quantities to control dust on areas with extensive traffic including unpaved surfaces.<br>• Prevent or promptly remove mud or soil tracked out onto public roadways.<br>• All clearing and grading activities shall cease during periods of forecasted high winds (greater than 20 mph averaged over 1 hour). | |

## Table ES-1
## Recommended Mitigation Measures

| Resource Area & Potential Impacts | Recommended Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|
| **Geology & Soils:**<br><br>Slope stability issues associated with an increase in mining depth, over steepened walls, and insufficient setback distances is a potentially significant impact. | Geologic and Soil Mitigation – 1:<br><br>• Under no circumstances will slopes be allowed to pose a temporary or long-term hazard to the quarry or to off-site locations. All slopes will be cut at an angle of repose, engineered, designed, and/or benched or otherwise protected to ensure long-term stability in accordance with engineering design requirements.<br><br>• Current slopes, safety factors, and setbacks not in compliance with permit provisions will be corrected. These corrections can either be backfilled with properly compacted materials, utilization of benches, and/or an engineered correction. All improvements shall be in place prior to project approval.<br><br>• As directed by the City Engineer, United Rock will retain a qualified geotechnical engineering consultant to evaluate the potential for geotechnical hazards and unstable soil for all corrective actions. The consultant will evaluate the nature of the steep slope and/or unstable soil hazard for the quarry sites. The evaluation shall be based on guidelines of the December 2003 Irwindale Slope Stability Committee report. Soil testing will be conducted, if needed, to ascertain the depth, lateral extent of unstable materials, and potential.<br><br>• The geotechnical engineering consultant will prepare a report that includes recommendations for stabilizing the locations considered to be hazardous. This report shall be submitted to the City for review, comment, and approval prior to implementation.<br><br>• The mine depth, slopes, and setback distances will be monitored on an annual basis. The City of Irwindale will be notified of all situations found to be out of compliance with permit requirements. Areas found to be out of compliance will be corrected by United Rock prior to project approval. | Less than Significant |
| Inadequate soil compaction during backfill operation could occur resulting in an increased risk of liquefaction and other earthquake induced hazards. | Geologic and Soil Mitigation – 2:<br><br>• All areas of fill or backfill operations in the quarry during mining and reclamation shall be compacted in accordance with Chapter 33 of the 2002 Los Angeles County Building Code or its latest version. (Previous identified as Chapter 70 of the Uniform Building Code, established by the International Conference of Building Officials), or other methods approved by the City of Irwindale; and shall meet criteria stated in the April 2004 Irwindale performance Specification for Proposed Mine Backfills. .<br><br>• Quarterly results of compaction samples shall be submitted to the City of Irwindale. | Less than Significant |

## Table ES-1
## Recommended Mitigation Measures

| Resource Area & Potential Impacts | Recommended Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|
| **Geology & Soils** *(continued)*<br><br>Seismic activity in the United Rock facility area could cause damage to Post-Reclamation facilities. | Geologic and Soil Mitigation – 3:<br><br>All practicable precautions will be taken to design and construct post-reclamation facilities to withstand the projected ground shaking associated with the maximum probable earthquake (MPE) in the area. This includes secondary hazards induced by earthquakes (liquefaction, lurching, lateral spreading, rapid differential settlement, induced landslides, and rock-fall avalanche). The MPE represents the strongest earthquake likely to occur over the design life of the post-reclamation facilities. The geotechnical engineering investigation, prepared by a California licensed geotechnical engineer, shall be in accordance with the April 2004 Irwindale Backfill Performance Specifications for Existing Mine Backfill Operations, to provide seismic design criteria for site development and building. . | Less than Significant |
| Wave action induced erosion effect to quarry walls at groundwater surface. | Geologic and Soil Mitigation – 4:<br><br>• To minimize the potential damage from wave action induced erosion effects, quarry walls at groundwater surface shall be reinforced using the recommended practices and procedures of the Army Corps of Engineers, or implement detailed remediation developed in accordance with the May 2004 Guidelines for drainage, erosion control, and water quality control for open pit mines in Irwindale. Such remediation shall receive Lead Agency approval prior to construction. | Less than Significant |
| **Hydrology & Drainage:**<br><br>During reclamation, surface water runoff has the potential to cause erosion and transport pollutants. | Hydrology and Drainage Mitigation – 1<br><br>• Prior to the reclamation phase of the Proposed Project, United Rock shall develop a SWPPP in accordance to NPDES guidelines and submitted it to the City for review and approval. At a minimum, the SWPPP will identify erosion minimization and control BMPs and pollution elimination/minimization BMPs, as well as stormwater runoff water quality monitoring procedures.<br>• Surface and groundwater samples shall continue to be collected on an annual basis from Quarries No. 2 and 3 as long as groundwater is exposed. Results will be provided to the City, the Watermaster and the RWQCB.<br>• Erosion control measures shall be designed and implemented in accordance with May 2004 Guidelines for drainage, erosion control, and water quality control for open pit mines in Irwindale.<br>• United Rock shall implement measures to reduce the potential for hazardous constituents in fill material or to later reclaimed areas through compliance with all Waste Discharge Requirements as established by the RWQCB and prohibit:<br>a. the use of hazardous, designated or liquid wastes;<br>b. the use of toxic wastes (i.e., insecticides, poisons and radioactive materials) | Less than Significant |

## Table ES-1
## Recommended Mitigation Measures

| Resource Area & Potential Impacts | Recommended Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|
| | c. the use of asbestos or asbestos products;<br>d. the use of asphalt products unless places below the high-high water mark | |
| **Land Use & Planning:**<br><br>No significant land use impacts are identified, however, the following measure is recommended to ensure that future land use plans and zoning designations are internally consistent with regard to regulating future post-reclamation land uses. | Land Use & Planning Recommended Measures:<br><br>• The City of Irwindale shall establish a Regional Commercial zoning designation within Title 17 (Zoning) of the Irwindale Municipal Code. Adoption of said zone will be consistent with the definition of the Regional Commercial land use designation in the City General Plan Update. | |
| **Noise:**<br><br>**Mining Operations:** Noise generated during mining could result in temporary or long-term increases in noise levels at sensitive receptors. | Noise Impact Mitigation – 1:<br><br>a. If noise impacts exceed the applicable noise standard as measured at the property line of a nearby sensitive receptor, the use of construction type of equipment near residential dwellings shall be limited to a Monday through Friday work schedule of 7:00 a.m. to 7:00 p.m. and between 7:00 a.m. to 12:00 p.m. Saturday.<br>b. Construction equipment shall be equipped with manufacturer recommended mufflers or equivalent.<br>c. Construction equipment shall be turned off when not in operation.<br>d. Maintain the earthen berm around the facilities to reduce noise impacts at nearby residential areas.<br>e. Visits to the site by trucks shall be minimized.<br>f. Use heavy equipment with low manufactured noise levels whenever practical.<br>g. The dredge used at the site shall be electrically powered.<br>h. If dredge noise levels exceed 60 dBA CNEL as measured at the property line of the nearest residential property, the dredge shall be operated on a Monday through Friday work schedule of 7:00 a.m. to 7:00 p.m. and between 7:00 a.m. to 12:00 p.m. Saturday to reduce sleep interference. | Less than Significant |

## Table ES-1
## Recommended Mitigation Measures

| Resource Area & Potential Impacts | Recommended Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|
| **Reclamation and Post Reclamation Construction Operations:** Noise generated during reclamation and post reclamation construction could result in temporary or long-term increases in noise levels at sensitive receptors. | Noise Impact Mitigation – 2:<br>a. Use of equipment near residential dwellings shall be limited to a Monday through Friday work schedule of 7:00 a.m. to 7:00 p.m. and between 7:00 a.m. to 12:00 p.m. Saturday to reduce sleep interference or operations shall take place away from residential locations to ensure noise levels do not exceed City General Plan and zoning prescribed noise levels at the residential location.<br>b. Construction equipment shall be equipped with manufacturer recommended mufflers or equivalent.<br>c. Construction equipment shall be turned off when not in operation.<br>d. Maintain the earthen berm around the facilities to reduce noise impacts at nearby residential areas.<br>e. Maintain truck traffic along major traffic arteries (e.g., Arrow Highway, Buena Vista Street, and Interstate 605) and away from residential streets. | Less than Significant |
| **Noise *(continued)***<br><br>**Post Reclamation:** Operational noise associated with post reclamation construction of industrial/commercial facilities could result in an increase in noise levels at the site. | No Mitigation Required:<br><br>Post-reclamation noise levels will depend upon the type of facility industrial/commercial activity at the site. Development of these future land uses is dependent upon the City of Irwindale's approval of zoning, land use, and project specific approval which will be subject to independent environmental review in the decades ahead. | |

## Table ES-1
## Recommended Mitigation Measures

| Resource Area & Potential Impacts | Recommended Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|
| **Public Services & Utilities:**<br><br>Impacts to public services and utilities are not anticipated to be significant with implementation of the mining and reclamation phases of the Proposed Project. Measures are recommended to reduce the potential for adverse impacts on services and utilities for post-reclamation land uses. | Public Services and Utilities Recommended Measures:<br><br>• Prior to the approval of any post-reclamation land development project, the Applicant shall demonstrate to the City that a sufficient amount of water exists to adequately service the proposed land use development project.<br><br>• Prior to the approval of any post-reclamation land development project, the Applicant shall demonstrate that the Los Angeles County Sanitation District has adequate capacity to handle the wastewater needs of the proposed land use. | |
| **Traffic & Circulation:**<br><br>During the mining and reclamation phases of the proposed project there are potentially significant traffic impacts at the intersections of Live Oak Avenue and Arrow Highway, and Buena Vista Street and Arrow Highway. | Traffic & Circulation Mitigation Measures:<br><br>**On-Site Improvements:**<br><br>• Provide adequate sight distance at the project access roadways where they intersect with the public roadways. The minimum sight distance should be provided to meet the City of Irwindale and Caltrans requirements.<br><br>• Provide a 200-foot minimum northbound and southbound pocket lane at the Quarry No. 4 / Production Plant access along Buena Vista Street.<br><br>• Provide a 200-foot minimum eastbound left turn pocket lane at the Quarry No. 4 / Production Plant access along Arrow Highway.<br><br>• Provide a 150-foot minimum westbound right turn pocket lane at the Quarry No. 4 / Production Plant access along Arrow Highway.<br><br>• Restrict the Quarry No. 4 / Production Plant access to right turn in and out, and left turn in only.<br><br>• Off-site Improvements: | |

## Table ES-1
## Recommended Mitigation Measures

| Resource Area & Potential Impacts | Recommended Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|
| | • A second westbound left turn lane and a third through-lane shall be constructed at the intersection of Live Oak Avenue and Arrow Highway,<br>• The Buena Vista southbound left turn lane shall be restriped to provide a shared left-right turn lane at the intersection of Buena Vista Street and Arrow Highway.<br>• Traffic related impacts associated with post reclamation land development projects could result in an adverse impact on local roadways and intersections. However, these impacts will depend upon the type of facility industrial/commercial activity at the site. Development of these future land uses is dependent upon the City of Irwindale's approval of zoning, land use, and project specific approval which will be subject to independent environmental review in the decades ahead. | |

# SECTION 1.0 INTRODUCTION

This report constitutes a Draft Environmental Impact Report (EIR) for the proposed modifications to United Rock Products Corporation's (United Rock) Aggregate Mining and Reclamation Plans for Quarries No. 2 and 3 and the addition of an un-mined area of Quarry No. 4/Production Plant that is will be located to the west of the newly constructed Buena Vista Street. This area would become a part of Quarry No. 2. The proposed changes and modifications to existing Conditional Use Permits, which are described in full detail in Section 2.0 of this Draft EIR, require discretionary approval by the City of Irwindale (City) and are therefore subject to the requirements of CEQA. CEQA requires environmental review and documentation for any project or discretionary action to be undertaken or approved by a State or local agency.

The primary goals and objectives of the Proposed Project are to allow for:

- Continued mining at quarries Nos. 2, 3 Plant;
- Reclamation of quarries No. 2 & 3 to provide future opportunities for land redevelopment, groundwater recharge, or other uses that are compatible with surrounding land uses; and
- Post-reclamation uses that are consistent with City General Plan land use designations and land use policies that are commercially-viable revenue generators for the City.

## 1.1 PURPOSE AND SCOPE OF THE EIR

This Draft EIR has been prepared by the City acting in its capacity as Lead Agency pursuant to CEQA and the CEQA Guidelines. It was prepared in compliance with CEQA of 1970 (Public Resources Code §§21000 *et seq.*), and the CEQA Guidelines (California Code of Regulations (CCR), Title 14, §§15000 *et seq.*). As described in the CEQA Guidelines Section 15121(a), an EIR is a public information document that assesses potential environmental impacts of a proposed project and identifies mitigation measures and alternatives to the project that could reduce or avoid potential adverse environmental impacts. CEQA requires that State and local government agencies consider the environmental consequences of projects over which they have discretionary authority. It is not the purpose of an EIR to recommend either approval or denial of a project.

## 1.2 CEQA PROCESS OVERVIEW

The CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. This EIR has been prepared as a project EIR, pursuant to Section 15161 of the CEQA Guidelines, which defines a project EIR in the following terms:

> *The most common type of EIR examines the environmental impacts of a specific development project. This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project including planning, construction, and operation.*

The purpose of a project EIR is to inform governmental decision makers and the public about the potential significant environmental effects associated with a proposed action or "project". CEQA Guidelines Section 15378 defines a "project" as "the whole of an action, which has the potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment..." A project is subject to CEQA if the Lead Agency determines that the project involves one or more discretionary approvals.

Under CEQA Guidelines 15002(f)(1), an "EIR is prepared when the public agency finds substantial evidence that the project may have a significant effect on the environment." The Lead Agency is the agency with the greatest responsibility for supervising or approving the project as a whole. The Lead Agency may develop and circulate an initial study of potential environmental impacts, or it may forgo further initial review of the project and begin work directly on the EIR.

Once a Lead Agency has determined that an EIR is necessary, it must issue a Notice of Preparation (NOP) for 30 days to all responsible and trustee agencies and other interested parties. The Lead Agency must also send a copy of the NOP to the State Clearinghouse. The purpose of the NOP and Initial Study is to inform agencies and the public that a project is proposed and to solicit input on the scope and nature of reasonably expected environmental impacts of the project. This input is used by the Lead Agency to develop and refine the scope of the EIR.

Once the scope of the EIR has been determined, the Lead Agency begins analyzing and documenting all potential environmental impacts. Once complete, the Draft EIR is released for a public review period. The Lead Agency may also conduct public meetings or hearings to solicit additional input from interested parties on the content and conclusions in the Draft EIR. All comments received on the Draft EIR during the public review period must be addressed in the Final EIR. The Final EIR reflects comments and responses as well as any changes to the text, maps, exhibits or other graphics of the EIR. The Lead Agency then considers certification of the EIR, and subsequently, project approval.

## 1.3 NOTICE OF PREPARATION (NOP) AND PUBLIC SCOPING MEETING

In compliance with the CEQA Guidelines, an NOP was prepared by the City and issued on October 17, 2003 (SCH Number 2003101088). The NOP review period and Project scoping provided an opportunity for governmental agencies, the public and all other interested parties to provide comments on the scope of the environmental issues to be evaluated in the EIR. Comments from governmental agencies and the public were due to the City on November 17, 2003. Comment letters were received from South Coast Air Quality Management District (SCAQMD), the Main San Gabriel Basin Watermaster (Watermaster), and the Department of Transportation District 7 (CalTrans). Copies of these letters are included in Appendix A of this Draft EIR.

The input received during Project scoping has assisted in identifying the range of actions, alternatives, issues and potential effects associated with implementation of the Proposed Project. All issues raised during the scoping process were reviewed by the City to determine the appropriate issues for consideration, and level of analysis required in the Draft EIR.

Issues discussed within this Draft EIR include:

- Air Quality
- Geology and Soils
- Hydrology and Drainage
- Land Use and Planning
- Noise
- Public Health and Safety/Hazardous Materials
- Public Services and Utilities
- Traffic/Circulation
- CEQA Required Sections (Potential Growth Inducing and Cumulative Impacts)
- Alternatives to the Proposed Project

The City held a public scoping meeting on November 19, 2003 to provide the public, government agencies, the public and all other interested parties with information on the proposed modifications to mining operations and reclamation plans of United Rock Quarries No. 2, No. 3, and with the resulting modifications to the footprint of Quarry No.4/Production Plant. The purpose of the meeting was to provide general information on the CEQA process as well as an opportunity for interested parties to identify environmental issues and alternatives to be addressed in the Draft EIR.

A notice of the public scoping meeting was sent to all interested parties and NOP commenting agencies to inform them of the Proposed Project as well as the date, time and location of the public meeting.

The location of the public scoping meeting for this EIR was held on the following date and location:

November 19, 2003 at 6:30 p.m.
City of Irwindale City Council Chamber
5050 N. Irwindale Avenue
Irwindale, California 91706

## 1.4 PUBLIC REVIEW OF THE DRAFT EIR

This Draft EIR is being circulated to Federal, State, regional and local agencies, and interested organizations and individuals that may wish to review and comment on the report. Publication of this Draft EIR marks the beginning of a 30-day public review period during which written comments may be submitted to the City at the following address:

Mr. Vicente Mas
Acting Director of Planning
City of Irwindale
5050 North Irwindale Avenue

Irwindale, California 91706
Telephone: (626) 430-2209
Facsimile: (626) 962-2018

Copies of the Draft EIR will be made available to the public at the City Planning Department and the Irwindale Public Library, both at the above address. Written comments on this Draft EIR will be accepted through June 4, 2004.

## 1.5 EFFECTS FOUND NOT TO BE SIGNIFICANT

CEQA Guidelines §15128 requires that an EIR include a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR. Based on the Initial Study prepared for the Proposed Project, site visits and additional background research on the Proposed Project, the following issue areas were found to have impacts that would not to be significant and therefore are not discussed further in the Draft EIR.

### 1.5.1 Aesthetics

The Proposed Project will not have an adverse effect on a scenic vista or scenic resources. It will not degrade the existing visual character or quality of the site and its surroundings or create new sources of substantial light or glare. Mining operations have been in existence at the Project sites since 1910 and therefore no impacts to aesthetics will occur as a result of the continued mining phase of the Proposed Project. The Proposed Project area is not located within a scenic vista or along a scenic corridor. The reclamation phase of quarry Nos. 2 and 3 will result in visual improvements of the site as mining activities will be eliminated, and the pits reclaimed and developed for industrial, commercial, or other resource management uses.

### 1.5.2 Agricultural Resources

The Proposed Project area is located within an urbanized region of Los Angeles County, surrounded by industrial, mining, and residential land uses, and not within the surveyed boundaries of Prime Farmland (California Department of Conservation 1999). The Project area is not zoned for agricultural use and no Williamson Act contracts are associated with the Project site. The Proposed Project would not involve the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The Proposed Project will not impact agricultural resources.

### 1.5.3 Biological Resources

The Proposed Project area is in an urbanized area and wildlife presence is very limited due to the highly disturbed nature of the sites. The Proposed Project will not impact any riparian or wetland habitat or other sensitive natural community identified in local or regional plans, policies, and regulations by the California Department of Fish and Game (CDFG) or the U.S. Fish and Wildlife Service (USFWS). The continued mining activities will preclude the establishment of any habitat, marshland vegetation, or wetlands. Thus no impacts to biological resources are expected from the Proposed Project.

### 1.5.4 Cultural Resources

The Project site does not have any buildings, structures, or additional sites designated as historic or prehistoric resources. The Proposed Project will not cause a substantial adverse change in the significance of an archaeological or paleontological resource as defined in the CEQA Guidelines Section 15064.5. No impacts to cultural resources are expected from the Proposed Project.

### 1.5.5 Population and Housing

The Proposed Project will have no reasonably foreseeable impact on population and housing. The continued mining operations phase and the reclamation phase of the Proposed Project will not induce population growth, displace housing, or displace people. The reclamation phase of the Proposed Project will not displace housing or displace people and is not anticipated to induce population growth. However, post-reclamation land uses that will occur decades in the future may create significant employment opportunities attracting new residents to locate in the area, with attendant demands for housing. Potential effects of these future land uses are too speculative to assess at this time, and will be subject to independent environmental review in the decades ahead.

### 1.5.6 Recreation

The Proposed Project will not impact existing recreational resources, and it would not result in an increased need for parks, or require expansion of recreational facilities.

## 1.6 INTENDED USES OF THE EIR

This Draft EIR is part of the environmental review process for the Proposed Project. The intent of this Draft EIR is to enable the City and other agencies and interested parties to evaluate the environmental impacts of the Proposed Project.

The EIR and the information contained within is expected to be used for the following purposes:

- To inform the public, decision-makers, elected officials and other stakeholders regarding the Proposed Project and to solicit input on the potential environmental effects identified in the Draft EIR;
- To disclose to the public, decision-makers, elected officials and other stakeholders the potential environmental effects associated with short-term construction and long-term operation of the Proposed Project;
- To identify ways to avoid or minimize potential environmental effects of the Proposed Project and evaluate alternatives to the proposed action(s);
- To provide the Irwindale Planning Commission and Irwindale City Council with a technically and legally adequate environmental document to be used in their decision-making process for approval of the proposed CUP modifications;
- To provide regulatory agencies with information necessary to determine if they have jurisdiction over the Proposed Project and, if so, to identify project permitting requirements.

## 1.7 ORGANIZATION OF THE DRAFT EIR

The Draft EIR is organized as follows:

**Executive Summary.** This section presents a summary of the proposed Project and Alternatives considered in this Draft EIR, identifies areas of controversy and issues to be resolved, and provides a summary of potential environmental impacts and mitigation measures.

**Section 1.0 – Introduction.** This section describes the purpose and organization of the EIR and its preparation, review, and certification process.

**Section 2.0 – Project Description.** This section describes the existing United Rock Products Corporation operations in Irwindale at quarry Nos. 1, 2, 3, and 4/Production Plant, and the description, goals and objectives of the Proposed Project. Quarry No. 1 and the ongoing aggregate processing and production at Quarry 4/ Production Plant are not part of the Proposed Project, and are therefore not addressed in the impact analyses.

**Section 3.0 – Environmental Setting and Impact Analysis.** This section describes the regional and local environmental settings for the Proposed Project. The section also describes the regulatory setting, thresholds of significance, and includes a discussion of potentially significant adverse environmental impacts associated with the Proposed Project for each environmental issue area. The impact analysis is organized by resource area and separated into Mining Impact Analysis, Reclamation Impact Analysis, and Post Reclamation Impact Analysis discussions.

**Section 4.0 – Other Environmental Considerations.** This section discusses potentially significant irreversible effects and irretrievable commitment of resources, growth inducing impacts, and cumulative impacts.

**Section 5.0 – Alternatives to the Proposed Project.** This section describes the alternatives to the Proposed Project and compares their relative impacts to those of the Proposed Project. This section also provides a brief description of alternatives previously considered but rejected from further analysis.

**Section 6.0 – Mitigation Summary.** This section lists all of the mitigation measures recommended in the Draft EIR to reduce potentially significant impacts to a less-than-significant level and identifies the level of significance of the impact once mitigation is accomplished.

**Section 7.0 – Acronyms and Abbreviations.** This section provides a list of acronyms and abbreviations that are used throughout the Draft EIR.

**Section 8.0 – Organizations and Persons Consulted.** This section identifies the agencies, organizations, and individuals consulted in preparing the Draft EIR.

**Section 9.0 – References.** This section provides a list of references cited in the Draft EIR

**Section 10.0 – List of Preparers.** This section provides the names of the Draft EIR preparers.

**Appendices** *(supporting technical information referenced in the report text)*

Appendix A – NOP, NOP Distribution List and Comment Letters. Includes a copy of the NOP, the list of entities who were sent the NOP, and the comment letters submitted in response to the NOP for the Proposed Project.

Appendix B – Public Notice, Contains a copy of the Pubic Notice for the Draft EIR public scoping meeting.

Appendix C – EIR Distribution List. Contains the list of agencies and individuals who are on the mailing list to receive a copy of the Draft EIR.

Appendix D – SCAQMD Rule 403.

Appendix E – Noise Measurement Data.

Appendix F – Watermaster List of Groundwater Contamination Sites.

Appendix G – Traffic Impact Assessment, prepared by Urban Crossroads, Inc.

Appendix H – Air Quality Technical Data.

Appendix I – April 2004 Performance Specification for Proposed Mine Backfills in Irwindale.

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# SECTION 2.0 PROJECT DESCRIPTION

## 2.1 INTRODUCTION AND PROJECT LOCATION

United Rock Products Corporation (United Rock) currently operates and manages aggregate mining activities within the City of Irwindale (City) consisting of several sand and gravel quarries (Quarries No. 1, 2, and 3) and a processing plant (Quarry No. 4/Production Plant). These sites are located within the boundaries of the City of Irwindale, in Los Angeles County, California (see **Figure 2-1 Regional Location**). Irwindale is a 9.5 square mile city located 20 miles east of Downtown Los Angeles. It is adjacent to and east of the Cities of Duarte and Monrovia. The Proposed Project area can be found in Sections 1 and 2 of the USGS 7.5' topographic quadrangle map Baldwin Park. The project area is within the San Gabriel Valley, west of Interstate 605, south of Interstate 210, and north of Arrow Highway. **Figure 2-2 Site Location Map** presents the relative location of Quarries No. 2, No. 3 and No. 4/Production Plant. **Figure 2-3, 2-4** and **2-5** depict the site configurations at Quarries No. 2, 3 and Quarry 4/ Production Plant.

The Proposed Project consists of three physical sites: Quarries No. 2 and No. 3, and Quarry No. 4/Production Plant, which is United Rock's Production Plant. United Rock has submitted an application to the City for a Conditional Use Permit (CUP) to allow modifications to its mining operations and reclamation plans for Quarries No. 2 and 3. United Rock proposes to modify its operations and duration of mining activities and has submitted new reclamation plans for Quarries No. 2 and 3. Also included in the Proposed Project is the addition of an un-mined area of Quarry No. 4/Production Plant that is now located to the west of the newly constructed Buena Vista Street. This area would become a part of Quarry No. 2 after the right-of-way has been vacated by the City.

The operations of the Production Plant are not a part of the above referenced CUP entitlement for Quarries No. 2 and 3. Rather, they have a separate entitlement, a CUP granted by Los Angeles County in 1947.

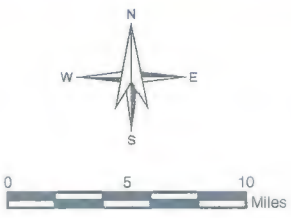
The Proposed Project includes: (1) the continued mining operations at both Quarry No. 2 and No. 3; (2) modified reclamation plans to include backfilling the quarries in a manner that would allow for future land use consistent with the City's intended Post-Reclamation land use designations as outlined in their draft General Plan for the quarries following the cessation of mining operations and completion of reclamation; and (3) Post-Reclamation land uses and future development.

Quarry No. 2 is proposed to be zoned for Industrial/Commercial use. Quarry No. 3 is being considered for either Industrial Commercial Use or Open Space to accommodate use as a groundwater recharge basin under the new proposed zoning land use classifications. Quarry No. 4/Production Plant is proposed to be zoned for Regional Commercial use. Specific Post-Reclamation land development will be identified and planned for in the future closer to the cessation of mining activities and would be subject to a subsequent environmental review process as required under CEQA. Therefore, this Draft EIR evaluates Post-Reclamation land development at a general qualitative level.










Universal Transverse Mercator
North American Datum 1927
Zone 11

UNITED ROCK QUARRY AND RECLAMATION PLAN EIR

*FIGURE 2-1*
*REGIONAL LOCATION*

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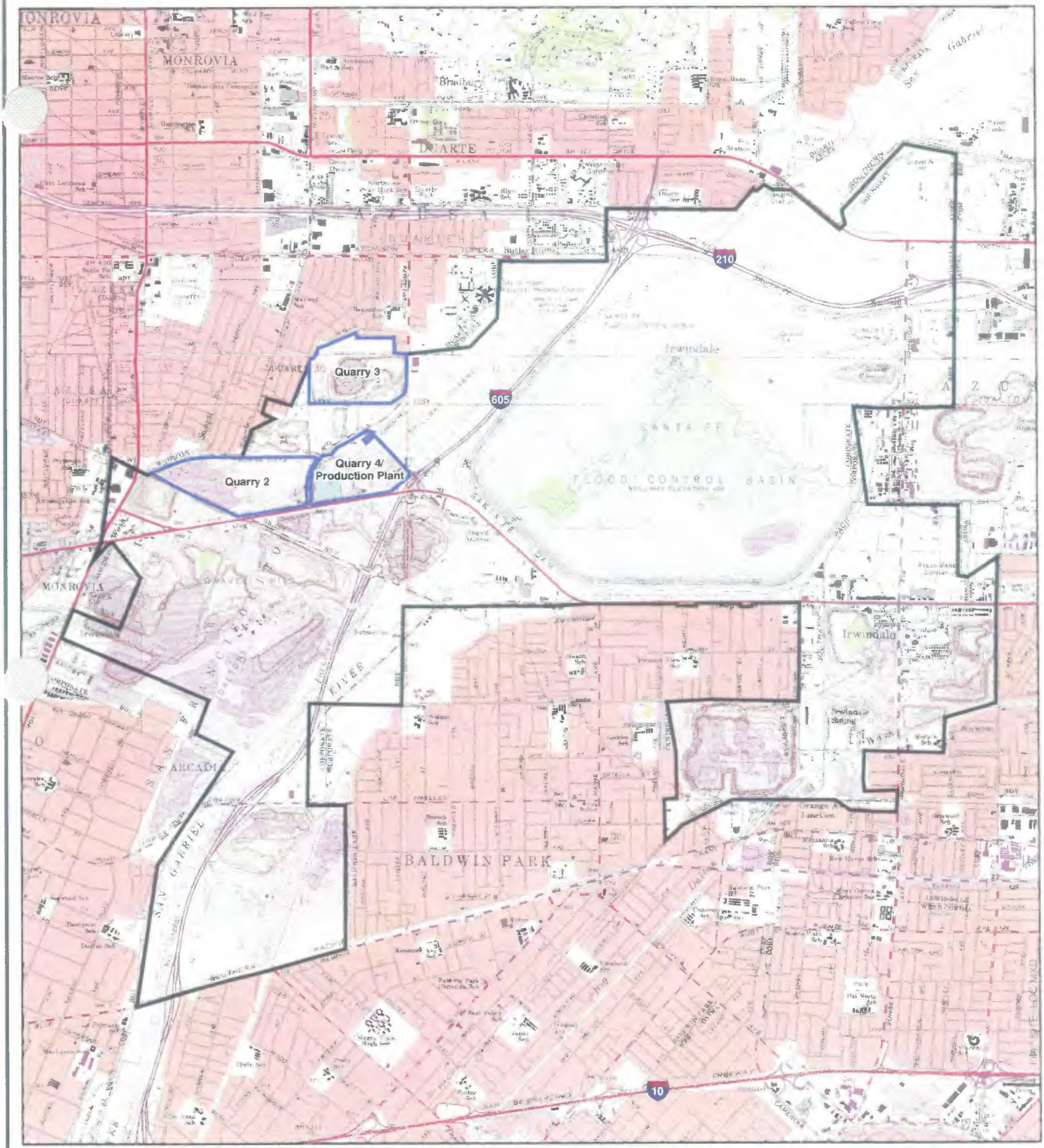


*Source: USGS 7.5' Quadrangles, Mt. Wilson, Azusa, El Monte, Baldwin Park, California.*

UNITED ROCK QUARRY AND RECLAMATION PLAN EIR

*FIGURE 2-2*
*SITE LOCATION MAP*

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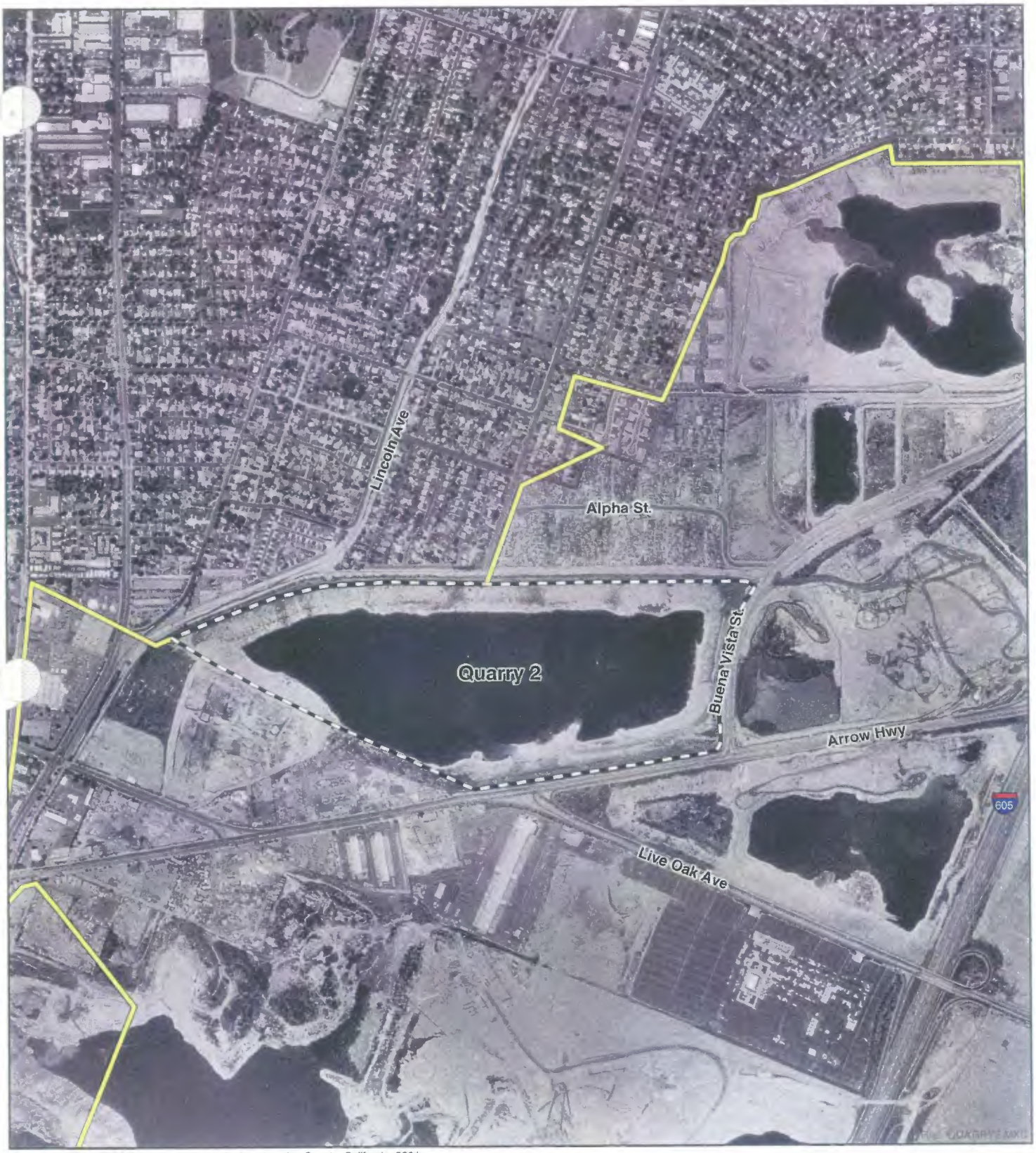


*Source: USDA, NRCS Orthophoto Mosaic for Los Angeles County, California, 2001.*

**Legend**

- Quarry Boundary
- City of Irwindale Boundary

N
W E
S

0 250 500 1,000 1,500 Feet

Universal Transverse Mercator
North American Datum 1927
Zone 11

UNITED ROCK QUARRY AND RECLAMATION PLAN EIR

*FIGURE 2-3*
*QUARRY 2*

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*Source: USDA, NRCS Orthophoto Mosaic for Los Angeles County, California, 2001.*

**Legend**

- Quarry Boundary
- City of Irwindale Boundary

N
W E
S

0 250 500 1,000 1,500 Feet

Universal Transverse Mercator
North American Datum 1927
Zone 11

UNITED ROCK QUARRY AND RECLAMATION PLAN EIR

*FIGURE 2-4*
*QUARRY 3*

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*Source: USDA, NRCS Orthophoto Mosaic for Los Angeles County, California, 2001.*

**Legend**

- Quarry Boundary
- City of Irwindale Boundary

N
W E
S

0 250 500 1,000 1,500 Feet

Universal Transverse Mercator
North American Datum 1927
Zone 11

UNITED ROCK QUARRY AND RECLAMATION PLAN EIR

*FIGURE 2-3*
*QUARRY 2*

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## 2.2 PROJECT GOALS AND OBJECTIVES

The primary goals and objectives of the Proposed Project are to allow for:

- Continued mining operations at Quarry Nos. 2 and 3;
- Reclamation of the Quarries, consistent with SMARA, to provide future opportunities for land redevelopment and/or resource management that are compatible with surrounding land uses; and
- Post-reclamation uses that are consistent with City General Plan land use designations and land use policies.

## 2.3 PROJECT BACKGROUND AND HISTORY

Mining operations occupy over 50 percent of the City of Irwindale's land area. Combined with the large amount of land within the City given to flood control, economic development has historically been somewhat constrained. Quarry Nos. 2 and 3 have been actively mined for decades, and excavation of these pits began prior to enactment of the Surface Mining and Reclamation Act of 1975. Currently, the mining operations in Quarries No. 2 and 3 are operating under a CUP issued in July 1994 with an approved depth of 275 feet. Since the approval by the City's Planning Commission, the City and United Rock were in a legal dispute over the amended reclamation plans that were submitted to the City in 1996. Subsequent efforts to resolve differences over the amended reclamation plans were unsuccessful, and United Rock appealed to the State Mining and Geology Board (SMGB) in 1998 asserting that the City was not acting on the reclamation plan supplements within a reasonable time. In March 2003, the SMGB dismissed United Rock's appeal on the amended reclamation plans, and asked United Rock to work with the City to resolve the issues.

## 2.4 PROJECT DESCRIPTION

### 2.4.1 Existing Operations and Activities

The following discussion describes existing ongoing operations at United Rock quarries 1-4. Additional specific detail on existing activities and operations is provided in **Table 2-1**.

***Quarry No. 1*** – In 1990, the City approved a Reclamation Plan for Quarry No. 1. The State Mining and Geology Board (SMGB) required that adequate financial assurance be secured and a Mitigation Monitoring Program (MMP) be implemented. The reclamation plan was revised to conform to the requirements of approved Conditional Use Permit (92-CUP) and the financial assurance was increased.

Currently, Quarry No. 1 is under reclamation as an inert landfill. Reclamation backfilling is occurring at the average rate of 1.2 million tons per year (MTY) and is expected to continue at this rate until reclamation is complete in approximately 2020. The hours of filling operations are from 6 a.m. to 5 p.m. Monday through Friday and from 6 a.m. until noon on Saturday. No filling is allowed to occur on Sunday. Occasionally, night deliveries will be made.

## Table 2-1
## Existing United Rock Operations And Activities

| | Quarry 1 | Quarry 2 | Quarry 3 | Quarry 4 | Total (All Quarries) |
|---|---|---|---|---|---|
| **Water Level** | | | | | |
| High Groundwater Level | NA | 324 msl | 332 msl | NA | NA |
| Average Groundwater Level | NA | 250 msl | 250 msl | NA | NA |
| Current Groundwater Level | NA | 200 msl | 200 msl | NA | NA |
| **Water Use** | | | | | |
| Gallons Per Day (6 days per week) | 15,000 | 5,000 | 5,000 | 900 acre-feet per year less 25,000 gallons per day used in the 3 Quarries. | 900 acre-feet per year up to a max of 1,000 acre feet per year. |
| Source | 2 yard wells | 2 yard wells | 2 yard wells | 2 yard wells | Two yard wells entitlement for 1,000 acre-feet per year. Can buy additional water if needed. |
| **Hours of Operation** | | | | | |
| Mining | NA | 6a.m. to 10p.m. six days per week. (can be 24 hours based on need); occasional Sunday. | Currently none; was 6a.m. to 10p.m. – six days a week; occasional Sunday. | NA | NA |
| Processing (Quarry No. 4) | NA | NA | NA | Typically 5a.m. to 3p.m. weekdays - can be 24 hrs; up to noon Sat. | NA |
| Trucks Loading/Un-loading and Leaving Site | Reclamation = 6 a.m. to 5 p.m. weekdays; 6 a.m. – noon on Saturday. Occasional night reclamation. | None | None | 24 hours weekdays; up to noon Sat. | |
| **Employees** | | 53 | | | 53 |
| Aggregate Trucks | NA | NA | NA | 420 | 420 |
| Other – reclamation trucks (workday): | 220 incoming for reclamation | NA | NA | NA | 220 |
| Other: | | | | | |
| Employee Cars (workday): | NA | Up to 20 | Up to 20 | 53 | 73 |
| **Current Zoning** | | | | | |
| | M-2, Heavy Manufacturing | Q-Quarry and M-2, Heavy Manufacturing | Q-Quarry and A-1, Agricultural | M-2, Heavy Manufacturing | NA |




*Source: USDA, NRCS Orthophoto Mosaic for Los Angeles County, California, 2001.*

**Legend**

- Quarry Boundary
- City of Irwindale Boundary
- Land Area to be Transfered

N
W E
S

0 250 500 1,000 1,500 Feet

Universal Transverse Mercator
North American Datum 1927
Zone 11

UNITED ROCK QUARRY AND RECLAMATION PLAN EIR

*FIGURE 2-6*
*QUARRY 4 LAND AREA TO BE TRANSFERRED TO QUARRY 2*

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***Quarry No. 4/Production Plant*** – The United Rock Production Plant is currently located in Quarry No. 4. The Quarry No. 4/Production Plant site is currently zoned M-2, which is a City zoning designation that allows heavy manufacturing operations. Mining and processing activities are permitted to occur in this zone with an approved CUP (granted by Los Angeles County in 1947) for mining and/or processing activities.

Existing ongoing activities in Quarry No. 4/Production Plant include crushing, sizing and washing of materials that have been extracted from Quarries No. 2 and 3. United Rock processes 100% of the material that they mine from Quarries No. 2 and 3. Stockpiles are located in this Quarry pending sales and off-site transport. In addition to the existing ongoing operations and activities conducted by United Rock in Quarry No. 4, there are several tenants in the quarry that operate a concrete batch plant, two asphalt plants and a construction equipment maintenance yard. United Rock sells the asphalt plant tenant material used in making asphalt and also sells to the batch plant.

The sand and gravel plant processes excavated material into construction aggregate. Belt conveyors move the excavated material from the active quarries into a surge pile on the Plant Site. The material is then drawn from the bottom of the surge pile onto another belt conveyor and taken to the plant for processing. The first separation is made on a large shaking screen with rocks larger than 1-½ inches in diameter sent to the crushers and the rocks smaller than 1-½ inches in diameter and part of the sand sent to the washing facility. The large rocks are crushed in a series of crushers and taken by belt conveyors to additional shaking screens where they are separated into products by size.

Each product is stockpiled separately above a tunnel containing a belt conveyor. The product is withdrawn from the stockpile and moved to one of a series of bins built over long platform scales. As a truck moves onto the scale, it is loaded from the overhead bin and driven to the delivery site. Construction aggregates are delivered to the ready-mix concrete and asphalt plants by conveyor belt directly from the stockpiles of the sand and gravel plant. The smaller material moves by belt conveyor to the washing facility where it is cleaned by high-pressure sprays while being passed across shaking screens. The screens separate the material into gravel (particles larger than ¼ inch in diameter) and sand that contains a specified percent of each size fraction. The sand is then drained in large dewatering screws and the gravel and sand are stockpiled above another scale. The washed products are mostly used as aggregates in Portland cement concrete.

Fine particles from the washing process are directed to the siltation ponds on-site where they settle out. Once they have settled, the water is recycled. Only local materials have been deposited in the siltation pond and that policy will continue with implementation of the Proposed Project.

Existing hours of operation for activities in Quarry No. 4/Production Plant, including processing activities, are up to 24 hours per weekday for truck loading activities and up to noon on Saturday. Except in response to emergency situations, no truck loading is permitted on Sunday.

Site access is provided to Quarry No. 4/Production Plant from Arrow Highway and from Buena Vista Street. Currently there are approximately 53 one-way employee-related trips into Quarry No. 4/Production Plant each day. It is estimated that there are currently 420 truck trips per day (based on 26 tons per truck and five days a week, 52 weeks per year). These truck trips include asphalt tenant and batch plant tenant trucks and from sales of quarried and processed material to off-site consumers.

## Table 2-3
## Proposed Project Description

| | Quarry No. 1 (Not Part of the Project) | Quarry No. 2 | Quarry No. 3 | Quarry No. 4 | Total (All Quarries) |
|---|---|---|---|---|---|
| **Volume Removed** | | | | | |
| To Date 10/28/03 | 14.47 MCY<br>21.6 MT | 30.28 MCY;<br>45.42 MT | 19.9 MCY<br>29.85 MT | NA | 64.65 MCY<br>96.87 MT all Quarries;<br>50.18 MCY<br>75.27 MT for Quarries No. 2 and 3. |
| Permitted Remaining | NA | 0.19 MCY<br>0.29 MT | 7.53 MCY<br>11.3 MTN | NA | 7.72 MCY<br>11.58 MT |
| Additional Per New Permit | | 16.81 MCY<br>25.22 MT | 9.61 MCY<br>14.42 MT | | 26.42 MCY<br>39.64 MT<br>Quarries No. 2 and 3 only |
| Total Remaining for Removal | | 17.0 MCY<br>25.51 MT | 17.14 MCY<br>25.72 MT | | 34.14 MCY<br>51.23 MT<br>Quarries No. 2 and 3 only |
| Total Removal At Closure (To Date + Remaining for Removal) | | 47.28 MCY<br>70.92 MT | 37.04 MCY<br>55.56 MT | | 84.32 MCY<br>126.48 MT<br>Quarries 2 and 3 only |
| Annual Average Rate | No mining | 2.56 MT | 2.56 | Processing same as mined amount | 2.56 MTY<br>Annual average all quarries |
| Annual Maximum Rate | No mining | 3.5 MT | 3.5 MT | Processing same as mined amount | 3.5 MTY annual cap for all quarries |
| Off-Site Residuals | None | None | None | None | By end of operations all residuals will have been sold as part of annual mined amount (i.e. included in 3.5 MT annual cap |
| **Slopes** | | | | | |
| Above Water | NA | 1:1 | 1:1 max | NA | NA |
| Below Water | NA | 2:1 | 2:1 | NA | NA |
| **Water Level** | | | | | |
| High Groundwater Level | NA | 324 msl | 332 msl | NA | NA |
| Average Groundwater Level | NA | 250 msl | 250 msl | NA | NA |
| Current Groundwater Level | NA | 200 msl | 200 msl | NA | NA |

## Table 2-3
## Proposed Project Description

| | Quarry No. 1 (Not Part of the Project) | Quarry No. 2 | Quarry No. 3 | Quarry No. 4 | Total (All Quarries) |
|---|---|---|---|---|---|
| **Reclamation** | | | | | |
| Begin | Currently happening – no change | 2018-2020 Reclamation will commence concurrently with mining | When inert fill material becomes available. (Based on the past and current market conditions, there is a constant inert waste stream of 1.2 MT per year of fill material for reclamation in the San Gabriel Valley area) | NA | NA |
| Tons Per Year | 1.2 same as current. | 1.2 | See explanation above | NA | |
| Trucks Per Day | Average of 264 per day based on 1.2 MT per year per Quarry | | | | Each truck holds an average of approximately 25 tons. |
| Hours/Days of Reclamation | 6a.m. – 4p.m. weekdays and Saturday 6a to 12pm | | | | |
| Volume of Backfill Required | 20.1 MT | 59.61 MT | For reclamation 55.56 and 0 MT if the groundwater recharge basin alternative is selected. | NA | 79.71 MT for Quarries 1 and 2 plus 55.56 MT if Quarry 3 is reclaimed. |
| Years to Reclaim | To 2018 | To 2061 years | To 2100 for backfill | | |
| Level of Compaction | All fill shall be placed and compacted in accordance with the Chapter 33 of the 2002 Los Angeles County Building Code or its latest version (previously identified as Chapter 70 of the Uniform Building Code, established by the International Conference of Building Officials), or other methods approved by the City of Irwindale; and shall meet criteria stated in April 2004 Irwindale Performance Specifications for proposed Mine Backfills. Fill placement and compaction shall be supervised by a registered civil engineer practicing in the field of applied soil mechanics. | | | | |
| Average Depth of Quarry After Reclamation | To street level. | Average depth of 37.5 feet below street level | To street level if reclaimed. | | N/A |
| Maximum Depth of Quarry After Reclamation | NA | 1/3 (west end) filled to 75 feet below street level | To street level if reclaimed. | | N/A |
| Inclination of Residual Slopes | NA | All slopes shall be 2:1 backfill w/vegetation | Reclaimed to street level. | NA | N/A |

The conveyor has already been relocated under a new Buena Vista Street alignment. The realignment of Buena Vista Street was completed in June 2003. It is anticipated that traffic will be diverted to the newly aligned Buena Vista Street once the EIR for the project has been certified and the Proposed Project approved by the City. At that time, the old Buena Vista street will be closed to traffic and vacated and will become available for mining activities as part of Quarry No. 2 operations and activities.

All mining products from Quarry No. 2 are proposed to continue to be transported to Quarry No. 4 / Production Plant via the existing operating conveyor belt. As with existing operations, it is anticipated that approximately up to 20 small vehicle/car trips per day will access the Quarry via the same existing entry and exit locations.

The end of the mining phase for Quarry No. 2 would occur when either of the following conditions occurs: (a) the mining depth reaches 410 feet in Quarry No. 2; or (b) by December 31, 2018 – 2020, whichever occurs first.

**Reclamation** – The initial reclamation rate is proposed to be 500,000 TPY for approximately 18 years then 1.2 MTY until reclamation has been completed. Concurrent mining and reclamation is proposed and will be allowed by the City with reclamation activities likely to occur in the western portion of Quarry No. 2 while mining is still continuing elsewhere in the Quarry. Reclamation is anticipated to be completed in the year 2061. The refill rate may be higher after Quarry No. 3 mining activities have been completed.

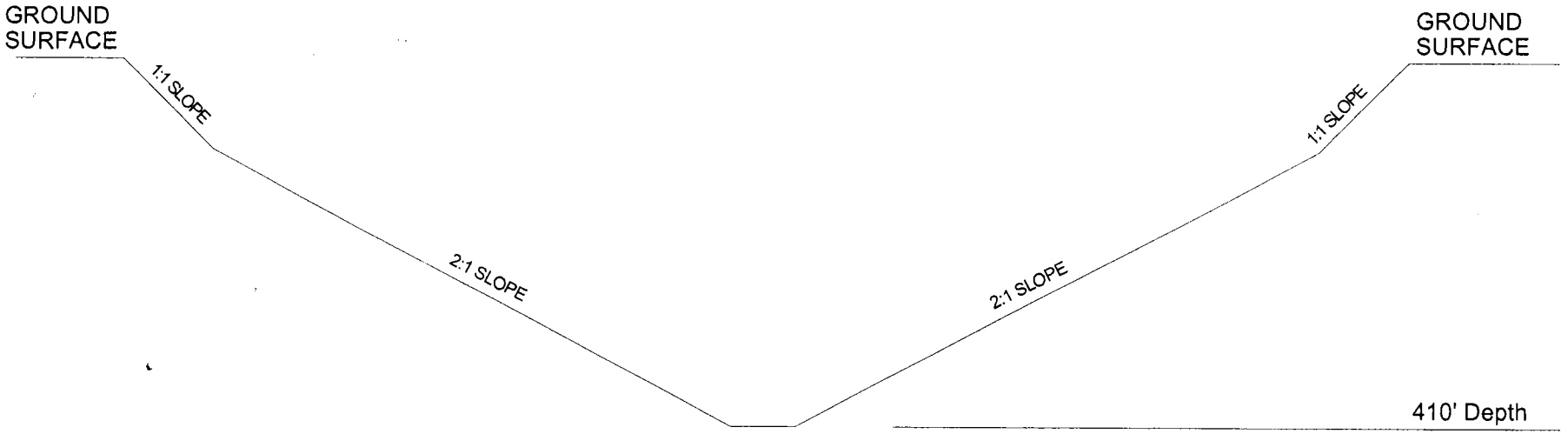
It is anticipated that mining in Quarry No. 3 will be done with conventional equipment concurrently with mining in Quarry No. 2. This mining will be limited to the removal of material remaining above water level. Mining of material below water level will only occur upon completion of mining in Quarry No. 2, since the underwater extraction of materials will be done after relocation of the clam shell dredge from Quarry No. 2 to Quarry No. 3.

**Backfilling and Grading** – All fill shall be placed and compacted in accordance with the Chapter 33 of the 2002 Los Angeles County Building Code or its latest version (previously identified as Chapter 70 of the Uniform Building Code, established by the International Conference of Building Officials), or other methods approved by the City of Irwindale; and shall meet criteria stated in the April 2004 Irwindale Performance Specifications for Proposed Mine Backfills. Fill placement and compaction shall be supervised by a registered civil engineer practicing in the field of applied soil mechanics.

The reclamation of Quarry No. 2 will consist of backfilling with inert material (inorganic construction material; soil removed from sedimentation, flood control and debris reservoirs; and exported soil from building projects in the area). **Figures 2.7 and 2.8** show cross sections of Quarry No. 2 to schematically illustrate conditions of the pit at the end of the reclamation process.

**Slope Stabilization** – The final slopes within the pit at the completion of mining shall have a minimum slope not steeper than 2:1 (horizontal:vertical see **Figure 2.7**). The proposed slopes are consistent with present standards of practice and are capable of supporting vegetation and erosion potential. The erosion control measures shall be designed in accordance with the May 2004 *Guidelines for Drainage, Erosion Control, and Water Quality Control for Open Pit Mines in Irwindale.*

# UNITED ROCK PIT No. 2




## TYPICAL X-SECTION AT END OF MINING

N.T.S.

CITY OF IRWINDALE
PUBLIC WORKS DEPARMENT
BY: EDGAR ROJAS
APRIL 2004

UNITED ROCK QUARRY AND RECLAMATION PLAN EIR

*FIGURE 2-7*
*SCHEMATIC QUARRY CONFIGURATION*
*QUARRY NO. 2*

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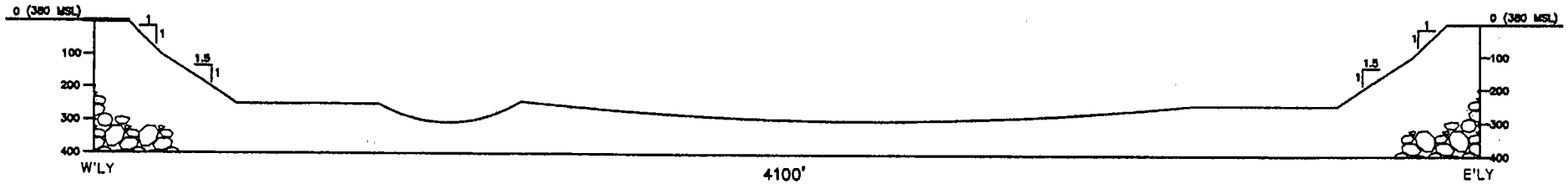
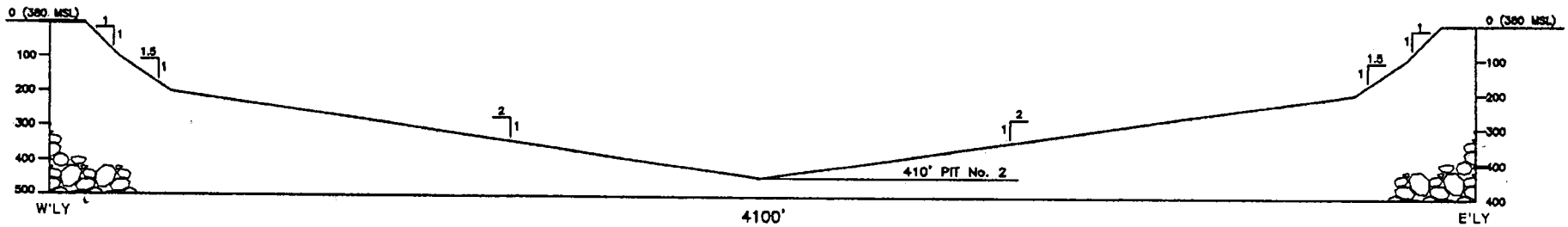
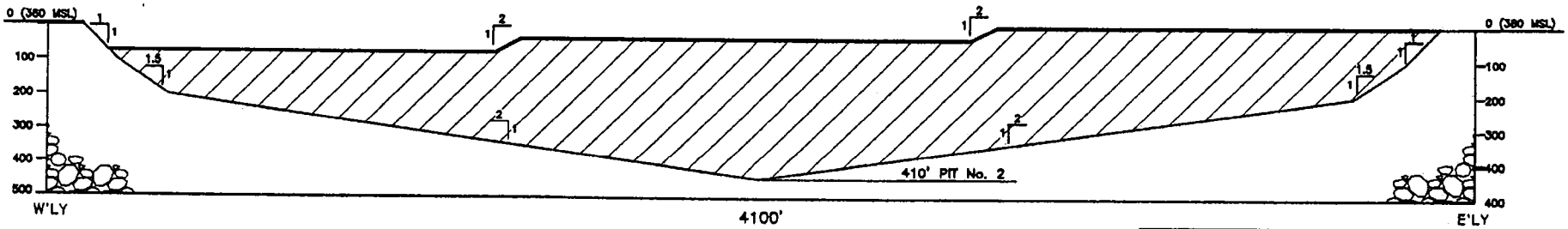
# UNITED ROCK PIT No. 2




EXISTING CONDITION




FUTURE CONDITION UPON MINING COMPLETION




FUTURE CONDITION UPON MINING COMPLETION

RECLAMATION-ENGINEERED FILL

## TYPICAL X-SECTION

N.T.S.

CITY OF IRWINDALE

UNITED ROCK QUARRY AND RECLAMATION PLAN EIR

*FIGURE 2-8*
*TYPICAL CROSS SECTION BY PHASE*
*QUARRY NO. 2*

GREYSTONE®

**Equipment Removal** – All equipment, structures, and other facilities associated with the mining/production operation shall be dismantled and removed from each pit, and disposed of in a manner permitted by law.

**Post-Reclamation** – Quarry No. 2 is proposed to be designated for Industrial-Commercial use, and to be developed with industrial and retail businesses.

*Quarry No. 3*

**Mining** – Implementation of the Proposed Project would involve a maximum mineral extraction rate of 3.5 MTY once the clam shell dredge from Quarry No. 2 is in place and fully operational. Occasional mining of Quarry No. 3 will continue concurrent with mining in Quarry No. 2 for the next few years. Following completion of mining in Quarry No. 2, the clamshell dredge will be relocated to Quarry No. 3 as soon as underwater extraction becomes feasible.

Extracted minerals would be transported to Quarry No. 4/Production Plant for processing via the existing conveyor system. During active mining operations, there will be approximately 20 vehicle trips per day (i.e., employees, small service trucks). No change in access is proposed with implementation of the Proposed Project.

The end of the mining phase for Quarry No. 3 would occur when either of the following conditions occurs: (a) mining reaches a maximum depth of 440 feet in Quarry No. 3; or (b) by December 31, 2035-2037, whichever comes first.

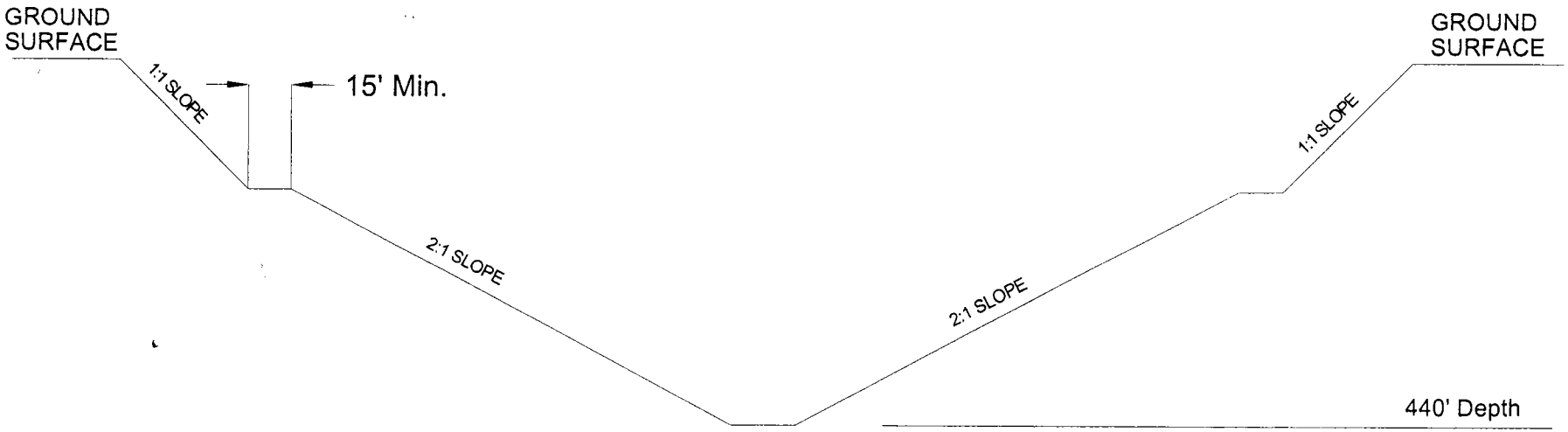
**Reclamation** – Quarry No. 3 is proposed to be designated for Industrial-Commercial use, or alternatively as Open Space. If reclaimed, the pit will be backfilled to street level, and subsequently developed with production and retail businesses. Under the Open Space alternative, the pit will be retained for use as a groundwater recharge basin.

**Backfilling and Grading** – All fill shall be placed and compacted in accordance with the Chapter 33 of the 2002 Los Angeles County Building Code or its latest version (previously identified as Chapter 70 of the Uniform Building Code, established by the International Conference of Building Officials), or other methods approved by the City of Irwindale; and shall meet criteria stated in the April 2004 Irwindale Performance Specifications for Proposed Mine Backfills. Fill placement and compaction shall be supervised by a registered civil engineer practicing in the field of applied soil mechanics.

The reclamation of Quarry No. 3 will consist of backfilling with inert material (inorganic construction material; soil removed from sedimentation, flood control and debris reservoirs; and exported soil from building projects in the area). **Figures 2.9 and 2.10** show cross sections of Quarry No. 3, to schematically illustrate conditions of the pits at the end of the reclamation process.

**Slope Stabilization** – The final slopes within the pit at the completion of mining shall have a minimum slope not steeper than 2:1 (horizontal:vertical see **Figure 2.9**). The proposed slopes are consistent with present standards of practice and are capable of supporting vegetation and erosion potential. The erosion control measures shall be designed in accordance with the May 2004 *Guidelines for Drainage, Erosion Control, and Water Quality Control for Open Pit Mines in Irwindale.*

# UNITED ROCK PIT No. 3




## TYPICAL X-SECTION AT END OF MINING

N.T.S.

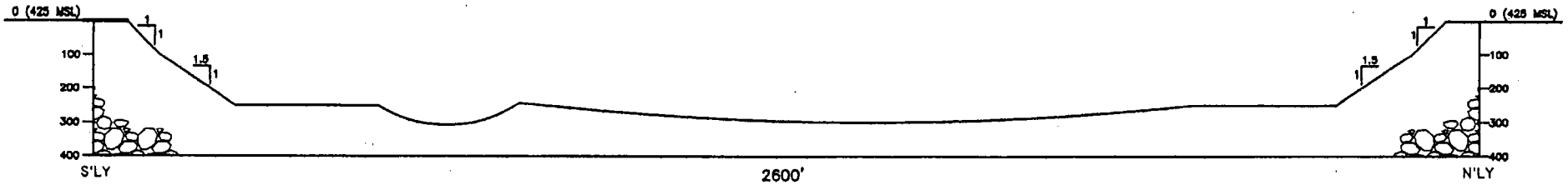
CITY OF IRWINDALE
PUBLIC WORKS DEPARMENT
BY: EDGAR ROJAS
APRIL 2004

UNITED ROCK QUARRY AND RECLAMATION PLAN EIR

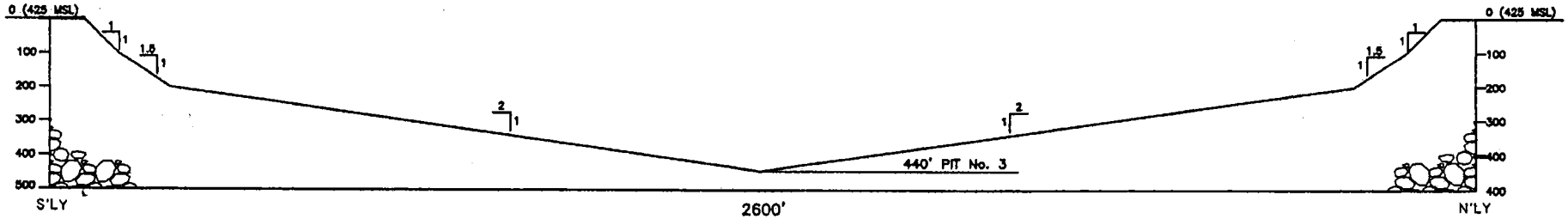
*FIGURE 2-9*
*SCHEMATIC QUARRY CONFIGURATION*
*QUARRY NO. 3*

GREYSTONE®

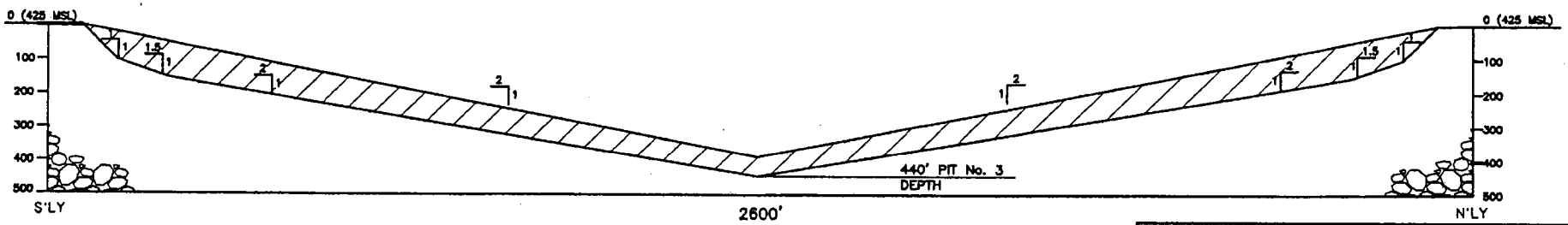
# UNITED ROCK PIT No. 3




EXISTING CONDITION




FUTURE CONDITION UPON MINING COMPLETION




FUTURE CONDITION UPON MINING COMPLETION

RECLAMATION-ENGINEERED FILL/SLOPE STABLISHMENT

## TYPICAL X-SECTION

CITY OF IRWINDALE
PUBLIC WORKS DEPARTMENT
BY EDGAR BANG
APRIL 2004

UNITED ROCK QUARRY AND RECLAMATION PLAN EIR

*FIGURE 2-10*
*TYPICAL CROSS SECTION BY PHASE*
*QUARRY NO. 3*

GREYSTONE®

**Equipment Removal** – All equipment, structures, and other facilities associated with the mining/production operation shall be dismantled and removed from each pit, and disposed of in a manner permitted by law.

**Post-Reclamation** – Quarry No. 3 will be designated for Industrial-Commercial use, and developed with industrial and retail businesses, or alternatively, designated as Open Space and developed for use as a groundwater recharge basin.

*Quarry No. 4*

The existing CUP (issued by Los Angeles County in 1947) is anticipated to remain in effect for Quarry No. 4/Production Plant. No relocation or basic change in the nature or location of uses and activities within the Quarry is anticipated. No change in the operations of existing tenants is anticipated. However, a portion of Quarry No. 4 under the existing Buena Vista Street will become part of Quarry No. 2 when the street is vacated by the City.

**Reclamation** – Quarry No. 4/Production Plant is proposed to be designated for Commercial use and developed as a regional retail center. Since the site will not be mined, reclamation includes dismantling and removal of all equipment and facilities, followed by clearing and grading to prepare the site for subsequent development.

**Post-Reclamation** – The site will be targeted for development of a regional retail commercial center. Specific uses are not identified.

The backfill materials for Quarries No. 2 and 3 may include construction debris or other Class U (inert) waste, soil removed from sedimentation, flood control, or debris reservoirs, imported soils from grading operations in the Los Angeles area, or similar acceptable inert materials. The quarries will be filled in accordance with the requirements of the Main San Gabriel Basin Watermaster, as set forth in its Resolution No. 3-99-57. Restrictions on the availability of such materials in the volumes required will govern the rate at which backfill will be placed in the quarries.

## 2.5 IDENTIFICATION OF POTENTIAL ENVIRONMENTAL ISSUES

The following issues were identified in the scoping process for this Proposed Project. Potential Environmental Issues include:

- Air Quality – Extension of the duration of mining operations along with the subsequent reclamation and development of the quarry sites could generate emissions or dust that may have a significant effect on local and /or regional air quality.
- Geology and Soils – The continued excavation of materials could affect surrounding land uses including residences in relation to as a result of slope stability issues related to mineral extraction.
- Hydrology and Drainage – Quarry No. 2 currently excavates materials from below the water table and exposes the San Gabriel Groundwater Basin, a listed Superfund site.
- Land Use – Post-reclamation land development of the former quarries has the potential to result in adverse impacts to surrounding communities or conflict with existing land use plans.

- Noise – Current mining, future reclamation and post-reclamation land development could generate increased noise levels adversely affecting surrounding sensitive receptors.
- Public Health and Safety/Hazardous Materials – Continued mining and new development would increase the risk of the public to exposure to hazardous materials or other safety issues.
- Public Services and Utilities – Continued mining or future development could adversely effect the provision of police, fire or educational services or negatively impact local utility service.
- Traffic/Circulation – Current and future traffic generated by mining, reclamation and post reclamation development would adversely affect the local road system by increasing local and regional traffic generation for roadway segments and roadway intersections.

# SECTION 3.1 AIR QUALITY

This section presents the potential environmental impacts of the Proposed Project on local and regional air quality including an analysis of equipment, and vehicle combustion exhaust as well as fugitive dust emissions and potential impacts on sensitive receptors. A discussion of potential impacts is provided for the mining, reclamation, and post-reclamation phases of the Proposed Project. Section 3.1.1 describes the existing setting and discusses the applicable Federal, State and local regulations. An analysis of potential air quality-related effects associated with the Proposed Project is provided in Section 3.1.2. Mitigation measures to avoid, eliminate or reduce effects to a less than significant level are presented in Section 3.1.3.

## 3.1.1 EXISTING SETTING

The Proposed Project is located within the South Coast Air Basin (Air Basin), which is classified as an "extreme" non-attainment area for both federal and state standards for ozone (smog). The Air Basin also exceeds the state standard for airborne particulate matter ($PM_{10}$) ("serious" classification). Irwindale's climate is generally Mediterranean, with warm, dry summers and mild, dry winters. Average annual precipitation is approximately 17 inches (WRCC 2003). The distinctive climate of the area is influenced by its terrain and geographic location. The Air Basin is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the southwest and high mountains around the rest of the perimeter of the City. The principal climatic feature of the region is the semi-permanent, high-pressure system over the Pacific Ocean (known as the Pacific High). This high-pressure ridge over the West Coast often creates a pattern of late-night and early-morning low clouds, hazy afternoon sunshine, daytime onshore breezes, and little temperature variation year-round. The usually mild climatological pattern is interrupted by periods of extremely hot weather, winter storms, or Santa Ana winds.

The favorable climate of the Air Basin increases the potential to create air pollution problems. Air quality within the Air Basin generally rates from fair to poor. Sinking, or subsiding air from the Pacific High creates a temperature inversion (known as a subsidence inversion), which acts as a lid to vertical dispersion of pollutants. The height of the base of the inversion at any given time is known as the "mixing height." Restricted maximum mixing heights, 3,500 feet above sea level or less, average 191 days per year. Weak summertime pressure gradients further limit horizontal dispersion of pollutants in the mixed layer below the subsidence inversion. Poorly dispersed anthropogenic (man-made) emissions, combined with strong sunshine, lead to photochemical reactions and create ozone in this surface layer.

Daytime onshore flow (i.e., sea breeze) and nighttime offshore flow (i.e., land breeze) are quite common in Southern California. The sea breeze helps to moderate daytime temperatures in the western portion of Los Angeles County, which greatly adds to the climatic draw of the region. This also leads to emissions being blown out to sea at night and returning to land the following day. Under certain conditions, this atmospheric oscillation results in the offshore transport of air from the Los Angeles region to San Diego County, which often results in high ozone concentrations being measured at South Coast Air Quality Management District (SCAQMD) air pollution monitoring stations.

## 3.1.1.1 Regulatory Setting

### 3.1.1.1.1 Federal

Regulation of air quality in California is achieved through both Federal and State ambient air quality standards and emission limits for individual sources of air pollutant emissions. The Federal Clean Air Act (CAA) of 1970 and amendments in 1977 and 1990 require the U.S. EPA to establish National Ambient Air Quality Standards (NAAQS) to protect public health and welfare. NAAQS are established for the so-called criteria pollutants, i.e., ozone, carbon monoxide (CO), nitrogen dioxide ($NO_2$), sulfur dioxide ($SO_2$), $PM_{10}$, particulate matter with an aerodynamic diameter of 2.5 microns or less ($PM_{2.5}$), and lead (Pb) and are presented in **Table 3.1-1** (Note that, by definition, $PM_{10}$ includes $PM_{2.5}$). The NAAQS are set to protect the elderly, very young, and chronically sensitive portions of the population, and are required to include a reasonable margin of safety to protect against potential hazards which research has not yet identified. In some cases, the State standards provide a wider margin of safety than the national standards.

### 3.1.1.1.2 State

The California CAA of 1988 also established California Ambient Air Quality Standards (CAAQS) for criteria pollutants and additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles (see **Table 3.1-1**). The California Air Resources Board (CARB) is the State regulatory agency with authority to set air quality standards, monitor air quality, conduct research, and set and enforce emission standards for motor vehicles, fuels, and consumer products. It oversees and assists local air quality districts, which regulate most non-vehicle sources of air pollution, including stationary source emissions. In Los Angeles County, the SCAQMD has this authority. In addition, the SCAQMD has been designated as the agency principally responsible for comprehensive air pollution control in the Air Basin. The geographic borders for the SCAQMD and the Air Basin include all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The SCAQMD also acts as the primary reviewing agency for environmental documents addressing potential air quality impacts, and develops regulations that must be consistent with, or more stringent than, Federal and State air quality policies.

## 3.1.1.2 Recent Additions to Air Quality Standards

Under the CAA of 1970, the U.S. EPA is required to review public health standards every five years and to update standards, as necessary, to protect the public health with an adequate margin of safety, based on the latest scientific evidence. As a result, in July 1997 the U.S. EPA adopted more stringent federal standards. The standards introduced a new eight-hour ozone standard and a new fine particulate standard, which applies to $PM_{2.5}$. Various industrial and environmental groups challenging these standards filed a number of lawsuits. In its decision of February 27, 2001, the U.S. Supreme Court unanimously upheld the proposed 1997 standards. California also adopted its own annual $PM_{2.5}$ standard.

## Table 3.1-1
## Federal and California Ambient Air Quality Standards

| Pollutant | Averaging Time | California Standards Concentration[a] | Federal Standards Primary[b] | Federal Standards Secondary[c] |
|---|---|---|---|---|
| **Ozone ($O_3$)** | 1-Hour | 0.09 ppm (180 micrograms per cubic meter [$\mu g/m^3$]) | 0.12 ppm (235 $\mu g/m^3$) | Same as Primary Standard |
| | 8-Hour | N/A | 0.08 ppm (3-year average of annual 4th highest daily maximum) | |
| **Carbon Monoxide (CO)** | 8-Hour | 9.0 ppm (10 $mg/m^3$) | 9 ppm (10 $mg/m^3$) | - |
| | 1-Hour | 20 ppm (23 $mg/m^3$) | 35 ppm (40 $mg/m^3$) | - |
| **Sulfur Dioxide ($SO_2$)** | Annual Average | N/A | 0.030 ppm (80 $\mu g/m^3$) | - |
| | 24-Hour | 0.04 ppm (105 $\mu g/m^3$) | 0.14 ppm (365 $\mu g/m^3$) | - |
| | 3-Hour | N/A | N/A | 500 ppbv (1,300 $\mu g/m^3$) |
| | 1-Hour | 0.25 ppm (655 $\mu g/m^3$) | N/A | - |
| **Respirable Particulate Matter ($PM_{10}$)** | 24-Hour | 50 $\mu g/m^3$ | 150 $\mu g/m^3$ | Same as Primary Standard |
| | Annual Arithmetic Mean | 20 $\mu g/m^3$ | 50 $\mu g/m^3$ | |
| **Nitrogen Dioxide ($NO_2$)** | Annual Average | N/A | 53 parts per billion by volume (ppbv) (100 $\mu g/m^3$) | Same as Primary Standard |
| | 1-Hour | 250 ppbv (470 $\mu g/m^3$) | N/A | - |
| **Fine Particulate Matter ($PM_{2.5}$)** | 24-Hour | No Separate State Standard | 65 $\mu g/m^3$ | Same as Primary Standard |
| | Annual Arithmetic Mean | 12 $\mu g/m^3$ | 15 $\mu g/m^3$ | |
| **Lead (Pb)** | 30-Day Average | 1.5 $\mu g/m^3$ | N/A | |
| | Calendar Quarter | N/A | 1.5 $\mu g/m^3$ | Same as Primary Standard |
| **Hydrogen Sulfide** | 1-Hour | 0.03 ppm (42 $\mu g/m^3$) | No Federal Standards | No Federal Standards |
| **Sulfates** | 24-Hour | 25 $\mu g/m^3$ | No Federal Standards | No Federal Standards |
| **Visibility Reducing Particles** | 8-Hour (10 am to 6 pm, PST) | Insufficient amount to produce an extinction coefficient of 0.23 per kilometer – visibility of 10 miles or more (0.07-30 miles or more for Lake Tahoe) due to particles when the relative humidity is less than 70 percent. Method: ARB Method V (8/18/89) | No Federal Standards | No Federal Standards |

[a] Equivalent units given in parentheses are based upon a reference temperature of 25°C and pressure of 760 mm mercury. Parts per million by volume = ppmv, and parts per billion by volume = ppbv.
[b] The levels of air quality necessary, with an adequate margin of safety, needed to protect public health.
[c] The levels of air quality necessary to protect public welfare from any known or anticipated adverse effect of a pollutant.

#### 3.1.1.2.1 Eight-Hour Ozone Standard

The U.S. EPA adopted a new eight-hour standard for ozone based on recent medical studies that showed longer-term exposures at lower ozone levels caused significant health effects. The new federal eight-hour standard is 0.08 ppm.

To ensure a smooth transition to the new standard, air pollution control districts must first reach attainment of the one-hour ozone standard before being required to attain the new eight-hour standard. Although the new standard appears to be much more stringent, it has a longer averaging period of eight hours, and multi-hour averages are typically lower than their highest single hour. The State one-hour standard is still more stringent than the new eight-hour federal standard.

The SCAQMD currently maintains a monitoring station in Azusa, located approximately 4 miles east-northeast of the Proposed Project area. At the Azusa station, the State one-hour ozone standard was exceeded on 40 days in 2003. The State standard is 0.09 ppm and the federal one-hour standard is 0.12 ppm. One-hour standards measure peak ozone levels in any given hour. The Azusa station exceeded the new federal eight-hour ozone standard of 0.08 ppm on 21 days in 2003.

#### 3.1.1.2.2 24-Hour and Annual $PM_{2.5}$ Standards

The U.S. EPA adopted a new 24-hour standard for $PM_{2.5}$ based on medical studies that showed that smaller particles lodged deeper into the lungs causing respiratory problems. The new federal 24-hour standard is 65 $\mu g/m^3$. The new federal annual arithmetic mean standard is 15 $\mu g/m^3$. California has adopted an annual arithmetic mean standard of 12 $\mu g/m^3$, and is in the process of establishing a 24-hour standard. Preliminary $PM_{2.5}$ data suggests that the Air Basin will not be able to meet the new $PM_{2.5}$ standards.

### 3.1.1.3 Site-Specific Air Quality

The SCAQMD operates an extensive ambient air-monitoring network, continuously monitoring air pollution levels at numerous sites throughout the Air Basin in compliance with federal and State requirements. Data generated at these monitoring sites are used to define the nature and severity of air pollution in the Air Basin and to determine attainment status.

Air basins are designated under the CAA as "attainment" (meeting air quality standards for a given pollutant), "nonattainment" (exceeding standards for a given pollutant), or "unclassified" (insufficient data are available to positively designate, but otherwise considered to be attainment) areas for each criteria air pollutant. The federal and State designations for the Air Basin are presented in **Table 3.1-2**. The Air Basin is under the jurisdiction of the SCAQMD.

Of the seven criteria air pollutants regulated by U.S. EPA and nine regulated by CARB, ozone, $PM_{10}$, and CO occur in concentrations sufficient to violate either national or State standards in the Air Basin. However, the Air Basin has technically met the CO standards in 2002 and the District will request reclassification as attainment in the next few years (SCAQMD 2003). The Air Basin meets State and national air quality standards for $NO_2$, $SO_2$, and Pb.

Local sources of air pollutants are mostly related to mining activities in Irwindale, surrounding jurisdictions and mobile source transportation-related vehicular emissions. Historical records from the Azusa station show that the level of ozone pollution in the region periodically exceeds federal standards. The latest validated air quality summary tables (1999 – 2003) for ozone, CO, $NO_2$, $PM_{10}$, fine particulate matter (particulate matter less than 2.5 microns in aerodynamic diameter; $PM_{2.5}$) are presented in **Table 3.1-3** (CARB 2004) for the Azusa monitoring site.

**Table 3.1-2**
**South Coast Air Basin Attainment Designations**

| Pollutant | State | Federal |
|---|---|---|
| Ozone (1-hour) | Nonattainment | Nonattainment |
| Carbon Monoxide | Nonattainment | Nonattainment |
| Nitrogen Dioxide | Unclassified/Attainment | Unclassified/Attainment |
| Sulfur Dioxide | Attainment | Attainment |
| $PM_{10}$ | Nonattainment | Nonattainment |
| Sulfates | Attainment | N/A[a] |
| Hydrogen Sulfide | Unclassified | N/A |
| Visibility Reducing Particles | Unclassified | N/A |
| Lead | Attainment | Unclassified/Attainment |

[a] N/A = not applicable; no standard.
Source: CARB 2003.

#### 3.1.1.3.1 Air Basin Air Quality Trends

Over the years, the air quality in the Air Basin has improved significantly, due primarily to the comprehensive control strategies implemented to reduce pollution from mobile and stationary sources. The total number of days the Air Basin exceeds the federal 1- hour standard has decreased over the last two decades from more than 200 days to fewer than 50. However, the Air Basin still exceeds the federal 1-hour standard more frequently than any other location in the U.S. The Air Basin is designated as an "extreme" nonattainment area for ozone. In 2001, the Air Basin exceeded the federal and state standards for $PM_{10}$, although improvements have been registered for this pollutant as well. Exceedances of the federal annual and 24-hour $PM_{10}$ standards were confined to Riverside and San Bernardino counties. However, the more stringent state $PM_{10}$ standards were exceeded over much larger areas. In 2001, the Air Basin did not exceed the standards for carbon monoxide, nitrogen dioxide, sulfur dioxide, sulfates or lead. Although the 2002 air quality data has not yet been quality assured/quality controlled, the preliminary data confirms the trend of continued progress (SCAQMD 2003).

### 3.1.1.4 Air Toxics

Toxic air contaminants (TACs) are airborne substances that are capable of causing short-term or long-term adverse human health effects. TACs include both organic and inorganic chemical substances. TACs may be emitted from a variety of common sources, including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. Research and teaching facilities where a variety of chemicals are used for various experiments may also be a source of TACs.

# Table 3.1-3
## South Coast Air Basin – Azusa Station Air Quality Data 1999-2003

**Ozone – 1-Hour: Number of Days Exceeding Federal and State Standards**

| Station | Number of Days Exceeding Federal 1-Hour Standard Concentration > 12 parts per hundred million (pphm) | | | | | Number of Days Exceeding State 1-Hour Standard Concentration > 9 pphm | | | | | Maximum 1-Hour Concentration (pphm) | | | | | Date of Maximum 1-Hour Concentration | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 03 | 02 | 01 | 00 | 99 | 03 | 02 | 01 | 00 | 99 | 03 | 02 | 01 | 00 | 99 | 03 | 02 | 01 | 00 | 99 |
| Azusa | 11 | 5 | 9 | 11 | 2 | 40 | 26 | 36 | 32 | 24 | 15 | 14 | 19 | 17 | 14 | 5/28 | 9/22 | 8/26 | 5/28 | 8/21 |

**Ozone – 8-Hour: Number of Days Exceeding Federal Standard**

| Station | Number of Days Exceeding Federal 8-Hour Standard Concentration > 8 pphm | | | | | Maximum 8-Hour Concentration (pphm) | | | | | Date of Maximum 8-Hour Concentration | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 03 | 02 | 01 | 00 | 99 | 03 | 02 | 01 | 00 | 99 | 03 | 02 | 01 | 00 | 99 |
| Azusa | 21 | 11 | 18 | 15 | 7 | 12.4 | 10.2 | 13.0 | 14.2 | 9.8 | 7/13 | 6/16 | 8/26 | 5/28 | 8/22 |

**Nitrogen Dioxide – Maximum 1-Hour Concentration**

| Station | Maximum 1-Hour Concentration (ppm) State Standard > 0.25 ppm | | | | | Date of Maximum 1-Hour Concentration | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 03 | 02 | 01 | 00 | 99 | 03 | 02 | 01 | 00 | 99 |
| Azusa | 0.120 | 0.121 | 0.124 | 0.154 | 0.152 | 1/13 | 11/5 | 10/16 | 12/2 | 11/2 |

**Particulate Matter ($PM_{10}$)**

| Station | Annual Arithmetic Average Federal Standard 50 $\mu g/m^3$ * State Standard 20 $\mu g/m^3$ | | | | | Highest 24-Hour Concentration Federal Standard 150 $\mu g/m^3$ ** State Standard 50 $\mu g/m^3$ | | | | | Date of Highest 24-Hour Concentration | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 03 | 02 | 01 | 00 | 99 | 03 | 02 | 01 | 00 | 99 | 03 | 02 | 01 | 00 | 99 |
| Azusa | N/A | 45.8 | 45.3 | 46.3 | 56.3 | 119 | 91 | 106 | 94 | 103 | 10/24 | 9/23 | 10/16 | 7/5 | 11/2 |

* Not to exceed 50µg/m3 for a three-year average
** Not to exceed 150µg/m3 for a three-year average of annual 99th percentile

**Particulate Matter ($PM_{2.5}$)**

| Station | Annual Average Federal Standard 15 $\mu g/m^3$ * State Standard 12 $\mu g/m^3$ | | | | | Highest 24-Hour Concentration Federal Standard 150 $\mu g/m^3$ ** | | | | | Date of Highest 24-Hour Concentration | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 03 | 02 | 01 | 00 | 99 | 03 | 02 | 01 | 00 | 99 | 03 | 02 | 01 | 00 | 99 |
| Azusa | N/A | 20.7 | 21.7 | 20.2 | N/A | 121.2 | 72.4 | 79.7 | 92.5 | 81.3 | 7/5 | 10/15 | 11/6 | 10/20 | 1/18 |

* Not to exceed 15µg/m3 for a three-year average
** Not to exceed 65µg/m3 for a three-year average of annual 98th percentile

Source: CARB 2004.

The 1990 Federal CAA Amendments expanded the regulation of hazardous air pollutants (HAPs, the Federal government terminology for TACs), establishing a list of 172 individual compounds and 17 compound categories to be regulated as HAPs. The Federal CAA required the U.S. EPA to establish a stringent, technology-based emissions standard for stationary sources of emissions of these listed substances. The Federal CAA Amendments also required the U.S. EPA to list "major" and "area" source categories that the U.S. EPA finds sufficiently threatening to human health or the environment by November 1993, to establish emissions standards for at least 40 stationary source categories by November 1994, and to establish standards for all regulated sources by November 2002.

"Major sources for HAPs" are defined as any stationary source that emits at least 10 tons per year of any single HAP or 25 tons per year of any combination of HAPs. "Area sources" are stationary sources encompassing small diverse facilities that routinely release a small amount of HAPs. By November 1997, the U.S. EPA had listed sufficient categories and subcategories of area sources to ensure that 90 percent of the emissions of the 30 HAPs presenting the greatest threat to the public health in the largest number of urban areas are subject to regulation.

#### 3.1.1.4.1 Air Toxics Control Measures

At the State level, CARB continues to implement an ongoing program to identify toxic air contaminants, assess their public health risks, and develop air toxics control measures to reduce toxic emissions from specific source categories statewide. Under this program, known as AB 1807 or the Tanner program, CARB, in cooperation with the Office of Environmental Health Hazard Assessment, develops priorities for identification of toxic compounds, investigates and documents the adverse health risks posed by such compounds, identifies statewide sources of emissions, evaluates public health risks and available control technologies, and approves statewide emission control measures. Local air districts then must adopt and implement the State-approved emission reduction measures.

## 3.1.2 Potential Environmental Impacts

### 3.1.2.1 Thresholds of Significance

The significance of potential impacts to air quality was determined based on CEQA guidelines (CCR §§ 15000-15387, Appendix G), SCAQMD thresholds for criteria pollutants and other relevant considerations. These guidelines identify certain thresholds that may be considered to determine whether an impact is significant. Using these thresholds, the Proposed Project would be considered to have significant air quality impacts if it were to:

- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations; or,
- Create objectionable odors affecting a substantial number of people.

The Proposed Project will not include generation of objectionable odors, and therefore will not present a potential for significant odor impact. Regarding criteria pollutants, SCAQMD provides quantitative guidance regarding significance thresholds for both construction activities and operational activities. These significance thresholds, listed in pounds per day (lb/day), are presented in **Table 3.1-4** for project construction and project operations.

**Table 3.1-4**
**SCAQMD Significance Thresholds (lb/day)**

| | ROG | NOx | CO | $PM_{10}$ | SOx |
|---|---|---|---|---|---|
| Construction | 75 | 100 | 550 | 150 | 150 |
| Operation | 55 | 55 | 550 | 150 | 150 |

### 3.1.2.2 Mining Impact Analysis

Current mining operations will continue at Quarries No. 2 and 3. Processing of the extracted materials will continue at Quarry 4/Production Plant. Mined material from Quarry No. 2 is conveyed to the Quarry No. 4/Production Plant, where it is sized, crushed, cleaned, and loaded out onto haul trucks, or further processed into asphalt or cement products by on-site tenants before being transported offsite. The tenants activities are not part of the Proposed Project, nor subject to review in this Draft EIR.

When mining at Quarry No. 2 is complete, mined material will then be recovered at Quarry No. 3. Mined material is generally obtained from below the water table, and is therefore wet until some time after it is received at the Quarry No. 4/Production Plant. Therefore the potential for fugitive dust emissions exists primarily at the Quarry No. 4/Production Plant. Additional fugitive dust is generated at Quarries No. 2 and 3 as a result of vehicles and equipment traveling over unpaved roads.

There are several sources of air emissions associated with mining operations which can be categorized into the following two emission types: (1) combustion exhaust from stationary and mobile fuel-burning equipment and on-road vehicles and trucks, and (2) fugitive dust, including $PM_{10}$, created by material handling operations and mobile equipment operating on unpaved or dusty paved surfaces.

1. Sources of combustion exhaust include: mobile mining equipment, loaders, graders, excavators, dozers, tractors, water trucks, generator sets, and associated equipment. CO, $NO_x$, reactive organic gases (ROG), $SO_x$, and $PM_{10}$ are emitted. Since $NO_x$ and ROG are ozone precursors, mining activities contribute to a net increase in ozone concentrations in the region.
2. Sources of fugitive dust ($PM_{10}$) include: removal of aggregate material from dry surfaces; transfer points in conveyor systems; load-in to stockpiles by conveyor drop and front-end loaders; load-out by front-end loaders to aggregate trucks; unpaved haul road traffic; and wind-blown dust from storage piles, open conveyors, and other dry, disturbed surfaces.

Trackout of mud and/or dirt by haul trucks onto paved public roads is also a major source of fugitive dust (SCAQMD 2004); when this material dries, it is re-introduced into the atmosphere as $PM_{10}$ by passing vehicular traffic.

Mining activities associated with the Proposed Project could generate vehicle emissions and fugitive dust that could have an adverse impact on sensitive receptors, such as residential neighborhoods, schools, hospitals, and parks.

In the warm, dry climate of Southern California, aggregate mining is by nature a dusty operation, especially from the spring to the fall. Constant monitoring, and considerable effort are required to adequately mitigate ambient air quality impacts due to material handling, mobile equipment, haul trucks, and vehicular traffic at these facilities.

In May 2003, SCAQMD initiated a comprehensive air monitoring study (SCAQMD 2004) on the potential for air quality impacts related to aggregate mining activities. The SCAQMD report is included in **Appendix H** of this Draft EIR. The study consisted of conducting upwind/downwind ambient air monitoring at six sites in Irwindale to evaluate $PM_{10}$ concentrations carried off site. United Rock was one of the facilities evaluated. The study was conducted in accordance with SCAQMD Rule 403 - *Fugitive Dust.* The upwind/downwind test is carried out for five consecutive hours. The acceptable ambient impact and procedure summary is described in SCAQMD's Rule 403(d)(4), which states, in part:

> "*A person shall not cause or allow $PM_{10}$ levels to exceed 50 micrograms per cubic meter when determined, by simultaneous sampling, as the difference between upwind and downwind samples collected on high-volume particulate matter samplers or other U.S. EPA-approved equivalent method for $PM_{10}$ monitoring.*"

Based on the SCAQMD-monitored ambient $PM_{10}$ air quality data, United Rock was one of the facilities that received a Notice of Violation (NOV) of SCAQMD Rule 403. Rule 403 is also attached as an Appendix to this DEIR. The NOV was issued on September 2, 2003.

United Rock has offered to implement a number of proactive measures to mitigate fugitive dust from its facilities. These are presented in Section 3.1.3.

Quarry 2 and 3 operations are proposed to include excavation of materials by dragline or underwater dredging. The excavated material would then be moved by conveyor belt from the active pits to quarry stockpiles located in Quarry 4. The mined material is sorted and may be crushed and/or washed before being stockpiled by size and type. Customer haul trucks are loaded with the stockpiled material, which are then transported off-site from Quarry 4.

Fugitive $PM_{10}$ emissions are generated at Quarry 4/Production Plant by material handling and include activities such as size sorting, crushing, stockpiling, load-out to haul trucks, and dust generated by trucks and other mobile equipment traveling on unpaved surfaces. Trackout of mud and dirt by haul trucks and other vehicles onto public streets also represents a potentially significant source. Dust control measures (primarily application of water sprays) are required to be implemented by SCAQMD Rule 403. An accurate quantitative estimate of fugitive dust

emissions is not possible given the number of variables that affect emissions generation; such as operational quantities, ambient winds, relative humidity, silt and moisture content of road and aggregate material, vehicle speeds, and frequency and efficiency of water application to roads, conveyor transfer points, and crushers. However, given the results of the SCAQMD study, it is likely that, at least some of the time, fugitive dust mitigation measures were not being implemented, or were insufficient, and $PM_{10}$ emissions and off-site impacts due to operations at the Production Plant can be concluded to have been "significant" for $PM_{10}$.

Emissions from on-site mobile equipment, haul trucks, and employee trips during mining operations were estimated using the URBEMIS2002 emissions model, Version 7.4.2, and the results are presented in **Table 3.1-5**. A 40-mile round trip distance is assumed for both types of vehicles. A copy of the URBEMIS2002 output for this scenario is included in **Appendix H**. Based on the estimated traffic emissions, impacts on air quality would be less than significant for emissions of ROG, NOx, CO, and SOx. Emissions of $PM_{10}$ would be significant.

**Table 3.1-5**
**United Rock Operational Emissions – On-site Mobile Equipment, Haul Truck, and Employee Traffic Only (lb/day)**

| | ROG | NOx | CO | $PM_{10}$ | SOx |
|---|---|---|---|---|---|
| On-site Mobile Equipment and Daily Traffic | 10 | 46 | 115 | 31 | 0 |
| SCAQMD Significance Threshold - Operations | 55 | 55 | 550 | 150 | 150 |
| Significant Impact | No | No | No | Yes, when fugitive dust is considered | No |

### 3.1.2.3 Reclamation Impact Analysis

The primary source of air emissions due to reclamation activities would consist of combustion emissions from operation of a tracked dozer to reclaim the quarries once mining is complete by backfilling the site with approved inert waste. Once reclamation begins above the water table, there will be twice-daily passes by a water truck to control fugitive dust generated by the arriving haul trucks and the dozer's backfilling and compaction activities.

The reclamation phase of the project would create new truck trips in the area and prolong the duration of the trips due to the protracted reclamation phase of the project as trucks travel to Quarry No. 3 to dispose of construction debris at the new Class U landfill.

Emissions during reclamation activities are also predicted using the URBEMIS2002 model. A copy of the output is included in **Appendix H** and the results are summarized in **Table 3.1-6**. These estimates are representative of reclamation at Quarry No. 2 and 3, as reclamation would not occur concurrently at these two sites. Reclamation of the Quarry No. 4/Production Plant would include disassembly of structures and conveyor systems, but no backfilling is expected to be required, as the site is at ground level. Comparison with SCAQMD significance thresholds for operations indicates air emissions would be below SCAQMD significance thresholds and would therefore be considered less than significant for the reclamation phases of Quarries 2 and 3.

**Table 3.1-6**
**United Rock Emissions – Reclamation Only (lb/day)**

| | ROG | NOx | CO | $PM_{10}$[1] | SOx |
|---|---|---|---|---|---|
| Maximum Daily | 4.4 | 28 | 37 | 42 | 0 |
| SCAQMD Significance Threshold - Operations | 55 | 55 | 550 | 150 | 150 |
| Significant Impact | No | No | No | No | No |

[1] After ground level surface is above water table. $PM_{10}$ would be approximately 1 lb/day if reclamation occurs while surface is below the water table because fugitive dust is presumed to be zero.

### 3.1.2.4 Post-Reclamation Impact Analysis

Post-reclamation activities would consist of typical equipment and activities associated with construction and operation of light industrial and commercial properties. Because the future horizon year for post-reclamation land development is so protracted and specific development proposals are unknown at this time, quantification of potential air quality impacts cannot be reasonably estimated at this time.

The City has determined and evaluated the potential environmental impacts of the Proposed Project in this Draft EIR based on best available data and the abilities and limitations of current impact assessment practices, recognizing that potential effects of future activities and land uses decades in the future necessarily exceeds the limits of reasonable forecasting and is too speculative to warrant detailed analysis. It is further assumed that all future post-reclamation phases of development will be subject to subsequent discretionary approvals and therefore will be subject to the requirements of CEQA. However, application of the post-reclamation mitigation measures prescribed in Section 3.1.3 should reduce air emission levels in the future.

## 3.1.3 MITIGATION MEASURES

The following mitigation measures are recommended as best management practices (BMPs) during mining operations, reclamation, and post-reclamation phases of the Proposed Project to reduce tailpipe exhaust emissions of CO, $NO_x$, $SO_x$, and $PM_{10}$, and fugitive dust.

The following mitigation measures are recommended as best management practices to reduce fugitive dust and tailpipe exhaust emissions of CO, $NO_x$, $SO_x$, and $PM_{10}$ throughout various stages of the project.

***Operation:***

- Heavy-duty diesel trucks shall be properly tuned and maintained to manufacturers' specifications to ensure minimum emissions under normal operations.
- Vehicles hauling dirt or fill shall be covered with a tarp or other means per SCAQMD guidelines.
- Vehicle speeds on site shall be limited to 15 mph.

In addition to the above, the following specific measures have already been agreed to by United Rock as part of settlement of the Notice of Violation #P34396 issued by SCAQMD based on ambient upwind/downwind tests conducted by SCAQMD pursuant to Rule 403.

- Purchase and operate a Tymco vacuum sweeper to reduce and prevent trackout onto Arrow Highway.
- Operate a full-time water truck onsite to water all unpaved roads inside the property.
- Improve dust controls on transfer points.
- Monitor and control dust from storage piles.
- Operate a wash rack for drivers to wet down material before leaving facility.
- Operate a wheel washer to remove soil from vehicle tires as needed.
- Purchase and install a second clean track for the landfill quarry.

***Reclamation:***

- Heavy-duty diesel trucks and other mobile equipment shall be properly tuned and maintained to manufacturers' specifications to ensure minimum emissions under normal operations.
- Apply water or chemical dust suppressants to unstabilized disturbed areas and/or unpaved roadways in sufficient quantity and frequency to maintain a stabilized surface; minimum of three times per day on days with no precipitation.
- Water or water-based chemical additives shall be used in such quantities to control dust on areas with extensive traffic including unpaved surfaces.
- Vehicles hauling dirt or fill shall be covered with a tarp or other means.
- Vehicle speeds on site shall be limited to 10 or 15 mph.
- Continue to operate a vacuum sweeper to reduce and prevent trackout onto Arrow Highway.
- Operate a full-time water truck onsite to water all unpaved roads inside the property.
- Improve dust controls on transfer points.
- Monitor and control dust from storage piles.
- Operate a wheel washer to remove soil from vehicle tires as needed.
- Purchase and install a second clean track for the landfill quarry.

***Post-Reclamation Construction:***

- Heavy-duty diesel trucks and other mobile equipment shall be properly tuned and maintained to manufacturers' specifications to ensure minimum emissions under normal operations.

- Apply water or chemical dust suppressants to unstabilized disturbed areas and/or unpaved roadways in sufficient quantity and frequency to maintain a stabilized surface; minimum of three times per day on days with no precipitation.
- Water or water-based chemical additives shall be used in such quantities to control dust on areas with extensive traffic including unpaved surfaces.
- Prevent or promptly remove mud or soil tracked out onto public roadways.

All clearing and grading activities shall cease during periods of forecasted high winds (greater than 20 mph averaged over 1 hour).

It should be noted that the CARB is currently conducting an extensive review program to investigate and promote measures for reducing diesel particulate and other gaseous emissions from on-road heavy-duty diesel-fueled residential and commercial solid waste collection vehicle engines. A number of promising methods are under consideration. Some of the mitigation measures include add-on hardware, such as a diesel particulate filters, a diesel oxidation catalyst, flow-through filters, alternative diesel fuels or fuel additives, and integrated systems that combine hardware with an alternative diesel fuel or fuel additive. Specific regulations will be developed in the future, and it is expected that diesel particulate and other gaseous emissions will be lower than what has been estimated for activities occurring much beyond 2010 or 2015.

## 3.1.4 LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of the mitigation measures described in Section 3.1.3, air emissions associated with Project mining, reclamation, and post-reclamation activities will be less than significant.

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# SECTION 3.2 GEOLOGY AND SOILS

This section describes the geology and soils of the Irwindale area and the greater southern California region. In addition, this section discusses other geological issues including seismicity/ground shaking, slope stability, liquefaction, subsidence, and expansive soils that could be associated with mining operations at Quarry No. 2, Quarry No. 3, and Quarry No. 4/Production Plant. This section identifies applicable laws, ordinances, regulations, and standards (LORS) related to mining operations and reclamation planning. Mitigation measures to minimize potential geologic and soil impacts are also provided to reduce potential impacts.

## 3.2.1 EXISTING SETTING

### 3.2.1.1 Regulatory Setting

The United Rock Quarries No. 2, 3 and 4/Production Plant are regulated by a variety of federal, State, regional and local laws, ordinances, regulations and standards (collectively referred to as LORS) related to mining operations. A brief discussion regarding the LORS pertinent to the Proposed Project are provided below.

#### 3.2.1.1.1 Federal

The 1997 Uniform Building Code (UBC) was developed by the International Conference of Building Officials (ICBO) and is used by most states, including California, as well as local jurisdictions to set basic standards for acceptable design of structures and facilities. The UBC provides information on criteria for seismic design, construction, and load-bearing capacity associated with various buildings and other structures and features. Additionally, the UBC identifies design and construction requirements for addressing and mitigating potential geologic hazards. New construction generally must meet the requirements of the most recent version of the UBC.

#### 3.2.1.1.2 State

The State Alquist-Priolo Earthquake Fault Zoning Act (A-P Act) of 1972 was passed to mitigate the hazards associated with surface faulting in California. Administered by the California State Department of Conservation, Division of Mines and Geology, the A-P Act prevents construction of buildings used for human occupancy on the surface traces of active faults. Before a proposed project can be permitted, cities and counties must require a geologic investigation to demonstrate that proposed buildings will not be constructed across active faults. Los Angeles County has been designated an A-P Act earthquake fault area.

The 1990 Seismic Hazards Mapping Act and related regulations establish a statewide minimum public safety standard for mitigation of earthquake hazards. The purpose of this Act is to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other ground failure as well as other hazards caused by earthquakes. The Act provides the minimum level of

mitigation needed to reduce the risk of a building collapse. Under this Act, the lead agency can withhold permits until geologic investigations are conducted and mitigation measures are incorporated into building plans. In addition, the Act addresses not only seismically induced hazards but also expansive soils, settlement, and slope stability. The program and actions mandated by this Act closely resemble those of the A-P Act by requiring:

- The State Geologist to delineate various "seismic hazard zones";
- Cities, counties, and/or other local permitting authority to regulate certain development "projects" within these zones by withholding the development permits for a site until the geologic and soil conditions are investigated and appropriate mitigation measures (if required) are incorporated into development plans;
- The State Mining and Geology Board (SMGB) to develop regulations, policies, and criteria in guiding cities and counties in their implementation of the law; and
- Sellers (and their agents) of real estate property within a mapped hazard zone to disclose that property lies within such a zone at the time of sale.

The 1998 California Building Code (CBC) specifies the acceptable design and construction requirements associated with various facilities or structures. This Code specifies criteria for open excavation, seismic design, and load-bearing capacity directly related to construction in the State. The CBC augments the UBC and provides information for specific changes to various sections in it. The seismic building requirements under the CBC are more stringent than the federal UBC.

The Surface Mining and Reclamation Act (SMARA) of 1975 is administered by the California Department of Conservation, Office of Mine Reclamation. This act requires mine owners to develop Reclamation Plans for use of the land after mining and to post Financial Assurances sufficient to perform the requirements specified in the site specific Reclamation Plan. SMARA also requires mine operators to obtain all necessary permits and approvals. Mining permit requirements (e.g., slopes, depths, setback distances, fencing, and operation hours) are specified in the mine's CUP. Normally, local "lead agencies" (e.g., city or county governments) are given the responsibility for "lead agency" oversight of SMARA compliance in their jurisdiction. This is the case for the City of Irwindale.

#### 3.2.1.1.3 Local

The City of Irwindale is the Lead Agency under both CEQA and SMARA for the United Rock Proposed Project. As the lead agency, the City is responsible for enforcing SMARA provisions and conditions of approval as required in United Rock's CUP applications. Therefore, any changes to United Rock's SMARA and CUP requirements must receive the approval of the City prior to implementation of the Proposed Project.

The City is responsible for planning and zoning and addresses the general current and future land uses (e.g., residential, commercial, or industrial) of property within its jurisdictional area. Zoning is intended to provide a uniform plan for the development of compatible facilities within given areas.

Building permits are required for construction of new facilities or major modifications to existing buildings. Consequently, the project sponsor must submit detailed design drawings of the development for approval by the City. The design specifications undergo a "plan check" to make sure they meet all federal, State, and local codes and other applicable development regulations and requirements. The City is then required to monitor the construction of the facility to make sure it is constructed in accordance with the approved design and related conditions of approval.

The City has established the following policies to reduce the potential geologic and soils related risks relative to quarry mining and reclamation-related activities:

- The City will permit quarry operations to continue as long as it is feasible to do so and only if the quarries are operating in a healthful and safe manner pursuant to existing codes and regulations.
- The City will continue to protect the area's resources through appropriate land use controls and planning.
- The City will continue to review and, if necessary, update its comprehensive emergency preparedness plan.
- The City is in the process of preparing a Natural Hazards Mitigation Plan in compliance with the Federal Emergency Management Agency (FEMA) requirements.
- The City will, at a minimum, maintain current emergency response standards.
- The City will work to reduce potential hazards through conscientious land use planning.

### 3.2.1.2 Regional Geological History

California's historical geologic activities have resulted in down-warped sedimentary basins, the uplift of mountain belts, and the horizontal displacement of the local crustal blocks by faults. The resultant impacts of these earth forces have created the mountains, valleys, deserts, and coastal lowlands found in the State. Additionally, these geologic activities have resulted in an endless variety of rocks, geologic structures (e.g., faults and folds), and surface materials in the State.

California geology is separated into 11 general geomorphic provinces or regions. These geomorphic provinces are naturally defined geologic regions that display a distinct unique landscape or landform. As a result, each of these provinces displays unique and definable features based on their geology, faults, topographic relief, and climate.

The City is located within the Peninsular Ranges Province. This province extends from the northern part of Los Angeles County to the Mexican border. The Western Transverse Ranges and the Central Transverse Ranges Provinces are located to the north of this province. The Eastern Transverse Ranges Province and Salton Trough Region are to the east, and the outer continental shelf is to the west of this area. In addition, the Peninsular Ranges Province is bounded by the Colorado Desert to the east and the offshore islands (e.g., Santa Catalina, Santa Barbara, San Clemente, and San Nicolas islands) and the continental shelf to the east.

The Peninsular Ranges Province consists of a series of ranges separated by northwest trending valleys, which are subparallel to faults that branch from the San Andreas Fault system. The topography of this province is similar to the Coast Ranges Province in northwestern California, but the province contains granitic rock and older metamorphic rocks similar to that found in the Sierra Nevada Province.

The main ranges in this province include the Laguna, San Jacinto, Santa Ana, Santa Rosa, San Gabriel, and Vallecito mountains. The main peaks in the area are Mount San Jacinto (10,780 feet) and Santa Rosa Mountain (8,040 feet). The low-elevation gaps and passes that occur between the various mountain ranges allow many desert animals and plants to extend their ranges into the relatively arid area of the southern coastlines.

A complex of interlocking fault zones, many of which are active, subdivides the Peninsular Range Providence three-dimensionally. Most of the existing faults are exposed at the surface and have been mapped in reasonable detail. However, other faults within this province have only been found to exist in drilling cores or seismic reflection data.

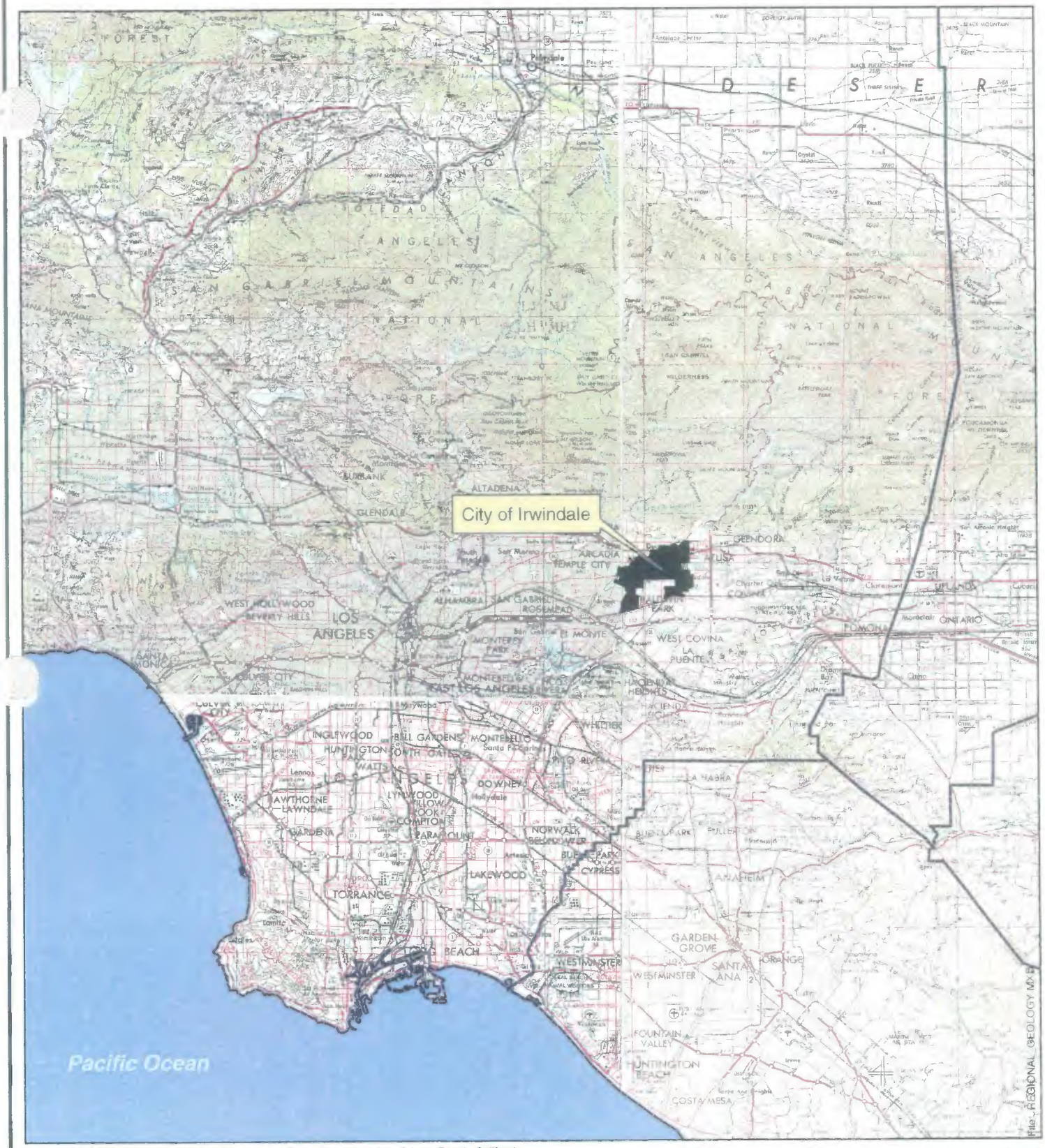
Basement rocks that predate sedimentation of the Peninsular Range Providence in the general Los Angeles Basin are a diverse and heterogeneous metamorphic and plutonic assemblage. They range from Early Proterozoic amphibolite and orthogeneiss to Early Cretaceous tonalities, granodiorites, and granitic rocks (McCulloh, Beyer, Morin 2002).

### 3.2.1.3 Local Geology

The Irwindale area is located in the greater Los Angeles Basin. The San Gabriel Mountains to the north and the Puente Hills and Pacific Ocean to the southwest are the main geophysical features of the area. A map showing the regional geologic features of the area is presented in **Figure 3.2-1**.

The topography of the Irwindale area is a result of the historical alluvial fan formed by the San Gabriel River. Except for the large mines in the City, the area slopes approximately 50 feet every mile toward the south. Elevation within the City ranges from approximately 625 feet above mean sea level (msl) in the north to about 310 feet above msl in the south. The mines within the City represent approximately 50 percent of the total land surface area in Irwindale. These mines exceed 200 feet in depth and represent a significant topographic relief feature within the City.

The Irwindale area is located on the alluvial fan of the San Gabriel River immediately south of the San Gabriel Mountains. For over 1.7 million years, the mountains to the north have been rising as a result of continued and ongoing plate tectonic activity. As a result, significant quantities of surface material have accumulated over the valley basement rock. These alluvium materials are relatively unconsolidated, consisting of sand, gravel, cobbles, and boulders, originating from flood debris from the San Gabriel River watershed. The historical alluvium fan formed by the San Gabriel River is approximately four miles wide and six miles long. The main part of this alluvial fan is located within the City. However, the fan extends into the City of Azusa to the east; Baldwin Park to the south; and the cities of Duarte, Arcadia, and Monrovia to the west. The alluvium deposits ranges in depth from 100 to over 600 feet. A general diagram outlining the extent of this alluvial fan is provided in **Figure 3.2-2**.




*Source: USGS 250k Quadrangles, Los Angeles, San Bernadino, Santa Ana, & Long Beach, California.*

UNITED ROCK QUARRY AND RECLAMATION PLAN EIR

*FIGURE 3.2-1*
*REGIONAL MAP OF*
*LOCAL GEOLOGICAL FEATURES*

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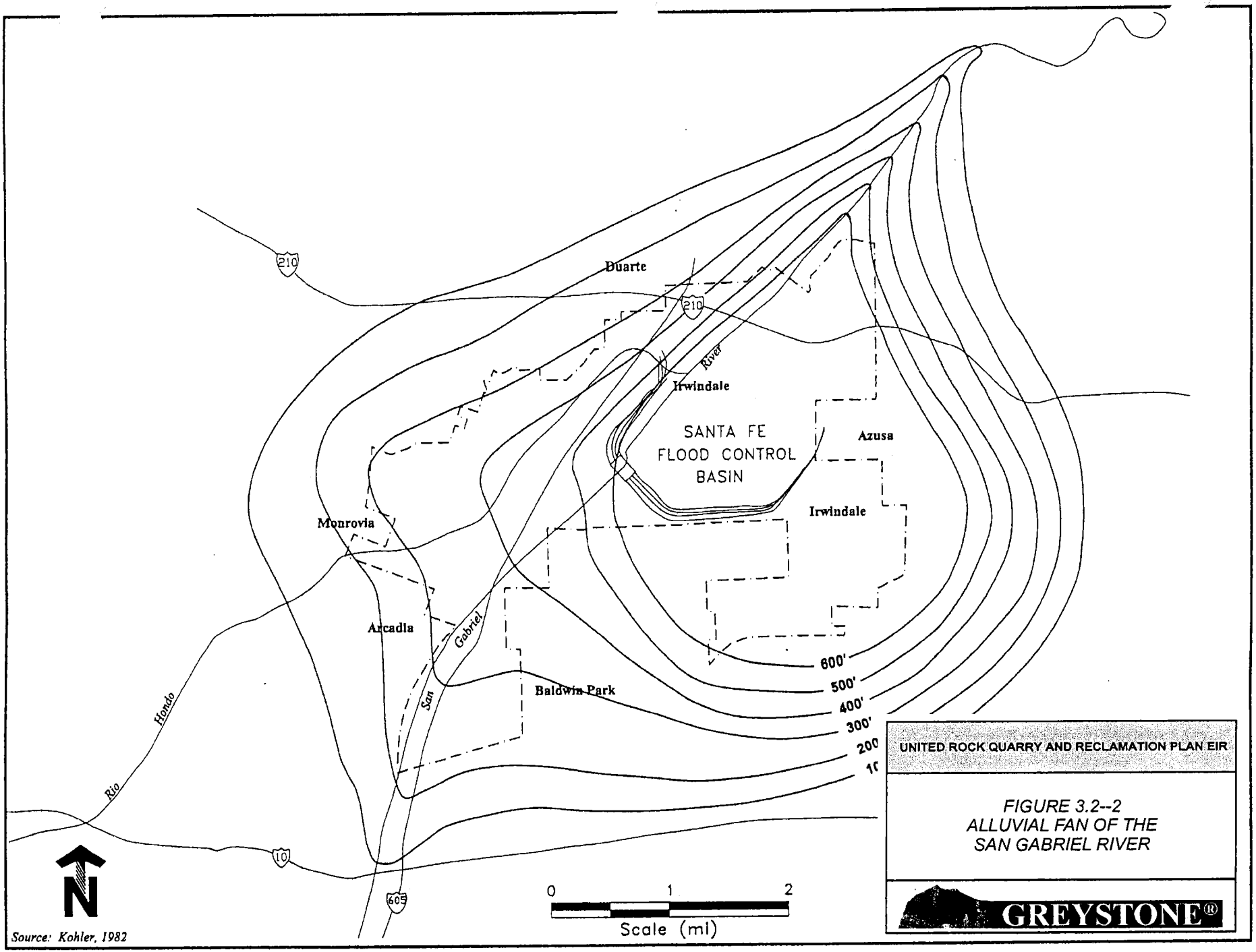
Duarte
210
210
River
Irwindale
SANTA FE
FLOOD CONTROL
BASIN
Azusa
Irwindale
Monrovia
Arcadia
Gabriel
San
Baldwin Park
Rio
Hondo
10
605
600'
500'
400'
300'
200
0
1
2
Scale (mi)
N
Source: Kohler, 1982
UNITED ROCK QUARRY AND RECLAMATION PLAN EIR
FIGURE 3.2--2
ALLUVIAL FAN OF THE
SAN GABRIEL RIVER
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Finer materials (e.g., sands and clays) are found along the edges of the fans due to the historical decreased energy of the San Gabriel River in these locations. Larger materials (e.g., cobbles and boulders) are located near the base of the San Gabriel Mountains and in the vicinity of the Santa Fe Flood Control Basin. However, due to historical seasonal variations in water flow, the stratigraphy of the San Gabriel alluvial fan varies, with lens-shaped deposits merging both up and down the gradient and laterally.

Most of the boulders and sands found in the alluvial material originate as bedrock. This bedrock material consists of crystalline granitic and metamorphic rocks containing granite, granodiorite, diorite, quartz diorite, gneiss, schist, pegmatite, gabbro, anorthosite, and vein quartz. These types of materials are ideal for aggregates used in concrete and asphalt and as a base-rock for other construction activities.

## 3.2.1.4 Seismic and Other Hazards

### 3.2.1.4.1 Seismicity

Seismic hazards in California are generally considered to be high in most areas. The seismic activity is the result of large plate tectonic movements between the North American and Pacific plates. As a result, a number of large earthquakes have occurred historically in both northern and southern California. For southern California, the last great earthquake occurred in the Fort Tejon area (near present day Bakersfield) on January 9, 1857. This earthquake had a magnitude of 7.9. However, more frequently smaller earthquakes occur near the City. These earthquakes include the 1971 San Fernando and the 1994 Northridge earthquakes. Both of these earthquakes had a magnitude of 6.7.

Seismologists use magnitude scales to express the seismic energy released by an earthquake. Since Charles Richter developed the original magnitude scale in the 1930s, there has been a proliferation of magnitude scales for measuring the size of earthquakes occurring in southern California using relatively high-frequency data from nearby seismograph stations. This scale (designated $M_L$ for Local Magnitude) eventually became known as the Richter magnitude. As more seismograph stations were installed around the world, it became apparent that the method developed by Richter was strictly valid only for certain frequency and distance ranges. New magnitude scales, including body-wave magnitude (Mb) and surface-wave magnitude (Ms) were developed based on Richter's original scale, but each is valid only for a particular frequency range and type of seismic signal. Because of the limitations of the $M_L$, Mb, and Ms scales, a new, more uniformly applicable extension of the magnitude scale, known as moment magnitude ($M_w$) was developed. Moment magnitude generally gives the most reliable estimate of earthquake size, especially for large earthquakes, and seismologists generally favor the $M_w$ scale. A representative scale giving earthquake magnitude is provided in **Table 3.2-1**.

The largest and most famous earthquake fault in California is the San Andreas Fault. The San Andreas Fault begins near the Salton Sea and extends northwards to Point Delgada, along the northern California coast. The total distance of this fault system is approximately 745 miles. The maximum credible earthquake (MCE) for the San Andreas Fault is believed to be 8.5 $M_w$. However, the San Andreas Fault area near the City is believed capable of generating a maximum earthquake of 7.8, which would result in a peak ground acceleration (g) of 0.16 at the City. This fault is approximately 37 miles northeast of the City of Irwindale. Seismologists estimate that a major earthquake in the 7.5 to 8.5 magnitude range has a 50 percent chance of occurring along the San Andreas Fault within the next 30 years (Jennings 1992 and City of Irwindale 2003).

## Table 3.2-1
## Earthquake Intensity and Damage

| Magnitude | Shaking Severity | Summary of Damage | Discussion |
|---|---|---|---|
| 1 | - | - | Not felt. Marginal and long period effects of large earthquakes. |
| 2 | - | - | Felt by persons at rest or on upper floors of buildings. |
| 3 | - | - | Felt indoors. Hanging objects wing. Vibration like passing of light trucks. Duration estimated by individuals. May not be recognized as an earthquake. |
| 4 | - | - | Hanging objects swing. Vibrations like passing of heavy trucks, or sensation of a jolt like a heavy ball striking the walls. Standing motorcars rock; windows, dishes and doors rattle; glasses clink; and crockery clashes. In the upper range of 4, wooden walls and frames creak. |
| 5 | Light | Pictures Move | Felt outdoors and direction estimated by individuals. Sleepers wakened; liquids disturbed, some spilled; small unstable objects displaced or upset; doors swing, close, or open; shutters and pictures move; and pendulum clocks stop, start, or change rate. |
| 6 | Moderate | Objects Fall | Felt by all. Many people frightened and run outdoors. Persons walk unsteadily; windows, dishes, and glassware break; knickknacks and books fall off shelves; pictures fall off walls; furniture moves or is overturned; small bells ring; and trees and buses shake. |
| 7 | Strong | Nonstructural Damage | Difficult to stand. Noticed by drivers of cars. Hanging objects quiver; furniture breaks; weak chimneys break at roof line; plaster, loose bricks, stones, tiles, and cornices fall; waves on ponds; water turbid with mud; small slides and caving in along sand or gravel banks; large bells ring; and concrete irrigation ditches damaged. |
| 8 | Very Strong | Moderate Damage | Steering of cars affected; stucco and some masonry walls fall; fall of chimneys, factory stacks, monuments, towers, elevated tanks; framed houses move on foundations if not bolted down; loose panel walls thrown out; decayed piling broken off; branches broken from trees; changes in flow or temperature of springs and wells; and cracks in wet ground and on steep slopes. |
| 9 | Violent | Heavy Damage | General panic. Frame structures, if not bolted, shifted off foundations; frames cracked; serious damage to reservoirs; underground pipes break; conspicuous cracks in ground; in alluvial areas sand and mud ejected; and sand craters. |
| 10 | Very Violent | Extreme Damage | Most masonry and framed structures destroyed with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes, embankments; large landslides; water thrown on banks of canals, rivers, and lakes; sand and mud shifted horizontally on beaches and flat lands; and rails bent slightly. |
| 11 | - | - | Rails bent greatly. Underground pipelines completely out of service |
| 12 | - | - | Damage near total. Large rock masses displaced. Lines of sight and level distorted. Objects thrown into the air. |

Source: California Department of Conservation 2004

A map showing the major faults within a 100-kilometer radius (60-miles) of the City is given in **Figure 3.2-3**. Information on these major fault locations near the City is provided in **Table 3.2-2**. In addition to the known faults listed in this table, the Los Angles Basin has a number of deep blind-thrust faults.

**Table 3.2-2**
**Major Faults Within a 62-Mile (100-kilometer) Radius of the City of Irwindale**

| Fault | Approximate Distance (miles) | Estimated Maximum Earthquake Event | | |
|---|---|---|---|---|
| | | Maximum Earthquake Magnitude ($M_w$) | Peak Acceleration (g) | Estimated Site Intensity (Modified Mercalli) |
| Sierra Madre | 2.7 | 7.0 | 0.48 | X |
| Raymond | 3.3 | 6.5 | 0.34 | IX |
| Clamshell-Sawpit | 3.9 | 6.5 | 0.32 | IX |
| Whittier | 9.9 | 6.8 | 0.18 | VIII |
| Cucamonga | 13.1 | 7.0 | 0.20 | VIII |
| Chino-Central Ave. (Elsinore) | 13.2 | 6.7 | 0.17 | VIII |
| Hollywood | 14.2 | 6.4 | 0.14 | VIII |
| San Gabriel | 21.7 | 6.9 | 0.11 | VII |
| San Andreas (1857 Rupture) | 23.2 | 7.8 | 0.16 | VII |
| San Jacinto – San Bernardino | 28.3 | 6.7 | 0.08 | VII |
| Santa Susana | 32.5 | 6.6 | 0.08 | VII |
| San Cayetano | 49.6 | 6.8 | 0.07 | VI |
| Helendale – Lockhardt | 58.8 | 7.1 | 0.06 | VI |

Source: Blake, Hollingsworth, and Stewart 2002

Historical earthquake data from 1800 to 2000, with the frequency of an earthquake with varying magnitudes, is provided in **Table 3.2-3**

**Table 3.2-3**
**Historical Earthquakes Pattern Within 100 Miles**

| Earthquake Magnitude | Number of Times Exceeded | Cumulative Number Per Year |
|---|---|---|
| 4.0 | 1275 | 6.343 |
| 4.5 | 482 | 2.398 |
| 5.0 | 165 | 0.821 |
| 5.5 | 57 | 0.284 |
| 6.0 | 28 | 0.139 |
| 6.5 | 12 | 0.060 |
| 7.0 | 6 | 0.030 |
| 7.5 | 2 | 0.010 |

Source: Blake, Hollingsworth, and Stewart 2002

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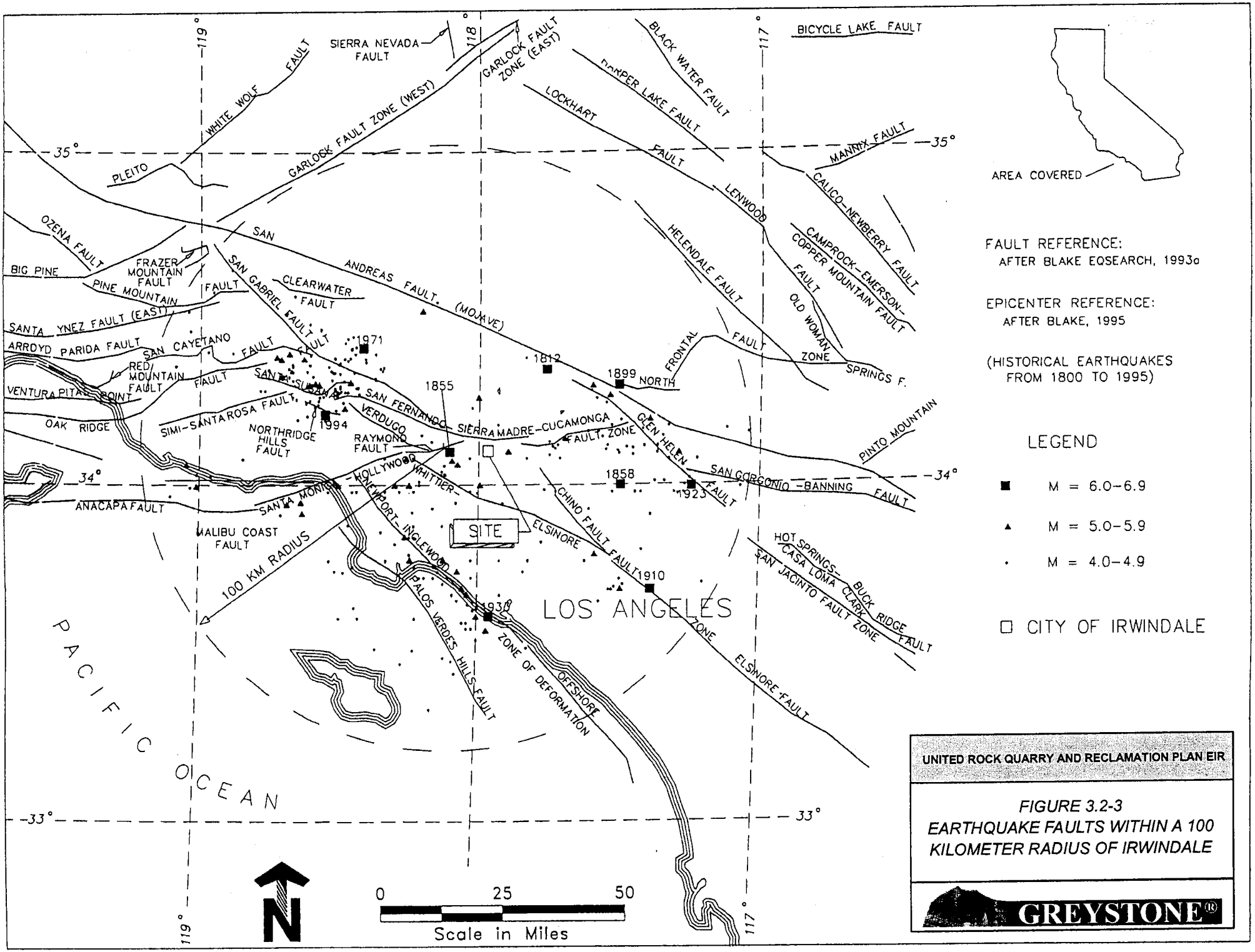


UNITED ROCK QUARRY AND RECLAMATION PLAN EIR

*FIGURE 3.2-3*
*EARTHQUAKE FAULTS WITHIN A 100 KILOMETER RADIUS OF IRWINDALE*

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The Sierra Madre fault zone runs along the southern foothills of the San Gabriel Mountains through the City. Although a number of active faults are in the project area, there are no Alquist-Priolo Special Study Zones within the City.

Of concern to the City of Irwindale is the potential risk associated with mine slope failure, especially during an earthquake event. The City organized the Irwindale Slope Stability Committee (Committee) to determine if current slopes pose a risk and to make recommendations regarding design requirements for slope stability angles. This Committee consisted of mine owners, consultants, and governmental representatives. Of particular concern to the City were mine slope stability at CalMat Durbin Quarry, Hanson Aggregates Quarry, CalMat Reliance Quarry, and United Rock Quarry No. 2 and Quarry No. 3.

The Committee's guidelines for the study were to address the following issues:

- Shear strength parameters for natural soils;
- Design groundwater levels;
- Procedures for static slope stability analyses; and
- Procedures for seismic slope stability analyses.

The results of this study were published on December 24, 2003 (Irwindale Slope Stability Committee 2003).

A study performed under the auspices of the Committee by Geo-Logic Associates indicated that a peak ground acceleration of 0.55 g has the probability of a 10 percent occurrence in the next 50 years. The most likely source of this peak ground acceleration would be a 6.8 earthquake on the Sierra-Madre Fault (Geo-Logic Associates 2003).

#### 3.2.1.4.2 Subsidence

Land subsidence can be caused by various natural phenomena such as tectonic movement, consolidation, hydro-compaction, and rapid sedimentation. Additionally, subsidence can also result from a variety of human activities, including withdrawal of water or petroleum from the subsurface. The highest potential for any significant subsidence in the Irwindale areas would be related to major tectonic movements associated with the many faults near the area.

#### 3.2.1.4.3 Landslides

A landslide refers to rock or debris slowly to rapidly descending down a slope due to gravity. In general, areas with the steepest terrain have the greatest potential for landslides. Significant areas of steep terrain associated with mountains and hills are not located within the City. Therefore, the likelihood of landslides from these features affecting the City is very low. However, many of the aggregate mines in the City have steep slopes, some of which are over 200 feet in height. These steep slopes would be subject to potential landslide activity during periods of heavy rain and/or major local tectonic activity.

#### 3.2.1.4.4 Liquefaction

During strong ground shaking, loose, saturated, and cohesionless soils can experience a temporary loss of shear strength. This phenomenon is known as liquefaction. Liquefaction of soils is dependent on soil grain-size distribution, relative soil density, degree of soil saturation, and intensity and duration of an earthquake. The potential hazard associated with liquefaction is a seismically induced settlement.

Liquefaction is a phenomenon in which saturated soils lose strength and cohesion when subjected to dynamic forces, such as shaking during an earthquake. Liquefaction can also occur in unsaturated soils with low cohesion, such as sand. Liquefaction and related phenomena have been responsible for tremendous amounts of damage during historical earthquakes when water pressure between soil particles can increase to the point where the soil cohesion is lost. The City is considered to have a limited liquefaction hazard, and the most recent California Division of Mines and Geology's Seismic Hazard Mapping Program indicated that potential ground motion effects within the city pose no greater impact than the surrounding area.

### 3.2.1.5 Mineral Resources

The nature of the bedrock materials in the Irwindale area make the alluvium found in the City a valuable mineral source for aggregates used in concrete and asphalt and as a base-rock for other construction projects. In many cases, construction projects within the Los Angeles Basin specify Irwindale-grade aggregate for use in building materials. As a result, aggregate mining activities have been ongoing within the City for more than 100 years.

#### 3.2.1.5.1 Regional Quarries

Based on the Unified Soil Classification System, the general size of the materials found in the San Gabriel River alluvial fan is shown in **Table 3.2-4**. The materials found in the San Gabriel River alluvium fan are composed mostly of the materials given in this table with the exception of silts and clays. Silts and clays make up approximately 5 to 10 percent of the material found in the Irwindale area alluviums. These volumes of silts and clays are considered very small for most alluvium deposits. Additionally, silts and clays are considered waste materials in aggregate production. Therefore, the Irwindale aggregates are considered some of the best in the State.

**Table 3.2-4**
**General Particle Size of Material Found in the Alluvial Fan**

| Particle Type | Particle Size | U.S. Standard Sieve Number |
|---|---|---|
| Boulder | Over 8 inches | - |
| Cobble | 3 to 8 inches | - |
| Course Gravel | ¾ to 3 inches | - |
| Fine Gravel | No. 4 sieve to ¾ inches | Greater than No. 4 |
| Course Sand | - | No. 4 to No. 10 |
| Medium Sand | - | No. 10 to No. 40 |
| Find Sand | - | No. 40 to No. 200 |
| Silt or Clay | - | Less than No. 200 |

Source: Greystone 1999

Due to the value of aggregate material found in Irwindale, a number of mines are in or have been in operation in the area. A listing of these mines and their status are given below:

- Azusa Western – No longer active
- United Rock Quarry No. 1 – Under reclamation
- United Rock Quarry No. 2 – Active mining
- United Rock Quarry No. 3 – Opportunistic mining
- United Rock Production Plant – Will not be mined (provided Proposed Project is approved)
- Bubalo Sierra Pit – Active mining
- Calmat Azusa Largo – Active
- Vulcan Baldwin Park Olive – Inactive
- Calmat Durbin – Active
- Irwindale Pit – Reclamation complete
- Miller Brewery Calmat Reliance Quarry No. 1 – Reclamation complete
- Calmat Reliance Quarry No. 2 – Under reclamation
- Hanson Aggregate (Livingston-Graham Irwindale) – Active mining
- Miller Brewery Kincaid Plant – Reclamation compete
- Manning Brothers Pit – (L.A. County Flood Control District owned) Used as a spreading basin operated by L. A. County Flood Control District
- Manning Brothers Pit – (Irwindale owned) Under reclamation for future
- Alpha Pit – Reclamation complete
- Nu-Way Live Oak – Under reclamation

The location of all active mines is given in **Figure 3.2-4**. The location of all mines listed above is provided in **Figure 3.2-5**. No other commercially available mineral deposits are known to occur within the City of Irwindale.

#### 3.2.1.5.2 United Rock

The following section discusses the current operations at Quarry No. 2, Quarry No. 3, and Quarry No. 4/Production Plant. This section will describe the general features of these facilities and permit requirements related to geology. A map showing the United Rock facilities is provided in **Figure 3.2-5**.

The Committee's Geo-Logic Associates study performed a static and dynamic slope stability analysis on Quarries No. 2 and 3. The purpose of this analysis was to:

- Estimate the "maximum slope height based on the December 2003 *Slope Stability Guidelines for Open Pit Mines in Irwindale*;

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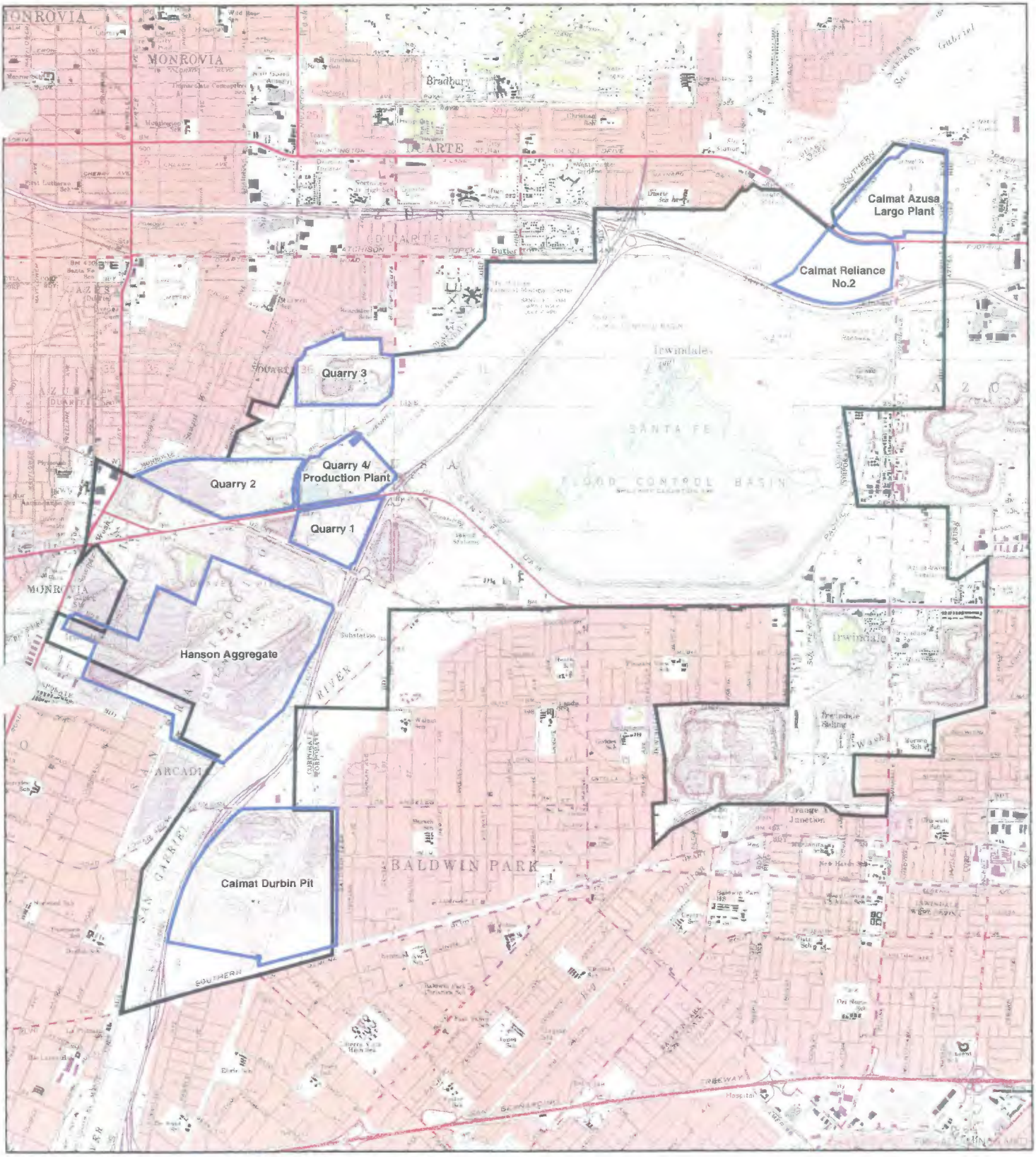


*Source: USGS 7.5' Quadrangles, Mt. Wilson, Azusa, El Monte, Baldwin Park, California.*

**Legend**

- Quarry Boundaries
- City of Irwindale Boundary

N
W E
S

0 0.25 0.5 1 Miles

Universal Transverse Mercator
North American Datum 1927
Zone 11

UNITED ROCK QUARRY AND RECLAMATION PLAN EIR

*FIGURE 3.2-4*
*ACTIVE MINE LOCATIONS IN THE CITY OF IRWINDALE*

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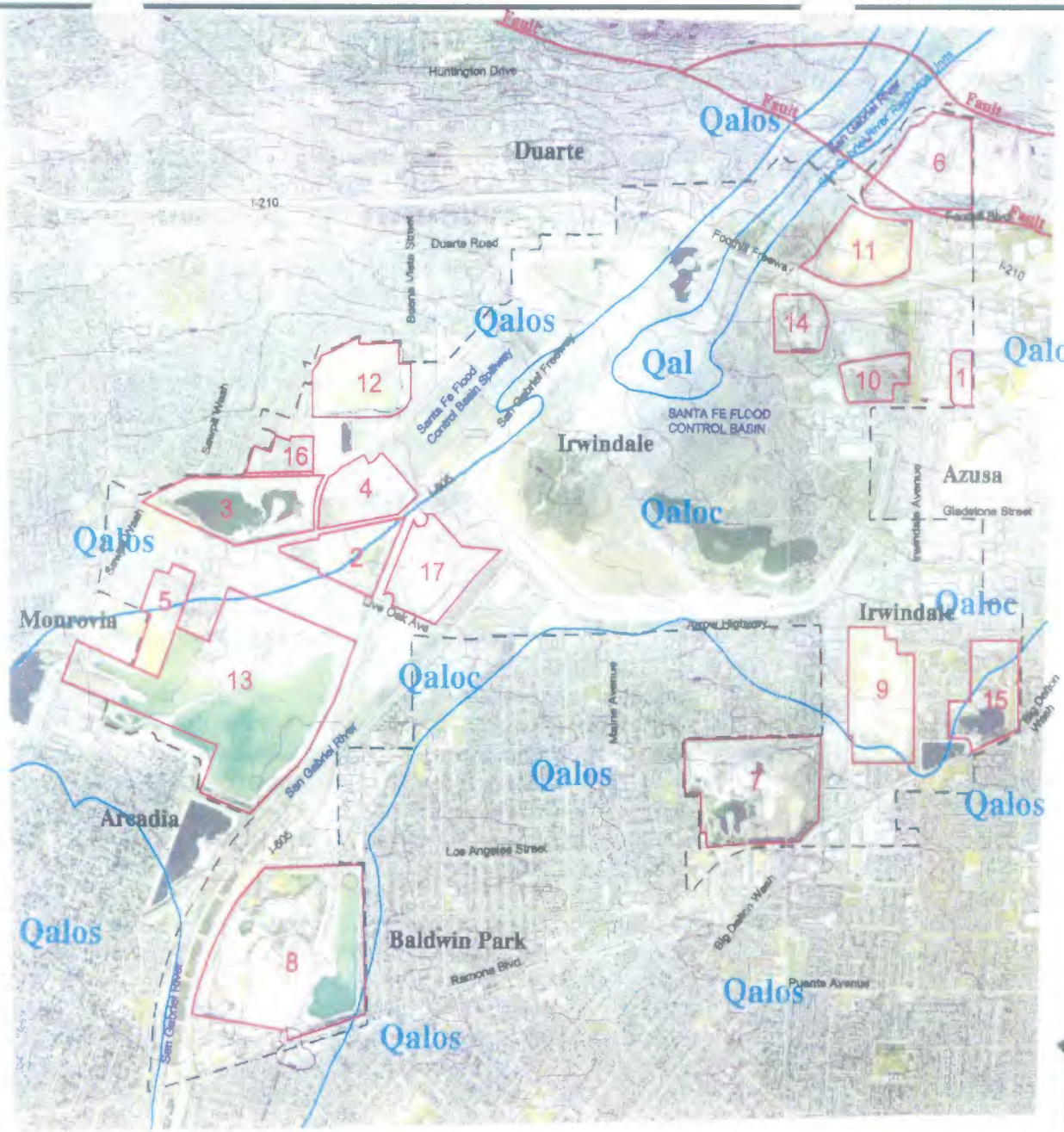


## LEGEND:

1= Azusa Western (remnant, NAPOTS)
2= United Rock #1
3= United Rock #2
4= United Rock Plant
5= Bubalo Sierra Pit
6= Calmat Azusa Largo Main Plant Site
7= Vulcan Baldwin Park Olive Pit
8= Calmat Durbin Pit
9= Irwindale Pit (reclaimed, NAPOTS)
10= Miller Brewery Calmat Reliance #1
11= Calmat Reliance #2
12= United Rock #3
13= Livingston-Graham Irwindale Plant
14= Miller Brewery Kincaid Plant
15= City of Irwindale / LA County
Manning Brothers Pit
16= Alpha Pit (reclaimed, NAPOTS)
17= Nu-Way Industries
Nu-Way Live Oak

Site Boundary Line
City Boundary

Fault Contact
Geologic Contact

Qal - Alluvium in the active portion of the San Gabriel River north from the Santa Fe Flood Control Basin consisting of reworked Qalos and Qaloc deposits.

Qalos - Stream Channel, Alluvial fan, Flood Plain, and Dune Deposits, Fine to Medium-coarse Grained Older (Holocene) Alluvium.

Qaloc - Very Coarse-Grain, Older (Holocene) Alluvium.

N

0 3000 6000
Scale (ft)

UNITED ROCK QUARRY AND RECLAMATION PLAN EIR

*FIGURE 3.2-5*
*SOILS MAP FOR THE IRWINDALE AREA*

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- Establish static and seismic stability of the existing critical slopes in these quarries with both the current and design groundwater levels;
- Screen and check the stability of all the perimeter slope profiles using the results of the above evaluations; and
- Identify options for remediation of the existing conditions, where necessary, to produce acceptable static and seismic stability.

The above analysis used a static safety factor of 1.5 or more and a seismic-induced displacement of 0.79 inches (2 cm.) or less at the property line. This study provided several remedial options for maintaining slope stability. These options assume a minimum 50-foot buffer, except where existing slopes already encroach upon this limit. The recommended remedial options identified in this study are listed below:

- Trimming slopes to 1:1 or flatter from the top, consistent with the 50-foot buffer criteria;
- Buttressing the full slope height where slope configurations allow;
- Installation of caisson type reinforcements, or grouted columns, at property line to stabilize slopes adjacent to roadways;
- Acquiring adjacent property to comply with the 50-foot buffer criteria, or permitted setback limits;
- Obtaining setback easements from adjacent property owners; and/or
- Slope restoration in the event of failure (no action alternative).

In addition, the report indicated that any of these options may be applicable in a particular case, depending on the nature of facilities at or near the slope perimeters or property boundaries, and the degree of risk presented. It should also be noted that these remedial measures do not address slopes underlain in whole or part by fill.

#### *3.2.1.5.2.1 Quarry No. 2*

Quarry No. 2 is an active mine consisting of approximately 110 acres. The original allowable mining depth based on Resolution PC 247-94 was 275 feet. Resolution PC 2003 eliminated the depth restriction and imposed a time restriction of July 1, 2004.

Mining is currently being performed using a clamshell dredge. Aggregate from the dredge is placed on a conveyor belt which transports the material to Quarry No. 4/Production Plant, where it is processed to meet customer requirements. As of October 2003, this quarry had produced an estimated 30.28 MCY or 45.42 million tons of aggregate. Removal of aggregate at this facility has been approximately 2 MCY (3.5 MT) per year. The estimated current permitted aggregate reserves at this quarry are 0.19 MCY (0.29 MT). The original permit for mining the site was to the end of December 2003. However, quarry operation at this facility has been extended to July 2004, pending completion of this EIR.

The current CUP for this quarry establishes a 50-foot setback distance along the north side of the mine and a setback distance of 100 feet along the eastern and southern sides. The southwestern part of the mine has a zero setback distance. The slope requirement for this mine is 1 to 1 (1:1)

above groundwater and 2:1 below groundwater. Setback and slope conditions are exceeded along the eastern wall, and slope conditions are possibly exceeded along the southern wall.

The 2003 Geo-Logic Associates report identified areas of concern for Quarry No. 2. Some of the areas identified in the Geo-Logic Associates report require immediate attention. The 2004 GeoPen Tech report evaluated the Geo-Logic Associates report. The results of both reports are summarized below:

- Section W15 (South Slope) – Seismic displacement analysis on this section of the quarry wall exceeds the 2 centimeter criteria as adopted by the December 2003 Irwindale Slope Stability Guidelines. Therefore, the slope does not meet regulatory requirements. Additionally, the crest of the slope is about 50 feet from the property line. Thus, there is no room to trim the slope to a flatter gradient for remediation.
- Section N59 and N60 (East Slope) – Seismic displacement analysis on this section of the quarry wall exceeds the 2 centimeter criteria as adopted by the December 2003 Irwindale Slope Stability Guidelines. The slope does not meet regulatory requirements. The crest of the slope is about 50 feet from property line, but the slope is steeper than 1:1. Therefore, the slope cannot be trimmed for remediation.

#### *3.2.1.5.2.2 Quarry No. 3*

Quarry No. 3 is approximately 110 acres in size. Dry mining at this facility has been intermittent over the last 10 years. Aggregate (dry) mining in this Quarry will be performed using heavy equipment (e.g., drag lines, bulldozers, and front end loaders). The mined material will be placed on a conveyor system for transport to Quarry No. 4/Production Plant. When mining has ceased at Quarry No. 2 and sufficient groundwater level is reached, the clamshell dredge used at Quarry No. 2 will be moved to Quarry No. 3.

The original mining depth was to 150 feet. The allowable mining depth was increased by the City to a depth of 275 feet in the same resolution granted for Quarry No. 2. As of October 2003, this quarry had produced an estimated 19.9 MCY (29.85 MT) per year. The estimated available permitted aggregate is 7.53 MCY (11.3 MT) for this quarry.

The CUP for this quarry establishes a 100-foot setback distance along the east and south side of the mine and a setback distance of 50 feet along the north and west sides. The slope requirement for this mine is 1 to 1 (1:1) above groundwater and 2:1 below groundwater. Currently, the mine is out of compliance with CUP requirements for slopes along sections of the south and southeastern wall. Additionally, the mine is not in compliance with some setback distances along the southern wall and a small section along the northern wall.

The 2003 Geo-Logic Associates report identified areas of concern for Quarry No. 3. Some of the areas identified in the Geo-Logic Associates report require immediate attention. The 2004 GeoPen Tech report evaluated the Geo-Logic Associates report. The results of both reports are summarized below:

- Section W8 (South Slope) –Seismic displacement analysis on this section of the quarry wall exceeds the 2 centimeter criteria as adopted by the December 2003 Irwindale Slope Stability Guidelines. As a result, the existing slope does not meet the criterion adopted

by the Committee for adequate seismic stability. Additionally, the evaluation of trimming to 50 feet is not considered adequate and other remediation measures are required.

- Section W15 (South Slope) – Seismic displacement analysis on this section of the quarry wall exceeds the 2 centimeter criteria as adopted by the December 2003 Irwindale Slope Stability Guidelines. Therefore, the slope does not meet regulatory requirements. Additionally, the crest of the slope is about 50 feet from the property line. Thus, there is no room to trim the slope to a flatter gradient for remediation, and other remediation measures are required.
- Section W16 (North Slope) - Seismic displacement analysis on this section of the quarry wall exceeds the 2 centimeter criteria as adopted by the December 2003 Irwindale Slope Stability Guidelines. The crest of the slope is about 78 feet from the property line. Additionally, the evaluation of trimming to 50 feet is not considered adequate and other remediation measures are required.
- Slopes in southeast corner of the pit defined by the east property line to Station 6+00S and the south property line to Station 57+00E (underlain by non-engineered fill) were identified in the 2001 Geo-Logic Associates Report. United Rock has submitted remediation plans to the City for review and approval.

#### *3.2.1.5.2.3 Quarry No. 4/ Production Plant*

Quarry No. 4/Production Plant is approximately 75 acres in size. This site is currently used for processing of aggregate mined from Quarry No. 2 and will also be used for processing material recovered from Quarry No. 3.

Aggregate from Quarry No. 2 is washed, sorted by size, and stockpiled for sale to clients. Additionally, the production plant crushes oversize rock or larger materials to produce appropriate size material for sale. Once available aggregate deposits at Quarry No. 2 have been depleted, Quarry No. 4/Production Plant will process material from Quarry No. 3. Although the Production Plant is also referred to and listed as a quarry site, mining is not being contemplated at this time.

The Production Plant also has tenants that operate two asphalt plants, a ready-mix concrete plant, and a construction equipment maintenance facility. These operations are not included as part of the project description being evaluated in this Draft EIR. United Rock sells the rock and/or sand to the on-site asphalt and concrete operations. Contractor haul trucks also operate out of the plant delivering sand and aggregate material in bulk to construction and job sites in the Los Angeles, Riverside, Orange, and San Bernardino counties.

### 3.2.1.6 Soils

Soils in the Irwindale area consist primarily of old dissected alluvium fan deposits of sand and gravel and artificial fill. Major artificial fill areas are found in the Santa Fe Flood Control Dam, along major freeways, or at quarry locations being backfilled as part of reclamation activities.

Alluvium is composed of sand-rich Holocene to late Pleistocene rock. These materials are cataloged as Qal, Qalos, and Qaloc. A diagram of the locations of the soils found in the Irwindale area is provided in Figure 3.2-5. A general discussion of the materials that make up these soils is provided as follows:

- **Qal** – These alluviums are located in the active portion of the San Gabriel River north of and into the Santa Fe Flood Control Basin. These materials consist of reworked Qalos and Qaloc deposits.
- **Qalos** – These materials tend to be located to the fringes of the historical San Gabriel River alluvium fans. These materials consist of stream channel, flood plain, and dune deposits. These materials tend to be fine to medium-course grain older alluvium of the Holocene period.
- **Qaloc** – These materials are located in the northern and central portions of the San Gabriel River fan. These alluviums consist of the historical main stream channel material. As a result, they tend to be very course-grain materials. These materials tend to be composed of older Holocene and Pleistocene materials.

The material located at the United Rock facilities is of Qalos type. Alluvium soils found at the United Rock facilities are generally well drained, have moderately rapid permeability, and have low erosion hazards.

## 3.2.2 POTENTIAL ENVIRONMENTAL IMPACTS

This section discusses potential impacts associated with geologic hazards and soil resources that may be affected or may affect the safety and operational reliability of the Proposed Project. This section also includes mitigation measures designed to avoid or eliminate the impacts or reduce the impacts to a level that is considered less than significant.

Only post reclamation activities will occur at Quarry No. 4/Production Plant. The main change will be the decrease of the production plant site from approximately 75 acres to about 50.37 acres as a result of the street vacation for Buena Vista. All changes as a result of this transfer of land will relate to the analysis performed for Quarry No. 2. Therefore, the following thresholds of significance and resultant impact discussion will address changes only in activities at Quarries No. 2 and 3.

### 3.2.2.1 Methodology and Thresholds of Significance

The significance of potential geological land use impacts was determined based on CEQA guidelines and other relevant considerations. These guidelines identify certain thresholds that should be considered when determining whether an impact is significant or considered less than significant.

CEQA Appendix G states that a project may have a significant impact on geology and soils or be significantly affected by geology and soils if it:

- Exposes people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:

  - Rupture of a known earthquake fault or based on other substantial evidence of a known fault;
  - Strong seismic ground shaking;
  - Seismic-related ground failure, including liquefaction;
  - Landslides;
- Result in substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project
- Be located on expansive soils; or,
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are unavailable.

Therefore, impacts would be considered significant if any component of the Proposed Project meets the significance criteria outlined above.

From a mineral resources standpoint, a project would have a significant impact if it:

- Results in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State; and/or
- Results in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

It should be noted that increased depths and prolonged duration of mineral extraction in Quarry No. 2 and 3 will result in an increase in the extraction of a State identified mineral resource. As a result, the Proposed Project will have a potentially beneficial effect. Therefore, the following impact analysis addresses potential impacts associated with geologic activities (e.g., earthquakes, subsidence, landslides, and liquefaction) on proposed operations and related activities.

## 3.2.2.2 Mining Impact Analysis

### 3.2.2.2.1 Quarry No. 2

Under the Proposed Project, the recently built new Buena Vista Street will be used and the older, existing Buena Vista Street will be vacated and become part of the Quarry No. 2 mining area. With the rerouting of Buena Vista Street, Quarry No. 2 will be expanded by approximately 24.6 acres to the east, for a total size of about 134.6 acres. Figure 2-6 shows the land area to be transferred to Quarry No. 2.

Mining depth would also be increased from 275 feet to a maximum of 410 feet below grade. Figures 2-7 and 2-8 depict the post mining quarry configuration and typical cross sections of the quarry by project phase. Implementation of the Proposed Project would allow for an additional 16.81 million cubic yard (25.22 million tons) to be mined at the site. Slopes and setback distances in the current CUP will not be changed.

Under the proposed changes in mining operation, some of the current CUP issues associated with Quarry No. 2 will be corrected. The setback and slope issues associated with the current conditions along the eastern portion of the quarry will be corrected. Additional land area needed for adequate setback distances is not available to correct slopes along this quarry wall to comply with permit requirements. With approval of the Proposed Project, the over-steepened wall would be considered a working wall, and slopes and setback distances would be corrected as mining proceeds in the easterly direction. Therefore, implementation of the Proposed Project would have a positive effect on geology and soils.

Issues associated with slopes, setback, and safety factors along the other areas identified in the Geo-Logic Associates study will be corrected by the Proposed Project at Quarry No. 2 although these out of compliance issues require correction with or without the Proposed Project.

The main adverse impact associated with the Proposed Project would be a potential decrease in the stability of the slopes and a higher risk of a landslide due to the increase in depth of the mine below the water table. A loss in slope stability and an increase in slope failure potential could result in a landslide of the quarry walls during heavy precipitation periods and/or during a major significant earthquake. Slopes would have to be maintained at 1:1 above the elevation of groundwater and 2:1 below the elevation of groundwater. Although the areas adjacent to the walls do not have population centers, a major wall failure would extend beyond the property line, affecting nearby property. Therefore, the Proposed Project would result in a significant impact unless mitigation measures are incorporated into project design.

#### 3.2.2.2.2 Quarry No. 3

With the Proposed Project, Quarry No. 3 will be permitted to increase the mine depth from 275 feet to a maximum of 440 feet below the top of the quarry. Slopes would have to be maintained at 1:1 above the elevation of groundwater and 2:1 below the elevation of groundwater when underwater mining activities are initiated. Figures 2-9 and 2-10 depict the post mining quarry configuration and typical cross sections of the quarry by project phase. This Proposed Project would increase aggregate production by an estimated 9.61 million cubic yards (which equates to 14.42 million tons). The Proposed Project would result not result in an increase in the extraction rate but would increase the duration of mining in a State identified important mineral resource area.

Issues associated with setback, slopes, and safety factors along the wall and slopes identified in the Geologic study will be resolved by the Proposed Project due to the implementation of remedial measures. Exceedance of permit conditions along the Quarry No. 3 walls will be remediated through compliance with mitigation measures described below.

As mentioned in the above analyses for Quarry No. 2, the Proposed Project to increase the depth of the quarry presents a potential loss in slope stability and an increase in slope failure potential, especially during heavy precipitation periods and/or during an earthquake. Additionally, the areas to the north and west are populated. A failure of the wall and a resultant landslide could pose a risk to property and human lives at these locations. Therefore, the Proposed Project would result in a significant adverse impact in the absence of mitigation.

## 3.2.2.3 Reclamation Impact Analysis

### 3.2.2.3.1 Quarry No. 2

Backfilling Quarry No. 2 with inert material is mandated under United Rock's Reclamation Plan for this site. It is estimated that approximately 59.61 million tons of additional backfill material is required. The main consideration will be compaction of the backfill materials to a level acceptable under Chapter 33 of the 2002 Los Angeles County Building Code or its latest version and shall meet the criteria in City's April 2004 Performance Criteria for Proposed Mine Backfills for post-reclamation land uses.

Improper compaction of inert material deposited in and above the groundwater will result in an increase in liquefaction of the soil at the site during an earthquake. Poor backfill compaction could affect the post-reclamation structures built on the site, resulting in building failure and injury to on-site occupants during a major earthquake. This seismic-induced settlement in backfill could cause differential settlement and would be considered a significant adverse impact. Therefore, mitigation measures will be required to reduce potentially significant impacts associated with site reclamation.

### 3.2.2.3.2 Quarry No. 3

Quarry No. 3 will be reclaimed and backfilled with inert material similar to backfilling being performed at Quarry No. 1 and that proposed for Quarry No. 2. Reclamation of Quarry No. 3 will require approximately 55.56 million tons of clean fill. Reclamation through properly compacted and placed backfill would correct the existing slope and setback issues at the quarry site.

As indicated for Quarry No. 2, the main issue will be compaction of the backfill materials to a level acceptable under the UBC and CBC for post-reclamation land uses. Improper compaction of inert material deposited in and above the groundwater will result in an increase in liquefaction potential of the soil at Quarry No. 3 during an earthquake. This could affect the structural viability of buildings and occupant safety for post-reclamation structures on the site. This seismic-induced settlement in backfill could cause differential settlement and would be considered a significant adverse impact. Therefore, mitigation measures will be required to reduce potentially significant impacts associated with site reclamation.

## 3.2.2.4 Post-Reclamation Impact Analysis

Any post-reclamation development of the lands for Quarries No. 2, 3 and Quarry No. 4/Production Plant would require structures to meet future UBC and CBC requirements. The City has determined and evaluated the potential environmental impacts of the Proposed Project in this Draft EIR based on best available data and the abilities and limitations of current impact assessment practices, recognizing that potential effects of future activities and land uses decades in the future necessarily exceeds the limits of reasonable forecasting and is too speculative to warrant detailed analysis. It is further assumed that all future post-reclamation phases of development will be subject to subsequent discretionary approvals and therefore will be subject to the requirements of CEQA.

## 3.2.3 MITIGATION MEASURES

Slope stability issues associated with an increase in mining depth, over steepened walls, and insufficient setback distances is a potentially significant impact

Geologic and Soil Mitigation – 1:

- Under no circumstances will slopes be allowed to pose a temporary or long-term hazard to the quarry or to off-site locations. All slopes will be cut at an angle of repose, engineered, designed, and/or benched or otherwise protected to ensure long-term stability in accordance with engineering design requirements.
- Current slopes, safety factors, and setbacks not in compliance with permit provisions will be corrected. These corrections can either be backfilled with properly compacted materials, utilization of benches, and/or an engineered correction. All improvements shall be in place prior to project approval.
- As directed by the City Engineer, United Rock will retain a qualified geotechnical engineering consultant to evaluate the potential for geotechnical hazards and unstable soil for all corrective actions. The consultant will evaluate the nature of the steep slope and/or unstable soil hazard for the quarry sites. The evaluation shall be based on guidelines of the December 2003 Irwindale Slope Stability Committee report. Soil testing will be conducted, if needed, to ascertain the depth, lateral extent of unstable materials, and potential.
- The geotechnical engineering consultant will prepare a report that includes recommendations for stabilizing the locations considered to be hazardous. This report shall be submitted to the City for review, comment, and approval prior to implementation.
- The mine depth, slopes, and setback distances will be monitored on an annual basis. The City of Irwindale will be notified of all situations found to be out of compliance with permit requirements. Areas found to be out of compliance will be corrected by United Rock prior to project approval.

Inadequate soil compaction during backfill operation could occur resulting in an increased risk of liquefaction and other earthquake induced hazards.

Geologic and Soil Mitigation – 2:

- All areas of fill or backfill operations in the quarry during mining and reclamation shall be compacted in accordance with Chapter 33 of the 2002 Los Angeles County Building Code or its latest version, (previously identified as Chapter 70 of the Uniform Building Code, established by the International Conference of Building Officials) or other methods approved by the City of Irwindale; and shall meet criteria stated in the April 2004 City of Irwindale Performance, May 2004.
- Quarterly results of compaction samples shall be submitted to the City of Irwindale.

Seismic activity in the United Rock facility area could cause damage to Post-Reclamation facilities.

Geologic and Soil Mitigation – 3:

- All practicable precautions will be taken to design and construct post-reclamation facilities to withstand the projected ground shaking associated with the maximum probable earthquake (MPE) in the area. This includes secondary hazards induced by earthquakes (liquefaction, lurching, lateral spreading, rapid differential settlement, induced landslides, and rock-fall avalanche). The MPE represents the strongest earthquake likely to occur over the design life of the post-reclamation facilities. The geotechnical engineering investigation, prepared by a California licensed geotechnical engineer, shall be in accordance with the April 2004 Irwindale Backfill Performance Specification for existing Mine Backfill Operation, to provide regional seismic design criteria for site development and building design.

Wave action induced erosion effect to quarry walls at groundwater surface.

Geologic and Soil Mitigation – 4:

- To minimize the potential damage from wave action induced erosion effects, quarry walls at groundwater surface shall be reinforced using the recommended practices and procedures of the Army Corps of Engineers, or implement detailed remediation developed in accordance with the May 2004 Guidelines for drainage, erosion control, and water quality control for open pit mines in Irwindale. Such remediation shall receive Lead Agency approval prior to construction.

## 3.2.4 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Mitigation measures will reduce the risk of wall failure at Quarries No. 2 and 3 and insure that good engineering practices are utilized in current and future planning for these sites. Given the nature of potential earthquake risk in the Irwindale area; unknown factors dealing with the alluvium compositions horizontally, vertically, and from site to site; historical fluctuating groundwater levels; the risk of wall failure is expected to remain until site reclamation activities are substantially underway. However, the recommended mitigation measures will reduce impacts to a level that is considered less than significant.

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# SECTION 3.3 HYDROLOGY AND DRAINAGE

This section presents a discussion of the existing hydrology, hydrological conditions and drainage patterns on-site and in the project vicinity as well a discussion of potential impacts of the Proposed Project on hydrology and drainage. The section begins with a description of the regional setting followed by a discussion of applicable federal, State and local regulations. Mitigation measures to avoid, eliminate or reduce potential environmental impacts are also provided.

## 3.3.1 EXISTING SETTING

The United Rock quarries are located within the eastern boundary of the Los Angeles River watershed and immediately adjacent to the San Gabriel River watershed (see **Figure 3.3-1**). The quarries are existing deep excavations and therefore do not generate appreciable runoff to either watershed. The Los Angeles River watershed measures approximately 824 square miles. Approximately 324 square miles of the watershed are covered by forest or open space including the headwaters area originating in the Santa Monica, Santa Susana, San Gabriel and Verdugo Mountains. Major tributaries to the Los Angeles River include the Pacoima Wash and Tujunga Wash. These washes both drain portions of the Angeles National Forest in the San Gabriel Mountains. The Burbank Western Channel and Verdugo Wash drain the Verdugo Mountains. (SWRCB 2004).

The United Rock quarries lie within the Main San Gabriel Groundwater Basin (Basin) aquifer that underlies most of the San Gabriel Valley (see **Figure 3.3-2**). The aquifer is approximately 167 square miles of water-bearing alluvium. The Basin is bound by the San Gabriel Mountains on the north, the San Jose Hills on the east, the Repetto, Merced and Puente Hills on the south and southwest, and the Raymond fault on the northwest. Principal water-bearing formations of the basin are unconsolidated and semi-consolidated sediments which range in size from coarse gravel to fine-grained sands. The major sources of natural recharge are infiltration of rainfall on the valley floor, percolation, and flow of runoff from the adjacent mountains (Watermaster 2004).

Water levels fluctuate substantially in the Basin due to infiltration from major storms, surface water spreading operations along the San Gabriel River, and long-term wet and dry cycles that normally affect southern California (City of Irwindale 2003). Groundwater levels at the Key Well, located in nearby Baldwin Park, is used as the benchmark for determining the groundwater level for the entire aquifer. The elevation of the groundwater fell from 229 feet above mean sea level (msl) in June 2000, to 220 feet above msl in June 2001, and to 212 feet above msl in June 2002 in response to below average annual precipitation years. The Main San Gabriel Watermaster's (Watermaster's) goal is to keep the Key Well water level between 200 and 250 feet above msl. Thus, the groundwater level is near the low end of the recommended operating level for the Basin, but is still adequate for meeting current water needs (Watermaster 2002).

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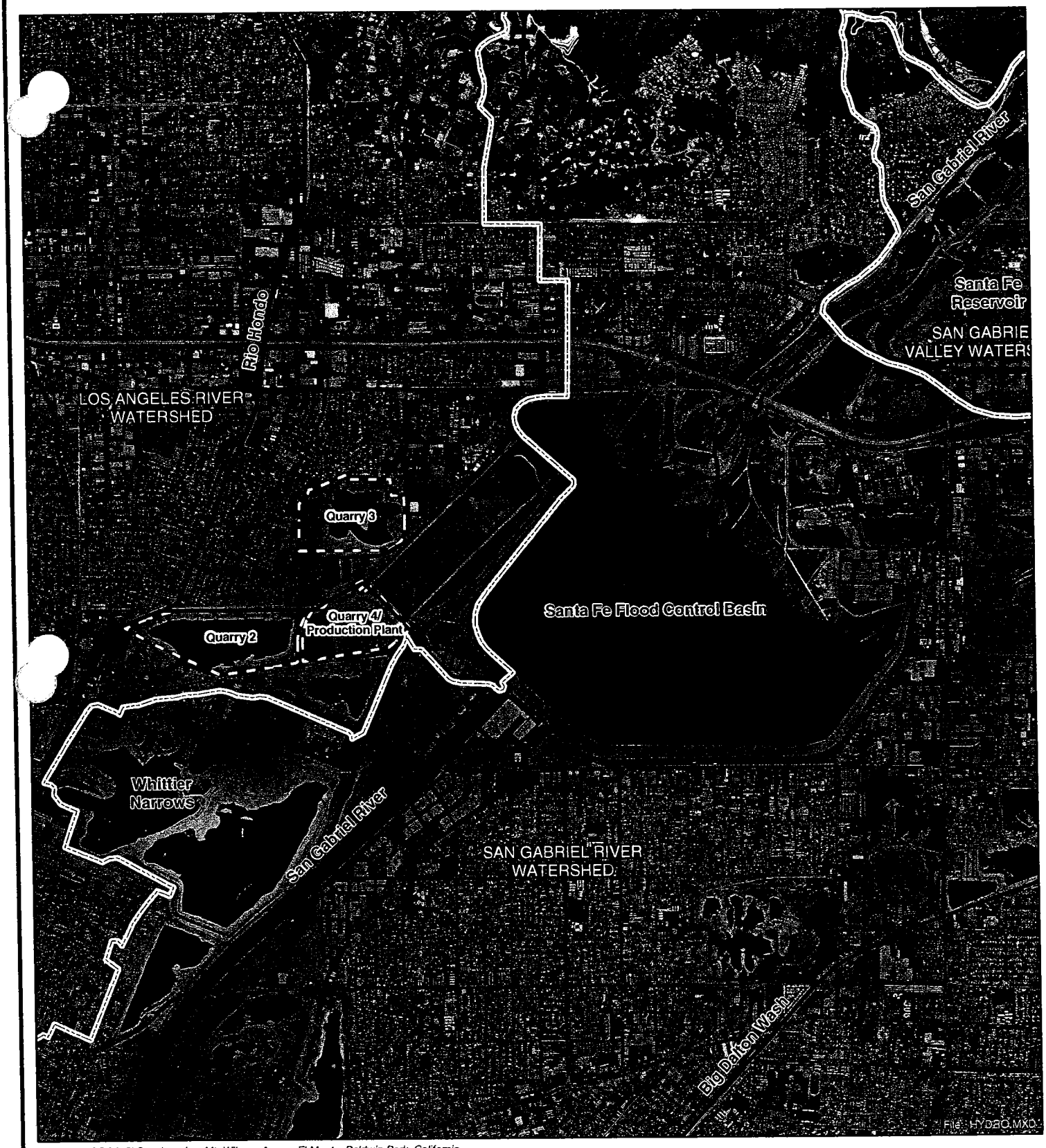


*Source: USGS 7.5' Quadrangles, Mt. Wilson, Azusa, El Monte, Baldwin Park, California.*

**Legend**

- Quarry Boundaries
- Lake/Pond
- Watershed Boundary
- Stream/River

N
W E
S

0 0.25 0.5 1 Miles

Universal Transverse Mercator
North American Datum 1927
Zone 11

**UNITED ROCK QUARRY AND RECLAMATION PLAN EIR**

*FIGURE 3.3-1*
*SURFACE WATER HYDROLOGY*

GREYSTONE®

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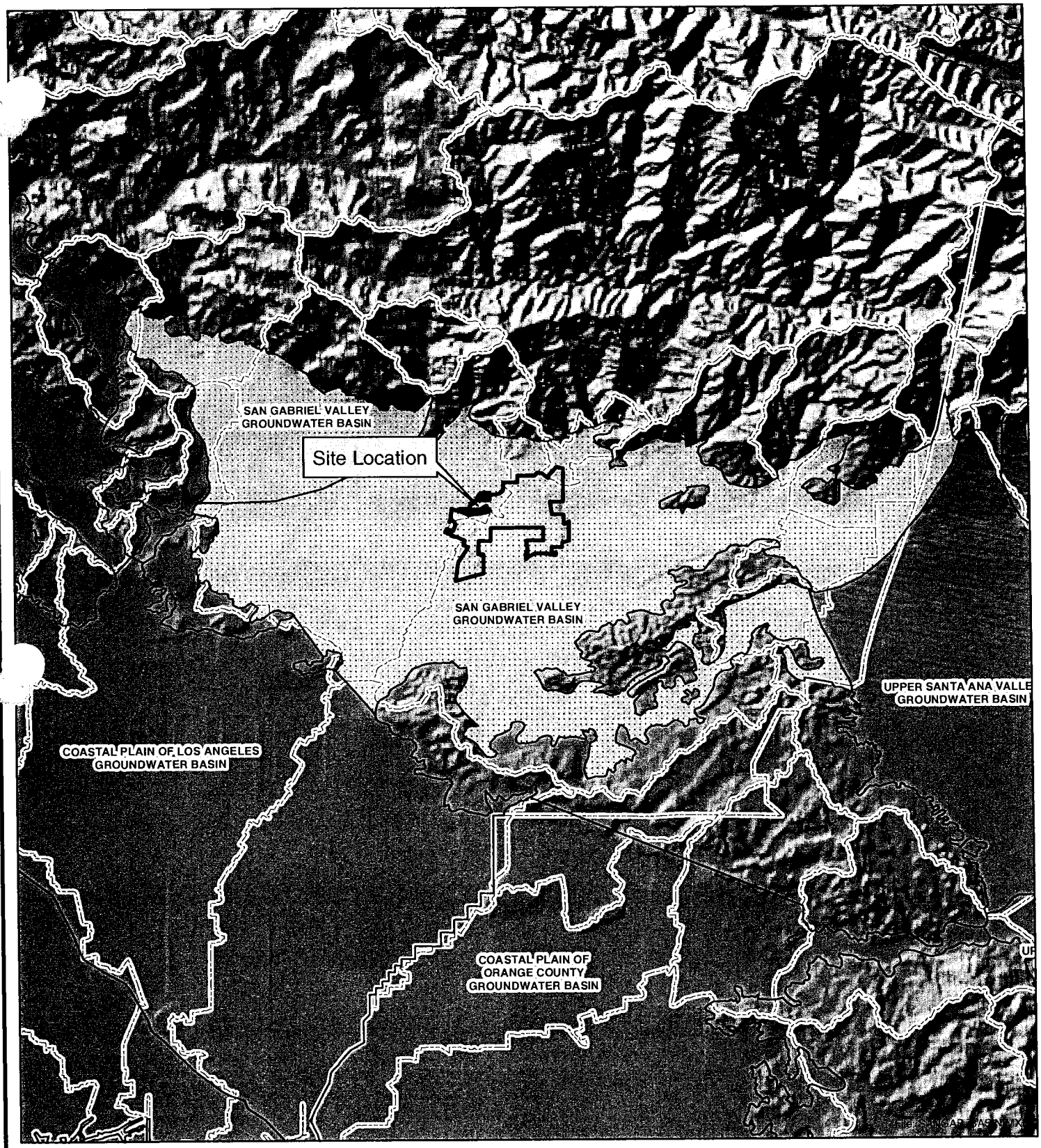


## Legend

- Quarries
- City of Irwindale Boundary
- San Gabriel Groundwater Basin
- Groundwater Basin Boundary
- Watershed Boundary

N
W E
S

0 2.5 5 Miles

Universal Transverse Mercator
North American Datum 1927
Zone 11

UNITED ROCK QUARRY AND RECLAMATION PLAN EIR

*FIGURE 3.3-2*
*MAIN SAN GABRIEL BASIN*

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## 3.3.1.1 Regulatory Setting

### 3.3.1.1.1 Federal Regulations

#### 3.3.1.1.1.1 Federal Clean Water Act (33 U.S.C. 1251 et seq.)

The Federal Clean Water Act (CWA) establishes water quality standards and criteria and programs to maintain beneficial uses of water. For example, CWA Section 208 requires the use of best management practices (BMPs) to control releases of pollutants in stormwater at construction sites. Section 303(d) requires that all activities be evaluated for their effect on impaired water bodies and that plans are made for improving the quality of these water bodies. Section 404 authorizes the Army Corps of Engineers to evaluate projects that will discharge dredge or fill materials into waters of the U.S. and provides mechanisms for wetland protection. Section 401 requires Regional Water Quality Control Boards (RWQCB) to monitor and assure compliance of discharges of dredged and fill material with State water quality standards. Section 402(p)(3)(B)(iii) authorizes the National Pollutant Discharge Elimination System (NPDES) permit program to control water pollution by regulating point sources that discharge pollutants into waters of the United States. Point sources are discrete conveyances such as pipes or man-made ditches.

### 3.3.1.1.2 State Regulations

#### 3.3.1.1.2.1 Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Division 7 of the California Water Code) was enacted to establish a regulatory program to protect water quality and beneficial uses of all waters of the State of California. It created the State Water Resources Control Board (SWRCB) and RWQCB to plan, implement, manage and enforce water quality protection and management. The Los Angeles RWQCB is empowered to require compliance with State and local water quality standards. The NPDES Permitting program is administered by the SWRCB. Issuance of a NPDES Permit requires preparation of a Notice of Intent with the SWRCB and development of a Stormwater Pollution Prevention Program (SWPPP) that incorporates applicable BMPs and a monitoring program.

### 3.3.1.1.3 Local Regulations

#### 3.3.1.1.3.1 Standard Urban Storm Water Mitigation Plan (SUSMP)

The County of Los Angeles prepared a SUSMP to outline the County's action plan to comply with the Municipal Stormwater Permit (NPDES No. CAS0004001). This permit will minimize stormwater discharges within the watersheds of the County of Los Angeles and the incorporated cities of Los Angeles County.

The SUSMP was developed as part of the municipal storm water program to address storm water pollution from new development and redevelopment by the private sector. This SUSMP contains a list of the minimum required BMPs that must be used. Additional BMPs may be required by ordinance or code on a case-by-case basis (County of Los Angeles Department of Public Works 2004).

#### 3.3.1.1.3.2 Los Angeles County Stormwater Ordinance

The Los Angeles County Stormwater Ordinance addresses provisions that apply to the discharge or disposal of any stormwater and/or runoff to the storm drain system and/or receiving waters within any unincorporated area covered by the NPDES municipal stormwater permit.

### 3.3.1.2 Climate and Precipitation

The average high temperature for the City of Irwindale is 78 degrees and the average low is 51 degrees (City of Irwindale 2004). Precipitation averages approximately 17-20 inches per year with 31 days of precipitation. The rainy season extends from November through March (Irwindale City Data 2004).

Average precipitation in the Basin, from 1992-93 to 2001-02 was 18.5 inches. However, during 2001-02, rainfall in the San Gabriel Valley was about 30 percent of average and many portions of the Valley had the lowest amount of rainfall in recorded history. In 2001-02, the San Gabriel Valley received only 5.1 inches of rain, the lowest amount of rainfall on record since records began in 1872 (Watermaster 2002). Therefore, precipitation varies substantially from year to year.

### 3.3.1.3 Surface Water/Stormwater

***Quarry No. 2***

Stormwater runoff and drainage from existing mining operations at Quarry No. 2 is completely contained on site. Drainage and runoff generated on-site is controlled and kept on-site through a system of dikes, berms, silt fences, revegetation efforts, hay bales, and other standard BMP control measures. On-site stormwater is ultimately routed into the open pit quarries. The perimeters of the quarries are generally bermed to control erosion and prevent surface water from flowing over the quarry walls into the pits. Existing erosion control measures will be maintained in such a manner to control erosion and prevent surface water from flowing over the quarry walls. The United Rock quarry sites do not contain any permanent drainages or streams, or any natural drainage courses

The Buena Vista Channel, which is channelized and lined, is located adjacent to the northwest corner of Quarry No. 2. Surface runoff from the quarry does not enter the Buena Vista Channel. Runoff is prevented from entering this waterway through compliance with the 50-foot setback distance requirement at the north wall and through existing implementation of BMPs around the perimeter of the quarry. Quarry No. 2 contains a man-made open water pit created by mining below the existing groundwater table.

The United Rock quarries lie within the 100-year flood plain as described by the Federal Emergency Management Agency (FEMA). The quarry sites are located between approximately 1 and 1.5 miles from the San Gabriel River and the Santa Fe Dam Flood Control Basin. In the event of a 100-year flood, the quarry sites may become inundated (City of Irwindale 2003). The Department of Conservation (DOC) has commented that the Santa Fe Dam Spillway may convey flood flows into the quarries in the event of a catastrophic 100-year or great flood event.

United Rock currently holds one waste discharge requirement (WDR) permit from the Regional Water Quality Control Board (RWQCB). This permit is for the inert landfill operated in Quarry No. 1, where mining has been completed and reclamation is in process. However, Quarry No. 1 is not part of the Proposed Project.

***Quarry No. 3***

Stormwater runoff and drainage from existing mining operations at Quarry No. 3 is completely contained on site. Drainage and runoff generated on-site is controlled and kept on-site through a system of dikes, berms, silt fences, revegetation efforts, hay bales, and other standard BMP control measures. On-site stormwater is ultimately routed into the open pit quarries. The perimeter of the quarries are generally bermed to control erosion and prevent surface water from flowing over the quarry walls into the pits. Existing erosion control measures will be maintained in such a manner to control erosion and prevent surface water from flowing over the quarry walls. The United Rock quarry sites do not contain any permanent drainages or streams, or any natural drainage courses.

The United Rock quarries lie within the 100-year flood plain as described by the Federal Emergency Management Agency (FEMA). The quarry sites are located between approximately 1 and 1.5 miles from the San Gabriel River and the Santa Fe Dam Flood Control Basin. In the event of a 100-year flood, the quarry sites may become inundated (City of Irwindale 2003).

United Rock currently holds one waste discharge requirement (WDR) permit from the Regional Water Quality Control Board (RWQCB). This permit is for the inert landfill operated in Quarry No. 1, where mining has been completed and reclamation is in process. However, Quarry No. 1 is not part of the Proposed Project.

***Quarry No. 4/Production Plant***

Stormwater runoff and drainage from existing operations at Quarry No. 4 / Production Plant is completely contained on site. Drainage and runoff generated on-site is controlled and kept on-site through a system of dikes, berms, silt fences, revegetation efforts, hay bales, and other standard BMP control measures. On-site stormwater is ultimately routed into the detention basin/ sedimentation pond. The perimeter of the quarries are generally bermed to control erosion and prevent surface water from flowing over the quarry walls into the pits. Existing erosion control measures will be maintained in such a manner to control erosion and prevent surface water from flowing over the quarry walls. The United Rock quarry sites do not contain any permanent drainages or streams, or any natural drainage courses.

In addition, Quarry No. 4 / Production Plant contains three on-site sedimentation ponds used to collect and treat all wash water generated from the aggregate washing and sorting operations, as well as all stormwater runoff.

The United Rock quarries lie within the 100-year flood plain as described by the Federal Emergency Management Agency (FEMA). The quarry sites are located between approximately 1 and 1.5 miles from the San Gabriel River and the Santa Fe Dam Flood Control Basin. In the event of a 100-year flood, the quarry sites may become inundated (City of Irwindale 2003).

United Rock currently holds one waste discharge requirement (WDR) permit from the Regional Water Quality Control Board (RWQCB). This permit is for the inert landfill operated in Quarry No. 1, where mining has been completed and reclamation is in process. However, Quarry No. 1 is not part of the Proposed Project.

### 3.3.1.4 Groundwater

The Proposed Project is located within the Basin aquifer. The major features found in the City that affect the availability of local groundwater resources include: surface run-off provided by the San Gabriel Mountains, San Gabriel River flows, the Rio Hondo Dam, the Los Angeles County spreading grounds, and in the numerous recharge basins and exposed groundwater in actively mined quarries.

The County of Los Angeles Department of Public Works operates 20 spreading facilities, used for groundwater recharge, in the San Gabriel Valley. These spreading grounds receive direct runoff and flows from the San Gabriel Mountains. Two spreading facilities are located near the United Rock quarries: the Santa Fe Spreading Grounds (adjacent to and southeast of Quarry No. 3) and the Buena Vista Spreading Grounds (adjacent to and south of Quarry No. 3). Proximity of these wells to the Santa Fe Dam spreading grounds or containment area of the Santa Fe Dam suggests that there is a marked local effect from surface storage and spreading (Geo-Logic Associates 2003).

Quarry No. 4 / Production Plant has two groundwater production wells on site; however, only one well is typically in use while the other remains available for back-up purposes (United Rock, 2004). Approximately 900 acre-feet (AF) per year of groundwater is used for dust suppression at Quarries No. 2 and 3 as well as for dust suppression and aggregate washing at Quarry No. 4/Production Plant. Due to the nature of the use, most of the water evaporates and is not a major contributor to surface water or groundwater discharge (HDR 2003).

Groundwater at Quarry4/Production Plant was measured at 205.6 ft above mean sea level (msl) for the first, second and third quarters of 2003, increasing to 212.2 ft msl for the forth quarter. However, groundwater measured in the same well was 270.7 ft msl in August of 1998, decreasing to 175.7 in August of 2001, declining 95 ft in 3 years. Groundwater flow direction was to the southwest (MACTEC 2004).

In October of 2003, a bathymetric survey (which defines the underwater topography) was performed for United Rock Quarry No. 2 by Mr. Robert Reese, Land Surveyor license No. LS6208. At that time, the depth to the groundwater was measured at 211 ft. msl (179 feet below ground surface [bgs]) and the lowest point on the quarry bottom was measured at 101 ft. msl (289 feet bgs) (Reese 2004).

### 3.3.1.5 Local Surface Water and Groundwater Uses

#### 3.3.1.5.1 Municipal and Public Supply

Local surface water can be stored in reservoirs behind Cogswell, San Gabriel, and Morris Dams. However, in 2002, only 14,400 acre-feet (AF) of water was stored in these facilities due to a year of low precipitation. This storage volume was significantly lower than the 10-year average of 48,000 AF, and was a result of the lowest rainfall on record (Watermaster 2002).

Approximately 81,000 AF of water was imported to the Basin from Northern California and the Colorado River in 2001-02 and consisted of approximately 35,000 AF of treated water and 46,000 AF of untreated water for groundwater recharge. This is greater than the 10-year average of approximately 63,300 AF and is partially the result of increased short-term reliance on treated, imported water to offset the loss of groundwater from wells shut down due to contamination and low water elevations (Watermaster 2002).

#### 3.3.1.5.2 Mining and Industry

United Rock uses approximately 900 AF of water per year for road dust suppression and aggregate washing. The water is obtained by pumping from one of their two deep wells located at Quarry No.4/Production Plant. Therefore, the small quantity of direct groundwater used by United Rock does not have a constraining effect on supply or effect the forecast of local water service providers.

#### 3.3.1.5.3 Water Use and Forecasts

The Watermaster identifies projected water demands to increase regional understanding of the aquifer demands, so that the aquifer can be managed in a way that preserves and improves the overall available water supply and water quality. The San Gabriel Valley Water Company produced 41,746.49 AF of water in the 2001-02 fiscal year. Projected annual groundwater demand for the City from 2002-03 through 2006-07 is 38,528 AF. Groundwater demand projections consider more efficient water conservation techniques, thereby decreasing the future demand relative to existing consumption rates.

According to the Watermaster, local water producers in the area have proposed to construct 12 new wells, build seven treatment plants, replace four wells, and reactivate three wells during the next five years. The Watermaster will continue providing the following services to assist producers in meeting water demands:

- Investigate all new or increased water extractions;
- Provide computer modeling and technical support on treatment issues concerning the impact of extraction on contaminant migration (see Section 3.3.1.5.4);
- Establish priorities for areas requiring further investigation and coordinate with producers on water supply modifications; and
- Direct changes in pumping or treatment as necessary.

#### 3.3.1.5.4 Water Quality and Contamination Issues

The Basin aquifer contains a large Superfund cleanup site regulated by the USEPA. Volatile organic compounds (VOCs) and nitrates are the most prominent contaminants found in the Basin. Since 1991, clean-up has been focused on treating VOCs. The discovery of perchlorate and N-nitrosodimethylamine (NDMA) posed a problem for the existing pump and treatment facilities in place for VOC treatment. Since the recent detection of perchlorate and NDMA, the Watermaster has been instrumental in the successful implementation of five treatment facilities to treat VOCs, perchlorate, and NDMA (Watermaster 2002).

To provide safe drinking water that meets State and federal drinking water standards, 18 treatment plants are treating about 15 billion gallons of VOC-contaminated water each year. Water contaminated with nitrates above the maximum contaminant level (MCL) is either blended with other sources or not used (Watermaster 2002).

Currently, water samples are collected from the quarries, if groundwater is exposed, on a quarterly basis. Results of quarterly monitoring are made available to the City. Implementation of the proposed Project will require the Watermaster and the City Engineer to determine the types of analyses and reporting that United Rock will need to perform as part of the continued groundwater monitoring program. Based on the current groundwater monitoring program, it is anticipated that the annual analysis will include:

- Polycyclic Aromatic Hydrocarbons by EPA Method 8020;
- Halogenated Volatile Organic Compounds by EPA Method 8010;
- pH by EPA Method 150.1;
- Total Suspended Solids by EPA Method 160.2;
- Specific Conductance by EPA Method 120.1; and
- Total Recoverable Petroleum Hydrocarbons by EPA Method 418.1.

**Table 3.3-1**
**Quarry No. 4/Production Plant Groundwater Quality vs. California Drinking Water Standards**
**(Fourth Quarter 2003 Data)**

| Constituent | Units | Recommended Maximum Concentration Level (MCL)[1] | Water Source IRW-1 (August 2003) |
|---|---|---|---|
| **Field Measurements** | | | |
| pH (pH units) | pH units | 6-9 | 7.48 |
| Electrical Conductivity (EC) | µmhos/cm | 900* | 334 |
| Carbon Dioxide ($CO_2$) | ppm | -- | 4 |
| Alkalinity | ppm | -- | 180 |
| **Inorganic** | | | |
| pH (pH units) | pH units | 6-9 | 7.77 |
| Electrical Conductivity (EC) | µmhos/cm | 900* | 406 |
| Total Dissolved Solids (TDS) | mg/L | 450* | 248 |
| Chloride (Cl) | mg/L | 100** | 30 |
| Sulfate ($SO_4$) | mg/L | 100** | 19.7 |
| Nitrate (as N) | mg/L | 10 | 1.00 |
| Boron (B) | mg/L | 0.5** | <0.1 |
| Total Hardness (as $CaCO_3$) | mg/L | -- | 176 |
| Chemical Oxygen Demand (COD) | mg/L | -- | 8.32[J] |
| Bicarbonate ($HCO_3$) | mg/L | -- | 148 |
| Carbonate ($CO_3$) | mg/L | -- | <1 |
| Cadmium (Cd) | µg/L | 5 | <5 |
| Chromium (Cr) | µg/L | 50 | <10 |
| Nickel (Ni) | µg/L | 100 | <10 |
| Lead (Pb) | µg/L | 15*** | <15 |

**Table 3.3-1**
**Quarry No. 4/Production Plant Groundwater Quality vs. California Drinking Water Standards**
**(Fourth Quarter 2003 Data)**

| Constituent | Units | Recommended Maximum Concentration Level (MCL)[1] | Water Source IRW-1 (August 2003) |
|---|---|---|---|
| **Organic** | | | |
| Benzene | µg/L | 1 | <0.25 |
| Trichloroethylene (TCE) | µg/L | 5 | <0.25 |
| Tetrachloroethylene (PCE) | µg/L | 5 | <0.25 |
| Methyl t-butyl ether (MTBE) | µg/L | 13 | <0.5 |
| Vinyl Chloride (VC) | µg/L | 0.5 | <0.25 |

[1] Source: CCR, Title 22, Division 4, Chapter 15.
* Secondary MCL – Established for certain chemicals, characteristics or constituents which affect taste, odor or appearance of drinking water.
** Source: Water Quality Objectives for Ground Waters, Main San Gabriel Basin.
*** Action level – Health-based advisory levels established by the Department of Health Services (DHS), which primary MCLs have not been adopted.
J Analyte detected above the method detection limit (MDL) but below the practical quantification limit (PQL).
NA Not available – water was too turbid to obtain field measurements for $CO_2$ and alkalinity.

The monitoring program will continue through mining operations until reclamation activities have reached a state where the pit has been backfilled to above groundwater levels (HDR Inc. 2003).

Water samples collected quarterly at Quarry No. 4/Production Plant's production well show that both inorganic and organic groundwater quality parameters meet California Drinking Water Standards (see **Table 3.3-1**) (MACTEC 2004).

## 3.3.2 POTENTIAL ENVIRONMENTAL IMPACTS

### 3.3.2.1 Methodology and Thresholds of Significance

#### 3.3.2.1.1 Methodology

The analysis presented below is based on a review of the 1997/1998 Stormwater Pollution Prevention Plan (SWPPP) prepared for the quarries, review of the Initial Study prepared for the Proposed Project, watershed and floodplain maps, water quality databases, the Los Angeles County SUSMP and Stormwater Ordinance, and a site visit conducted in March 2004.

#### 3.3.2.1.2 Thresholds of Significance

According to CEQA Appendix G, the Proposed Project will be considered to have a potentially significant impact on hydrology and/or water quality if it will:

- Violate any water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level;

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional source of polluted runoff;
- Otherwise substantially degrade water quality;
- Place housing within a 100-year flood hazard area as mapped on a FEMA map or other flood hazard delineation map;
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or,
- Inundation by seiche, tsunami or mudflow.

### 3.3.2.2 Mining Impact Analysis

The Proposed Project Quarries No. 2 and 3 are generally self-contained and do not discharge to the San Gabriel River, Rio Hondo or other surface water bodies. Potential impacts of mining operations are restricted primarily to the accumulation of sediments. Processing of mined materials results in fines or very small particles from the washing process that are currently directed to a siltation pond in Quarry No. 4/Production Plant. No changes to Quarry 4 operations are proposed.

Surface runoff and drainage from implementation of the Proposed Project will continue to be controlled by existing berms, silt fences, sediment ponds, revegetation, hay bales, or other control measures, to ensure that surrounding land and water resources are protected from erosion, gullying, sedimentation and contamination.

The 1997/98 SWPPP was reviewed and determined to be generally adequate to continue containing on-site runoff. The SWPPP was prepared in accordance with NPDES General Permit No. CAS0004001. The SWPPP identifies potential pollution sources affecting the quality of stormwater discharged to Quarry No. 4/Production Plant and describes the BMPs currently proposed to address stormwater discharge. The SWPPP states that United Rock has no illicit connections/discharges to the surface drainage system. These BMPs are designed to prevent stormwater from contacting site pollutant sources.

The May 2004 Guidelines for Drainage, Erosion Control and Water Quality Control for Open Pit Mines in Irwindale shall be used to evaluate all erosion control measures, existing BMPs and other related drainage structures. United Rock will be required to implement specific measures as a result of this review of the existing practices.

Due to the nature of the Proposed Project, and with existing BMPs in place, and compliance with May 2004 Guidelines for Drainage, Erosion Control and Water Quality Control for Open Pit Mines in Irwindale, impacts are expected to be less than significant.

## 3.3.2.3 Reclamation Impact Analysis

### 3.3.2.3.1 Erosion and Sedimentation

Reclamation activities, including re-stabilizing the quarry walls and backfilling, could potentially cause erosion and convey silts and polluted runoff to areas outside of the Proposed Project area. Potential impacts could include increased sedimentation of adjacent drainages and polluted water supplies. These impacts have the potential to be significant.

The existing SWPPP will need to be amended when the Proposed Project is implemented to comply with the NPDES permit. Quarry 4/ Production Plant is not subject to NPDES requirements. United Rock's NPDES permit is required to be amended when there is a change in the construction, operation, or maintenance which may affect the discharge of significant quantities of pollutants to surface waters, ground waters, or the municipal storm drain system.

Mitigation measures are provided in Section 3.3.3 to reduce these impacts to a level that is considered less than significant.

## 3.3.2.4 Post-Reclamation Impact Analysis

### 3.3.2.4.1 Stormwater

Post reclamation land uses, as commercial/industrial, will create new pavement and impervious surfaces that will reduce stormwater infiltration and increase the overall runoff coefficient of the site, resulting in additional direct stormwater runoff. Sufficient drainage infrastructure will need to be engineered and installed so that any additional runoff would be conveyed via storm drains to nearby surface waters. Additional retention basins may be needed to further avoid increasing peak flow. Additionally, as part of the Proposed Project, the final design will be required to comply with Los Angeles County SUSMP and implementation of BMPs including retention and infiltration basins to reduce urban runoff. These measures would include development of on-site flood control basins, drain screens and degreasers.

The City has determined and evaluated the potential environmental impacts of the Proposed Project in this Draft EIR based on best available data and the abilities and limitations of current impact assessment practices, recognizing that potential effects of future activities and land uses decades in the future necessarily exceed the limits of reasonable forecasting and is too speculative to warrant detailed analysis. It is further assumed that all future post-reclamation phases of development will be subject to subsequent discretionary approvals and therefore will be subject to the requirements of CEQA.

## 3.3.3 MITIGATION MEASURES

During the reclamation phase of the Proposed Project, potential impacts on hydrology and drainage may be significant unless mitigated. The following mitigation measures are recommended to be implemented to reduce potential adverse impacts to a level that is less than significant:

1. Prior to the reclamation phase of the Proposed Project, United Rock shall develop a SWPPP in accordance to NPDES guidelines and submit it to the City for review and approval. At a minimum, the SWPPP will identify erosion minimization and control BMPs and pollution elimination/minimization BMPs, as well as stormwater runoff water quality monitoring procedures.
2. Surface and groundwater samples shall continue to be collected on an annual basis from Quarries No. 2 and 3 as long as groundwater is exposed. Results will be provided to the City, the Watermaster and the RWQCB.
3. Erosion control measures shall be designed and implemented in accordance with May 2004 Guidelines for drainage, erosion control, and water quality control for open pit mines in Irwindale.
4. United Rock shall implement measures to reduce the potential for hazardous constituents in fill material or to later reclaimed areas through compliance with all Waste Discharge Requirements as established by the RWQCB and prohibit:
    a. the use of hazardous, designated or liquid wastes;
    b. the use of toxic wastes (i.e., insecticides, poisons and radioactive materials)
    c. the use of asbestos or asbestos products;
    d. the use of asphalt products unless places below the high-high water mark.

## 3.3.4 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No impacts would be significant after implementation of the mitigation measures listed above.

# SECTION 3.4 LAND USE AND PLANNING

This section presents a discussion of the existing land use and planning conditions onsite and in the project vicinity as well a discussion of potential impacts of the Proposed Project on the land use plans and policies of the City of Irwindale and surrounding communities. The section begins with a description of the regional setting followed by a discussion of applicable local plans and policies. Mitigation measures to avoid, eliminate or reduce potential environmental impacts are also provided.

## 3.4.1 EXISTING SETTING

### 3.4.1.1 Regulatory Setting

#### 3.4.1.1.1 Federal

As there is no Federal involvement associated with the proposed project (i.e. neither Federal land nor Federal funding would be utilized), Federal land use plans and policies would not apply to the Proposed Project.

#### 3.4.1.1.2 State

##### *3.4.1.1.2.1 Surface Mining and Reclamation Act of 1975*

The Surface Mining and Reclamation Act (SMARA) was enacted by the State of California Legislature in 1975 to address the need for a continuing supply of mineral resources, and to prevent or minimize the impacts of surface mining to public health, property and the environment.

SMARA applies to all government agencies and entities engaged in surface mining operations in California (including those on federally managed lands), which disturb more than one acre or remove more than 1,000 cubic yards of material. This includes, but is not limited to: dredging and quarrying, borrow pitting, and the stockpiling of mined materials (OMR 2004). The Department of Conservation's Office of Mine Reclamation and the SMGB are jointly charged with ensuring proper administration of the Act's requirements.

##### *3.4.1.1.2.2 California Environmental Quality Act*

CEQA requires that project proponents assess potential land use impacts, including project consistency with local land use policies and plans. Consistency with local land use plans and policies is one of several criteria that can be used to assess whether a project could have significant environmental impacts under the provisions of CEQA.

#### 3.4.1.1.3 Local

Both the 1973 General Plan and the 2004 Draft General Plan Update guide land development in the City by defining specific areas in which certain types of development would and would not be allowed to be developed.

#### 3.4.1.1.3.1 City of Irwindale General Plan

The City of Irwindale has initiated a comprehensive update to the existing approved General Plan, which was originally adopted on June 12, 1973. The 1973 General Plan provides a general guideline for development within the City and plans for six land use categories that include low density residential, commercial, open space, town center, industrial, and parks and recreational (see **Figure 3.4-1**). The Draft General Plan Update seeks to provide a more specific direction for future development within the city and contains a total of 15 land use categories. The Draft General Plan Update designates the Quarries 2 and 3 as "Industrial" and Quarry 4/Production Plant as "Regional Commercial". All the sites are within the Quarry Overlay. Designations of the surrounding areas include Regional Commercial, Commercial Recreation, and Open Space.

#### 3.4.1.1.3.2 1973 General Plan

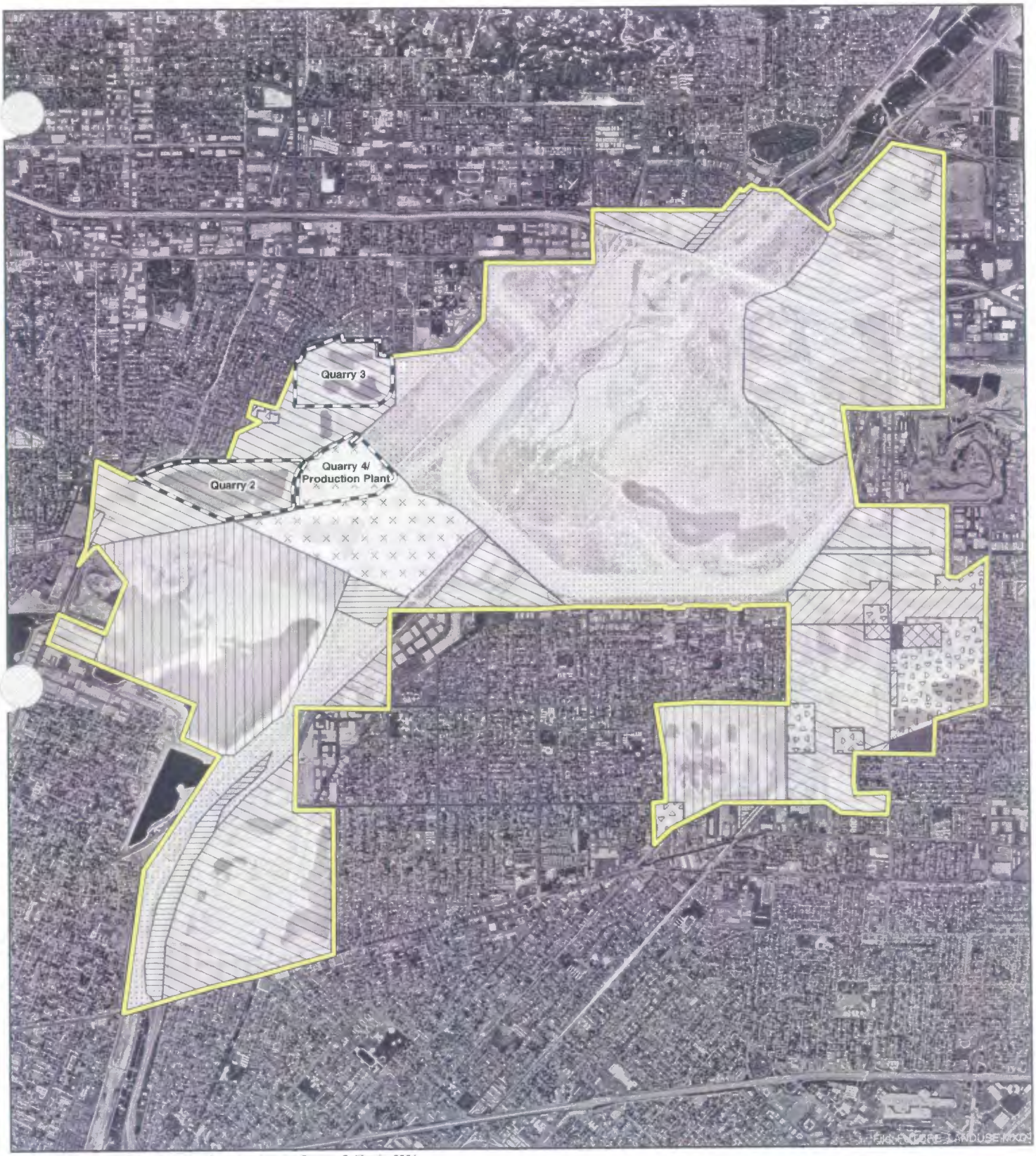
The 1973 General Plan "Industrial" designation applies to 59 percent of the city and the land is employed primarily for use as quarries/mines. The 1973 General Plan states that, "it is likely that a considerable amount of industrial land will ultimately be developed as light industrial, manufacturing, or recreational facilities." Considering future closures, the 1973 General Plan encourages the development of a comprehensive plan for these areas in regard to future uses. Additionally, the 1973 General Plan states that, "it is apparent that it is physically impossible to fill all the quarries back to their original states," therefore, a restriction on future uses exists (Irwindale, 1973).

#### 3.4.1.1.3.3 2004 Draft General Plan Update

As shown in **Figure 3.4-2**, the Draft General Plan Update currently anticipates designation of Quarries 2 and 3 of the project as "Industrial" with the Quarry Overlay. Quarry No. 4/Production Plant would be designated as "Regional Commercial" also with a Quarry Overlay (Irwindale, 2003). The definitions of these designations are presented below.

- **Regional Commercial**. This category of land use is designed to encourage a balanced mix of commercial, office professional, and light manufacturing uses along a number of high-visibility traffic corridors. The maximum development intensity for this designation is a 2.0 to 1.0 Floor Area Ratio (FAR) (i.e., on a one acre parcel (43,560 square feet), up to 87,120 square feet of development would be permitted).[1]
- **Industrial/Business Park**. The Industrial designation corresponds to the CM (Commercial Manufacturing), M-1 (Light Manufacturing), and the M-2 (Heavy Manufacturing) zones. The FAR for this category is 1.0 to 10, though the majority of parcels included in this designation will have FARs ranging between 0.5 to 0.8 due to the need for surface parking and loading areas.
- **Quarry/Quarry Overlay**. This land use designation applies to the quarry uses in the City.

[1] Regional Commercial permits an FAR up to 2.0. Although this FAR does not create any land use issues, the traffic analysis for post reclamation uses the City directed FAR of 0.5. If the FAR of 2 is permitted by the City, traffic generated will be greater and should be addressed.




*Source: USDA, NRCS Orthophoto Mosaic for Los Angeles County, California, 2001.*

## Legend

- City of Irwindale Boundary
- Quarry Boundary
- Commercial
- Commercial Recreation
- Easement
- Industrial
- Institution
- Open Space
- Parks
- Regional Commercial
- Residential

N
W E
S

0 0.25 0.5 Miles

Universal Transverse Mercator
North American Datum 1927
Zone 11

UNITED ROCK QUARRY AND RECLAMATION PLAN EIR

*FIGURE 3.4-2*
*PROPOSED GENERAL PLAN UPDATE*
*LAND USE MAP*

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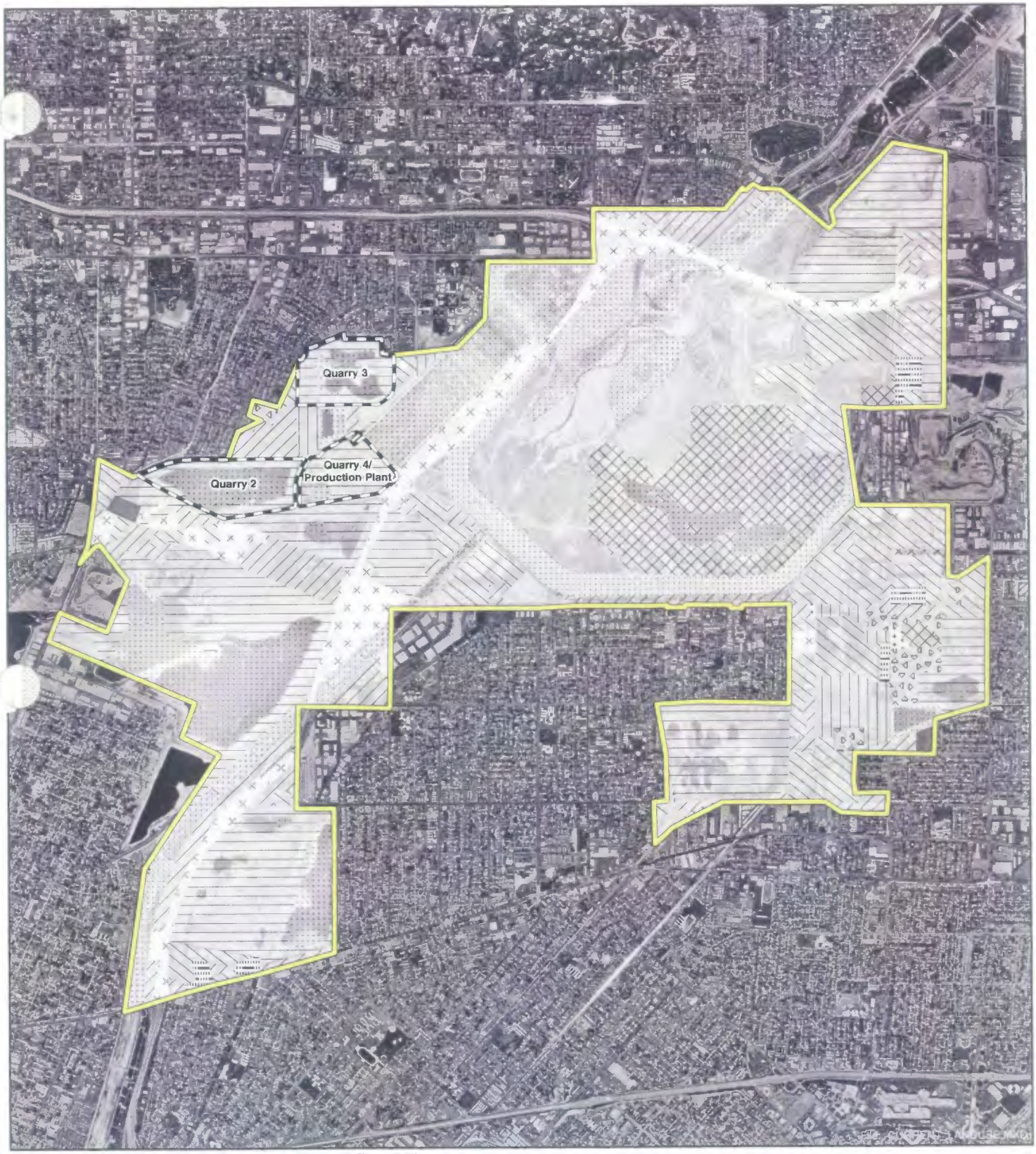


*Source: USDA, NRCS Orthophoto Mosaic for Los Angeles County, California, 2001.*

## Legend

- City of Irwindale Boundary
- Quarry Boundary
- Commercial
- Construction
- Extraction
- Industrial
- Institution
- Mixed Commercial and Industrial
- Parks
- Public Facilities
- Residential
- Transportation and Utilities
- Vacant
- Water and Floodways

N
W E
S

0 0.25 0.5 Miles

Universal Transverse Mercator
North American Datum 1927
Zone 11

UNITED ROCK QUARRY AND RECLAMATION PLAN EIR

*FIGURE 3.4-1*
*EXISTING LAND USE MAP*

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Proposed policies in the Draft General Plan Update's Community Development Element direct the City to plan for the transition of the quarries within the City to alternative uses (Community Development Element (CDE) Policy 2), while permitting quarry operations as long as feasible consistent with existing codes and regulations (CDE Policy 11). In addition, the Draft General Plan Update CDE Policy 8 calls on the City to promote the development of a regional commercial center.

According to the Resource Management Element of the Draft General Plan Update, mines and quarries within the City must be reclaimed / rehabilitated in accordance with SMARA. This policy is further reinforced by existing City Ordinance 356, Mining Permits and Reclamation Plans (General Plan Update 2003). The Draft Resource Management Element contains a description of the three quarries, which identifies that Quarries 2 and 3 are being operated under the current CUP and reclamation plans. Quarry 4 / Production Plant is identified as being used for materials stockpiling and processing only, with its reclamation plan included with those of Quarries 2 and 3. The reclamation plan states that no further mineral commodities are to be removed from Quarry 4. (Irwindale, 2003)

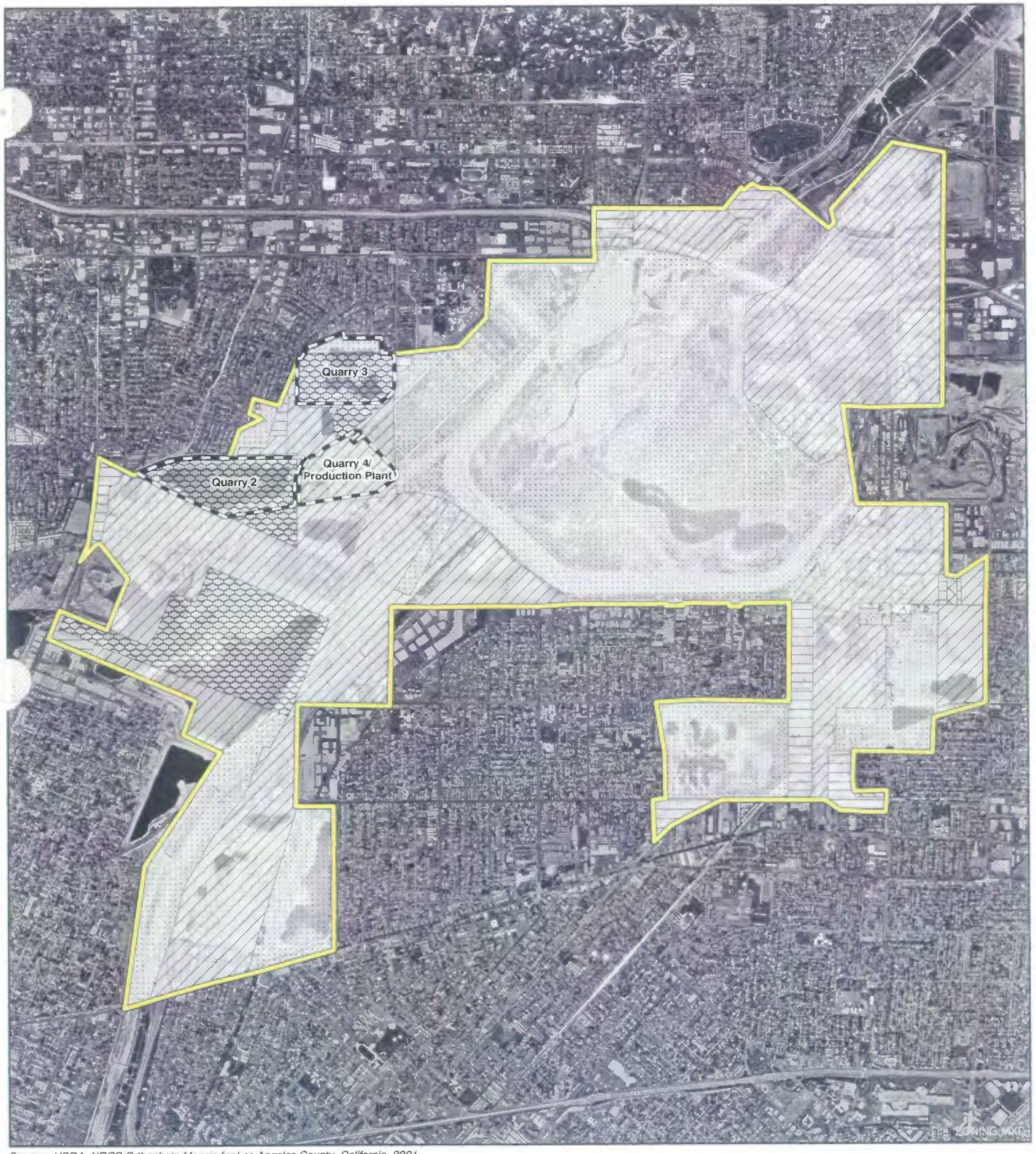
#### *3.4.1.1.3.4 City of Irwindale Zoning Ordinance –Title 17*

The City's Zoning Ordinance implements the policies of the City of Irwindale General Plan by regulating the distribution and intensity of land uses. The purpose of the Zoning Ordinance is to serve the needs of development within the City and to promote the public health, safety, welfare and general prosperity with the aim of preserving a wholesome, serviceable and attractive community.

Quarries No. 2 and 3 are designated as "Quarry" (Q) and Quarry 4/Plant Site is designated "Heavy Manufacturing" (M-2), (see **Figure 3.4-3**).

Section 17.60.010 of the Zoning Ordinance details the following permitted uses within the Q designation, provided a conditional use permit is obtained:

1. Any use first permitted in the M-2 zone, subject to the limitations set forth in this chapter;
2. Quarries;
3. Asphalt plants;
4. Batching plants;
5. Dumps, inert solid;
6. Block, tile or specialty plants, using or processing crushed rock, sand, gravel, decomposed granite or similar material; and
7. Accessory uses; provided, such uses are established on the same lot or parcel of land, are incidental to, and do not substantially alter the character of any use permitted above, including, but not limited to signs, aggregate dryers, truck storage, equipment and supply storage, scales or weighing equipment and office and repair shop structures. (Ord. 245 §1(part), 1971: prior code §9500).
8. Any similar use not listed in this section but determined by the Planning Commission to require a conditional use permit.




*Source: USDA, NRCS Orthophoto Mosaic for Los Angeles County, California, 2001.*

## Legend

- City of Irwindale Boundary
- Quarry Boundary
- Agricultural
- Commercial Manufacturing
- Commercial Residential
- Heavy Commercial
- Heavy Manufacturing
- Light Manufacturing
- Neighborhood Commercial
- Quarry Zone
- Single Family Residential

N
W E
S

0 0.25 0.5 Miles

Universal Transverse Mercator
North American Datum 1927
Zone 11

UNITED ROCK QUARRY AND RECLAMATION PLAN EIR

*FIGURE 3.4-3*
*CURRENT ZONING MAP*

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Uses permitted in the M-2 Zone are detailed in Section 17.56.010 of the Zoning Ordinance. The M-2 zone includes 25 specific uses that would be considered an allowable use within that zone as well as any permitted use within the M-1 zone subject to all the limitations and restrictions set forth in the M-1 zone. Mining is not a permitted use by right within either manufacturing zone. Allowable uses include but are not limited to: roofing material manufacturing; statuary manufacturing and wood products manufacturing (excluding planing mill). Mining is allowed upon the issuance of a CUP in the M-1 and M-2 zones. Other uses conditioned upon obtainment of a CUP also are allowed. These include but are not limited to blast furnaces; cement, lime, gypsum, plaster-of-Paris manufacturing and gas manufacturing and storage.

#### *3.4.1.1.3.5 Southern California Association of Governments*

The Southern California Association of Governments (SCAG) is an organization of municipalities within the southern California region. SCAG functions as the Metropolitan Planning Organization for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The federal government mandates SCAG to research and draw up plans for transportation, growth management, hazardous waste management, and air quality. SCAG acts as an areawide clearinghouse for regionally significant projects and reviews them for consistency with regional plans. Guidance provided by these reviews is intended to assist local agencies and project sponsors to take actions that contribute to the attainment of regional goals and policies. As developed in the Planning for Integrated Land Use and Transportation (PILUT) process for SCAG's Regional Transportation Plan, applicable SCAG policies for various phases of the Proposed Project are:

3.03 The timing, financing, and location of public facilities, utility systems, and transportation systems shall be used by SCAG to implement the region's growth policies.

3.18 Encourage planned development in locations least likely to cause environmental impact.

3.22 Discourage development, or encourage the use of special design requirements, in areas with steep slopes, high fire, and seismic hazards.

3.23 Encourage mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resources, measures that would reduce exposure to the seismic hazards, minimize earthquake damage, and to develop emergency response and recovery plans.

3.27 Support local jurisdictions and other service providers in their efforts to develop sustainable communities and provide, equally to all members of society, accessible and effective services such as: public education, housing, health care, social services, recreational facilities, law enforcement, and fire protection.

4.02 Transportation investments shall mitigate environmental impacts to an acceptable level.

4.04 Transportation Control Measures shall be a priority

4.16 Maintaining and operating the existing transportation system will be a priority over expanding capacity.

5.07 Determine specific programs associated actions needed (e.g., indirect source rules, enhanced use of telecommunications, provisions of community based shuttle services, provision of demand management based programs, or vehicles-miles-traveled/emission fees) so that options to command and control regulations can be assessed.

5.11 Through its environmental review process, SCAG should help ensure that plans at all levels of government (regional, air basin, county, subregional and local) consider air quality, land use, transportation, and economic relationships to ensure consistency and minimize conflicts.

9.05 Minimize potentially hazardous developments in hillsides, canyons, areas susceptible to flooding, earthquakes, wildfire and other known hazards, and areas with limited access for emergency equipment.

9.06 Minimize public expenditure for infrastructure and facilities to support urban type uses in areas where public health and safety could not be guaranteed.

9.07 Maintain adequate viable resource production land, particularly lands devoted to commercial agriculture and mining operations.

9.08 Develop well-managed viable ecosystems of known habitats or rare, threatened and endangered species, including wetlands.

11.07 Encourage water reclamation throughout the region where it is cost-effective, feasible and appropriate to reduce reliance on imported water and wastewater discharges. Current administrative impediments to increased use of wastewater should be addressed.

#### *3.4.1.1.3.6 Los Angeles County Metropolitan Transportation Agency*

As detailed in Section 3.8 Traffic/Circulation, Los Angeles County Metropolitan Transportation Agency (MTA) has developed a Congestion Management Program (CMP). As required by statute, Los Angeles' CMP includes a Land Use Analysis program to analyze the impacts of local land use decisions on the regional transportation system, including an estimate of the costs of mitigating those impacts.

### 3.4.1.2 Regional Land Use Setting

The City of Irwindale is located in the eastern portion of Los Angeles County within the San Gabriel Valley (see Figure 2-1, Regional Location). The City is generally bounded on the north by Duarte, on the east by Azusa, on the south by Baldwin Park, and on the west by the cities of Monrovia, Arcadia, and Duarte and islands of unincorporated Los Angeles County (see Figure 2-2 Site Location Map).

The San Gabriel Valley and the surrounding cities have a wide variety of land uses including residential communities, commercial/retail shopping centers, and manufacturing and industrial developments. As shown in **Table 3.4-1,** the development of residential, commercial and industrial uses in Irwindale are substantially less than those of the surrounding cities.

**Table 3.4-1**
**Comparison of Irwindale's Land Uses With Neighboring Cities**
**(Percentage of Total Land Area Devoted to Major Land Uses)**

| City | Residential | Commercial | Industrial |
|---|---|---|---|
| Irwindale | 1% | 0.25% | 15% |
| Azusa | 54% | 14% | 32% |
| Baldwin Park | 63% | 9% | 13% |
| Covina | 49% | 10% | 4% |
| Duarte* | 25% | 3% | 2% |
| El Monte | 58% | 18% | 10% |
| Monrovia | 78% | 9% | 13% |
| West Covina | 76% | 20% | 4% |

* The figures shown for the City of Duarte are lower by comparison due to the inclusion of substantial amounts of National Forest lands within the City's corporate boundaries.
Source: Irwindale, 2003

## 3.4.1.3 Local Land Use Setting

While the surrounding communities have a number of different land uses, a large portion of Irwindale is used for sand and gravel mining, with quarries located throughout the City. Active and inactive quarries, and Quarry No. 4/Production Plant represent 1,631.24 acres, or 26.83 percent of the City's 6,080 acres. Another dominant land use feature in the City is the Santa Fe Flood Control Basin for the San Gabriel River. The Flood Control Basin covers 1,920.26 acres, or 31.58 percent of the City, and consists of the Santa Fe Dam and the open space behind the dam, which is used as a recreational area. With approximately 60 percent of the City used either for mining or flood control along with rights of way for roads and railroads, the remaining land available for residential and commercial development has been limited. The policies of the City's Draft General Plan Update are directed at reclaiming the quarries, upon cessation of mining activities for other alternative uses that support and advance the City's long-term vision for the City.

### 3.4.1.3.1 United Rock Quarry No. 2

United Rock Quarry No. 2 is located on the western boundary of the City. Longden and Live Oak Avenues and Arrow Highway bound the quarry on the south. The City's boundary with the City of Monrovia and an unincorporated section of Los Angeles County called the South Monrovia islands is to the west and north. Buena Vista Street (both the existing, soon to be vacated and the new alignment) are located to the east of Quarry No. 2.

The quarry is in current operation with mining being conducted underwater with a clamshell dredge. Material is transported to the plant site via a new conveyor belt that goes under both the old and new Buena Vista Streets. No hauling of aggregate via trucks is done from this site. Employee cars and small service vehicles enter and leave the site via an exit on Buena Vista near Arrow Highway. Currently old Buena Vista remains open to through traffic. However, the City plans to vacate the old street and re-route traffic to the new alignment. United Rock proposes to utilize the land area under the existing Buena Vista Street for mineral extraction upon the City's opening of the new alignment of Buena Vista Street.

The existing land uses surrounding Quarry No. 2 are as follows: to the south are the United Rock Quarry No. 1, the Hanson Aggregates Quarry, and the Irwindale Speedway. Quarry No. 1 is currently being reclaimed, operating as a landfill and being reclaimed with inert construction debris and other clean fill materials. The Hanson Aggregates Quarry is an active mine, and the Speedway is an existing auto racing commercial-recreation venue. Along Live Oak Avenue there are some small industrial operations consisting of truck storage yards and building supply businesses.

Along the northern boundary of Quarry No. 2 there are residences within the South Monrovia Islands of unincorporated Los Angeles County. Further north and east within the City of Irwindale are additional quarry related support areas and yards. To the east beyond Buena Vista Street is the United Rock Quarry 4/Production Plant, which is described further below.

#### 3.4.1.3.2 United Rock Quarry No. 3

United Rock Quarry No. 3 is located on the north and western boundary of the City. The City of Duarte bounds the site to the west and north, the alignment of Buena Vista to the east and Meridian Street to the South. This quarry has been intermittently mined since 1997.

Currently Quarry No. 3 is and will continue to be only being intermittently mined until Quarry No. 2 mining operations cease. During mining operations, a conveyor belt system will be used to transport material to Quarry No. 4/Production Plant similar to that used currently in Quarry No. 2.

The land uses to the south of Quarry No. 3 include Quarry No. 2 located to the southwest and the Quarry No. 4/Production Plant located to the south. Along Meridian Street and Bateman Avenue there are two business/industrial parks. The flood control spillway channel is to the east. The Department of Conservation has expressed a concern that in the event of a major catastrophic flood event, Quarry No.3 could become inundated with flood flows emanating from the Santa Fe Dam Spillway.

Along the northern side of the quarry are residential units, which are located in the City of Duarte. Also in the City of Duarte approximately one half mile northeast of the quarry is the City of Hope Medical Center.

#### 3.4.1.3.3 Quarry No. 4/United Rock Production Plant

Quarry No. 4/Production Plant is located in the Northwest section of the City. Buena Vista Street is to the north and west; Arrow Highway is to the south; and the Santa Fe Dam spillway channel and Interstate 605 is to the north and east. United Rock's processing plant is located here, which is sometimes identified as Quarry No. 4/Production Plant. Activities include crushing, sizing and washing the material received currently from Quarry No. 2, and from Quarry No. 3 in the future. Stockpiles are located in this pit pending sales. In addition to United Rock's operation, there are tenants who operate a batch plant and two asphalt plants. United Rock sells the asphalt plant tenants material used in making asphalt and also sells to the ready-mix plant. There is also another tenant that operates a construction equipment maintenance yard.

South of the Production Plant is the Quarry No. 1 reclamation site, and further south is the Irwindale Speedway. To the west is Quarry No. 2 and to the north is Quarry No. 3.

## 3.4.2 POTENTIAL ENVIRONMENTAL IMPACTS

This section identifies the potentially significant adverse impacts on land use plans and policies and suggested mitigation measures for the Proposed Project.

### 3.4.2.1 Methodology and Thresholds of Significance

The potential impacts associated with the proposed project are evaluated through a qualitative comparison of the anticipated impacts of the Proposed Project and the existing baseline conditions. Impacts to land use can occur from both a physical and regulatory standpoint. The impacts associated with the physical land use involve the physical differences between the anticipated project effects and the existing site and area conditions. The impact analyses associated with the regulatory requirements are evaluated through a policy analysis of the various planning policies and regulations with jurisdiction over the project. These impacts are assessed through the following significance criteria.

The significance of potential land use impacts was determined based on CEQA guidelines (CCR §§ 15000-15387, Appendix G). The proposed Project would be considered to have significant land use impacts if it were to:

- Physically divide an established community;
- Permanently displace existing, developing, or approved urban/industrial buildings or activities over a substantial area (i.e., residential, commercial, industrial, extractive, governmental, or institutional);
- Conflicts with any applicable land use plan, zoning ordinance, land use policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects, including applicable Habitat Conservation Plans (HCPs) and environmentally sensitive lands.

### 3.4.2.2 Mining Impact Analysis

Implementation of the Proposed Project would not physically divide any established community. Proposed operations would not permanently displace any existing or future development since the mining activities are current and will continue until Quarries No. 2 and No. 3 are exhausted, reclaimed and redeveloped with future uses. The Proposed Project would modify the existing entitlements and CUP between United Rock and the City. These modifications would not change existing operations but would allow for the continuation of existing operations and mineral extraction at greater depths.

The existing approved General Plan and the draft proposed General Plan Update designate the areas of the mining activities as permitted uses therefore no conflict with existing or proposed land use plans would occur. The impacts of the Proposed Project mining activities on land use plans and policies would be less than significant. No mitigation measures are required.

### 3.4.2.3 Reclamation Impact Analysis

Both SMARA and plans, policies and ordinances require that once mining activities have discontinued, the mined area is to be reclaimed. While there are communities to the north and

west of the Proposed Project area, none of these would be significantly affected by reclamation activities. Reclamation is assumed as part of the future General Plan land use and zoning plans and policies. Therefore, impacts would be less than significant and no mitigation measures are required.

### 3.4.2.4 Post-Reclamation Impact Analysis

The post-reclamation redevelopment of the Quarries is planned to be consistent with the draft General Plan land use map and related policies. Post reclamation redevelopment for Quarries No. 2 and 3 would consist of Industrial/Business Park uses. Although there are residential uses to the north and west of the Quarries, the development of these sites would be within the existing envelope of the quarries and therefore would not divide any existing community.

The Proposed development of the Industrial and Regional Commercial uses would occur after the materials are removed from the quarries and the reclamation process, as required by state and local regulation, would begin. Therefore, the Proposed Project would not represent a displacement of existing, developing, or approved extractive activity over a substantial area.

The current General Plan and CUP for Quarries No. 2 and No. 3 have post-reclamation uses of the areas as Open Space. It should be noted that the proposed changes in the planned post-reclamation land uses for these sites is a change on paper only. There would be no actual loss of existing open space resources within the City of Irwindale. No impacts to existing public recreation, other public use benefit or habitat loss would occur due to the change in planned post-reclamation land uses for these sites.

The City's General Plan Update and the proposed modification of the applicant's CUP would permit development of Industrial and Regional Commercial uses on the sites, and includes a Quarry Overlay which would permit mining and mining related activities. The General Plan Update is anticipated to be approved in 2004. The General Plan Update land use designation of Regional Commercial does not currently have any comparable zone within the City's Zoning Ordinance. However, it is anticipated that concurrent with approval of the General Plan update, the zoning code would be amended to include a similar and consistent classification and would therefore be in place well before any post-reclamation land uses are developed as part of the Proposed Project. Although not required, the mitigation measure listed below is suggested to reduce the potential for land use and zoning inconsistencies regulating future land uses that may be developed as part of the Proposed Project.

The City has determined and evaluated the potential environmental impacts of the Proposed Project in this Draft EIR based on best available data and the abilities and limitations of current impact assessment practices, recognizing that potential effects of future activities and land uses decades in the future necessarily exceeds the limits of reasonable forecasting and is too speculative to warrant detailed analysis. It is further assumed that all future post-reclamation phases of development will be subject to subsequent discretionary approvals and therefore will be subject to the requirements of CEQA.

## 3.4.3 MITIGATION MEASURES

No impacts would be significant with implementation of the Proposed Project. Therefore, no mitigation measures are required. However, implementation of the measure below is suggested to ensure future land use plans and zoning designations and requirements are internally consistent with regard to regulating future post-reclamation land uses.

- The City of Irwindale shall establish a Regional Commercial zoning designation within Title 17 (Zoning) of the Irwindale Municipal Code. Adoption of said zone will be consistent with the definition of the Regional Commercial land use designation in the City General Plan Update.

## 3.4.4 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No impacts would be significant with implementation of the Proposed Project.

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This section presents a discussion of the general noise characteristics in the project area, followed by a discussion of the existing noise sources and applicable Federal, State and local noise regulations. This section also contains an analysis of potential noise impacts associated with implementation of the Proposed Project and recommended mitigation measures to reduce potential adverse impacts.

## 3.5.1 EXISTING SETTING

Sound is technically described in terms of the loudness (amplitude) of the sound and frequency (pitch) of the sound. The standard unit of measurement of the loudness of sound is the decibel (dB). Decibels are based on a logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner more similar to the Richter scale used to measure earthquakes. Noise has been defined as unwanted sound.

Commonly heard sounds have complex frequency and pressure characteristics. Accordingly, sound measurement equipment has been designed to account for the sensitivity of human hearing to different frequencies. Correction factors for adjusting actual sound pressure levels to correspond with human hearing have been determined experimentally. For measuring noise in ordinary environments, the A-weighted (dBA) correction factors are employed. The adjustment for human hearing de-emphasizes the very low and very high frequencies of sound in a manner similar to the response of the human ear. Therefore, the dBA measurement is a good correlation to a human's subjective reaction to noise. As a result, the dBA scale is the basis for most noise ordinances and standards.

Noise is known to have several adverse effects on people. From these known effects of noise, criteria have been established to help protect the public health and safety and prevent disruption of certain human activities. This criteria is based on such known impacts of noise on people such as hearing loss, speech interference, sleep interference, physiological responses and annoyance. Each of these potential noise impacts on people are briefly discussed in the following narratives:

**HEARING LOSS** is not a concern in community noise situations of this type. The potential for noise induced hearing loss is more commonly associated with occupational noise exposures in heavy industry or very noisy work environments. Noise levels in neighborhoods, even in very noisy airport environs, are not sufficiently loud to cause hearing loss.

**SPEECH INTERFERENCE** is one of the primary concerns in environmental noise problems. Normal conversational speech is in the range of 60 to 65 dBA and any noise in this range or louder may interfere with speech. There are specific methods of describing speech interference as a function of distance between speaker and listener and voice level.

**SLEEP INTERFERENCE** is a major noise concern for traffic noise. Sleep disturbance studies have identified interior noise levels that have the potential to cause sleep disturbance. Note that sleep disturbance does not necessarily mean awakening from sleep, but can refer to altering the pattern and stages of sleep.

**PHYSIOLOGICAL RESPONSES** are those measurable effects of noise on people that are realized as changes in pulse rate, blood pressure, etc. While such effects can be induced and observed, the extent is not known to which these physiological responses cause harm or are a sign of harm.

**ANNOYANCE** is the most difficult of all noise responses to describe. Annoyance is a very individual characteristic and can vary widely from person to person. What one person considers tolerable can be quite unbearable to another of equal hearing capability.

The equivalent sound pressure level ($L_{eq}$) is defined as the average noise level, on an energy basis, for a stated period of time (e.g., hourly or daily). In practice, the level of a sound source is conveniently measured using a sound level meter that includes an electrical filter corresponding to the A-weighted curve. The sound level meter also performs the calculations required to determine the $L_{eq}$ for the measurement period.

The following discussion sets a basis of familiarity with known and common noise levels. A quiet whisper at five feet is 20 dBA; a residential area at night is 40 dBA; a residential area during the day is 50 dBA; a large and busy department store is 60 dBA; a typical construction site is 80 dBA; a subway train at 20 feet is 90 dBA; and a jet takeoff at 200 feet is 120 dBA. **Table 3.5-1** lists the reference noise of various recognizable noise sources.

**Table 3.5-1**
**Typical Sound Levels Measured in the Environment and Industry**

| Noise Source at a Given Distance | A-Weighted Sound Level in Decibels | Noise Environments | Subjective Impression |
|---|---|---|---|
| Civil Defense Siren (100 ft) | 140 | | |
| | 130 | | Limits Amplified Speech |
| Jet Takeoff (200 ft) | 120 | | Pain Threshold |
| | 110 | Rock Music Concert | |
| Pile Driver (50 ft) | 100 | | Very Loud |
| Ambulance Siren (100 ft)<br>Freight Cars (50 ft) | 90 | Boiler Room<br>Food Blender<br>Printing Press Plant | Hearing Loss |
| Pneumatic Drill (50 ft) | 80 | In Kitchen With Garbage Disposal Running<br>Very Noisy Restaurant | Complaints Likely |
| Freeway (100 ft) | 70 | | Moderately Loud<br>Complaints Possible |
| Vacuum Cleaner (10 ft) | 60 | Data Processing Center | |

**Table 3.5-1**
**Typical Sound Levels Measured in the Environment and Industry**

| Noise Source at a Given Distance | A-Weighted Sound Level in Decibels | Noise Environments | Subjective Impression |
|---|---|---|---|
| Department Store | 60 | Normal Conversation | |
| Light Traffic (100 ft) | 50 | Private Business Office<br>Dishwasher in Next Room | Acceptable Noise |
| Large Transformer (200 ft) | 40 | Quiet Urban Area at Nighttime | Quiet |
| Soft Whisper (5 ft) | 30 | Quiet Bedroom | Very Quiet |
| | 20 | Recording Studio<br>Rural Area at Nighttime | |
| | 10 | | Hearing Threshold |

Source: U.S. EPA 1974 and compilation of data from a number of private and governmental agency sources.

In determining the daily level of environmental noise, the difference in response of people to daytime and nighttime noises must be accounted for. Nighttime exterior background noises are generally lower than daytime levels. Most household noise also decreases at night and exterior noise becomes more noticeable. Further, most people sleep at night and are sensitive to noise intrusion. To account for human sensitivity to nighttime noise levels, the Community Noise Equivalent Level (CNEL) was developed. CNEL is a noise index that accounts for the greater annoyance of noise during the evening and nighttime hours. CNEL values are calculated by averaging hourly $L_{eq}$ sound levels for a 24-hour period, and apply a weighting factor to evening and nighttime $L_{eq}$ values. The weighting factor, which reflects the increased sensitivity to noise during evening and nighttime hours, is added to each hourly $L_{eq}$ sound level before the 24-hour CNEL is calculated. For the purposes of assessing noise, the 24-hour day is divided into 3 time periods, with the following weighting.

| | | |
|---|---|---|
| Daytime: | 7:00 a.m. – 7:00 p.m. | Weighting factor of 0 dBA |
| Evening: | 7:00 p.m. – 10:00 p.m. | Weighting factor of 5 dBA |
| Nighttime: | 10:00 p.m. – 7:00 a.m. | Weighting factor of 10 dBA |

This results in the following formula used to calculate CNEL:

$$CNEL = 10 * \log \{1/24 [12 * (10^{Ld/10}) + 3 (10^{(Le+5)/10}) + 9 * (10^{(Ln+10)/10})]\}$$

Where: $L_d$ is the average daytime noise level $L_{eq}$ dBA.
$L_e$ is the average evening noise level
$L_n$ is the average nighttime noise level $L_{eq}$ dBA.

The Day-Night Sound Level ($L_{dn}$) differs from the CNEL in that it divides the day into only two periods, with the following weighting:

| | | |
|---|---|---|
| Daytime: | 7:00 a.m. – 10:00 p.m. | Weighting factor of 0 dBA |
| Nighttime: | 10:00 p.m. – 7:00 a.m. | Weighting factor of 10 dBA |

This results in the following formulation to calculate $L_{dn}$:

$$L_{dn} = 10 * \log \{1/24 [15 * (10^{Ld/10}) + 9 * (10^{(Ln+10)/10})]\}$$

Where: $L_d$ is the average daytime noise level $L_{eq}$ dBA.
$L_n$ is the average nighttime noise level $L_{eq}$ dBA.

Increases in A-weighted noise level can be described in the following ways:

- Except in carefully controlled laboratory experiments, humans cannot perceive a change of 1 dBA;
- Outside the laboratory, a 3 dBA change is considered a reasonable perceivable difference;
- A change in noise level of at least 5 dBA is required before any noticeable change in community response would be expected; and
- A 10 dBA increase is subjectively heard as approximately a doubling in loudness, while an increase of 20 dBA is four times as loud, and so on (Beranek 1988).

To calculate the noise level at a given distance from a noise source, the noise levels are mathematically propagated using the Inverse Square Law of Noise Propagation. Briefly, this formulation states that noise decreases by approximately six dBA with every doubling of the distance from the source. This methodology is represented by the following formula:

$$L_2 = L_1 - 20 \log (R_2/R_1)$$

Where:
$L_1$ = Noise level measured at a distance $R_1$ from the source.
$L_2$ = Noise level at a selected distance $R_2$ from the source.

**Table 3.5-2** is provided to demonstrate how construction noise would decrease with distance using the above mathematic formula:

**Table 3.5-2**
**Noise Level Decreases with Distance from Construction**

| Distance (feet) | Noise Level (dB) |
|---|---|
| 50 | 91 |
| 100 | 85 |
| 500 | 71 |
| 1,000 | 65 |
| 2,500 | 57 |
| 5,000 | 51 |

## 3.5.2 EXISTING CONDITIONS

### 3.5.2.1 General Background Noise Sources

Noise analysis customarily focuses on "sensitive receptors" (i.e., noise-sensitive land uses such as residences, hotels, churches, auditoriums, schools, libraries, hospitals, and parks). Sensitive receptors within the City and close to the various United Rock facilities are limited. A discussion regarding the location and activities regarding "sensitive receptors" near the United Rock facilities is below:

- **Quarry No. 2** – This is an active quarry site. A residential area is located approximately 600 feet northwest of the quarry. This residential area is currently approximately half a mile from clamshell dredge activity in the quarry, and the dredge is well below the line of site of these residents Quarry No. 4/Production Plant is located to the east, and commercial/industrial facilities are located to the south and west of the quarry. The Irwindale Speedway is southeast of Quarry No. 2.
- **Quarry- No. 3** – This pit is currently mined only intermittently. Residential areas are located along a portion of the northeastern and northwestern property lines as well as all along the northern portion of the quarry site. Commercial and industrial facilities are located toward the southwest and southern sections of the quarry.
- **Quarry No. 4/Production Plant** – The production plant is used to process material from Quarry No. 2. Material from this quarry is brought to the site via a conveyor belt under Buena Vista Street. The material is sorted at the facility to meet material demands of United Rock customers. Oversized material is crushed. The facility also has asphalt and cement plants. No residential areas are located near this facility. Interstate 605 is along the southeastern corner of the facility. Arrow Highway and United Rock Quarry No. 1 are located to the south, and Quarry No. 2 is to the west. Commercial/industrial buildings across from Buena Vista Street are to the northwest of the plant. An undeveloped area is located toward the northeast.

A figure showing general land uses near the United Rock facilities is provided in Figure 3.4-1.

### 3.5.2.2 Noise Survey

The purpose of the noise survey was to develop and analyze data regarding the noise environment created by mining operations within the City, particularly the United Rock facilities under examination in this EIR. Determining the noise environment near the mines consists of conducting noise measurements near operational locations of the mines and conducting general environmental noise measurements near the mines. This noise data will be used to evaluate:

- The overall noise environment of mining operations (baseline);
- The noise levels from mobile equipment operating within the mine;
- The noise levels generated by haul trucks transporting aggregate from the mines;
- The current impact of mining operations on noise sensitive areas near the quarries; and
- The cumulative affect of major environmental noise sources (e.g., freeway) near the mines.

### 3.5.2.3 Methodology

A noise survey was conducted in the City area from November 19 to 21, 2003 by Greystone as part of another project. Two types of surveys were performed during this period (Greystone 2003).

The first survey was a short-term survey at various locations in or near various Irwindale mining operations. The main purpose of this survey was to develop general information associated with noise levels at quarry operations and the production plant. Therefore, short-term monitoring was performed at or near the property line of several mining sites within the City to:

- Obtain overall noise levels generated at the location (baseline noise levels); and
- Obtain general measurements of peak noise level generated by mobile equipment operating at the quarry.

Short-term noise level measurements were taken over a continuous 2-hour period using a Quest Technologies, Model 2700. The noise meter was set on the dBA scale and on the fast response mode. The highest and lowest noise measurements every five minutes were recorded on worksheets. Therefore, 24 high and 24 low noise measurements were recorded for each mine. The noise measurements taken for each location is provided in Appendix E.

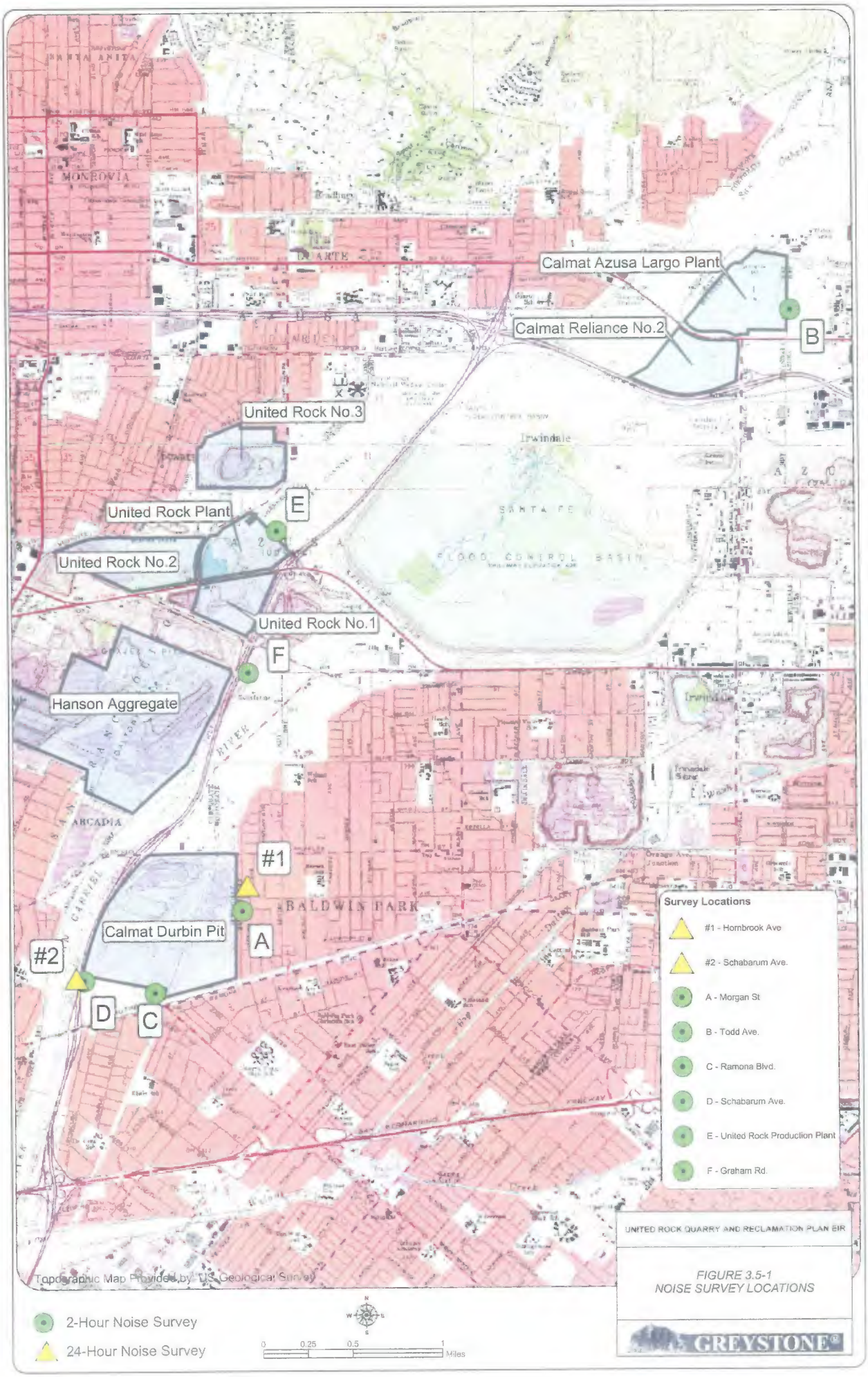
Short-term noise surveys were performed at the following locations:

- **CalMat Azusa Largo** – Noise survey conducted at 751 Todd Avenue on November 19, 2003.
- **CalMat Durbin** – Noise survey conducted between Buildings 12961 and 12941 in a commercial park of Ramona Boulevard on November 20, 2003.
- **Quarry No. 4/Production Plant** – Noise survey conducted in an undeveloped area north of the facility on November 20, 2003.
- **Hanson Aggregates** – Noise survey conducted on Graham Road on November 21, 2003.

The noise monitoring locations for the above locations is presented in **Figure 3.5-1**.

Noise levels measurements taken at the CalMat Azusa Largo locations will be used to assess noise levels from dry mining operations that will initially be performed at Quarry No. 3. Noise levels at the CalMat Durbin site will be used to determine noise associated with haul trucks and general mining operations, and noise levels at the Quarry No. 4/Production Plant will be used to determine production noises. Noise levels at the Hanson Aggregates facility will be used to establish haul truck noise levels and general background noise levels of Interstate-605 (I-605).

The second type of noise measurements taken in the City were long-term measurements. The main purpose of this type of survey was to determine the overall noise environment for mining operations and traffic on the I-605. Therefore, two 24-hour noise surveys were performed to determine the noise level generated by mining operations and the I-605 during daytime and evening. The first site was near I-605 and the second site was at a distance of 100 feet from I-605 to evaluate noise attenuation with distance from the freeway.


Calmat Azusa Largo Plant
Calmat Reliance No.2
B
United Rock No.3
United Rock Plant
E
United Rock No.2
United Rock No.1
F
Hanson Aggregate
#1
Calmat Durbin Pit
A
#2
D
C
Survey Locations
#1 - Hombrook Ave
#2 - Schabarum Ave.
A - Morgan St
B - Todd Ave.
C - Ramona Blvd.
D - Schabarum Ave.
E - United Rock Production Plant
F - Graham Rd.
Topographic Map Provided by U.S. Geological Survey
2-Hour Noise Survey
24-Hour Noise Survey
0 0.25 0.5 1 Miles
UNITED ROCK QUARRY AND RECLAMATION PLAN EIR
FIGURE 3.5-1
NOISE SURVEY LOCATIONS
GREYSTONE

Long-term noise level measurements were conducted using a MetroSonics DB3080 datalogger. The datalogger was set to record the average noise level ($L_{eq}$), the noise level exceeded 10 percent of the time ($L_{10}$), and the noise level exceeded 90 percent of the time ($L_{90}$) for one-hour periods. Noise levels measurements at these locations were conducted from November 19, to 21 November 2003. The noise measurements taken for each location are provided in Appendix E.

The two long-term noise survey locations are given as follows:

- Back yard of 4213 Hornbrook Avenue
- Approximately one hundred feet from the edge of the eastbound lane of I-605 at 12761 Schabarum Avenue.

The noise monitoring locations for the above locations are provided in **Figure 3.5-1**.

Long-term noise measurements on 4213 Hornbrook Avenue will be used to determine general overall baseline noise levels from mining operations. The measurements taken at Schabarum Avenue will be used to ascertain noise levels associated with the I-605. Additionally, the two locations are approximately one mile apart along level terrain. Therefore, these two measurements can be used to obtain noise attenuation with distance from the I-605.

### 3.5.2.4 Noise Survey Results

The results of the short-term noise survey performed for the four locations are provided in **Table 3.5-3**.

**Table 3.5-3**
**Equipment Noise Survey Results**

| Location | Distance from Facility Operating Area (feet) | Noise Levels (dBA) | | |
|---|---|---|---|---|
| | | High | Low | Average |
| CalMat Durbin | 50 and 1,300* | 73.0 | 53.9 | 63.4 |
| CalMat Azusa Largo | 1,400 | 64.9 | 56.5 | 60.7 |
| Quarry No 4/Production Plant | 1,000 | 68.0 | 62.3 | 65.2 |
| Hanson Aggregate | 30 | 87.8 | 61.4 | 74.6 |

* 50 feet represents the distance from the survey point to aggregate haul truck routs and the 1,300 feet represents the distance to the main production site.
Source: Greystone 2003

The average low noise measurements given in Table 3.5-3 for CalMat Durbin, CalMat Azusa Largo, and Quarry No. 4/Production Plant represents the baseline noise level for aggregate production facilities within the City. The baseline noise level is the noise level generated by the rock crushing facility, belt conveyor systems, deposits of graded aggregate, and other general steady state noise sources. Therefore, the average low noise levels from this type of equipment at the quarry's property line range from approximately 54 to 62 dBA.

The average high noise measurements given in the above table at CalMat Azusa Largo and Quarry No. 4/Production Plant represent average levels of mobile equipment (e.g., dump trucks, front end loaders, bull dozers, and other on-site vehicles) operating within the facility. Measured average high noise levels for these facilities were 65 and 68 dBA at the quarry's property line.

The high average noise measurements given in Table 3.5-3 for CalMat Durbin and Hanson Aggregates represent product haul trucks transporting material to various off-site construction sites. Noise levels from these trucks average 88 at 30 feet and 73 dBA at 50 feet. Consequently, haul trucks represent the most significant noise source associated with aggregate production within the City. However, significant noise impacts do not occur within the City or to nearby residential areas from these trucks for the following reasons:

- Trucks are routed away from noise sensitive areas near production plant sites;
- Trucks use major transportation arteries and adjacent freeways;
- Truck traffic at the production plant generally operate from 7:00 a.m. to 7:00 p.m.; and
- Truck traffic within the production plant site is directed along roadways adjacent to commercial or industrial land uses.

Long-term twenty-four hour noise levels are presented in **Table 3.5-4**.

**Table 3.5-4**
**24- Hour Noise Level Measurements**

| | Noise Levels (dBA) | | | | |
|---|---|---|---|---|---|
| | $L_{eq}$ | $L_{10}$ | $L_{90}$ | $L_{dn}$ | CNEL |
| Morgan Street (Location 1) | 55 | 59 | 48 | 43 | 44 |
| Schabarum Avenue (Location 2) | 79 | 81 | 76 | 75 | 76 |
| Source: Greystone 2003 | | | | | |

An analysis was performed to determine whether the noise at Morgan Street is associated with mining operation or noise attenuation from I-605 (the Schabarum Avenue location). This comparison was performed using the inverse square low mentioned previously. The distance between Location 1 and 2 is approximately one mile. The calculated noise attenuation between these two location using CNEL values is provided as follows:

$$L_2 = L_1 - 20 \log (R_2/R_1) = 76 - 20 \log (5{,}280/100) = 76 - 34 = 42 \text{ dBA}$$

This calculated value is in good agreement with the measured value of 44 dBA and confirms that the major noise source in this area is the I-605 Freeway.

Additionally, long-term noise measurements were taken near I-605 at 12761 Schabarum Avenue. This noise survey location was taken approximately 100 feet from the east edge of the freeway. The measured results indicated that the average high noise level was 84.9 dBA, and the average low noise level was 72.1 dBA. Calculated noise attenuation over distance using the inverse square law for this location is provided in **Table 3.5-5**.

**Table 3.5-5**
**Noise Attenuation with Distance from Interstate 605**

| Distance (feet) | Noise Level (dBA) | | |
|---|---|---|---|
| | High Level | Average Level | Low Level |
| 100 | 85 | 79 | 72 |
| 200 | 79 | 73 | 66 |
| 400 | 71 | 67 | 60 |
| 800 | 65 | 59 | 54 |
| 1,320 (1/4 mile) | 63 | 57 | 50 |
| 2,640 (1/2 mile) | 57 | 51 | 44 |
| 3,960 (3/4 mile) | 53 | 47 | 40 |
| 5,280 (1 mile) | 51 | 45 | 38 |

The City has also conducted a noise impact assessment and found that the major noise source in the area was related to traffic along freeways and major roadway segments. A traffic noise analysis using the Federal Highway Administration "FHWA Highway Traffic Noise Prediction Model" (FHWA-RD-77-108, December 1978) was performed for the major roadways in the City. This model used traffic volume, vehicle mix, vehicle speed, and roadway geometry to compute noise levels.

The results of the modeling are presented in **Table 3.5-6**.

**Table 3.5-6**
**Noise Measurements Survey Results by the City of Irwindale**

| Roadway Segment | CNEL (at 50 ft.) | Distance to CNEL Contour (ft.) | | | |
|---|---|---|---|---|---|
| | | 55 CNEL | 60 CNEL | 65 CNEL | 70 CNEL |
| Interstate 210 (Foothill Freeway) | 72.3 | 2,157 | 1,930 | 993 | 110 |
| Interstate 605 (San Gabriel River Freeway) | 74.1 | 2,303 | 2,120 | 1,220 | 125 |
| Arrow Highway (north of Live Oak) | 63.1 | 1,100 | 750 | 510 | 15 |
| Arrow Highway (between Live Oak & Irwindale) | 61.7 | 1,215 | 727 | 493 | 27 |
| Arrow Highway (east of Irwindale) | 61.3 | 1,201 | 693 | 373 | 19 |
| Foothill Boulevard | 61.0 | 975 | 427 | 210 | 0 |
| Irwindale (north of Arrow) | 60.7 | 750 | 375 | 163 | 0 |
| Irwindale (south of Arrow) | 60.5 | 501 | 320 | 110 | 0 |
| Live Oak Avenue | 58.2 | 275 | 101 | 47 | 0 |

Source: City of Irwindale 2003

The above roadway segments near the United Rock facilities are I-605, Arrow Highway (north of Live Oak), and Live Oak Avenue. These roadway segments will be used to establish general background noise levels for the area.

## 3.5.3 NOISE ENVIRONMENTS

### 3.5.3.1 Quarry No. 2

The main noise sources at Quarry No. 2 site are a floating clamshell type dredge and a conveyor system. The clamshell dredge is used to recover aggregate material (e.g., sand, gravel, and rock) below the groundwater, and the conveyor system is used to transport the recovered material to the Quarry No. 4/Production Plant, located to the east of the site. The only other noise generated at the site is related to truck engines from the approximately 20 vehicle trips to the quarry carrying supplies and personnel to the site and for maintenance on the dredge or conveyor system.

The clamshell type dredge is relatively quiet for construction type equipment with noise levels ranging from approximately 60 to 70 dBA at 50 feet. Also, the dredge is operating about 180 feet below grade; and therefore, not in a line-of-site with noise sensitive areas to the northwest of the quarry. The noise level estimated at the nearest residence would vary from 45 dBA if the dredge operated near the eastern portion of the mine to 35 dBA when the dredge operates toward the western side of the quarry. These noise levels would not exceed current background levels at the residences and are within regulatory requirements. Noise levels associated with the conveyor system are likely to be in the 50 to 60 dBA range at 50 feet. However, the conveyor system operates along the southeastern side of the mine and away from the nearest residence. Noise levels from the conveyor system would not be noticed at this residence.

Operations at the Quarry No. 2 are from 6:00 a.m. to midnight six days per week. Additionally, during peak demands, the quarry could operate 24-hours per day, 7-days per week. Calculated maximum noise levels from dredge activities operating near these residents would be approximately 45 dBA. It is likely that during very quiet hours (e.g., 10:00 p.m. to 5:00 a.m.) noise from dredging operations would hardly be noticeable by the nearest residents. This noise level is well within the recommended guidelines given in the regulations. Additionally, the City of Irwindale has not received complaints from the operation at Quarry No. 2 so it is concluded that it does not represent a significant noise impact to these residents.

The residential area to the northwest of the quarry is approximately 5,000 feet from I-610 and 1,000 feet from the intersection of Arrow Highway and Live Oak Avenue. Table 3.5-5 and Table 3.5-6 estimates that I-610 noise levels would range from 38 to 51 dBA at the nearest residents. Noise levels given in Table 3.5-6 for Arrow Highway and Live Oak Avenue would be from 50 to 55 dBA. Therefore, noise levels from these roadways would exceed and subsequently mask the noise levels generated at the quarry site.

### 3.5.3.2 Quarry No. 3

Quarry No. 3 has been intermittently mined and a conveyor system is already constructed and in place at the quarry. Due to fluctuations in groundwater, initial mining operations at the site would likely be performed using construction type equipment (e.g., bulldozers, drag lines, and front end loaders). Noise levels generated by this type of equipment are provided in **Table 3.5-7**.

**Table 3.5-7**
**Typical Noise Levels from Construction Equipment**

| Equipment | Typical Noise Level (dBA) at 50 feet | Equipment | Typical Noise Level (dBA) at 50 feet |
|---|---|---|---|
| Air Compressors | 81 | Backhoes | 80 |
| Compactors | 82 | Mobile Cranes | 83 |
| Bull Dozers | 85 | Generators | 81 |
| Jack Hammers | 88 | Loader | 85 |
| Rock Drills | 98 | Trucks | 88 |

Source: U.S. EPA 1971

Residential areas are located along the northern and along portions of the eastern and western boundary of the quarry.

Studies performed by the U.S. Environmental Protection Agency (U.S. EPA) found that site clearing and excavation noise levels varied from 85 to 91 dBA at a distance of 50 feet. U.S. EPA projected that the average noise for excavation activities would be approximately 89 dBA at a distance of 50 feet. Calculated noise levels using the monitoring data for CalMat Azusa Largo quarry in Table 3.5-3 indicated the average noise level for dry mining is 90 dBA at distance of 50 feet. It is likely that initial operations at Quarry No. 3 would generate comparable noise levels. Calculated noise levels for nearby residents would range from 55 to 65 dBA, depending upon the location of the equipment within the quarry. These noise levels would exceed the recommended guidelines, especially if evening and nighttime operations took place.

Once quarry operations have reached below the groundwater table at this site and mining operations at Quarry No. 2 have ended, the clamshell dredge will be moved from Quarry No. 2 to Quarry No. 3. Therefore, noise levels discussed above for dredging would occur at Quarry No. 3 when the active phase of mining is initiated in approximately 2018. When mining at the Quarry No. 3 is performed using the clamshell dredge, noise levels would range from approximately 40 to 48 dBA, depending upon the distance of the clamshell dredge from the nearest residents. These noise levels are within the recommended guidelines for residential areas.

The residential area to the north of Quarry No. 2 is approximately 4,000 feet from I-605. Noise estimates in Table 3.5-5 projects freeway noise at the nearest residence to be in the 40 to 53 dBA range, and noise model results in Table 3.5-6 estimate the noise level to be approximately 50 dBA. Therefore, dry mining activities may at times exceed these background noise levels, but dredging operations would likely not be noticed at the nearest residence, except during the evening and nighttime periods and when maintenance activities occur.

### 3.5.3.3 Quarry No. 4/Production Plant

As shown in Table 3.5-3, noise levels at the production plant varied from 62 to 68 dBA with an average of 65 dBA at distance of 1,000 feet. These noise levels were taken toward the northwest of the plant near Buena Vista Street. The lower noise levels represent general operations at the plant (e.g., rock crushing, sorting, and conveyors), and the higher noise levels are associated with vehicles (e.g., haul trucks, front-end loaders, passenger cars, and pickups).

Other than plant operations, the main ambient or background noise source as experienced at the Quarry No. 4/Production Plant site is related to traffic on I-605. The quarry site is within the 100 to 2,500 foot noise envelope of this freeway. As shown in Table 3.5-5, I-605 noise levels would range from a high range of 63 to 85 dBA during traffic flows during the day to a low range of 46 to 72 dBA during quiet evening hour traffic. $L_{eq}$ noise levels would be in the 57 to 79 dBA range. If evening and nighttime penalties were applied, CNEL levels would be from about 49 to 76 dBA, and $L_{dn}$ would be approximately 47 to 75 dBA. Noise level modeling results in Table 3.5-6 estimate CNEL noise levels for the production plant to range from 55 to 70 dBA.

## 3.5.4 REGULATORY SETTING

### 3.5.4.1 Federal

Federal codes, primarily the Occupational Safety and Health Act of 1970 (OSHA), govern worker exposure to noise levels. These regulations would be applicable to all phases of the Proposed Project and are designed to limit worker exposure to noise levels of 85 decibels (dB) or lower over an 8-hour period (Title 29, Code of Federal Regulations [CFR], Section 1910.95).

The U.S. Department of Transportation (U.S. DOT) has developed regulations under Title 23, CFR, Section 772 that govern highway noise design standards. These design standards are provided in **Table 3.5-8**.

**Table 3.5-8**
**Design Noise Levels and Land Use Relationships**

| Design Noise Level ($L_{10}$ dBA)[a] | Description of Land Use Category |
|---|---|
| 55 Interior | Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums. This level applies when no exterior noise sensitive land use or activity is identified. |
| 60 Exterior | Amphitheaters, particular parks or portions of parks, or open spaces which are dedicated or recognized by appropriate local authorities for activities requiring special qualities of serenity and quiet. |
| 70 Exterior | Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, picnic areas, recreation areas, playground, active sports areas, and parks. |
| 75 Exterior | Developed land, properties or activities not included in the above categories. |

The U.S. EPA has established general guidelines for noise levels in sensitive areas in order to provide state and/or local government's guidance in establishing local laws, ordinances, rules, or standards. The U.S. EPA guidelines suggest that the average residential outdoor noise level be 55 dBA, and the indoor level be 45 dBA (U.S. EPA 1974). The indoor level also applies to sensitive noise receptors such as hospitals, schools, and libraries.

### 3.5.4.2 State

As with federal standards, State of California regulations (California Noise Exposure Regulations and Title 8, CCR, Section 5095) address worker exposure to noise levels. These

regulations limit worker exposure to noise levels of 85 dB or lower over an 8-hour period. The State has not established noise levels for various non-work-related environments.

Although the State of California has not established non-worker noise environments, the Department of Health Office of Noise Control has published a Model Noise Ordinance to assist municipalities in developing their own noise ordinance. **Table 3.5-9** presents the California Model Noise Ordinance standards for a suburban area low density residential land use.

**Table 3.5-9**
**California Model Noise Ordinance Exterior Standards for Suburban Area –Low Density Residential Land Use**

| Maximum Time of Exposure | Noise Million | 7:00 a.m. to 10:00 p.m. (Daytime) | 10:00 p.m. to 7:00 a.m. (Nighttime) |
|---|---|---|---|
| 30 Minutes/hour | $L_{50}$ | 55 dBA | 45dBA |
| 15 Minutes/hour | $L_{25}$ | 60 dBA | 50 dBA |
| 5 Minutes/hour | $L_{8.3}$ | 65 dBA | 55 dBA |
| 1 Minute/hour | $L_{1.7}$ | 70 dBA | 60 dBA |
| Any Period of Time | $L_{max}$ | 75 dBA | 65 dBA |

## 3.5.4.3 Local

Many counties and local governments have established guidelines for noise levels. Generally, these guidelines are provided to reduce nuisance noise levels and to reflect human health concerns relative to noise exposure.

Los Angeles County regulates noise through the Los Angeles County Municipal Code, Title 12, Chapter 12.08.440 – Construction Noise. This code states that no construction equipment may operate between the hours of 7:00 p.m. and 7:00 a.m., Monday through Saturday, or at any time on Sunday or holidays, if the noise disturbance crosses a residential or commercial real properly line. In addition, contractors must conduct construction activities in such a manner as to comply with the noise limits shown in **Table 3.5-10**.

**Table 3.5-10**
**Los Angeles County Construction Noise Regulations**

| | Single-Family Residential | Multi-Family Residential | Semi-Residential / Commercial |
|---|---|---|---|
| **Maximum Noise Level for Nonscheduled, Intermittent, Short-Term Operation (less than 10 days) of Mobile Equipment** | | | |
| Monday through Saturday, 7:00 p.m. and 7:00 a.m. | 75 dBA | 80 dBA | 85 dBA |
| Daily, 7:00 p.m. and 7:00 a.m. and all day Sunday and Legal Holidays | 60 dBA | 64 dBA | 70 dBA |
| **Maximum Noise Level for Repetitively Scheduled and Relatively Long-Term Operation (Periods of 10 days or more) of Stationary Equipment** | | | |
| Monday through Saturday, 7:00 p.m. and 7:00 a.m. | 60 dBA | 65 dBA | 70 dBA |
| Daily, 7:00 p.m. and 7:00 a.m. and all day Sunday and Legal Holidays | 50 dBA | 55 dBA | 60 dBA |

Los Angeles County has also established goals and policies for noise-sensitive areas in unincorporated areas. These goals and policies are as follows:

**Goal N-1.** *An environment where noise-sensitive uses can exist without being subjected to unacceptable levels of noise.*

Policies

- N-1.1. Maintain quiet residential neighborhoods and consider the impacts of noise-generators when siting residential and other noise-sensitive uses; priority should be given to avoidance of acoustical incompatibility, rather than mitigation of excessive noise.
- N-1.2. Avoid development of residential and other noise-sensitive uses in areas of the County where outdoor ambient noise levels exceed 55 DNEL unless interior noise levels from exterior sources can be mitigated to less than 45 CNEL.
- N-1.3. Discourage noise-generating commercial and industrial uses near residential zones and existing residential and other noise-sensitive uses.
- N-1.4. Require acoustical review and analysis of proposed discretionary developments that may be significantly impacted by railroads/yards, airports, highways, amusement parks, surface mining operations and other major stationary noise sources.
- N-1.5. Require incorporation of effective noise abatement measures in residential development to achieve acceptable levels of community noise when avoidance of significant adverse noise impacts is impossible, impracticable or excessively costly in terms of derived acoustical benefits.
- N-1.6. Encourage construction of aesthetically designed noise barriers – either separately or in conjunction with other acoustical mitigation techniques – in new development projects where the circumstances warrant their inclusion.
- N-1.7. Encourage landscaping and vegetation berms along roadways and adjacent to other noise-generating sources as a means of increasing the absorption of noise energy and separation distance.

**Goal N-2:** *Properly sited noise-generating uses; protection of noise generating uses from encroachment by noise-sensitive uses.*

Policies

- N-2.1. Encourage the development of industrial and commercial land uses that do not produce excessive amounts of noise, particularly when proposed near noise-sensitive land uses.
- N-2.2. Locate new noise generating developments so that adverse noise impacts are either eliminated or substantially reduced to be within acceptable levels.
- N-2.3. Discourage incompatible uses adjacent to noise-generating uses such as airports and manufacturing centers.

Los Angeles County has established noise regulations under Title 12, Chapter 12.08.400 – Interior Noise Standards and Chapter 12.08.390 – Exterior Noise Standards by land use category.

These land use categories are based on their sensitivity to noise. These noise regulations are given in **Table 3.5-11**.

**Table 3.5-11**
**Los Angeles County Noise Standards**

| Noise Zone | Designated Land Use | Time Interval | Allowable Noise Level (dBA) |
|---|---|---|---|
| **Interior Noise Standards** | | | |
| All | Multifamily | 10:00 p.m. – 7:00 a.m. | 40 |
| | Residential | 7:00 a.m. – 10:00 p.m. | 45 |
| **Exterior Noise Standards (Receptor Property)** | | | |
| Noise Zone I – Noise-Sensitive Area | Noise-Sensitive Area | Anytime | 45 |
| Noise Zone II – Residential Properties | Residential Properties | 10:00 p.m. – 7:00 a.m. | 45 |
| | | 7:00 a.m. – 10:00 p.m. | 50 |
| Noise Zone III – Commercial Properties | Commercial | 10:00 p.m. – 7:00 a.m. | 55 |
| | | 7:00 a.m. – 10:00 p.m. | 60 |
| Noise Zone IV – Industrial Properties | Industrial Properties | Anytime | 70 |

The City of Irwindale proposed the following noise policies in their Administrative Draft of the City of Irwindale General Plan Update:

- The City of Irwindale will strive to reduce the community's exposure to noise from on-going manufacturing.
- The City of Irwindale will work toward reducing noise exposure in the City by considering noise and land use compatibility in land use planning.
- The City of Irwindale will continue to investigate strategies that will be effective in reducing the community's exposure to harmful noise levels.

The City of Irwindale has proposed land use planning standards for noise. These standards are given in **Table 3.5-12**.

**Table 3.5-12**
**Irwindale Proposed Noise Standards**

| Land Use | Desirable Maximum | Maximum Acceptable |
|---|---|---|
| Low-Density Residential | 55 dBA | 65 dBA |
| Medium-Density Residential | 60 dBA | 65 dBA |
| High-Density Residential | 65 dBA | 70 dBA |
| Schools | 60 dBA | 70 dBA |
| Office Commercial | 65 dBA | 75 dBA |
| Industrial | 70 dBA | 75 dBA |

## 3.5.5 ENVIRONMENTAL IMPACTS

### 3.5.5.1 Thresholds of Significance

The significance of potential impacts from the Proposed Project on existing noise levels was determined based on CEQA guidelines (CCR §§ 15000-15387, Appendix G). These guidelines identify thresholds that may be considered to determine whether an impact is significant. Using these thresholds, the Proposed Project would be considered to have significant noise impacts if it were to:

- Expose persons to or generate noise levels in excess of standards established in the local General Plan or noise ordinance, or applicable standard of other agencies;
- Expose persons to or generate excessive ground-borne vibrations or ground borne noise levels
- Result in a significant increase in noise levels at sensitive receptors in the area; or,
- Result in a substantial temporary, periodic or permanent increase in ambient noise levels in the project vicinity above levels existing without the project; commercial/industrial, and open space.

### 3.5.5.2 Potential Environmental Impacts

The assessment of potential noise impacts considers noise effects generated during implementation of all phases of the Proposed Project relative to ambient noise levels and applicable laws, policies and regulations.

The analysis of the impacts of noise typically focuses on "sensitive receptors" (i.e., noise-sensitive land uses such as residences, hotels, churches, auditoriums, schools, libraries, hospitals, and parks). Sensitive receptors near the quarry sites are given as follows:

- **Quarry No. 2** – Noise-sensitive receptors near this quarry are residents approximately 600 feet along the northwestern border of the quarry.
- **Quarry No. 3** – Noise-sensitive receptors near this quarry are residents along the north, near the northeast, and west of the site
- **Quarry No. 4/Production Plant** – No noise sensitive receptors are located near this location and no changes are proposed other than the transfer of 24.63 acres of land from this site to Quarry No. 2.

### 3.5.5.3 Quarry No. 2

Current operations at Quarry No. 2 consist of mining aggregate below groundwater using a clamshell dredge and conveying the mined material to the Quarry No. 4/Production Plant via a conveyor system. This conveyor system goes under the existing and the new alignment of Buena

Vista Street. Current mining operations are to a maximum depth of 275 feet. Slopes are 1:1 above the water line and 2:1 below the groundwater line. The maximum area of mining is 110 acres (the current footprint of the quarry). An additional 24.63 acres would be transferred to this quarry site from Quarry No. 4. Existing noise impacts associated with current mining activities at the site are provided in the baseline noise assessment in this section.

#### 3.5.5.3.1 Mining Operations

Under the Proposed Project, Buena Vista Street will be rerouted through Quarry No. 4/Production Plant and to the east of Quarry No. 2. The current Buena Vista Street along the eastern mine property line will be permanently closed. With the rerouting of Buena Vista Street, Quarry No. 2 would be expanded by approximately 24.63 acres to the east, for a total of about 134.6 acres. Mining depth would also be increased to a maximum of 410 feet below grade. This would allow for an additional 16.81 million cubic yards (25.22 million tons) to be mined at the site. Mining activity would be expanded until 2018 or 2020. Mine operations could occur from 6:00 a.m. to 12:00 p.m. Monday through Saturday with occasional mining on Sunday.

It is likely that mining along the newly acquired 24.6 acres would be performed using heavy equipment. As noted earlier, dry mining using heavy equipment generates average noise levels of approximately 90 dBA. Noise levels at the nearest residences from dry mining would result in an estimated noise level of 53 dBA. This residential area is in the County of Los Angeles. These noise levels would not exceed the noise levels recommended in Tables 3.5-8 and 3.5-9 from 7:00 a.m. to 10:00 p.m. (daytime). Noise levels could exceed those given in Tables 3.5-9, and 3.5-11 during evening and nighttime operations, but these noise levels would not exceed the City standards in Table 3.5-12. Further noise attenuation of 3 to 5 dBA would occur from structures along the northern side of the Quarry No. 2. In addition, existing background noise levels from Arrow Highway and Live Oak Avenue were estimated to range from 50 to 55 dBA at these residences.

Noise levels using the clamshell dredge would not increase as a result of the Proposed Project. These noise levels were calculated to be in the range of 35 to 45 dBA. These noise levels do not exceed the standards given in the regulatory section for either daytime or nighttime periods. The main change would be the extension of the duration of mining activities and subsequent noise levels by up to an additional 16 years. Since current mining activities do not significantly impact noise-sensitive receptors in the area, additional mining activities would not cause a significant noise impact.

#### 3.5.5.3.2 Reclamation

Reclamation of Quarry No. 2 will occur after mining is complete, sometime between year 2018 and 2020. Under reclamation, the Quarry No. 2 would be reclaimed and backfilled with inert construction debris and other clean material similar to that being performed at United Rock Quarry No. 1. Currently approximately 264 trucks trips per day occur at United Rock Quarry No. 1. This volume of traffic would likely occur at Quarry No. 2 during the reclamation phase. It is projected that these haul truck trips would result in approximately 1.2 million tons of material being deposited annually. Therefore, it is anticipated that backfill to proposed permit conditions would be completed by approximately 2061.

The Reclamation Plan indicates that the mine depth would average 75 feet along the western third of the mine and 37.5 feet along the central portion of the quarry. The eastern section along Buena Vista Street would be at street level.

Reclamation activities could result in an increase in peak noise levels at this location, because haul trucks typically have higher noise levels than the clamshell dredge. A truck volume of 264 trips per day would represent approximately 26 trucks per hour or one about every two minutes. Therefore, the elevated noise level would not be continuous during reclamation, but the refill of additional acreage would result in an increase in the level of these noises. As indicated in the current environmental noise analysis for United Rock Quarry No. 1, noise from the bulldozer and haul trucks would likely be approximately 85 dBA at distance of 50 feet. Therefore, the noise levels from reclamation activities in nearby residences were calculated to range from 48 to 60 dBA, depending upon reclamation location within the mine. These noise levels could exceed the federal, State, and Los Angeles guideline noise levels, especially when the activities occurred near the residents and during nighttime (10:00 p.m. to 7:00 a.m.), but they will not exceed the City standards of a maximum desirable level of 60 dBA and a maximum acceptable level of 65 dBA. Additionally, these noise levels could increase slightly as reclamation activity approached street level.

Backfilling Quarry No. 2 with inert material is mandated under the prior United Rock Reclamation Plan (1990). Therefore, backfilling of this mine will occur with or without approval of the proposed project. The main consideration will be the added time frame needed to fill the additional material mined from the site and the increased elevation of the mined site. The projected time to finish reclamation of this quarry is 2061 or about 41 to 42 years after mining is completed. As indicated earlier, it is estimated that approximately 25.22 million tons of additional material would be mined if the project were approved. Using an estimated backfill rate of 1.2 million tons per year, it is projected that an additional 21.2 years is needed to backfill this mine.

The areas to the northeast, east, south, and west of the site are currently heavy industrial/commercial and have no sensitive receptors nearby. Therefore, this land use would not have a significant noise impact. The combination of extending the length of time to backfill the quarry, possible operation of backfill during evening periods, and/or levels that could exceed some standards would not result in a significant adverse noise impact unless mitigated.

#### 3.5.5.3.3 Post Reclamation

Post reclamation activities will involve the construction of heavy industrial/commercial facilities on the property and the operation of these facilities. Construction activities for these types of facility can vary in both noise and duration, depending upon the type of facility. The general noise levels associated with construction are provided in **Table 3.5-13**.

Operational noise associated with heavy industrial/commercial can vary significantly depending upon the type of facility. In general, noise levels associated with the future zoning of the Quarry No. 2 would be between 60 to 75 dBA. These noise levels could impact the residential areas to the northwest of the site depending upon the type of activity taking place after post reclamation.

**Table 3.5-13**
**Noise Levels for Various Aspects of Construction and Composite Site Noise Levels**

| Construction Phase | Loudest Construction Equipment | Equipment Noise Level at 50 feet (dBA) | Composite Site Noise Level at 50 feet (dBA) |
|---|---|---|---|
| Site Clearing and Excavation | Dump Truck<br>Backhoe | 91<br>85 | 89 |
| Concrete Pouring | Truck<br>Concrete Mixer | 91<br>85 | 78 |
| Steel Erection | Derrick Crane<br>Jack Hammer | 88<br>88 | 87 |
| Mechanical | Derrick Crane<br>Pneumatic Tools | 88<br>86 | 87 |
| Clean-Up | Rock Drill<br>Truck | 98<br>91 | 89 |

Source: Barnes 1996

It should be noted that the transferred 24.6 acres would be developed as industrial/commercial as part of the post-reclamation plan for the Quarry No. 2. The City will review construction activities, and their associated noise levels, during approval of the proposed development project on the site. If the noise level exceed threshold values, project specific mitigations will be imposed at that time. Therefore, no significant impacts will occur.

## 3.5.5.4 Quarry No. 3

Historically, Quarry No. 3 has been intermittently mined since 1997. A new conveyor system was installed at the facility during 2003 to transport aggregate material directly to the Quarry No. 4/Production Plant, located approximately 1,000 feet south of the site. Currently, approved mining operations are a maximum depth of 275 feet and slopes are 1:1 above the groundwater level. Although seasonally variable, most of the bottom of Quarry No. 3 is above groundwater level. The 1996 Reclamation Plan conditionally approved mining of this site, but final approval is still pending by the City. The maximum area of mining is the current footprint of the quarry or 110 acres. Total permitted material available at this location is approximately 7.53 million cubic yards (11.3 million tons).

### 3.5.5.4.1 Mining Operation

Under the proposed action, Quarry No. 3 would be mined to a depth of 440 feet below the top of the quarry, an increase of 165 feet. Slopes would have to be maintained at 1:1 above groundwater and 2:1 below groundwater. This proposed action would increased aggregate production by an estimated 9.61 million cubic yards (14.42 million tons). Intermittent mining activities will likely take place at this facility from 2004 through the 2018/2020-timeframe or when aggregate production in Quarry No. 2 is no longer feasible. After the 2018/2020 period, mining would likely be continuous at this site until approximately 2035/2037.

Initial mining at Quarry No. 3 would be performed using heavy equipment, because the area is currently above groundwater. The average excavation noise levels for this activity would be approximately 89 dBA at a distance of 50 feet. These noise levels would result in a 55 to 65 dBA noise level at nearby residences, depending upon the location of the equipment within the quarry. These noise levels would exceed the recommended guidelines and regulations given in Tables 3.5-8, 3.5-9, and 3.5-11, especially if evening and nighttime operations took place. These noise levels will also be at the upper limits of those established by the City in Table 3.5-12

Once quarry operations have reached the groundwater table at this site and mining operations at Quarry No. 2 have ended, the clamshell dredge will be moved and operated at this site. Clamshell dredge noise levels would range from approximately 40 to 48 dBA, depending upon distance of the clamshell dredge from these residences. These noise levels are within the recommended guidelines for residential areas except for the Los Angeles County standards between 10:00 p.m. to 7:00 a.m., but these noise levels are within the City standards. However, the noise from dredge and other activities would continue at Quarry No. 3 for a longer period under the proposed action.

#### 3.5.5.4.2 Reclamation

Reclamation for this site is proposed to consist of backfilling the mine with inert material similar to the backfilling being performed at United Rock Quarry No. 1 and that proposed for Quarry No. 2. The second option is to use the site as a groundwater recharge basin for the San Gabriel Valley Basin. This alternative is discussed in Section 5 of this Draft EIR.

Under the Proposed Project, noise levels and impacts discussed for Quarry No. 2 would apply to this site. The main consideration will be the added time frame needed to fill the additional material mined from the site. No time frame was given for reclamation of this quarry site. However, the added time frame needed to back fill can be estimated. If an additional 14.42 million tons is removed from the site and the fill rate is 1.2 million tons per year, the added time for reclamation would be 12.01 years.

Equipment associated with backfilling operations would generate noise levels of approximately 89 dBA at a distance of 50 feet. This would result in estimated noise levels of 60 to 70 dBA at these residences. These levels would exceed federal, State, and local standards, especially if they occur in the evening and at nighttime. Additionally, these noises would occur over an extended time period. Therefore, the backfill operations would result in a significant adverse impact.

#### 3.5.5.4.3 Post Reclamation

Post reclamation for Quarry No. 3 would involve development of the site as a industrial/commercial use.

Operational noise associated with heavy industrial/commercial can vary significantly depending upon the type of facility. In general, noise levels associated with the future zoning of the Quarry No. 3 would be between 60 to 75 dBA. These noise levels could impact the residential areas to the northwest of the site depending upon the type of activity taking place after post reclamation

### 3.5.5.5 Quarry No. 4/Production Plant

Quarry No. 4/Production Plant is zoned M-2 (Heavy Manufacturing) by the City. This site is currently used for processing of aggregate mined in Quarry No. 2. Aggregate from Quarry No. 2 is washed, sorted by size, and stockpiled for sale to clients. Additionally, the production plant crushes oversize rock or larger materials to produce appropriate size material for sale.

The production plant also has tenants that operate two asphalt plants, a ready-mix concrete plant, and a construction equipment maintenance yard. United Rock sells the rock and/or sand to the on-site asphalt and concrete operations. Haul trucks also operate out of the plant delivering sand and aggregate material in bulk to construction and job sites in the Los Angeles, Riverside, Orange, and San Bernardino counties. Average haul truck traffic is approximately 420 trips per day.

Depending upon activity, this facility operates 24-hours per weekday and up to noon on Saturday. Operations at the facility are very limited on Sunday. Aggregate mining of the Quarry No. 4/Production Plant site is not planned nor are any other operational changes planned. The transfer of 24.63 acres from Quarry No. 4 to Quarry No. 4 would occur with the proposed project. No noise impacts would occur as part of this land transfer.

#### 3.5.5.5.1 Mining Operation

Under the proposed action, Buena Vista Street will be rerouted through the northwestern portion of the Quarry No. 4/Production Plant. Approximately 24.6 acres on the western side of the newly aligned Buena Vista Street will be transferred to the Quarry No. 2 site and used for mining of aggregate and setback distances. Therefore, the aggregate production plant site size would decrease from about 75 acres to 50.4 acres. This reduction in size will not change the existing activities (e.g., sorting, storing, and crushing of aggregate; asphalt production; cement manufacturing; and equipment maintenance) at the site.

Noise levels at the production plant vary from 62 to 68 dBA with an average of 65 dBA at 1,000 feet. The lower noise levels represent general operations at the plant (e.g., rock crushing, sorting, and conveyors), and the higher noise levels are associated with vehicles (e.g., haul trucks, front-end loaders, passenger cars, and pickups). No noise sensitive receptors are affected by the operation of the Quarry No. 4/Production Plant. Additionally, the current land use designation of M-2 is compatible with the current site use.

The overall noise levels from operation of the Quarry No. 4/Production Plant and traffic noise on I-605 will not change as a result of the proposed action. The proposed action will likely not alter the current or future planned aggregate production at the plant. The main result by enacting the proposed action will be to increase the length of mining activities at Quarries No. 2 and No. 3. This will increase the operational life of the Quarry No. 4/Production Plant to the 2035/2037-time period. However, no additional noise impacts from the Quarry No. 4/Production Plant are anticipated as a result of approval of the project.

#### 3.5.5.5.2 Reclamation

Reclamation activities at the Quarry No. 4/Production Plant will not change as a result of the proposed action. Reclamation activities will involve the demolition of the facilities (e.g., rock rushing and sorting plant, asphalt plants, cement plant, and other building or objects) currently located on the site and grading the area for future construction of industrial/commercial facilities on the property.

Demolition of on-site facilities will generate noise levels in the 80s to low 90s dBA range. These noise levels will result no matter if the proposed project is approved or not. The main difference is that these noise levels will occur later if the proposed action is approved. No noise sensitive receptors will be exposed to noise levels exceeding federal, State, or local LORS. Therefore, significant impacts associated with reclamation of the Quarry No. 4/Production site will not occur.

#### 3.5.5.5.3 Post Reclamation

As indicated for Quarry No. 2, post reclamation land development at Quarry No. 4/ Production Plant is anticipated to involve the construction and operation of industrial/regional commercial facilities. However, these future land use developments would not be developed until mining of Quarry No. 3 has ceased which is planned to occur several decades into the future.

Construction activities for these types of facilities can vary in both noise and durations, depending upon the type of facility. The general noise levels associated with construction were provided in Table 3.5-13. Additionally, operational noise associated with heavy industrial/commercial can vary significantly depending upon the type of facility. In general, noise levels associated with the future industrial/commercial would be between 60 to 75 dBA. These noise levels are in the range of current operations at the Quarry No. 4/Production Plant site.

The City has determined and evaluated the potential environmental impacts of the Proposed Project in this Draft EIR based on best available data and the abilities and limitations of current impact assessment practices, recognizing that potential effects of future activities and land uses decades in the future necessarily exceeds the limits of reasonable forecasting and is too speculative to warrant detailed analysis. It is further assumed that all future post-reclamation phases of development will be subject to subsequent discretionary approvals and therefore will be subject to the requirements of CEQA.

## 3.5.6 MITIGATION MEASURES

The main noise impacts associated with implementation of the Proposed Project would occur offsite near the residential areas. Implementation of the Proposed Project would extend the duration of noise impacts but would not generally affect the noise characteristics of the Project when compared to those associated with existing operations. Most of the noise effects of the Project would be related to mobile equipment and vehicles (e.g., dredges, trucks, backhoes, and front-end loaders). Implementation of the mitigation measures listed below would reduce potential adverse noise impacts of the Proposed Project.

**Noise Impact from Mining Operations – 1:** *Noise generated during mining could result in temporary or long-term increases in noise levels at sensitive receptors.*

**Noise Impact Mitigation – 1:**

a. If noise impacts exceed the applicable noise standard as measured at the property line of a nearby sensitive receptor, the use of construction type of equipment near residential dwellings shall be limited to a Monday through Friday work schedule of 7:00 a.m. to 7:00 p.m. and between 7:00 a.m. to 12:00 p.m. Saturday.

b. Construction equipment shall be equipped with manufacturer recommended mufflers or equivalent.

c. Construction equipment shall be turned off when not in operation.

d. Maintain the earthen berm around the facilities to reduce noise impacts at nearby residential areas.

e. Visits to the site by trucks shall be minimized.

f. Use heavy equipment with low manufactured noise levels whenever practical.

g. The dredge used at the site shall be electrically powered.

h. If dredge noise levels exceed 60 dBA CNEL as measured at the property line of the nearest residential property, the dredge shall be operated on a Monday through Friday work schedule of 7:00 a.m. to 7:00 p.m. and between 7:00 a.m. to 12:00 p.m. Saturday to reduce sleep interference.

**Noise Impact from Reclamation and Post Reclamation Construction Operations – 2:** *Noise generated during reclamation and post reclamation construction of sites could result in temporary or long-term increases in noise levels at sensitive receptors.*

**Noise Impact Mitigation – 2:**

a. Use of equipment near residential dwellings shall be limited to a Monday through Friday work schedule of 7:00 a.m. to 7:00 p.m. and between 7:00 a.m. to 12:00 p.m. Saturday to reduce sleep interference or operations shall take place away from residential locations to ensure noise levels do not exceed City General Plan and zoning prescribed noise levels at the residential location.

b. Construction equipment shall be equipped with manufacturer recommended mufflers or equivalent.

c. Construction equipment shall be turned off when not in operation.

d. Maintain the earthen berm around the facilities to reduce noise impacts at nearby residential areas.

e. Maintain truck traffic along major traffic arteries (e.g., Arrow Highway, Buena Vista Street, and Interstate 605) and away from residential streets.

**Noise Impact During Post Reclamation – 3:** *Operational noise associated with post reclamation construction of industrial/commercial facilities could result in an increase in noise levels at the site. However, these noise levels will depend upon the type of facility industrial/commercial activity at the site. This impact is dependent upon the City of Irwindale's approval of zoning, land use, and project specific approval which will be subject to environmental review under CEQA.*

**No Mitigation Required:**

Post-reclamation noise levels will depend upon the type of facility industrial/commercial activity at the site. Development of these future land uses is dependent upon the City of Irwindale's approval of zoning, land use, and project specific approval which will be subject to independent environmental review in the decades ahead.

## 3.5.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No Impacts would be significant.

# SECTION 3.6 PUBLIC HEALTH AND SAFETY AND HAZARDOUS MATERIALS

This section evaluates the potential effects on the environment and human health and safety from the storage, handling, and use of hazardous materials on or near Quarry No. 2 and Quarry No. 3. The main concerns regarding hazardous material uses are (1) the environmental risk and effects regarding on-site sediment and contaminant discharges to exposed groundwater; and/or (2) the potential impacts to exposed groundwater associated with nearby off-site stormwater runoff reaching these facilities.

## 3.6.1 EXISTING SETTING

### 3.6.1.1 Hazardous Materials

The City of Irwindale has relatively little land dedicated to residential uses given its proximity to the highly urbanized Los Angeles region and adjacent San Bernardino County. The predominant land use in the City is mining-related quarries and production facilities. The second most prominent land use categories are industrial and commercial land uses.

The analysis of hazardous materials issues is generally concerned with land use categories, because land use categories typically reflect and have a high correlation with the vulnerability of populations to a hazardous materials incident.

Land uses can be generally categorized into four groups based on their relative sensitivity of exposure to a hazardous material release. The four classifications are described below:

- Highly Sensitive – Schools, hospitals, convalescent homes, day care centers, and other areas where large numbers of people concentrate, who because of their age, physical condition, or large number may require assistance to evacuate;
- Highly to Moderately Sensitive – Multi-family (e.g., apartment complexes) and single-family residential areas;
- Moderately Sensitive – Commercial areas (e.g., shopping centers and shopping malls) and industrial areas; and
- Low Sensitivity – Rural areas (e.g., agricultural areas, farms, orchards, and nurseries) and open space (e.g., undeveloped areas, golf courses, and beaches).

The United Rock quarries are located mostly near industrial or commercial facilities, but some residential areas are nearby. A summary of the major land uses around the United Rock facilities and their sensitivity to an on-site release of hazardous materials are as follows:

- **Quarry No. 2** – A commercial/industrial area is located along the northeastern side of the quarry, and a residential area is located along the northwest boundary. Buena Vista Street and the Quarry No. 4/Production Plant is to the east. Portions of the United Rock Quarry No. 1, Irwindale Speedway, and commercial/industrial facilities are located south

of Arrow Highway. The area on the southwestern side is mostly commercial/industrial. Therefore, land uses around the Quarry No. 2 site have a high to moderate sensitivity to an on-site hazardous material spill incident.

- **Quarry No. 3** –Residential areas are located to the northwest, north, and northeast of the quarry. Commercial/industrial facilities are located along the boundaries of the other portions of the property. Buena Vista Street lies along the eastern boundary of the quarry. Therefore, land uses in the vicinity of this site have a high to moderate sensitivity to an on-site hazardous materials release incident.

An aerial photograph of the area showing the general types of land uses near the United Rock locations is provided in **Figure 3.4-1**.

#### 3.6.1.1.1 Identification of Hazardous Material Sites

A Phase I Environmental Site Assessment (ESA) may be performed to address hazardous material issues associated with commercial or industrial property if they are unknown. Additionally, a Phase I ESA may address hazardous material liabilities associated with the property under investigation as well as the possible impacts that adjacent parcels of land could have on the property being analyzed. Although a full Phase I ESA was not performed for the quarries, a literature search of governmental databases was performed to identify on-site and off-site sources and locations of hazardous material in or near these United Rock facilities.

Environmental Data Resources, Inc. (EDR) reviewed various federal, State of California, and local government databases for the Proposed Project. EDR is a research company that maintains large governmental databases of locations that use or have released hazardous materials.

Federal databases reviewed include the following:

- Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)
- National Priority List - Superfund (NPL)
- Proposed National Priority List Sites (Proposed NPL)
- Resource Conservation and Recovery Information System (RCRIS-TDS)
- Resource Conservation and Recovery Information System - Small Quantity Generators (RCRIS Small Quantity Generator)
- Resource Conservation and Recovery Information System - Large Quantity Generators (RCRIS Large Quantity Generator)
- National Priority List Liens (NPL LIENS)
- Emergency Response Notification System (ERNS)
- Corrective Action Report (CORRACTS)
- Superfund CERCLA Consent Degrees (CONSENT)

Facility Index System/Facility Identification Initiative Program Summary Report (FINDS)

- Hazardous Materials Information Reporting System (HMIRS)
- Material Licensing Tracking System (MLTS)
- PCB Activity Database System (PADS)
- RCRA Administrative Action Tracking System (RAATS)
- Records Of Decision (ROD)
- Toxic Chemical Release Inventory System (TRIS)
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA)/Toxic Substance Control Act Tracing System for the U.S. EPA (FTTS)
- National Oil and Hazardous Substances Pollution Contingency Plan (Delisted NPL)
- CERCLIS No Further Remedial Action Planned (CERC-NFRAP)
- Mines Master Index File (MINES)
- Department of Defense Sites (DOD)
- A Listing of Brownfields Sites (U.S. Brownfield)
- Section 7 Tracking System (SSTS)

The following is a list of the State of California databases reviewed in the EDR report for the United Rock facilities:

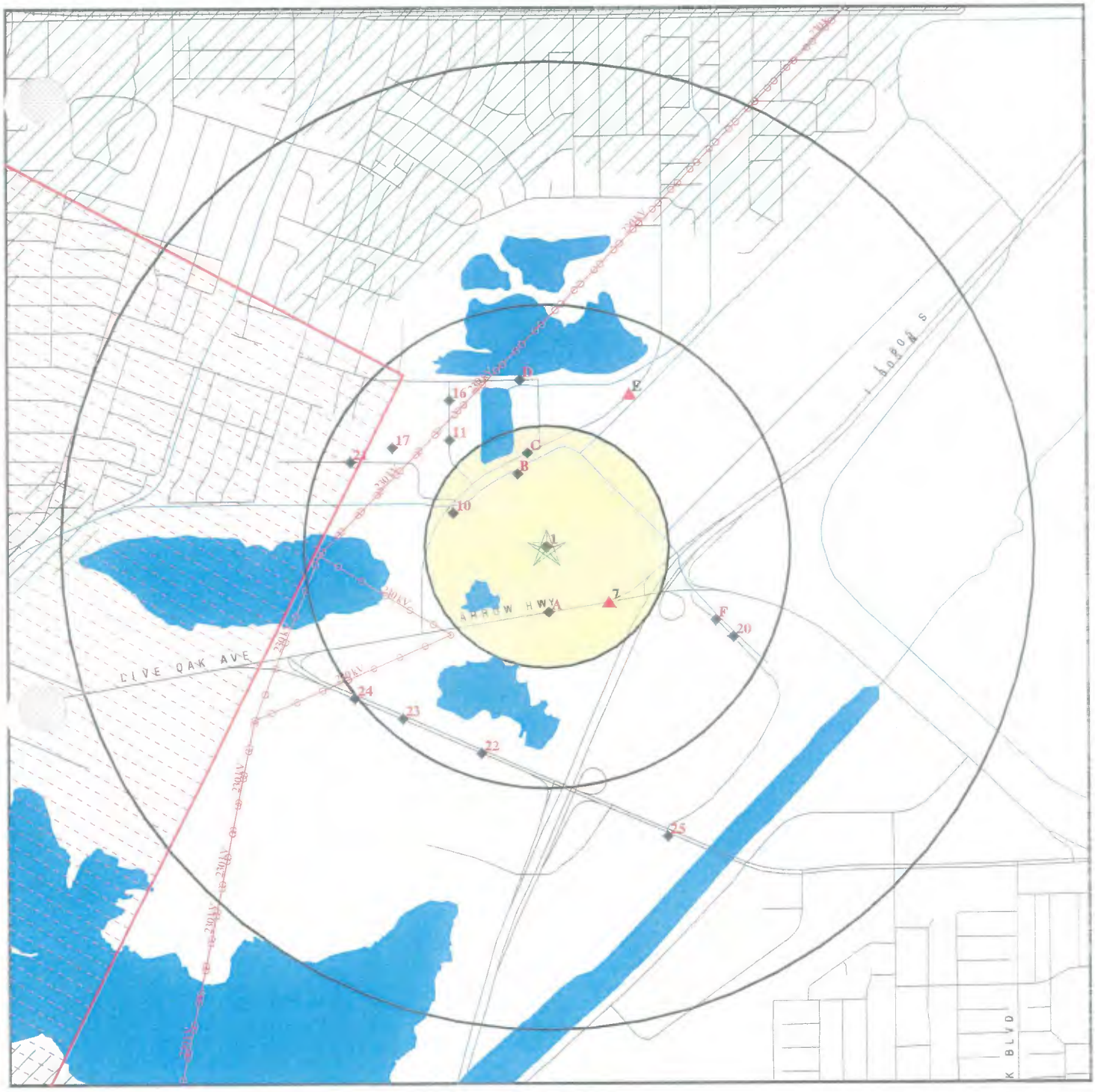
- California Department of Toxic Substances Control Sites (Cal-Sites)
- California Hazardous Material Incident Reporting System (CHMIRS)
- California Office of Emergency Information Sites (CORTESE)
- Leaking Underground Storage Tank Information System (LUST)
- State of California Water Resources Control Board Sites for Proposition 65 (Notify 65)
- State of California Water Resources Control Board List of Toxic Pit Cleanup Sites (Toxic Pit)
- Hazardous Substance Storage Container Data Base (UST)
- State of California Department of Toxic Substance Control Annual Work Plans (AWP)
- Department of Health Services Bond Expenditure Plan (CA Bond)
- California Environmental Protection Agency Facility Inventory Database for Active and Inactive Underground Storage Tanks (CA FID UST)
- State Water Resources Control Board list of Above Ground Petroleum Storage Tanks Facilities (AST)

- Department of Toxic Substance Dry Control Cleaner Facilities (CLEANERS)
- Department of Toxic Substance Control List of Deed Restrictions (DEED)
- State Water Resources Control Waste Discharge System (CA WDS)
- California Environmental Protection Agency Hazardous Waste Information System for Annual Manifest (HAZNET)
- State Water Resources Control Board Hazardous Substance Storage Container Database of Historical Listing of Underground Storage Tank Sites (Historical UST)
- State Water Resources Control Board Waste Management Unit Database (WMUDS/SWAT)
- California Environmental Protection Agency Spills, Leaks, Investigation & Cleanup Cost Recovery Listing (CA SLIC)
- California Environmental Protection Agency Underground Storage Tanks on Indian Land (Indian UST)
- California Environmental Protection Agency Leaking Underground Storage Tanks on Indian Land (Indian LUST)
- Department of Toxic Substance Control Voluntary Cleanup Program Properties (VCP)
- Department of Toxic Substance Control School Property Evaluation Program (SCH)
- Department of Toxic Substance Control No Further Action Determination (NFA)
- California Air Resources Board Emissions Inventory Data (EMI)
- Department of Toxic Substance Control Unconfirmed Properties Referred to Another Agency (REF)
- Department of Toxic Substance Control Properties Needing Further Evaluation (NFE)
- Where Volatile Organic Compound (VOC) Contamination is at or above the Maximum Contamination Level (MCL) - Area of Concern (AOCONCERN)
- State Water Resources Control Board Waste Management Unit State Landfills (State Landfills)

The following is a listing of Los Angeles County databases reviewed by EDR:

- Los Angeles County Department of Public Works Hazardous Material System – Street Number List (Los Angeles Co. HMS)
- Los Angeles County Community Health Services Site Mitigation List (LA Co. Site Mitigation)

A summary of the results of the database search is presented in **Table 3.6-1**. The location of the sites found in the EDR search for Quarry No. 2 and Quarry No. 3 are depicted in **Figures 3.6-1**, **3.6-2**, and **3.6-3**, respectively. To ensure a complete inventory, results also included the adjacent Quarry No. 4/Production Plant, although except for the 24.63 acres to be transferred to Quarry No. 2, the production plant is not evaluated as a part of the Project.




## Legend

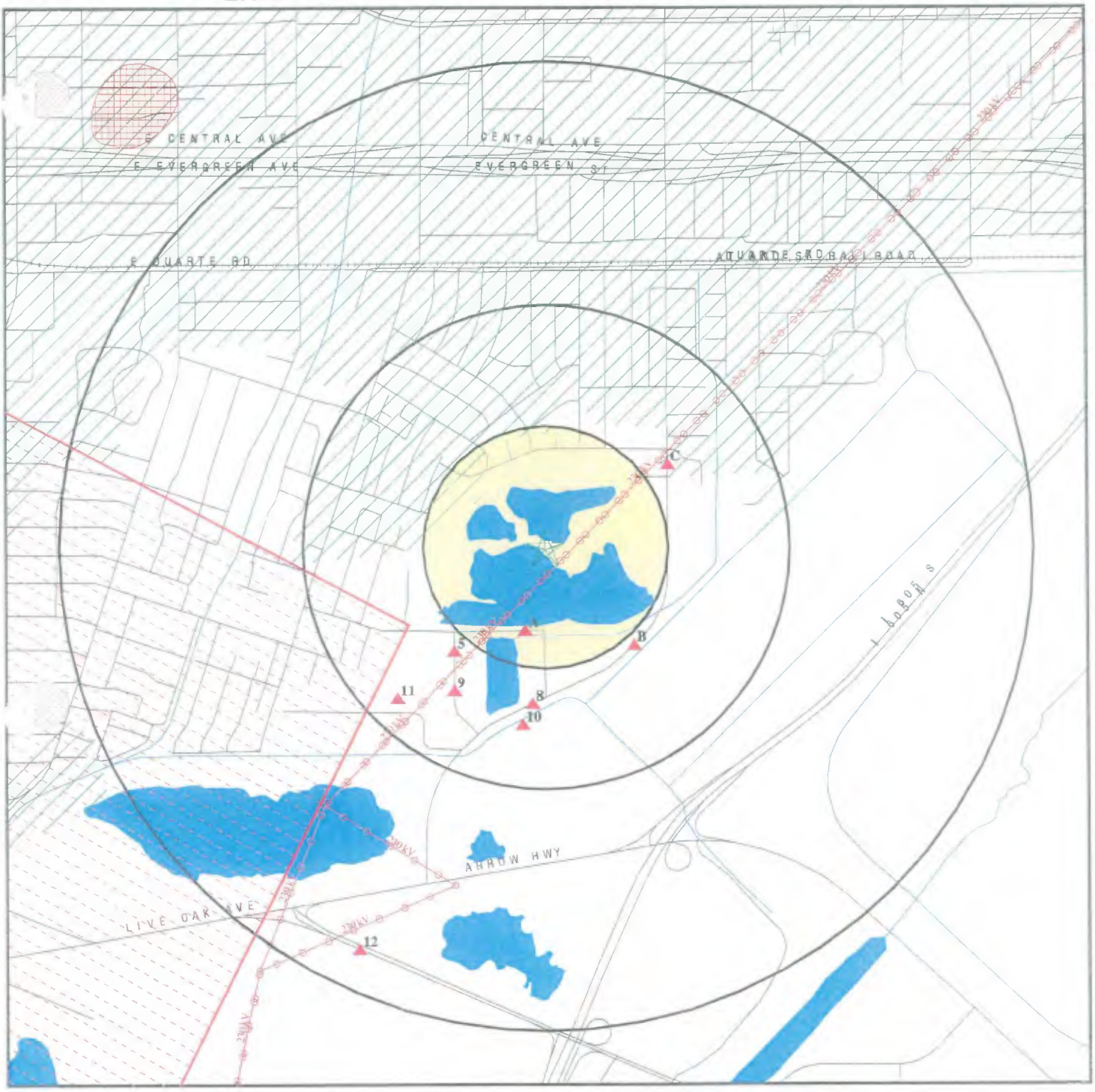
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Coal Gasification Sites
- National Priority List Sites
- Landfill Sites
- Dept. Defense Sites
- Power transmission lines
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- Areas of Concern

0 1/4 1/2 1 Miles

UNITED ROCK QUARRY AND RECLAMATION PLAN EIR

*FIGURE 3.6-1*
*LOCATIONS OF HAZARDOUS MATERIAL SITES NEAR UNITED ROCK QUARRY NO. 2*

GREYSTONE®




## Legend

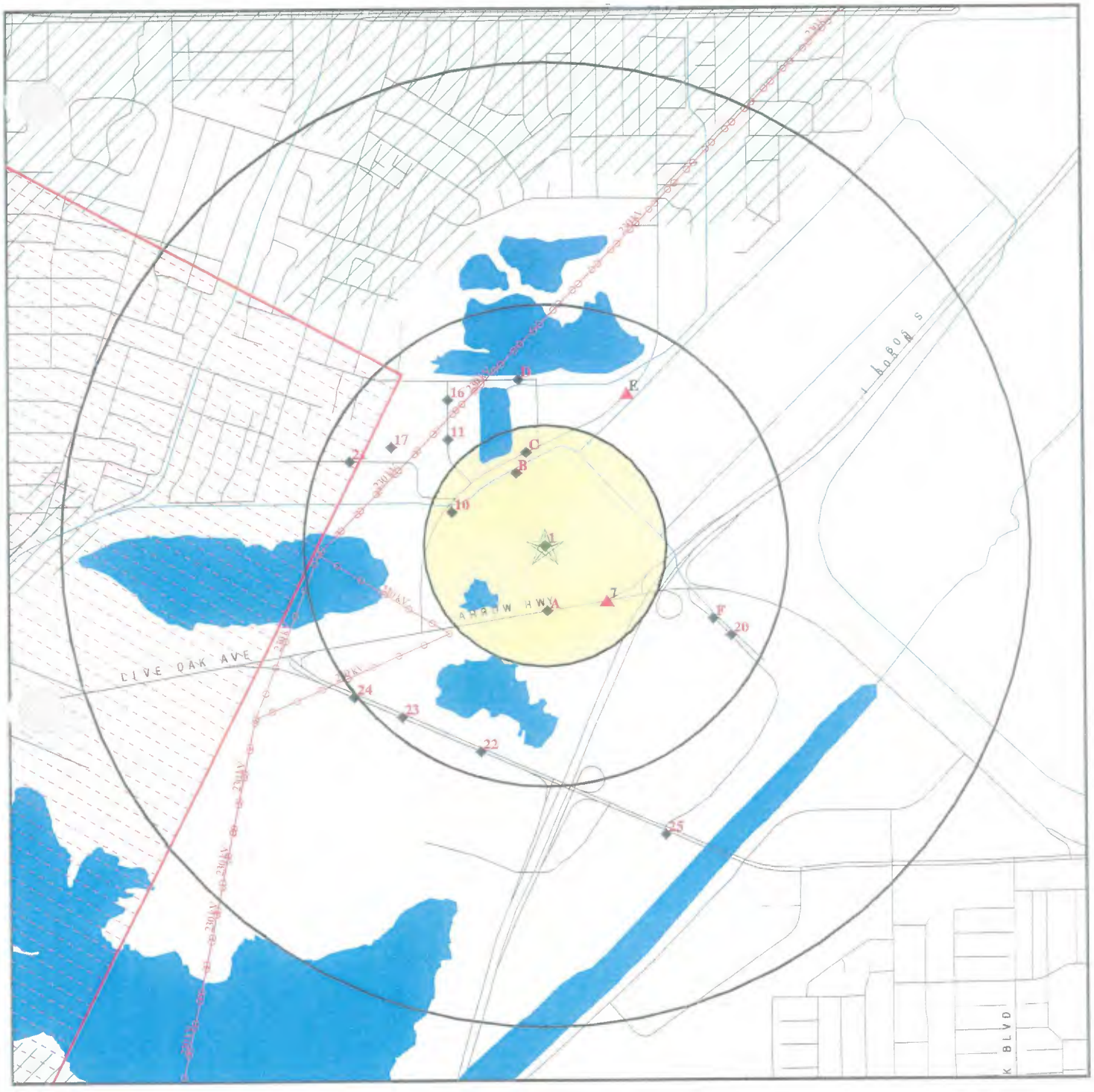
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Coal Gasification Sites
- National Priority List Sites
- Landfill Sites
- Dept. Defense Sites
- Power transmission lines
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- Areas of Concern

0 1/4 1/2 1 Miles

UNITED ROCK QUARRY AND RECLAMATION PLAN EIR

*FIGURE 3.6-2*
*LOCATIONS OF HAZARDOUS MATERIAL SITES NEAR UNITED ROCK QUARRY NO. 3*

GREYSTONE®




## Legend

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Coal Gasification Sites
- National Priority List Sites
- Landfill Sites
- Dept. Defense Sites
- Power transmission lines
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- Areas of Concern

0 1/4 1/2 1 Miles

UNITED ROCK QUARRY AND RECLAMATION PLAN EIR

*FIGURE 3.6-3*
*LOCATIONS OF HAZARDOUS MATERIAL SITES NEAR UNITED ROCK QUARRY NO. 4/PRODUCTION PLANT*

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It should be noted that not all the sites listed in the EDR database search have had releases of hazardous materials. However, many of the sites identified in the EDR report had small releases or releases that have been reported, remediated and closed by regulatory agencies. Sites that have been remediated no longer pose a health and/or safety risk.

Other findings in the EDR report include facilities that use, store, or dispose of hazardous materials.

EDR database entries that do not pose a risk to the current environment are as follows:

| | |
|---|---|
| RCRIS-TSD | RCRIS Small Quantity Generators |
| RCRIS Large Quantity Generators | MLTS |
| PADS | TSCA |
| FTTS | Delisted NPL |
| CERC-NFRAP | MINES |
| SSTS | UST |
| CA FID UST | AST |
| CLEANERS | CA WDS |
| HAZNET | Historical UST |
| WMUDS/SWAT | Indian UST |
| NFA | EMI |
| State Landfills | Los Angeles Co. HMS |

It should be noted that the sites listed in the EDR report for NPL, CERCLIS, and AOCONCERN are associated with historic contamination in the San Gabriel Valley Groundwater Basin. Contamination of the groundwater is a regional issue and will be examined separately. Therefore, of the 16 database entries sited near the Quarry No. 2 provided in **Table 3.6-1**, only seven are identified as having potential release. Additionally, only 10 of the 17 databases sites for Quarry No. 3 are spill related, and of the 31 databases near the Quarry No. 4/Production Plant, only 17 are identified as having contamination issues. Furthermore, an incident involving a hazardous material could be listed on multiple databases. For example, a release from an underground storage tank (UST) at one location could be listed in the LUST, CORTESE, and/or Cal-Sites databases.

**THE RISK POSED BY HAZARDOUS MATERIAL RELEASES NEAR AND AT UNITED ROCK QUARRIES NOS. 2 AND 3 IS DISCUSSED IN THE FOLLOWING SECTIONS.**

## Table 3.6-1
## Summary of Hazardous Material Sites for United Rock Facilities

| Database | Target Property | Search Distance | United Rock Quarry No. 2 (Distance from Subject Property in Miles) | | | | | | United Rock Quarry No. 2 (Distance from Subject Property in Miles) | | | | | | United Rock Production Plant (Distance from Subject Property in Miles) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | <1 | 1/8-1/4 | 1/4-1/2 | 1/2-1 | >1 | Total | <1 | 1/8-1/4 | 1/4-1/2 | 1/2-1 | >1 | Total | <1 | 1/8-1/4 | 1/4-1/2 | 1/2-1 | >1 | Total |
| **Federal Databases** | | | | | | | | | | | | | | | | | | | | |
| NPL | | 1.000 | 1 | 0 | 0 | 0 | NR | 1 | 0 | 0 | 1 | 0 | NR | 1 | 0 | 0 | 1 | 0 | NR | 1 |
| Delisted NPL | | 1.000 | 0 | 0 | 0 | 0 | NR | 0 | 0 | 0 | 0 | 0 | NR | 0 | 0 | 0 | 0 | 0 | NR | 0 |
| CERCLIS | | 0.500 | 1 | 0 | 0 | 0 | NR | 1 | 0 | 0 | 1 | NR | NR | 1 | 0 | 0 | 2 | NR | NR | 2 |
| Proposed NPL | | 1.000 | 0 | 0 | 0 | 0 | NR | 0 | 0 | 0 | 0 | 0 | NR | 0 | 0 | 0 | 0 | 0 | NR | 0 |
| CERC-NFRAP | | 0.250 | 0 | 0 | NR | NR | NR | 0 | 0 | NR | NR | NR | 0 | 0 | 0 | NR | NR | NR | 0 | 0 |
| CORRACTS | | 1.000 | 0 | 0 | 0 | 0 | NR | 0 | 0 | 0 | 0 | 0 | NR | 0 | 0 | 0 | 0 | 0 | NR | 0 |
| RCRIS-TSD | | 0.500 | 0 | 0 | 0 | 0 | NR | 0 | 0 | 0 | 0 | 0 | NR | 0 | 0 | 0 | 0 | 0 | NR | 0 |
| RCRIS Large Quantity Generator | | 0.250 | 0 | 0 | NR | NR | NR | 0 | 0 | 0 | NR | NR | NR | 0 | 0 | 0 | NR | NR | NR | 0 |
| RCRIS Small Quantity Generator | | 0.250 | 0 | 0 | NR | NR | NR | 0 | 0 | 0 | NR | NR | NR | 0 | 0 | 2 | NR | NR | NR | 2 |
| ERNS | TP | NR | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 |
| CONSENT | | 1.000 | 1 | 0 | 0 | 0 | NR | 1 | 0 | 0 | 1 | 0 | NR | 1 | 0 | 0 | 1 | 0 | NR | 1 |
| ROD | | 1.000 | 1 | 0 | 0 | 0 | NR | 1 | 0 | 0 | 1 | 0 | NR | 1 | 0 | 0 | 1 | 0 | NR | 1 |
| FINDS | TP | NR | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 |
| HMIRS | TP | NR | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 |
| MLTS | TP | NR | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 |
| MINES | | 0.250 | 0 | 0 | NR | NR | NR | 0 | 0 | 0 | NR | NR | NR | 0 | 0 | 0 | NR | NR | NR | 0 |
| NPL LIENS | TP | NR | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 |
| PADS | TP | NR | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 |
| DOD | | 1.000 | 0 | 0 | 0 | 0 | NR | 0 | 0 | 0 | 0 | 0 | NR | 0 | 0 | 0 | 0 | 0 | NR | 0 |
| U.S. Brownfields | | 0.500 | 0 | 0 | 0 | NR | NR | 0 | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 |
| RAATS | TP | NR | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 |
| FTTS | TP | NR | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 |
| TRIS | TP | NR | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 |
| SSTS | TP | NR | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 |
| TSCA | TP | NR | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 |
| **State of California and Local Agencies** | | | | | | | | | | | | | | | | | | | | |
| AWP | | 1.000 | 0 | 0 | 0 | 0 | NR | 0 | 0 | 0 | 0 | 0 | NR | 0 | 0 | 0 | 0 | 0 | NR | 0 |
| Cal-Sites | | 1.000 | 0 | 0 | 0 | 0 | NR | 0 | 0 | 0 | 0 | 0 | NR | 0 | 0 | 0 | 0 | 0 | NR | 0 |
| CHMIRS | TP | NR | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 |
| CORTESE | | 0.500 | 0 | 0 | 2 | NR | NR | 2 | 0 | 0 | 2 | NR | NR | 2 | 0 | 2 | 3 | NR | NR | 5 |
| Toxic Pits | | 1.000 | 0 | 0 | 0 | 0 | NR | 0 | 0 | 0 | 0 | 0 | NR | 0 | 0 | 0 | 0 | 0 | NR | 0 |

## Table 3.6-1
## Summary of Hazardous Material Sites for United Rock Facilities

| Database | Target Property | Search Distance | United Rock Quarry No. 2 (Distance from Subject Property in Miles) | | | | | | United Rock Quarry No. 2 (Distance from Subject Property in Miles) | | | | | | United Rock Production Plant (Distance from Subject Property in Miles) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | <1 | 1/8-1/4 | 1/4-1/2 | 1/2-1 | >1 | Total | <1 | 1/8-1/4 | 1/4-1/2 | 1/2-1 | >1 | Total | <1 | 1/8-1/4 | 1/4-1/2 | 1/2-1 | >1 | Total |
| AST | TP | NR | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 |
| WMUDS/SWAT | | 0.500 | 0 | 0 | 2 | NR | NR | 2 | 0 | 1 | 1 | NR | NR | 2 | 0 | 0 | 2 | NR | NR | 2 |
| LUST | | 0.500 | 0 | 0 | 2 | NR | NR | 2 | 0 | 0 | 2 | NR | NR | 2 | 0 | 2 | 3 | NR | NR | 5 |
| Notify 65 | | 1.000 | 0 | 0 | 1 | 0 | NR | 1 | 0 | 0 | 0 | 1 | NR | 1 | 0 | 0 | 0 | 2 | NR | 2 |
| CA WDS | TP | NR | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 |
| DEED | TP | NR | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 |
| CA SLIC | | 0.500 | 0 | 0 | 0 | NR | NR | 0 | 0 | 0 | 1 | NR | NR | 1 | 0 | 0 | 1 | NR | NR | 1 |
| HAZNET | TP | NR | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 |
| UST | | 0.250 | 0 | 0 | NR | NR | NR | 0 | 0 | 0 | NR | NR | NR | 0 | 0 | 1 | NR | NR | NR | 1 |
| CLEANERS | | 0.250 | 0 | 0 | NR | NR | NR | 0 | 0 | 0 | NR | NR | NR | 0 | 0 | 0 | NR | NR | NR | 0 |
| CA Bond | | 1.000 | 0 | 0 | 0 | 0 | NR | 0 | 0 | 0 | 0 | 0 | NR | 0 | 0 | 0 | 0 | 0 | NR | 0 |
| CA FID UST | | 0.250 | 0 | 0 | NR | NR | NR | 0 | 0 | 0 | NR | NR | NR | 0 | 0 | 0 | NR | NR | NR | 0 |
| Historical UST | | 0.250 | 0 | 0 | NR | NR | NR | 0 | 0 | 0 | NR | NR | NR | 0 | 0 | 3 | NR | NR | NR | 3 |
| State Landfills | | 0.500 | 0 | 0 | 4 | NR | NR | 4 | 0 | 1 | 2 | NR | NR | 3 | 0 | 0 | 6 | NR | NR | 6 |
| VCP | | 0.500 | 0 | 0 | 0 | NR | NR | 0 | 0 | 0 | 2 | NR | NR | 2 | 0 | 0 | 1 | NR | NR | 1 |
| Indian UST | | 0.250 | 0 | 0 | NR | NR | NR | 0 | 0 | 0 | NR | NR | NR | 0 | 0 | 0 | NR | NR | NR | 0 |
| Indian LUST | | 0.500 | 0 | 0 | 0 | NR | NR | 0 | 0 | 0 | 0 | NR | NR | 0 | 0 | 0 | 0 | NR | NR | 0 |
| SCH | | 0.250 | 0 | 0 | NR | NR | NR | 0 | 0 | 0 | NR | NR | NR | 0 | 0 | 0 | NR | NR | NR | 0 |
| NFA | | 0.250 | 0 | 0 | NR | NR | NR | 0 | 0 | 0 | NR | NR | NR | 0 | 0 | 0 | NR | NR | NR | 0 |
| EMI | TP | NR | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 |
| REF | | 0.250 | 0 | 0 | NR | NR | NR | 0 | 0 | 0 | NR | NR | NR | 0 | 0 | 0 | NR | NR | NR | 0 |
| NFE | | 0.250 | 0 | 0 | NR | NR | NR | 0 | 0 | 0 | NR | NR | NR | 0 | 0 | 0 | NR | NR | NR | 0 |
| Los Angeles Co. HMS | TP | NR | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 | 0 | 0 | NR | NR | NR | 0 |
| Los Angels Co. Site Mitigation | TP | NR | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 | NR | NR | NR | NR | NR | 0 |
| AOCONCERN | 1.000 | 0 | 0 | 0 | 0 | 1 | NR | 1 | 0 | 0 | 0 | 0 | NR | 0 | NR | NR | NR | NR | NR | 0 |
| Coal Gas | 1.000 | 0 | 0 | 0 | 0 | 0 | NR | 0 | 0 | 0 | 0 | 0 | NR | 0 | 0 | 0 | 0 | 0 | NR | 0 |
| | | | TOTAL | | | | | 16 | TOTAL | | | | | 17 | TOTAL | | | | | 33 |

TP Target Property
NR Not Required at this Search Distance
Sites may be listed in more than one database
Source: Ref. 1, 2, and 3

#### 3.6.1.1.2 Contamination Near United Rock Sites

The information provided in **Table 3.6-1** was used to ascertain contaminated sites near the various United Rock facilities. Sites that use, store, and/or dispose of hazardous materials and do not represent a contamination issue will be excluded from further analysis. Only sites with historical or current contamination will be reviewed.

##### *3.6.1.1.2.1 Quarry No. 2*

Seven database entries were listed in the EDR search distance of Quarry No. 2 were identified as having potential contamination. A brief discussion of these sites and their environmental risk are given in the following discussion:

- **San Gabriel Valley (Area 1)** – This site is listed in the CONSENT and ROD databases. However, these entries concern the overall contamination in the San Gabriel Valley Groundwater Basin. Groundwater contamination in the San Gabriel Valley will be examined in a separate section.
- **Rebecca Land/Shatto Trust (124 Live Oak Avenue)** – This site is on the LUST and CORTESE databases. The site is located southwest of the quarry site. This site involved contamination of on-site soil with petroleum hydrocarbons. The RWQCB closed their files for this site on April 4, 1997. Therefore, the site does not pose a risk to the environment or public health.
- **Western Emulsion Company (284 Live Oak Avenue)** – This site is on the Notify 65 database. This site is south of the quarry. Findings regarding this site were not provided in the EDR database search information.
- **Nu-Way Industries (400 East Live Oak Avenue)** – This site is on the LUST and CORTESE databases. The site is located southwest of the quarry site. This site involved contamination of on-site soil with hydrocarbons. Preliminary site assessment of the extent of the contamination is underway.

Examination of the above sites, locations, and types of contamination indicate that none of them represent a significant risk to the Quarry No. 2 property or to the health and safety of the employees of this facility.

Historical examination of this site during annual SMARA inspections indicated that a large abandoned landfill was located on property directly on the west side of Quarry No. 2. This landfill is listed as a State Landfill in the EDR database. Exposure of solid waste (e.g., paper, cardboard, concrete, and wood) was observed along the western side of the quarry wall during various SMARA reconnaissance of the area from 1999 through 2003. A large soil vapor extraction system, normally used for removing volatile organics, was observed on top of the old landfill site. This soil vapor extraction system, however, was never in operation during the site visits. Therefore, it is assumed that historical remedial action at this location has been completed, and the site no longer represents a threat to the environment or to public health.

#### *3.6.1.1.2.2 Quarry No. 3*

A total of ten database entries with potential spill issues were found near Quarry No. 3. Two of the sites are located at Quarry No. 4/Production Plant and will be discussed further below. A summary of the release sites found in the EDR database near Quarry No. 3 is provided as follows:

- **San Gabriel Valley (Area 1)** – See information given for Quarry No. 2.
- **City of Irwindale Public Works (2455 Buena Vista Street)** – This site is listed on the Ca SLIC database, and is located southeast of the quarry site. This site is a waste oil and mixed oil recycling facility. Additionally, the site is used to store contaminated soil from other off-site cleanups. The database indicated that contamination has not occurred at this location. Therefore, this location does not pose a current risk to the environment or public.
- **Alpha II/Irwindale (2432 – 2536 Bateman Avenue)** – This site is listed in the VCP database. The facility is located south of the quarry. This site has been used as an auto repair and wrecking yard. A contamination risk assessment of this location by the California Department of Toxic Substance Control (DTSC) on February 10, 1997 indicated that "No Further Action" at the site is needed. Therefore, contamination at the site does not represent a threat to the environment or public health.
- **Southwest Productions Company (2240 Buena Vista Street)** – This site is listed on the LUST, VCP, and CORTESE database. This site is northeast of the quarry. The database indicated that the on-site soil has been contaminated with hydrocarbons. However, the DTSC closed their files on the site as requiring "No Further Action" on February 22, 1993. Therefore, contamination at the site does not represent a threat to the environment or public health.
- **Vernon Asphalt Materials (2600 Buena Vista Street)** – This location is on the Quarry No. 4/Production Plant site. Therefore, see the discussion on the Quarry No. 4/Production Plant.
- **Boral Resources/Irwindale (2600 Buena Vista Street)** – This is on the Quarry No. 4/Production Plant site. Therefore, see the discussion on the Quarry No. 4/Production Plant.
- **Western Emulsion Company (284 Live Oak Avenue)** – See summary given for Quarry No. 2.

#### *3.6.1.1.2.3 Quarry No. 4/Production Plant*

A total of 17 EDR database sites are located near the Quarry No. 4/Production Plant. Several of the sites noted in Table 3.6-1 are on the Quarry No. 4/Production Plant site. Additionally, several sites have been noted in the above discussion for Quarries No. 2 or No. 3. All of these locations will be noted in the following discussion and risk assessment for sites near the Quarry No. 4/Production Plant:

- **San Gabriel Valley (Area 1)** – See information given for Quarry No. 2.

- **Griffith Company (1380 Arrow Highway)** – This site is listed in the LUST and CORTESE database. The facility is located south of the plant site. The UST leaked gasoline and resulted in only on-site soil contamination. Local regulatory agencies closed their files for the site on August 28, 1991. Therefore, contamination at the site does not represent a threat to the environment or public health.
- **Boral Resources/Irwindale (2600 Buena Vista Street)** – This is on the Quarry No. 4/Production Plant site. Therefore, see the following discussion on the Quarry No. 4/Production Plant. No operational changes are proposed to Quarry No. 4/Production Plant.
- **Vernon Asphalt Materials (2600 Buena Vista Street)** – This location is on the Quarry No. 4/Production Plant site. Therefore, see the following discussion on the Quarry No. 4/Production Plant. No operational changes are proposed to Quarry No. 4/Production Plant.
- **City of Irwindale Public Works (2455 Buena Vista Street)** – See information given for Quarry No. 3.
- **Alpha II/Irwindale (2432 – 2536 Bateman Avenue)** – See information given for Quarry No. 3.
- **Jonell Oil Corporation (13649 Live Oak Lane)** – This site is listed on the CERCLIS database. This site is located southeast and across Interstate 605 from the plant site. Information regarding contamination at this location was not provided, because the area is undergoing discovery by the property owner in accordance with regulatory agency requirements.
- **CF Motor Freight (13645 Live Oak Lane)** – This site is listed on LUST and CORTESE databases. This site is located southeast and across Interstate 605 from the plant site. This site is a leak of diesel fuel from an UST and involves on-site soil contamination only. Therefore, contamination at the site does not represent an off-site threat to the environment or public health.
- **B & B Redi-Mix Concrete (590 Live Oak Avenue)** – This site is listed on LUST and CORTESE databases. This site is located south east of the plant site. Contamination at this site was petroleum hydrocarbons from an UST. Only on-site soil was contaminated. Because this contamination involves on-site soil, it is unlikely it has migrated off-site. Therefore, contamination at the site poses a low risk to the environment or public health
- **Nu-Way Industries (400 East Live Oak Avenue)** – See information given for Quarry No. 2.
- **Western Emulsion Company (284 Live Oak Avenue)** – See information given for Quarry No. 2.
- **Chem Arrow (13643 Live Oak Avenue)** – This site is listed on Notify 65 database. This site is located southeast and across Interstate 605 from the plant. This site is approximately 0.5 miles from the Quarry No. 4/Production Plant site. No information is provided in the EDR report on the chemicals or nature of the potential release situation at the site, and it is assumed to pose no significant issues relative to the mine properties examined in this EIR.

### 3.6.1.1.3 Contaminated and Hazardous Material Uses at United Rock Sites

The following discussion pertains to the use of hazardous materials at the various United Rock facilities. In addition, the United Rock sites identified in the EDR database search with past or current known contamination issues will also be discussed in this section.

#### *3.6.1.1.3.1 Quarry No. 2*

Quarry No. 2 is an active aggregate mine. Current operations at the site involve the use of a clamshell dredge to remove aggregate below groundwater and belt conveyor system to transport the aggregate to the Quarry No. 4/Production Plant for processing. Hazardous materials associated with the operation of the clamshell dredge and conveyors involve routine and emergency maintenance of the equipment. Therefore, small quantities of hydraulic fluids, lubricating oils, motor oils, and cleaning solvents are brought to or used at the quarry site. The size of these containers ranges from approximately 5 to 55 gallons. Given the size of the containers and the type of products used, these chemicals represent a potential contamination source at Quarry No. 2.

The EDR database did not report any locations within Quarry No. 2 with known or reported hazardous material contamination issues.

#### *3.6.1.1.3.2 Quarry No. 3*

Currently, opportunistic and limited dry mining is underway at this site and will occur until aggregate mining at Quarry No. 2 is complete. Current mining activities involve heavy construction equipment (e.g., bulldozers, drag lines, trucks, and/or front-end loaders). Excavated material is transported via the existing conveyor belt to Quarry No. 4/ Production Plant for processing.

The main hazardous materials used on site relate to the operation of the conveyor system. These materials are primarily hydrocarbon-based lubricants. Hazardous materials involved in mining activities at the Quarry No. 3 site relate also to fuel for the equipment (e.g., gasoline or diesel) and products used to service and maintain mobile equipment. Fuel will be dispensed at the site using fuel trucks with trained personnel or taken to another location for fueling. Routine maintenance or emergency servicing will involve lubricating oil, hydraulic fluids, cleaning solvents, and/or motor oil. Generally, servicing of equipment will involve small volumes of hazardous materials (e.g., 5 to 10 gallons). Significant spills of hazardous materials are not anticipated during servicing of equipment at the site.

The EDR database did not reveal any locations of known hazardous material contamination issues at Quarry No. 3.

#### *3.6.1.1.3.3 Quarry No. 4/ Production Plant*

The Quarry No. 4/Production Plant site is used to process material from Quarry No. 2. and limited material from Quarry No. 3. Material from the quarries is brought to the site via a conveyor belt. The material is sorted at the facility to meet material demands of their customers.

Oversized material is crushed. Portions of the Quarry No. 4/Production Plant site are leased out to vendors for the manufacture of asphalt and cement. In addition, a vendor is located at this site who conducts maintenance and equipment repair activities.

Hazardous material usage at Quarry No. 4/Production Plant generally involves the use of various hydrocarbon based chemicals. Small quantities of hydraulic fluids, lubricating oils, motor oils, and cleaning solvents are used for performing routine and emergency maintenance of the site machinery. The size of these containers ranges from approximately 5 to 55 gallons.

Hazardous materials used for maintaining mobile vehicles (e.g., pickup trucks, front-end loaders, and dump trucks) used at the site relate to fuel for the equipment (e.g., gasoline or diesel) and lubricating oil, hydraulic fluids, cleaning solvents, and/or motor oil used to service and maintain the equipment. Fuel will be dispensed at the site using fuel trucks with trained personnel or taken to another location. Generally, these operations do not pose significant contamination or public health issues.

Major shop maintenance facilities use hydrocarbons and cleaning fluids similar those for mentioned above for the Quarry No. 4/Production Plant. However, normally containers that store these fluids are in the 5 to 55 gallon size range. Therefore, spillage would be limited and not pose a significant hazardous material risk to the environment or public health.

The EDR database search found several sites located on the Quarry No. 4/Production Plant site which are described here:

- **Irwindale Rock Plant D.S. (1245 Arrow Highway)** – The site is listed on the State Landfill database. The Quarry No. 4/Production site received a variety of construction rubble (e.g., concrete and asphalt) for recycling. This material was reground and used for on-site concrete and asphalt production. Therefore, contamination of soil at the plant did not occur for this activity. Therefore, this database listing did not pose a risk to the environment or public health.
- **Vernon Asphalt Materials (2600 Buena Vista Street)** – This site is listed in the LUST database. According to the EDR printout this site involved contamination and treatment of soil contaminated with diesel fuel. This item was closed by DTSC on March 29, 1994. Therefore, contamination at the site does not represent a threat to the environment or public health.
- **Boral Resources/Irwindale (2600 Buena Vista Street)** – This location is listed in the CORTESE database. This contamination involved a minor violation of their RWQCB permit. The EDR information on this site indicated that it resulted in a minor impairment of beneficial uses of their wastewater discharge. Therefore, this incident did not involve a spill of hazardous material and significant threat to the environment or public health.
- **Sully Miller (2600 Buena Vista Street)** – This site is listed on RCRIS – Small Quantity Generator and FINDS database. These databases are used to identify locations that use and dispose of hazardous materials. They do not represent release incidents. No violations were noted in the EDR database information on the site. This situation did not pose a risk to the environment or public health.

#### 3.6.1.1.4 San Gabriel Valley Groundwater Contamination

Significant groundwater contamination was discovered in the San Gabriel Valley in the late 1970s and early 1980s. The groundwater contamination was caused by past industrial and agricultural practices in the basin. Industrial practices resulted in the improper disposal of solvents into the groundwater thereby resulting in VOC contamination. Poor agricultural practices by farmers have resulted in contamination of the groundwater with nitrates ($NO_3$). Much of the San Gabriel Valley groundwater is a considered a CERCLA and NPL cleanup site.

The San Gabriel Valley Watermaster (Watermaster) and EDR groundwater well data was reviewed to determine the overall contamination levels within the vicinity of the United Rock facilities.

##### *3.6.1.1.4.1 Volatile Organic Compounds (VOC)*

The Watermaster information identified the general areas of high concentration of VOC contaminates in the groundwater. VOC contamination is centered in a few areas within the San Gabriel Groundwater Basin. The main area of concern near the Irwindale area is a plume of VOC that extends from the northeast to the southwest. This plume originated in the City of Azusa and extends to the southwest of the City of Baldwin Park. A secondary plume of VOC contamination is toward the southern part of the City of El Monte. Both of these plumes have VOC levels that exceed the MCL. The U.S. EPA under the National Primary Drinking Water Regulations and the National Secondary Drinking Water Regulations established the MCL level designation. These MCL concentrations provide the maximum levels of a given contaminant that can be in drinking water to protect public health. MCL levels for VOCs found in the groundwater plumes near the City, and associated health effects, are presented in **Table 3.6-2**.

The primary VOC plume (Azusa to Baldwin Park) likely extends into the eastern city limits of Irwindale. The second plume (El Monte) could extend into the southwestern corner of the Irwindale city limits.

**Table 3.6-2**
**Listing of Contaminates MCL**

| Contamination | MCL* | Potential Health Affects | Source of Contaminant |
|---|---|---|---|
| Carbon Tetrachloride (CTC) | 5.0 | Liver problems, increased risk of cancer | Discharge from chemical plant and other industrial activities. |
| 1,2- Dichloroethane (1,2-DCA) | 5.0 | Increased risk of cancer | Discharge from industrial chemical factories. |
| 1,1-Dichloroethylene (1,1-DCE) | 7.0 | Liver problems | Discharge from industrial chemical factories. |
| Cis-1,2-Dichloroethylene (C-1,1-DCE) | 70.0 | Liver problems | Discharge from industrial chemical factories. |
| Tans-1,2-Dichloroethylene (T-1,2-DCE) | 100 | Liver problems | Discharge from industrial chemical factories |
| Tetrachloroethylene (PCE) | 5.0 | Liver problems, increased risk of cancer | Discharge from industrial chemical factories and cleaners. |

**Table 3.6-2**
**Listing of Contaminates MCL**

| Contamination | MCL* | Potential Health Affects | Source of Contaminant |
|---|---|---|---|
| 1,1,1-Trichloroethane (1,1,1-TCA) | 200 | Liver, nervous system, or circulatory problems | Discharge from metal degreasing sites and other factories. |
| Trichloroethylene (TCE) | 5.0 | Liver problems and increased risk of cancer. | Discharge from metal degreasing sites and other factories. |
| 1,1-Dichlorothane (TCA) | 7.0 | Liver problems. | Discharge from industrial chemical factories. |
| Vinyl Chloride (VC) | 2.0 | Increased risk of cancer. | Leaching from PVC pipes and discharge from plastic factories. |
| Nitrate ($NO_3$) | 10.0 | Infants below the age of 6 months who drink water-containing excess of the MCL could become seriously ill and if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome. | Runoff from fertilizer use, leaching from septic tanks, sewage, and erosion of natural deposits. |

* Volatile Organic Compounds (VOC) - micrograms per liter (µg/L) and Nitrate ($NO_3$) - milligrams per liter (mg/L)

The historical and most recent VOC data for wells in or near the City were identified and are provided in Appendix F. The data presented in this table indicates historical high levels of VOCs to the north, east, and south of the City. However, recent data indicates significantly lower values of contaminates in all of the monitoring wells. The decrease in VOC contamination indicates that remediation efforts undertaken by the U.S. EPA and the Watermaster have been effective in removing historically high VOCs from the groundwater.

It should be noted that many of the municipal or other drinking water supply wells to the east, south, and southwest of the City have been shut down due to existing contamination above MCL concentrations.

Perchlorates have been found in the Azusa to Baldwin Park and the El Monte plumes. Additionally, hexavalent chromium and 1,4-dioxanes have been found in groundwater located in the El Monte plume. If these chemicals are found in potable drinking water wells, water agencies and providers try to blend the water to levels below MCL for these chemicals. If this is not feasible, the agencies will shutdown or deactivate the well due to the additional high treatment cost requirements for these chemicals.

EDR data for VOC for wells specifically near the United Rock sites are provided in Appendix F. The EDR data identify wells within a mile radius of Quarry No. 2, Quarry No. 3, and Quarry No. 4/Production Plant. This data indicated reduced concentrations over time of VOC contamination in the localized area. However, many of the VOC parameters for wells near the United Rock site still exceed dinking water limits.

#### *3.6.1.1.4.2 Nitrate Contamination*

The historical and most recent Watermaster data for nitrates is provided in Appendix F of this Draft EIR. The main area of concern in the San Gabriel Water Basin in regards to nitrate is to the east and south of the City. As shown in Appendix F, historical nitrate levels exceed MCL concentrations in almost all of the wells.

The most recent nitrate data provided in the EDR database is given in Appendix F. These data indicate that nitrate exceeds regulatory MCL drinking water standards given in Table 3.6-2.

## 3.6.2 PUBLIC HEALTH AND SAFETY

The primary public safety issues associated with the United Rock facilities are worker safety issues specified in the Occupational Safety and Health Act (OSHA). Worker safety issues are minimized by enforcement of California OSHA and federal OSHA regulations and the development of documents required under these regulations.

There are also public safety issues associated with the steep walls at Quarries No. 2 and No. 3 as well as water issues (e.g., drowning) at Quarry No. 2. However, these quarries are closed to the public and fenced with "No Trespassing" signs posted along the United Rock perimeter fences. Additionally, United Rock facilities are locked if unattended, patrolled by personnel, and/or have staffed stations at entry points. Therefore, the only public access is to climb over a fence and/or to trespass. As a result, entry into the facility by the public without approved access is an illegal act and performed at the trespasser's risk.

## 3.6.3 REGULATIONS

The storage, handling, and use of hazardous materials require compliance with various federal, State, and local laws, ordinances, regulations, and standards (LORS). These hazardous materials LORS deal with a variety of conditions such as protecting the environment from contamination, preventing excessive exposure of facility workers to hazardous materials, and/or preventing exposure or injury to surrounding community residents from hazardous materials.

### 3.6.3.1 Federal

The majority of federal hazardous materials regulations are governed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Superfund Authorization and Reauthorization Act (SARA), Clean Water Act (CWA), and Clean Air Act (CAA).

The SARA regulation is an amendment to the CERCLA legislation. CERCLA and SARA identify requirements for planning, reporting, and notifying regarding hazardous materials and hazardous material releases into the environment. Most of SARA and CERCLA regulations are given in Title 40, CFR, Parts 305 through 355.

The CWA and CAA provisions are designated to prevent accidental releases of hazardous materials to surface waters and the atmosphere. Other related federal laws or regulations that address hazardous materials are the OSHA and the Resource Conservation and Recovery Act (RCRA). OSHA regulations govern the use and safety aspects associated with worker safety, and RCRA regulations deal with the management of hazardous material wastes.

### 3.6.3.2 State

California laws and regulations associated with the storage, handling, and/or use of hazardous materials are provided in several sections of the California Health and Safety Code and Proposition 65.

California Health and Safety Code (H&SC), Section 25500, et seq. (the Water Bill), and the regulations found in Title 19, CCR, Section 2620, et seq., requires that local governments be responsible for the regulation of local facilities that store, handle, or use hazardous materials above specified quantities. Additionally, the law mandates that facilities which store these hazardous materials must prepare a Hazardous Material Business Plan (HMBP). The HMBP is required to identify the facility's internal response requirements to accidental spills such as emergency contacts, hazardous material inventory, control methods, emergency response, and training. The law also requires that the HMBP be submitted to the local administering agency. All spills from a facility must be reported to both the local administration agency and the Governor's Office of Emergency Services (OES). The threshold quantities for identified hazardous materials are 55 gallons for liquids, 500 pounds for solids, and 200 cubic-feet for compressed gases measured at standard temperature and pressure.

Proposition 65 or the Safe Drinking Water and Toxics Enforcement Act regulate cancer-causing and reproduction-impairing chemicals. Users of regulated chemicals identified under this law are responsible for informing the public that could be exposed to releases of these materials from their facility. Additionally, the law is intended to prevent discharges of specified hazardous materials into drinking water sources. The law provides a listing of chemicals of concern, which is updated periodically. Proposition 65 is administered through California's Office of Environmental Health Hazard Assessment.

The California Unified Hazardous Waste and Hazardous Material Management Regulatory Program Act is established in Chapter 6.11, Division 20, H&SC, Section 25404. This program establishes requirements for dealing with hazardous waste locally by establishing the Certified Unified Program Agency (CUPA).

In addition to the above LORS, other requirements dealing with hazardous materials are provided as follows:

- Title 19, CCR, Section 66262 requires generators of waste to determine whether it is a "hazardous waste" as defined on one of the lists of hazardous materials specified in federal or State regulations. This regulation also specifies labeling requirements for hazardous waste and specifies requirements for Small Quantity Generators including manifesting requirements.
- H&SC, Section 25189 specifies what constitutes illegal hazardous waste disposal activities.
- Title 19, CCR, Section 66265 requires facilities to properly store hazardous materials in such a way as to minimize the possibility of a fire, explosion, or any unplanned release of the material to air, soil, or surface water. This regulation also provides inspection for

areas storing hazardous materials, training for people handling hazardous wastes, and emergency preparedness and prevention provisions

- H&SC, Section 25250, et seq., specifies that used oil is a hazardous material under State regulations and specifies handling and disposal requirements (note that oil is not a hazardous material under federal regulations).
- H&SC, Section 25143 covers recycling and reporting requirements for hazardous materials.
- H&SC, Section 25187 and 25404 establishes site assessment guidelines for contaminated sites that may require remediation as a result of a spill.

### 3.6.3.3 Local

California delegates the responsibility for administrating federal and state hazardous material regulations to the local administrative agencies, normally the fire department or environmental health agency. In Irwindale, the local administration for the CUPA is the Los Angeles County Fire Department. Authority for the operation of CUPA in Los Angeles County is provided in the ordinance given in Title 12 - Environmental Protection, Chapter 12.50 - Unified Program.

Los Angeles County Ordinance Title 12, Chapter 12.52 specifies licensing requirements dealing with hazardous material waste controls. Title 12, Chapter 12.64 provides fee and penalty requirements dealing with disclosure and risk management of hazardous materials, and Title 12, Chapter 12.60 specifies requirements dealing with site assessment and remediation associated with accidental spills of hazardous materials.

The City of Irwindale does not have its own LORS dealing with hazardous material use, storage, or disposal.

## 3.6.4 POTENTIAL ENVIRONMENTAL IMPACTS

### 3.6.4.1 Threshold of Significance

Significance criteria under CEQA Guidelines Appendix G state that a project will normally have a significant effect on public health and safety relative to hazards and hazardous materials if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazards or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would create a significant hazard to the public or the environment: or
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

### 3.6.4.2 Public Health and Safety

United Rock facilities have a chain link fence and warning signs along the perimeter of the facility. During business hours, United Rock has personnel stationed at the site. During non-business hours or when the facility is not in operation, entrances are locked, and a security service provides site security. Therefore, illegal entrance and dumping would not pose a significant impact or contamination issue. This type of security will continue through mining and reclamation of the site.

The Watermaster routinely samples groundwater at and near the United Rock facility. Any significant change in water quality would be noticed during these sampling events and acted upon. The likelihood of contamination of groundwater during mining is very unlikely and does not pose a significant risk. Groundwater contamination could occur during reclamation if contaminated materials are dumped at the site. Under Quarry No. 1 Class U landfill permit, all loads entering the site are visually inspected. If the load is suspect, it is checked for contamination, and may be rejected. This type of inspection is required under United Rock's Class "U" landfill permit and will apply to reclamation of quarries nos. 2 and No. 3. Additionally, United Rock keeps general records of where contractors deposit loads brought to the site. As a result, contamination can be traced back to the contractor. Therefore, contamination during reclamation activities will not pose a significant impact.

In the event contamination is found at the site during reclamation activities, it would be the responsibility of United Rock or an identified contractor to remediate the condition in accordance with federal and State regulations. Responsible agencies would provide oversight of any remediation at the United Rock facility.

During post-reclamation, any facility on the site would be responsible for complying with all federal, State, and local standards regarding storage, handling, transportation, and disposal of hazardous materials.

### 3.6.4.3 Quarry No. 2

Current and proposed operations at Quarry No. 2 consist of mining aggregate below groundwater using a clamshell dredge and conveying the mined material to the Quarry No. 4/Production Plant via a conveyor system. This conveyor system goes under the current Buena Vista Street. Current mining operations are to a maximum of 275 feet. The maximum area of mining is the current quarry footprint of 110 acres.

#### 3.6.4.3.1 Mining Operations

Rerouting of Buena Vista Street and abandonment of the old alignment will expand the current operation by approximately 24.6 acres to the east, for a total of about 136.6 acres for Quarry No. 2. Mining depth is also proposed to be increased to a maximum of 445 feet below grade. This would allow for an additional 19.7 million cubic yards to be mined at the site. Therefore, the overall duration of mining activities in this quarry would be continued until 2018 or 2020.

It is likely that mining in the newly acquired 24.6 acres would initially be performed using heavy equipment until groundwater is reached and wet mining is initiated. Hazardous materials associated with heavy equipment use at Quarry No. 2 would be fuel for the equipment (e.g., gasoline or diesel) and products used to service and maintain the equipment. Fuel will be dispensed at the site using fuel trucks with trained personnel or taken to another location for fueling. Routine maintenance or emergency servicing will involve lubricating oil, hydraulic fluids, cleaning solvents, and/or motor oil. Generally, servicing of equipment will involve small volumes of hazardous materials (e.g., 5 to 10 gallon containers). Storage of these hazardous materials on-site is not planned.

Hazardous material use for the clamshell dredge and conveyor system would not change as a result of the proposed action to increase the size and depth of the mine. The main change would be the extension of mining activities and subsequent use of minor amounts of hazardous materials at the site for an additional 14 to 16 years.

Potential impacts associated with hazardous material use at the site would not be significant because the existing operations are ongoing and the net increase in exposure risk would be minimal when compared to the baseline that presently exists.

#### 3.6.4.3.2 Reclamation

Reclamation of Quarry No. 2 will occur after mining is complete, sometime between year 2018 and 2020. Under reclamation, Quarry No. 2 would be backfilled with inert material as a Class U landfill, similar to current operations at Quarry No. 1. It is anticipated that reclamation of Quarry No. 2 would be completed by 2061.

Quarry No. 2 will be operated as a Class "U" landfill under both existing and proposed actions. The only change is additional time needed to backfill the quarry to satisfy revised conditional use permit conditions. The backfill operations will use the same procedure for checking loads of incoming inert fill material as that used for Quarry No. 1. Additionally, a Class "U" landfill permit establishes safety procedures for handling potentially contaminated deliveries to the site. These procedures would minimize risk of disposal of contaminates at the site.

Haul trucks delivering inert solid waste to the site will not be serviced at the Quarry No. 2 site. Therefore, no hazardous materials will be used for this operation. The only hazardous materials used will be servicing the bulldozer or similar equipment with fuel and maintenance fluids (e.g., hydraulic fluids, motor oil, and lubricants). Servicing of the bulldozer and other mobile equipment would involve only minor quantities of hazardous materials. Hazardous materials will not be stored at the site.

Potential environmental impacts associated with hazardous material use at Quarry No. 2 would not be significant, because (1) safety procedures will be in place to insure backfill materials are not contaminated and (2) only small amounts of hazardous materials used for the bulldozer will be at the quarry at any given time. Any spills from servicing the bulldozer would be small and easily contained and removed.

#### 3.6.4.3.3 Post Reclamation

Post reclamation activities may involve the construction of heavy industrial/commercial facilities and the operation of these facilities. Construction activities for these types of facilities can use hazardous materials (e.g., paint, thinners, solvents, hydrocarbon fluids, and other materials). The extent of use of these materials will be dependent on the scope of the project developed for the site. Additionally, the industrial/commercial facilities on the Quarry No. 2 site can use a variety of types and quantities of hazardous material, depending upon the product manufactured or sold.

The proposed action will not change the ultimate land use, construction, or facility located at the site. Therefore, a significant environmental impact will not occur as a result of the Proposed Project.

### 3.6.4.4 Quarry No. 3

Historically, Quarry No. 3 has been intermittently mined since 1997. A new conveyor system was installed at the facility during 2003 to transport aggregate material directly to the Quarry No. 4/Production Plant, located approximately 1,000 feet south of the site. Currently, approved mining operations are to a maximum depth of 275 feet. Although seasonally variable, most of the bottom of Quarry No. 3 is generally above groundwater. The maximum area of mining is 110 acres, the current footprint of the quarry.

#### 3.6.4.4.1 Mining Operations

With implementation of the Proposed Project, Quarry No. 3 would be mined to a depth of 440 feet below grade level, an increase of 165 feet. This proposed action would increase aggregate production by an estimated 12.2 million cubic yards. Intermittent mining activities will likely take place at this facility from 2004 through the 2018/2020 timeframe or until quarry activities cease at Quarry No. 2. After the 2018/2020 period, mining would likely be continued at this site until approximately 2035/2037.

As noted earlier in the existing setting discussion, existing and proposed mining at Quarry No. 3 would be performed using heavy equipment, because the area is currently above groundwater. The use of hazardous materials discussed for Quarry No. 2 will be the same for this site.

Once quarry operations have reached the groundwater table at this site and mining operations at Quarry No. 2 have ended, the clamshell dredge will be moved and operated at this site. As noted in the previous section for Quarry No. 2, small quantities of hazardous materials are needed to operate and service the clamshell dredge. Therefore, the only change will be the operation of the quarry over a longer period of time.

Potential environmental impacts associated with hazardous material use at the site would not be significant, because large amounts will not be stored or used at the site. Additionally, any spills would be small and easily contained and removed.

#### 3.6.4.4.2 Reclamation

Implementation of the Proposed Project would enable Quarry No. 3 to be reclaimed in a manner substantially similar to Quarry No. 1 and that proposed for Quarry No. 2. Reclamation would involve operating the exhausted quarry as a Class "U" landfill accepting only clean fill.

Hazardous material would not be accepted for disposal at the site. The primary impacts of this phase of the project would be the added time needed to fill the additional material mined from the site. No hazardous materials would be stored at the site.

Potential environmental impacts associated with hazardous materials use at the site would not be significant, because large amounts will not be stored or used at the site. Additionally, any spills would be small and easily contained and removed.

#### 3.6.4.4.3 Post Reclamation

Post reclamation activities may involve the construction of heavy industrial/commercial facilities and the operation of these facilities. Construction activities for these types of facilities can use hazardous materials (e.g., paint, thinners, solvents, hydrocarbon fluids, and other materials). The extent of use of these materials will be dependent on the scope of the project developed for the site. Additionally, the industrial/commercial facilities on the Quarry No. 3 site can use a variety of types and quantities of hazardous materials, depending upon the product manufactured or sold.

The proposed action will not change the ultimate land use, construction, or facility located at the site. Therefore, a significant environmental impact will not occur as a result of the Proposed Project.

#### 3.6.4.4.4 Mining Operations

Under the Proposed Project, approximately 24.6 acres on the western side of the newly aligned Buena Vista Street will be transferred from Quarry No. 4 to Quarry No. 2 and used for mining of aggregate and to create additional setback distances. Therefore, the aggregate production plant site size would decrease from about 75 acres to 50.4 acres. This reduction in size will not have an effect on the existing activities (e.g., sorting, storing, and crushing of aggregate; asphalt production; cement manufacture; and equipment maintenance) at the site.

Implementation of the Proposed Project would not alter the current or future planned aggregate production at the plant. The main change that would result from implementation of the project would be an increase in the duration of the operational life of Quarry No. 4/ Production Plant necessary to support the aggregate processing requirements associated with the prolonged operational life of Quarries No. 2 and 3.

The use and types of hazardous materials discussed in the Existing Setting section for the Quarry No. 4/Production Plant site will not change as a result of enacting the proposed project. Therefore, no impacts would be significant.

## 3.6.5 MITIGATION MEASURES

No impacts would be significant; therefore, no mitigation measures are required or proposed.

## 3.6.6 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No impacts would be significant.

# SECTION 3.7 PUBLIC SERVICES AND UTILITIES

This section presents a discussion of the existing public services and utilities available to service the United Rock quarries as well a discussion of the potential impacts of the Proposed Project on the provision and service levels of public services and utilities. Mitigation measures to avoid, eliminate or reduce potential environmental impacts are also provided.

## 3.7.1 EXISTING SETTING

### 3.7.1.1 Police Protection

The City of Irwindale Police Department (IPD), located at 5050 North Irwindale Avenue, provides law enforcement services within the entire City limits including the United Rock quarries. The IPD has several internal divisions including detective, canine, bicycle patrol, communications, D.A.R.E., police explorer, and traffic safety. The IPD currently consists of approximately 25 full-time sworn officers, 10 reserve officers, two clerical staff, and six dispatchers. IPD equipment includes 15 patrol vehicles, 1 K-9 unit, two patrol motorcycles and one commercial truck. Average response time is approximately 3-4 minutes (Woodmansee 2004) throughout the City.

Due to the industrial nature of the City of Irwindale, the daytime population is significantly higher than the nighttime population as much of the day time population comes to the City for employment but resides elsewhere. According to the IPD, law enforcement is provided to approximately 50,000 persons during daytime hours and 1,446 residents during nighttime hours (Cox 2004).

The IPD maintains a performance standard based on response time, not direct staff ratios. Further, staffing goals are based in part on City resident satisfaction and other service indicators in determining staffing needs. According to the IPD, current ratios are adequate to continue providing a high level of police and law enforcement services to the public (Woodmansee 2004).

**Table 3.7-1** shows the 2003 statistics for the entire City of Irwindale.

**Table 3.7-1**
**2003 Crime Statistics for the City of Irwindale**

| Crime | Number of Instances |
|---|---|
| Murder | 1 |
| Rape | 1 |
| Robberies | 7 |
| Assaults | 32 |
| Burglaries | 70 |
| Larceny Counts | 41 |
| Auto Thefts | 48 |
| Source: Cox 2004 | |

### 3.7.1.2 Fire Protection

Fire protection services for the City are provided by the Los Angeles County Fire Department (Fire Department). Primary service to the United Rock quarries is provided by Station 169, located at 5112 North Peck Road in the City of Irwindale. This facility houses a single engine company manned by three full-time firefighters (LACFD 2004).

Station No. 48, within Battalion 16, provides secondary service to the United Rock quarries and is located at 15546 E. Arrow Highway. Station No. 48 is located approximately 3 miles from the United Rock quarries and houses a single engine company that is manned by four firefighters at any given time (Taplet 2004).

### 3.7.1.3 Schools

The United Rock quarries are located within the boundaries of the Covina Valley Unified School District (CVUSD). Two elementary schools lie within one-mile of the United Rock quarries: Annunciation, located at 1307 East Longden Avenue, Los Angeles County and Plymouth, located at 1300 Boley Street, in the City of Monrovia. The draft City of Irwindale General Plan Update Land Use Map indicates that no additional public schools are planned for the area within 1.0 mile of the United Rock quarries (City of Irwindale 2003).

### 3.7.1.4 Water

Water service within the City of Irwindale is provided by several different water agencies. The San Gabriel Valley Water Company (SGVWC), located in El Monte, serves the United Rock quarries and those areas located west of I-605 along Live Oak Avenue.

The City of Azusa's Water Department provides basic service to the largest portion of Irwindale from its most north-easterly boundaries to Ornelas Street, including all of the Santa Fe Dam east of the I-605. They have no facilities located within the City of Irwindale.

The Valley County Water District, located in Baldwin Park, also provides limited domestic water services to some areas of the City. However, the City is close to reaching its capacity with the Valley County Water District, and significant new demand will not be supported from this source under existing capacity constraints.

California-American Water Company, located in San Marino, serves the area north of the Buena Vista Channel to the Duarte City boundary.

United Rock consumes approximately 900 acre-feet (AF) per year of water for aggregate washing and dust suppression as well as for the bathroom facilities for all of its current facilities and operations. While the area around United Rock is served by the Cal American Water Company, United Rock obtains all of it water from on-site wells.

### 3.7.1.5 Natural Gas

Natural gas services are provided to residences and businesses in the City of Irwindale by the Southern California Gas Company. There are currently no under-served areas in the City, and

constraints to future development within the City are not anticipated (City of Irwindale 2003). The Southern California Gas Company offers conservation programs and incentives to both commercial and residential accounts. Currently, United Rock is not a natural gas consumer.

### 3.7.1.6 Electricity

Southern California Edison (SCE) provides basic electrical service for all residential and commercial customers within the City, including the United Rock quarries. Underground electrical lines are located throughout the City under major streets. There are no under-served areas and there are no constraints to additional electric service needed for future development (City of Irwindale 2003).

Mining operations in Quarry No. 2 operate with an electric-powered clam-shell dredge. Quarry No. 4/Production Plant also operates electrical equipment for the sorting and washing operations. Total demand is approximately 6.8 million kilowatt hours per year for these uses..

### 3.7.1.7 Sewer Services

The Los Angeles County Sanitation District provides the City's effluent treatment services through a major trunk line that extends throughout the City. The San Jose Creek Water Reclamation Plant receives the entire City's effluent. If there was a large volume of industrial and commercial wastewater, overflow would be routed to the Joint Water Pollution Control Plant. No existing service deficiencies or under-served areas exist within the City of Irwindale.

## 3.7.2 POTENTIAL ENVIRONMENTAL IMPACTS

### 3.7.2.1 Methodology and Thresholds of Significance

The analysis was conducted to determine potential increases in demand for specific public services and utilities within the project area as a result of project implementation. Due to the long-term nature of the proposed Project, certain assumptions regarding future supply of materials and the reliability of services were made.

According to Appendix G of the CEQA Guidelines, the Proposed Project would be considered to have a significant impact related to public services and utilities if it would result in:

- Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection, police protection, schools, parks, or other public facilities;
- The construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects; or,
- A need for new or expanded water supplies.

### 3.7.2.2 Mining Impact Analysis

The Proposed Project is the continuation of existing mining operations and extension of the duration of time over which mining activities would be allowed to occur. Implementation of the Proposed Project will not increase the City's population or the number of employees on the Project site. The proposed Project will not create any additional demand for services or utilities; therefore, the proposed Project will not impact the City's law enforcement, fire protection services, schools, water service, natural gas service, electric service or sewer services. The proposed Project will extend the years of operation; however, it will not increase the rate of utility usage or demands on the level of service. Therefore, these impacts would be considered less than significant.

### 3.7.2.3 Reclamation Impact Analysis

The present capacity of the Fire Department is not constrained and would be able to meet emergency services for the Proposed Project while meeting the needs of the rest of the City. The Proposed Project will not increase the population of the City nor will it result in the need to construct additional fire stations. Therefore, although the Proposed Project may require emergency services at sometime, the Fire Department is adequate to provide that service. Impacts would therefore be considered less than significant.

Water will be used for dust suppression during reclamation activities. No substantial increase in the rate of consumption of water will be needed for reclamation. Therefore, impacts would be considered less than significant.

Existing sewer services are operating under no existing constraints. Therefore, since no additional sewer services and no increase in the level of service will be needed, impacts are considered less than significant.

### 3.7.2.4 Post-Reclamation Impact Analysis

Upon completion of the reclamation phase of the Proposed Project, future land development projects may be built that increase the demands on public services and utilities including law enforcement, fire protection, schools, water, electricity, natural gas and sewer services.

The October 2003 Draft City of Irwindale General Plan has designated the Project area as "Regional Commercial." Although the Proposed Project site will not directly generate housing that would increase the demand for schools, the proposed development could potentially impact schools by increasing employment opportunities in the City. Post-reclamation service and utility requirements will be determined based on the final post-reclamation land use.

The City has determined and evaluated the potential environmental impacts of the Proposed Project in this Draft EIR based on best available data and the abilities and limitations of current impact assessment practices, recognizing that potential effects of future activities and land uses decades in the future necessarily exceeds the limits of reasonable forecasting and is too speculative to warrant detailed analysis. It is further assumed that all future post-reclamation phases of development will be subject to subsequent discretionary approvals and therefore will be subject to the requirements of CEQA.

## 3.7.3 MITIGATION MEASURES

While impacts to public services and utilities are not anticipated to be significant with implementation of the mining and reclamation phases of the Proposed Project, the following measures are recommended to reduce the potential for adverse impacts on services and utilities for post-reclamation land uses.

- Prior to the approval of any post-reclamation land development project, the Applicant shall demonstrate to the City that a sufficient amount of water exists to adequately service the proposed land use development project.
- Prior to the approval of any post-reclamation land development project, the Applicant shall demonstrate that the Los Angeles County Sanitation District has adequate capacity to handle the wastewater needs of the proposed land use.

## 3.7.4 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No impacts would be significant.

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# SECTION 3.8 TRAFFIC AND CIRCULATION

This section discusses the existing local and regional traffic and circulation patterns as well as the potential impacts of the Proposed Project's mining, reclamation and post-reclamation phases on local and regional roadway systems. The information presented herein summarizes information contained in a Traffic Impact Analysis (TIA) prepared for the project by Urban Crossroads, Inc. in February 2004. The complete TIA is included in this Draft EIR as Appendix G.

## 3.8.1 EXISTING REGULATORY SETTING

### 3.8.1.1 Federal

The United States Department of Transportation (USDOT) provides funding and oversight of the existing Federal highway system. The Federal regulation that could affect the Proposed Projects relates to motor carriers. The Motor Carrier Safety Regulations (Title 49, CFR, Subtitle B, Chapter III, Subchapter B) specifies safety considerations for transportation of goods, materials, and substances over public highways and roadways by haul trucks.

The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 and the Transportation Equity Act for the 21st Century (TEA-21) establish federal requirements for states and local transportation agencies to develop Congestion Management Systems (CMS) as a condition to receive federal transportation funds. CMS requires monitoring, performance measures, and, in certain cases, mitigation measures.

### 3.8.1.2 State

The California Department of Transportation (Caltrans) is responsible for constructing, enhancing, and maintaining the State highway and interstate freeway systems. As a result, any changes to the State roadway system require an encroachment permit from Caltrans.

In addition to maintaining highways, implementing general regulations and laws dealing with licensing, traffic signage, and other noncommercial driver requirements, State laws and regulations also govern motor carriers on roadways within the State. Some of the State laws and regulations that apply to motor carriers for the existing United Rock Quarries and Proposed Project include:

**California Vehicle Code (Division 14.8 – Safety Regulations, Sections 34500, 34501, 34501.3, and 34510 to 34511)** – This law specifies the requirements for the safe operation of motor vehicles, especially those motor vehicles used for the transportation of materials; and

**California Vehicle Code (Section 35780); California Streets and Highways Code (Section 660 through 711); and Title 21, CCR, Sections 1411.1 through 1411.6** – These laws identify the procedures and approvals obtained through Caltrans for the transportation of oversized or excessive loads over State highways and roadways.

**Government Code Section 65089** – This law requires that every county with an urbanized area develop a Congestion Management Program (CMP) and update it every two years. The local CMP, approved by the County Transportation Commission or Board of Supervisors, must include all cities within the county as well as the county itself. All Traffic Systems Management Program (TSM) projects must be in an urbanized area and included in the local CMP to ensure conformance with local transportation plans and priorities for implementation.

## 3.8.1.3 Local

### 3.8.1.3.1 Los Angeles County Metropolitan Transportation Agency

A CMP for the Los Angeles County Metropolitan Transportation Agency (MTA) has been developed to meet the requirements of Section 65089 of the California Government Code. As required by statute, Los Angeles' CMP contains the following elements:

- A system of highways and roadways, with minimum levels of service performance measurements designated for highway segments and key roadway intersections on this system.
- A performance element that includes performance measures to evaluate multimodal system performance.
- A transportation demand management (TDM) element that promotes alternative transportation strategies.
- A Land Use Analysis program to analyze the impacts of local land use decisions on the regional transportation system, including an estimate of the costs of mitigating those impacts.
- A seven-year Capital Improvement Program of projects that benefit the CMP system.
- A Deficiency Plan.

The MTA CMP has also been developed to meet the federal requirements for a CMS initially enacted in the ISTEA of 1991, and continued in the TEA-21 in 1998. The federal CMS requirement was modeled after California's CMP. Like the CMP, the CMS requires monitoring, performance measures, and, in certain cases, mitigation measures if performance standards are not achieved.

Jurisdictions are required to conform to local CMP requirements in order to receive their portion of state gas tax revenue allocated by Section 2105 of the California Streets and Highways Code. In addition, compliance with the CMP is necessary to preserve eligibility for state and federal funding for transportation projects.

Traffic-related policies included in the City of Irwindale General Plan primarily concern traffic resulting from long-term project operations. The City of Irwindale has established a Level of Service (LOS) goal of D for roadway segments within its jurisdiction. Traffic impacts are regulated through the City Public Works Department.

### 3.8.1.3.2 Transportation Systems Serving Irwindale

#### *3.8.1.3.2.1 Bus Service*

Foothill Transit provides bus service to the City of Irwindale. Foothill Transit was established in 1988 as a public / private partnership serving over 17 million passengers annually in the San Gabriel and Pomona Valleys. It is the second largest fixed route system in Los Angeles County, operating 299 buses and covering 327 square miles. Foothill Transit operates four bus routes in the City: Lines 185, 272, 492, and 494. Line 272 connects Duarte, Baldwin Park, and West Covina using Buena Vista Street and Arrow Highway and is the nearest bus route to the Project Site.

#### *3.8.1.3.2.2 Highway and Road System*

The City of Irwindale is located in the eastern portion of Los Angeles County. The City is generally bounded on the north by the City of Duarte, on the east by the City of Azusa, on the south by the City of Baldwin Park, and on the west by the cities of Monrovia, Arcadia, and Duarte.

Regional access to the City is provided by Interstate 210 (Foothill Freeway) that crosses the northerly portion of the City in an east/west direction, and Interstate 605 (San Gabriel River Freeway) that roughly parallels the San Gabriel River (see Figure 2-2, Site Location Map). Both I-210 and I-605 are six lanes and have Average Daily Traffic (ADT) volumes of 223,000 and 126,000 respectively. Ramp connection from the 1-210 to the City is via a full interchange at Irwindale Avenue. Connections to the City from the I-605 are a half interchange at Arrow Highway, a partial interchange at Live Oak Avenue, and full interchanges at Lower Azusa Road and Ramona Boulevard. Both I-210 and I-605 are identified in the Los Angeles County CMP as CMP facilities.

In addition, Interstate 10, an east/west freeway to the south of the City, provides indirect service as the partial interchange of Sunset Avenue in the City of West Covina eventually transitions into Irwindale Avenue within the City limits.

The dominant roadways within the City include Arrow Highway, Live Oak Avenue, Foothill Boulevard and Irwindale Avenue. These along with Peck Road/Myrtle Avenue are identified as major highways in the City. Secondary highways in the City include Azusa Canyon Road, Buena Vista Street, Cypress Street, Gladstone Street, Longden Avenue, Lower Azusa Road, Rivergrade Road, and Vincent Avenue.

Existing roadways in close proximity to the Project Site include the major roads of Arrow Highway, Live Oak Avenue, and Peck Road/Myrtle Avenue. Secondary highways are Buena Vista Street, Longden Avenue, and Rivergrade Road. Local streets include Bateman Avenue, Tifal Avenue, and Meridian Street. **Figure 3.8-1** shows the traffic impact analysis study area, and **Figure 3.8-2** illustrates the number of through lanes and intersection controls in the vicinity of the Project Area.

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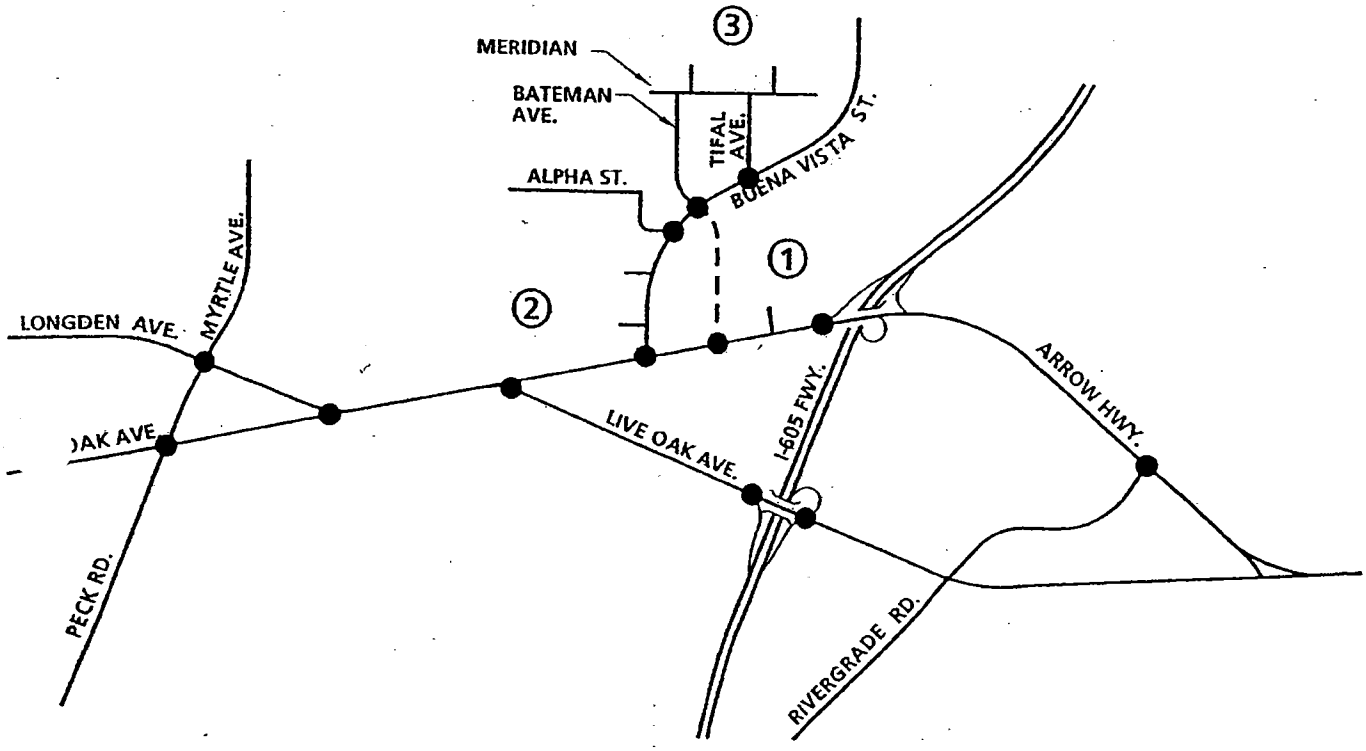


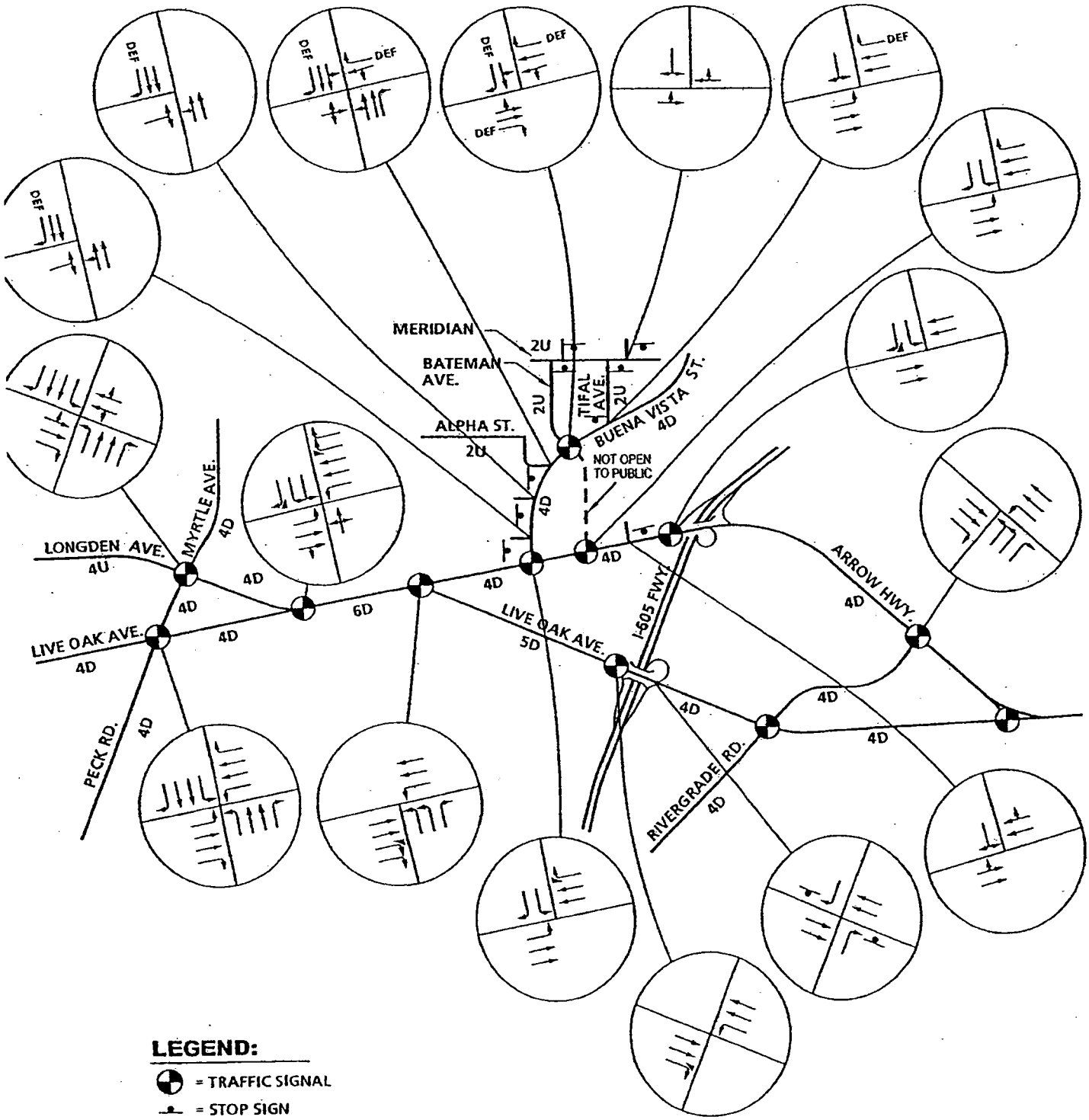

**LEGEND:**

- = PROPOSED BUENA VISTA STREET REALIGNMENT
- = INTERSECTION ANALYSIS LOCATION
- (1) = UNITED ROCK PLANT SITE
- (2) = UNITED ROCK PIT 2
- (3) = UNITED ROCK PIT 3

GREYSTONE©

Source: Urban Crossroads, 2004

**Figure 3.8-1**
**Traffic Study Area**




**LEGEND:**

- = TRAFFIC SIGNAL
- = STOP SIGN
- 4 = NUMBER OF LANES
- D = DIVIDED
- U = UNDIVIDED

Source: Urban Crossroads, 2004

**Figure 3.8-2**
**Existing Lane Configuration and Intersection Controls**

**Live Oak Avenue:** is a four-lane divided roadway west of Longden Avenue and east of the I-605 Freeway with an east-west orientation. Between Longden Avenue at the I-605 Freeway, Live Oak Avenue transitions between a 5 and 6 lane divided roadway. The current daily traffic volumes range from 21,700 to 37,600.

**Arrow Highway:** is a four-lane divided roadway with an east-west orientation. Arrow Highway currently carries between 14,800 and 28,000 trips per day. Arrow Highway is also identified as a Los Angeles County CMP facility.

**Peck Road/Myrtle Avenue:** is a four-lane divided roadway with a north-south orientation. This roadway currently carries between 27,600 and 31,900 vehicles per day in the vicinity of the site.

**Buena Vista Street:** is a four-lane divided roadway with a north-south orientation. It currently terminates at a T-intersection at Arrow Highway and currently carries approximately 10,000 vehicles per day. The current alignment of Buena Vista Street crosses the Project Site adjacent to Quarry 2. A new alignment for Buena Vista has been completed that would move the street in an easterly direction. Although the street alignment has been completed, it is not in service pending approval of the CUP and related agreements addressed in this EIR.

**Longden Avenue:** is a four-lane divided roadway east of Myrtle Avenue, and a four-lane undivided roadway west of Myrtle Avenue. Longden Avenue runs in an east-west orientation, and it continues east to Arrow Highway. Longden Avenue carries between 14,300 and 16,700 vehicles per day.

**Rivergrade Road:** is a four-lane divided roadway east of the I-605 Freeway. Rivergrade Road aligns in a north-south orientation and currently carries approximately 3,400 vehicles per day.

**Bateman Avenue:** is a two-lane undivided roadway with a north-south orientation that currently carries 2,800 vehicles per day.

**Tifal Avenue:** is a two-lane undivided roadway with a north-south orientation that currently carries 600 vehicles per day.

The existing United Rock mining operations currently use Arrow Highway, Buena Vista Street, and Meridian Street. **Figure 3.8-3** shows the existing access points at the quarries. Existing daily traffic volumes on arterial highways throughout the study area are shown on **Figure 3.8-4**.

Quarry 2 is currently being mined with material transported via a conveyor belt, which goes under Buena Vista Street. No trucks enter or exit this site for purposes of transporting product. Rather, product is transported to Quarry No. 4/Production Plant for processing and then from the Plant to end-users. Vehicles enter and exit on Buena Vista Street near Arrow Highway. No active mining is currently taking place in Quarry No. 3. A conveyor system similar to the system for Quarry 2 is currently in place, which would allow for the transport of product to the Plant site for processing once full scale underwater mining in Quarry No. 3 commences. As with Quarry No. 2, when Quarry No. 3 is being mined, all of the product will be transported to Quarry No. 4/Production Plant via conveyor for processing.

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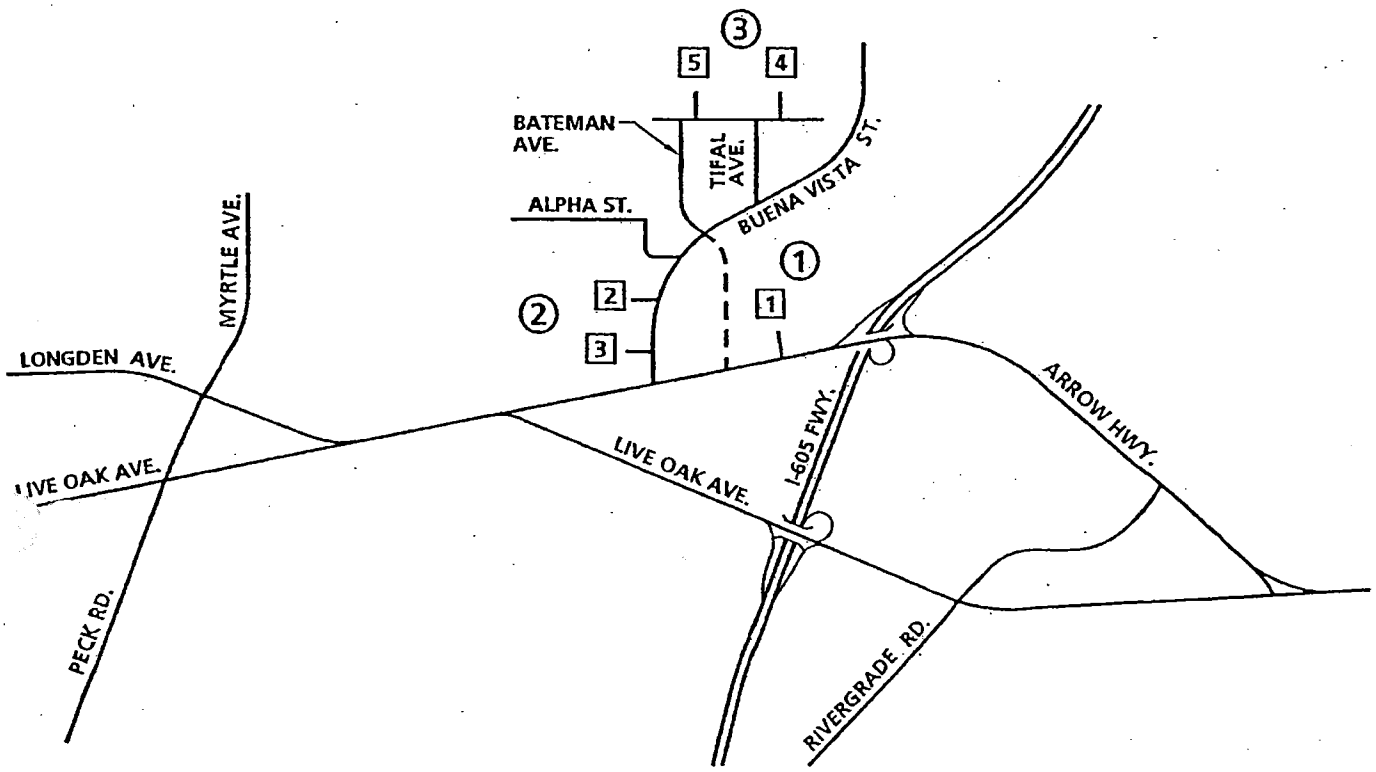


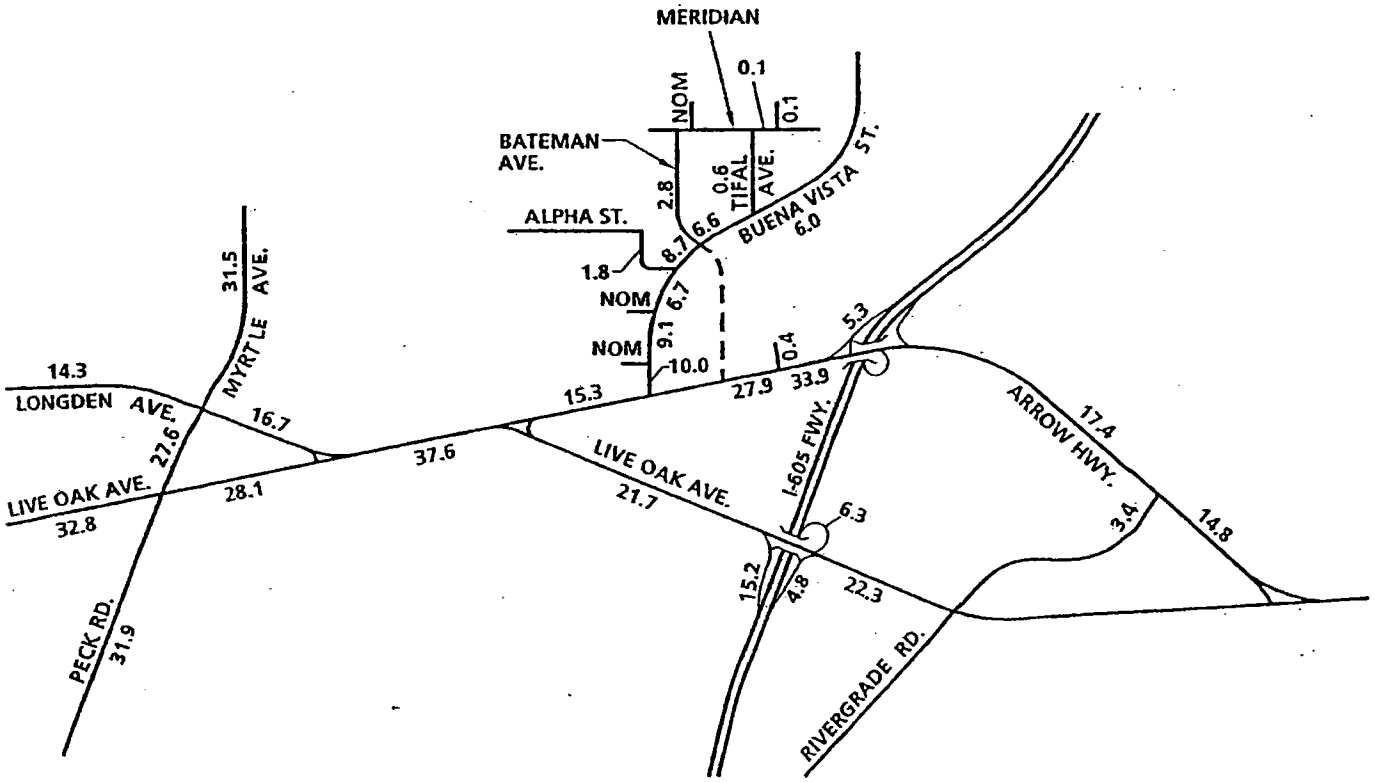

**LEGEND:**

(1) = UNITED ROCK PLANT SITE
(2) = UNITED ROCK PIT 2
(3) = UNITED ROCK PIT 3
[1] = PLANT SITE MAIN ACCESS
[2] = PIT 2 NORTHERLY ACCESS
[3] = PIT 2 SOUTHERLY ACCESS
[4] = PIT 3 EASTERLY ACCESS
[5] = PIT 3 WESTERLY ACCESS

N

GREYSTONE®
Source: Urban Crossroads, 2004

**Figure 3.8-3**
**Project Access**




**LEGEND:**

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

GREYSTONE®
Source: Urban Crossroads, 2004

**Figure 3.8-4**
**Existing Average Daily Traffic (ADT)**

The following intersections were selected for analysis based on the traffic consultant's discussions with the City of Irwindale and the Los Angeles County Congestion Management Plan requirements:

- Peck Road at Longden Avenue and Live Oak Avenue
- Longden Avenue at Live Oak Avenue
- Live Oak Avenue at Arrow Highway
- Buena Vista Street at Arrow Highway and Alpha Street
- I-605 Southbound Off-Ramp at Arrow Highway
- I-605 Southbound On-Ramp at Live Oak Avenue
- I-605 Northbound Off-Ramp at Live Oak Avenue
- Graham Access Road at Live Oak Avenue
- Rivergrade Road at Arrow Highway
- Bateman Avenue at Buena Vista Street
- Tifal Avenue at Buena Vista Street

Intersection Capacity Utilization (ICU) methodology was used to assess the operation of the intersections. To calculate an ICU, the volume of traffic using the intersection is compared with the capacity of the intersection. ICU is usually expressed as a percent which represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. Lane capacities of 1,600 vehicles-per-hour (VPH) for intersections, and 2,880 vehicles per lane per hour for dual left-turn lanes, were used in the analysis.

**Table 3.8-1** shows the definitions of LOS for uninterrupted flow (flow unrestrained by the existence of traffic control devices). **Tables 3.8-2** and **3.8-3** show the ICU level of service range and the expected delay time and corresponding LOS category for unsignalized intersections.

**Table 3.8-1**
**ICU Level of Service (LOS) Definitions**

| LOS | Definition |
|---|---|
| A | Free flow. Individual users are virtually unaffected by the presence of others in the traffic stream. |
| B | Stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver. |
| C | Stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream. |
| D | High-density but stable flow. Speed and freedom to maneuver are severely restricted, and the driver experiences a generally poor level of comfort and convenience. |
| E | Operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Small increases in flow will cause breakdowns in traffic movement. |
| F | Forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point. Queues form behind such locations. |

**Table 3.8-2**
**ICU Level of Service Range**

| V/C Ratio | LOS |
|---|---|
| v/c <= .60 | A |
| .60 <= .70 | B |
| .70 <= .80 | C |
| .80 <= .90 | D |
| .90 <= 1.00 | E |
| 1.00 < v/c | F |

**Table 3.8-3**
**Unsignalized Intersection Level of Service Range**

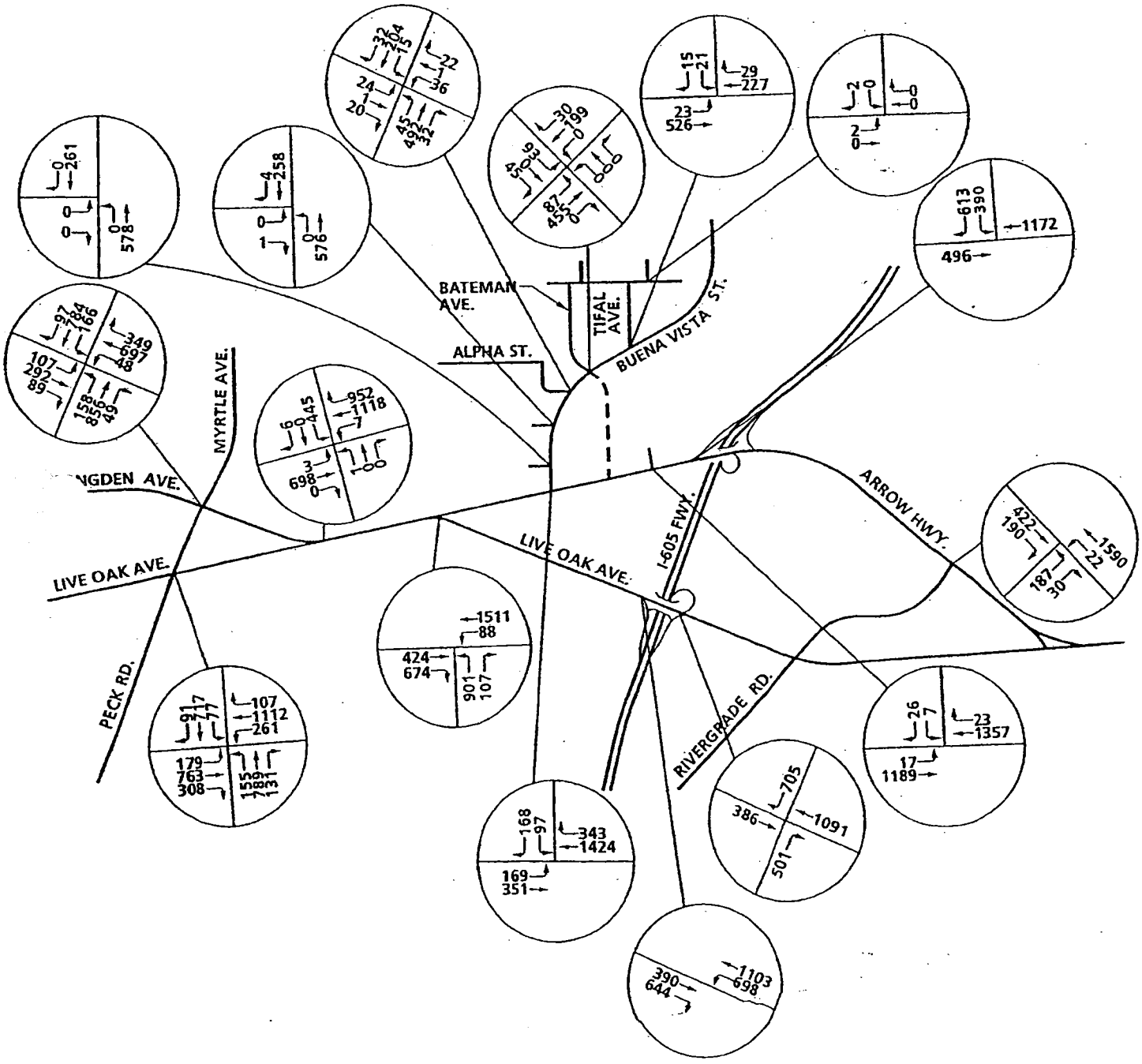
| Average Total Delay Per Vehicle (Seconds) | LOS |
|---|---|
| 0 to10.00 | A |
| 10.01 to 15.00 | B |
| 15.01 to 25.00 | C |
| 25.01 to 35.00 | D |
| 35.01 to 50.00 | E |
| More than 50.01 | F |

An existing vehicular activity summary is shown in **Table 3.8-4**. Existing ICUs are based upon manual AM and PM peak hour turning movement counts conducted for the traffic consultant in April and November 2003 (see **Figures 3.8-5 and 3.8-6**, respectively). Existing peak hour intersection traffic count sheets are included in Appendix G of the Draft EIR.

**Table 3.8-4**
**Existing Vehicular Activity Summary (Mining and Production)**

| Driveway | Land Use | | Peak Hour | | | |
|---|---|---|---|---|---|---|
| | | | AM | | PM | |
| | | | In | Out | In | Out |
| 1 | United Rock Plant Site (Main Access) | Passenger Cars | 8 | 7 | 4 | 14 |
| | | Trucks | 32 | 26 | 6 | 16 |
| | | Trucks (PCE=2.5) | 80 | 65 | 15 | 40 |
| | **TOTAL** | | **88** | **72** | **19** | **54** |
| 2 | Quarry No. 2 (Northerly Access) | Passenger Cars | 4 | 1 | 0 | 0 |
| | | Trucks | 0 | 0 | 0 | 0 |
| | | Trucks (PCE=2.5) | 0 | 0 | 0 | 0 |
| | **TOTAL** | | **4** | **1** | **0** | **0** |
| 3 | Quarry No. 2 (Southerly Access) | Passenger Cars | 0 | 0 | 0 | 0 |
| | | Trucks | 0 | 0 | 0 | 0 |
| | | Trucks (PCE=2.5) | 0 | 0 | 0 | 0 |
| | **TOTAL** | | **0** | **0** | **0** | **0** |
| 4 | Quarry No. 3 (Easterly Access) | Passenger Cars | 0 | 2 | 2 | 3 |
| | | Trucks | 2 | 0 | 0 | 0 |
| | | Trucks (PCE=2.5) | 5 | 0 | 0 | 0 |
| | **TOTAL** | | **5** | **2** | **2** | **3** |
| 5 | Quarry No. 3 (Westerly Access) | Passenger Cars | 0 | 0 | 0 | 0 |
| | | Trucks | 0 | 0 | 0 | 0 |
| | | Trucks (PCE=2.5) | 0 | 0 | 0 | 0 |
| | **TOTAL** | | **0** | **0** | **0** | **0** |
| | United Rock Product Corporation | Passenger Cars | 12 | 10 | 6 | 17 |
| | | Trucks | 34 | 26 | 6 | 16 |
| | | Trucks (PCE=2.5) | 85 | 65 | 15 | 40 |
| | **TOTAL VEHICLES FROM ALL DRIVEWAYS** | | **97** | **75** | **21** | **57** |

Source: United Rock Product Corporation Traffic Impact Analysis, 2004

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GREYSTONE®

Source: Urban Crossroads, 2004

**Figure 3.8-5**

**Existing AM Peak Hour Intersection Volumes**

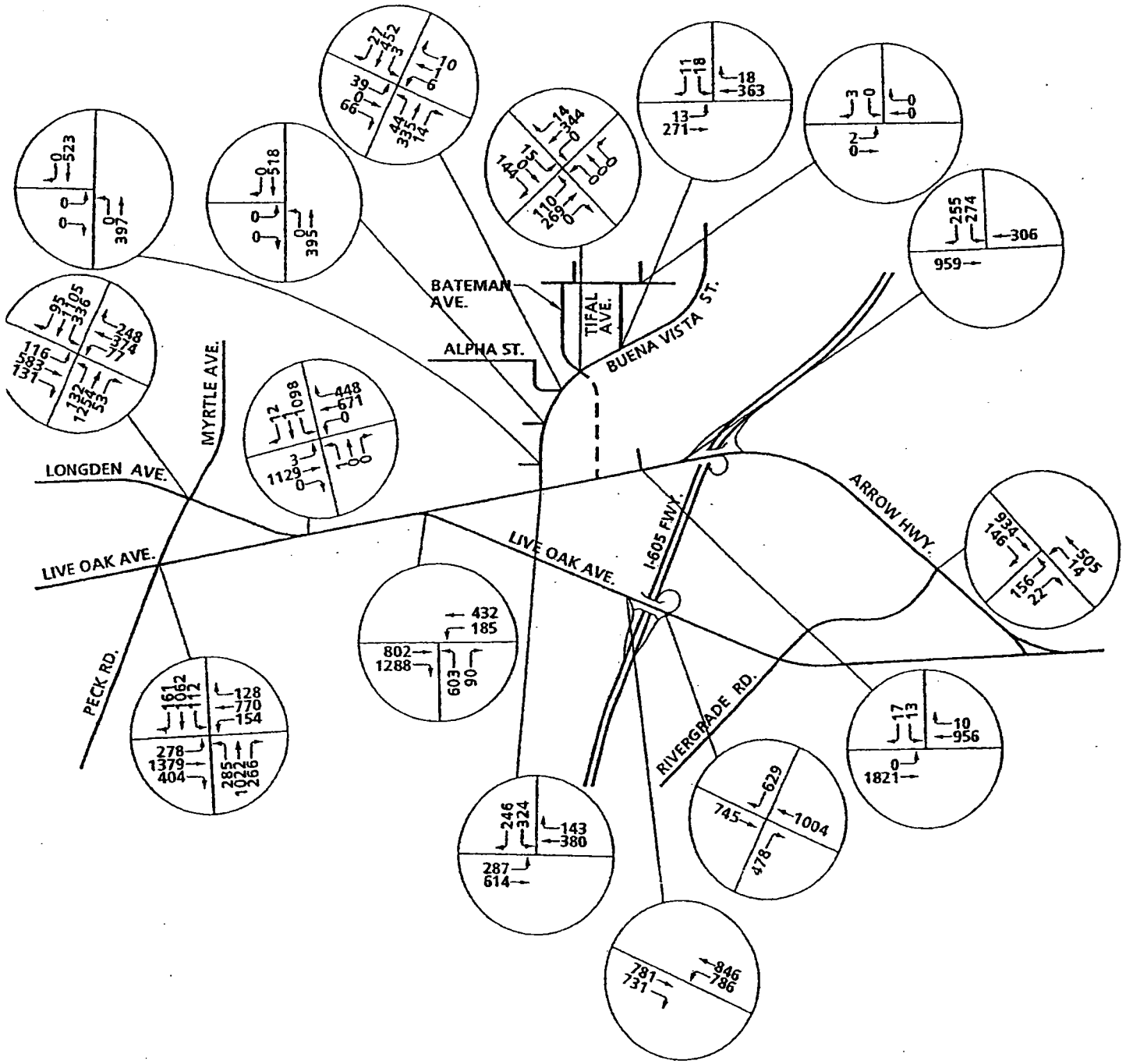


**Figure 3.8-6**
**Existing PM Peak Hour Intersection Volumes**

GREYSTONE®
Source: Urban Crossroads, 2004

Based on the calculation of volume to capacity ratios, the following thresholds have been used in assigning the letter value to the LOS for the intersections. These valuations apply to signalized intersections, for unsignalized intersections, the methodology from the Highway Capacity Manual (HCM) was used. For these intersections, the calculation of level of service is dependent on the occurrence of gaps occurring in the traffic flow of the main street. Using data collected describing the intersection configuration and traffic volumes at the study area location, the level of service has been calculated. The LOS criteria for this type of intersection analysis are based on measured or computed control delay per vehicle.

Based on the traffic counts and the calculation of LOS, the following study area intersections are currently operating at an unacceptable LOS ("E" or "F") during the peak hours:

- Myrtle Avenue at Longden Avenue and Live Oak Avenue
- I-605 Northbound Off-Ramp (NS) at Live Oak Avenue
- Quarry No. 4/Production Plant Main Project Access at Arrow Highway

#### *3.8.1.3.2.3 Rail Service*

There is no direct passenger rail service to the City. Passenger service is available from the San Bernardino line of MetroLink. The nearest MetroLink station is located at 3825 Downing Avenue in the City of Baldwin Park, approximately 2.6 miles southeast of the United Rock quarries. The City is crossed by the right-of-way for the Burlington Northern Southern Pacific (BNSP) paralleling Interstate 210 approximately one-half mile to the north of Quarry No. 3. Plans for the Metro Gold Line extension use portions of this right-of-way. In addition, there are a number of short spur lines that branch off of the BNSP line in the eastern half of the City. No rail spurs are in the immediate vicinity of the United Rock quarries.

## 3.8.2 POTENTIAL ENVIRONMENTAL IMPACTS

### 3.8.2.1 Methodology and Thresholds of Significance

The analysis of current and future reclamation traffic conditions are based on the TIA prepared by Urban Crossroads, Inc. and dated February 27, 2004. The complete TIA is included in this EIR as Appendix G. Because post-reclamation activities will occur approximately 30 to 60 years in the future, and would be subject to speculation regarding future transportation services, roadway improvements, and vehicular mix, the analysis of post-reclamation impacts will be presented qualitatively.

The City of Irwindale has established the threshold for acceptable LOS at city intersections and along roadway segments as LOS D or better. A significant impact has been defined as an increase in the V/C ratio equal to or greater than 0.04 if the intersection is operating at LOS C, an increase in the V/C ratio equal to or greater than 0.02 if the intersection is operating at LOS D, an increase in the V/C ratio equal to or greater than 0.01 if the intersection is operating at LOS E or F.

### 3.8.2.2 Mining Impact Analysis

Mining activity currently occurs in Quarry No. 2 and materials are transported to Quarry No. 4/Production Plant via a conveyor belt system under Buena Vista Street. Processed materials are transported by truck from the Plant site. When mining begins at Quarry No. 3, materials will also be transported to Quarry No. 4/Production Plant site by conveyor, not trucks.

The current traffic generation for the site is based on the level of activity occurring at each of the quarries. Therefore, traffic counts were conducted at the existing driveways to determine the number of vehicles entering and exiting the site during peak hours. **Table 3.8-4** presents the number of inbound and outbound peak hour trips for both passenger cars and trucks. For analysis purposes, a passenger car equivalency (PCE) factor of 2.5 has been applied to the truck trips. A PCE factor represents the relative impact of a truck with respect to a passenger car. The 2.5 factor indicates that a truck, because of its size and slow moving characteristics, will have an impact equivalent to 2.5 passenger cars. As indicated in Table 3.8-4, the site currently generates approximately 172 PCE trips during the AM Peak Hour and 78 PCE trips during the PM Peak Hour.

Future mining activities will not require an increase in the overall number of employees or trucks to/from the site. Therefore, the project trip generation is not anticipated to increase beyond the current levels. However, in the future the mining activities will shift sequentially from Quarry No. 2 to Quarry No. 3 as excavation is completed in Quarry No. 2. **Table 3.8-5** presents a summary of the vehicular activity at the future project driveways. It should be noted that some of the existing project access points are anticipated to be closed due to the proposed Buena Vista Street alignment expected to open in the future.

**Table 3.8-5**
**Future Vehicular Activity Summary (Mining and Production)**

| Driveway | Land Use | | Peak Hour | | | |
|---|---|---|---|---|---|---|
| | | | AM | | PM | |
| | | | In | Out | In | Out |
| | Quarry No. 4/Production Plant (Main Access) | Passenger Cars | 4 | 3 | 2 | 7 |
| | | Trucks | 16 | 13 | 3 | 8 |
| | | Trucks (PCE=2.5) | 40 | 32 | 7 | 20 |
| 1 | **TOTAL** | | **44** | **36** | **9** | **27** |
| | Quarry No. 4/Production Plant (Northerly Access) | Passenger Cars | 3 | 3 | 2 | 6 |
| | | Trucks | 13 | 11 | 2 | 6 |
| | | Trucks (PCE=2.5) | 32 | 26 | 6 | 16 |
| 8 | **TOTAL** | | **36** | **29** | **8** | **22** |
| | Quarry No. 2 (Easterly Access) | Passenger Cars | 3 | 1 | 0 | 0 |
| | | Trucks | 0 | 0 | 0 | 0 |
| | | Trucks (PCE=2.5) | 0 | 0 | 0 | 0 |
| 7 | **TOTAL** | | **3** | **1** | **0** | **0** |
| | Quarry No. 2 (Westerly Access) | Passenger Cars | 1 | 0 | 0 | 0 |
| | | Trucks | 0 | 0 | 0 | 0 |
| | | Trucks (PCE=2.5) | 0 | 0 | 0 | 0 |
| 6 | **TOTAL** | | **1** | **0** | **0** | **0** |
| | Quarry No. 3 (Easterly Access) | Passenger Cars | 0 | 1 | 1 | 2 |
| | | Trucks | 2 | 1 | 0 | 1 |
| | | Trucks (PCE=2.5) | 6 | 3 | 1 | 2 |
| 4 | **TOTAL** | | **6** | **4** | **2** | **4** |
| | Quarry No. 3 (Westerly Access) | Passenger Cars | 0 | 1 | 1 | 2 |
| | | Trucks | 3 | 1 | 0 | 1 |
| | | Trucks (PCE=2.5) | 7 | 3 | 1 | 2 |
| 5 | **TOTAL** | | 7 | 5 | 2 | 4 |

**Table 3.8-5**
**Future Vehicular Activity Summary (Mining and Production)**

| Driveway | Land Use | | Peak Hour | | | |
|---|---|---|---|---|---|---|
| | | | AM | | PM | |
| | | | In | Out | In | Out |
| 9 | Quarry No. 3 (Northerly Access) | Passenger Cars | 0 | 0 | 0 | 0 |
| | | Trucks | 0 | 0 | 0 | 0 |
| | | Trucks (PCE=2.5) | 1 | 0 | 0 | 0 |
| | **TOTAL** | | **1** | **0** | **0** | **0** |
| | United Rock Product Corporation | Passenger Cars | 12 | 10 | 6 | 17 |
| | | Trucks | 34 | 26 | 6 | 16 |
| | | Trucks (PCE=2.5) | 85 | 65 | 15 | 40 |
| | **TOTAL VEHICLES FROM ALL DRIVEWAYS** | | **97** | **75** | **21** | **57** |

Source: United Rock Product Corporation Traffic Impact Analysis, 2004

The trip distribution data presented represents the directional orientation of traffic to and from the Proposed Project site. Trip distribution is heavily influenced by the geographical location of the site, the project access points (see **Figure 3.8-7**) and the regional freeway system. The directional orientation of traffic was determined by evaluating surrounding land uses within the community.

Trip distribution has been based upon Year 2025 conditions, including the realignment of Buena Vista Street. The trip distribution patterns for each quarry are graphically depicted on **Figures 3.8-8 though 3.8-13** for outbound and inbound trips.

### 3.8.2.2.1 Future Traffic Without Project

To assess future traffic conditions without Project-related traffic, other development-related traffic volumes are added to existing traffic volumes after they are combined with ambient growth. The study year for analysis purposes is 2025. In this future year, Quarry No. 2 is anticipated to be in the reclamation phase and Quarry No. 3 will be in the active mining phase. Quarry 4 operations and activities will be unchanged.

To account for ambient growth on roadways, future traffic volumes have been calculated based on a 2.0 percent annual growth rate of existing traffic volumes over a twenty-one year period (2025).

A list of cumulative projects that could potentially add traffic to the study area intersections were supplied by the City of Irwindale and by Urban Crossroads. It was determined that traffic from three related, unbuilt projects (see **Figure 3.8-14**) in the study area were appropriate for inclusion in this Draft EIR traffic analysis. The daily, AM and PM peak hour trip generation for the related projects are shown in **Table 3.8-6**. The cumulative projects are projected to generate a total of approximately 18,712 trip-ends per day with 964 vehicles per hour during the AM peak hour and 1,680 vehicles per hour during the PM peak hour.

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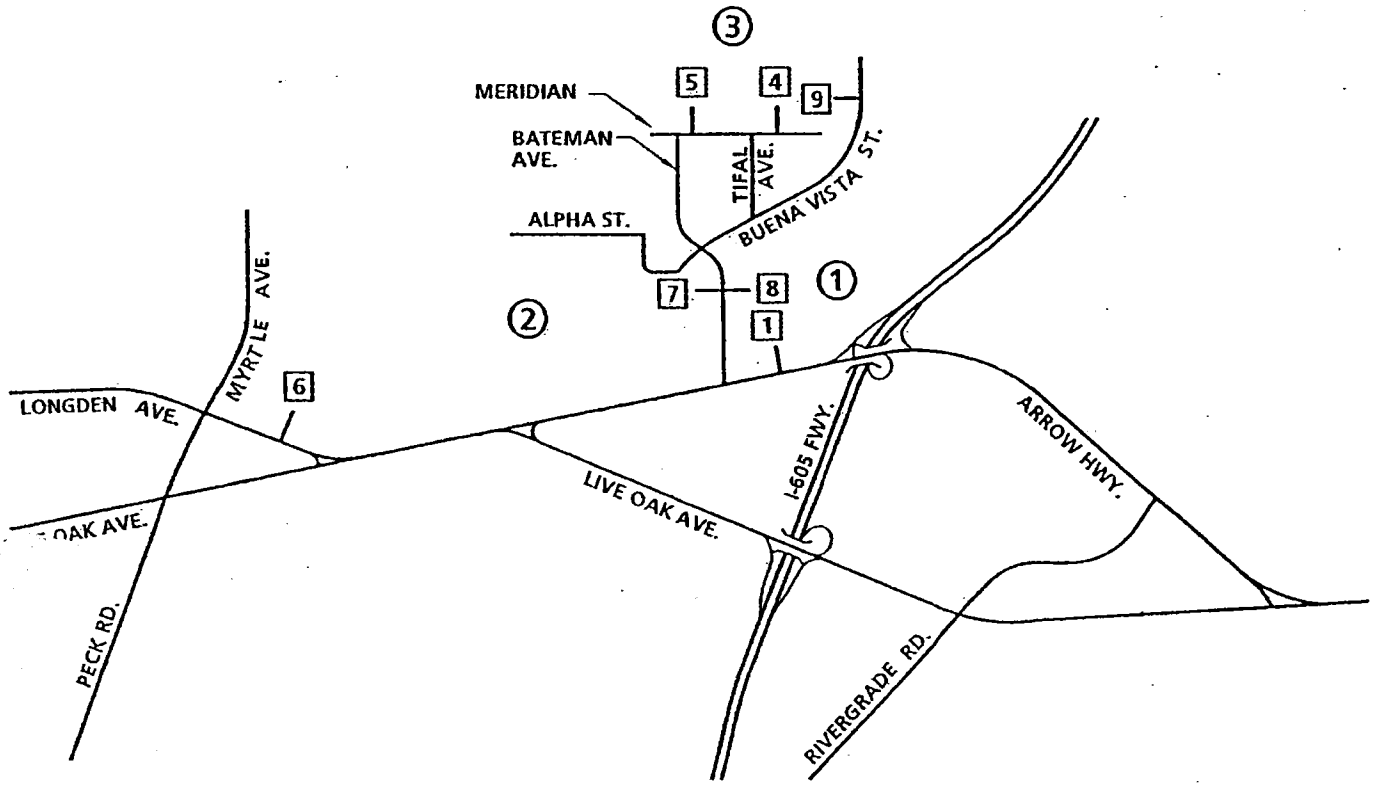
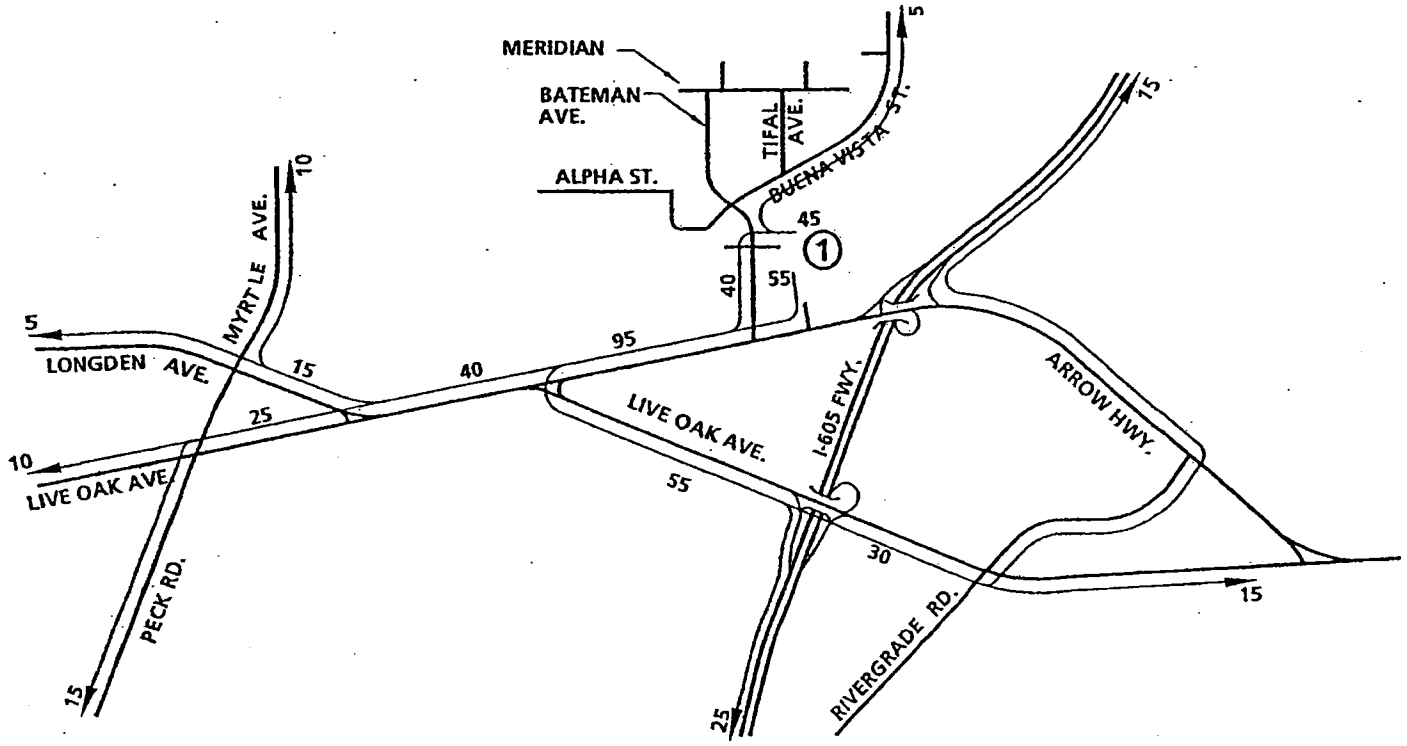



**LEGEND:**

| | |
|---|---|
| (1) = UNITED ROCK PLANT SITE | [5] = PIT 3 WESTERLY ACCESS |
| (2) = UNITED ROCK PIT 2 | [6] = PIT 2 WESTERLY ACCESS |
| (3) = UNITED ROCK PIT 3 | [7] = PIT 2 EASTERLY ACCESS |
| [1] = PLANT SITE MAIN ACCESS | [8] = PLANT SITE NORTHERLY ACCESS |
| [4] = PIT 3 EASTERLY ACCESS | [9] = PIT 3 NORTHERLY ACCESS |

GREYSTONE®
Source: Urban Crossroads, 2004

**Figure 3.8-7**
**Future Driveways**




**LEGEND:**

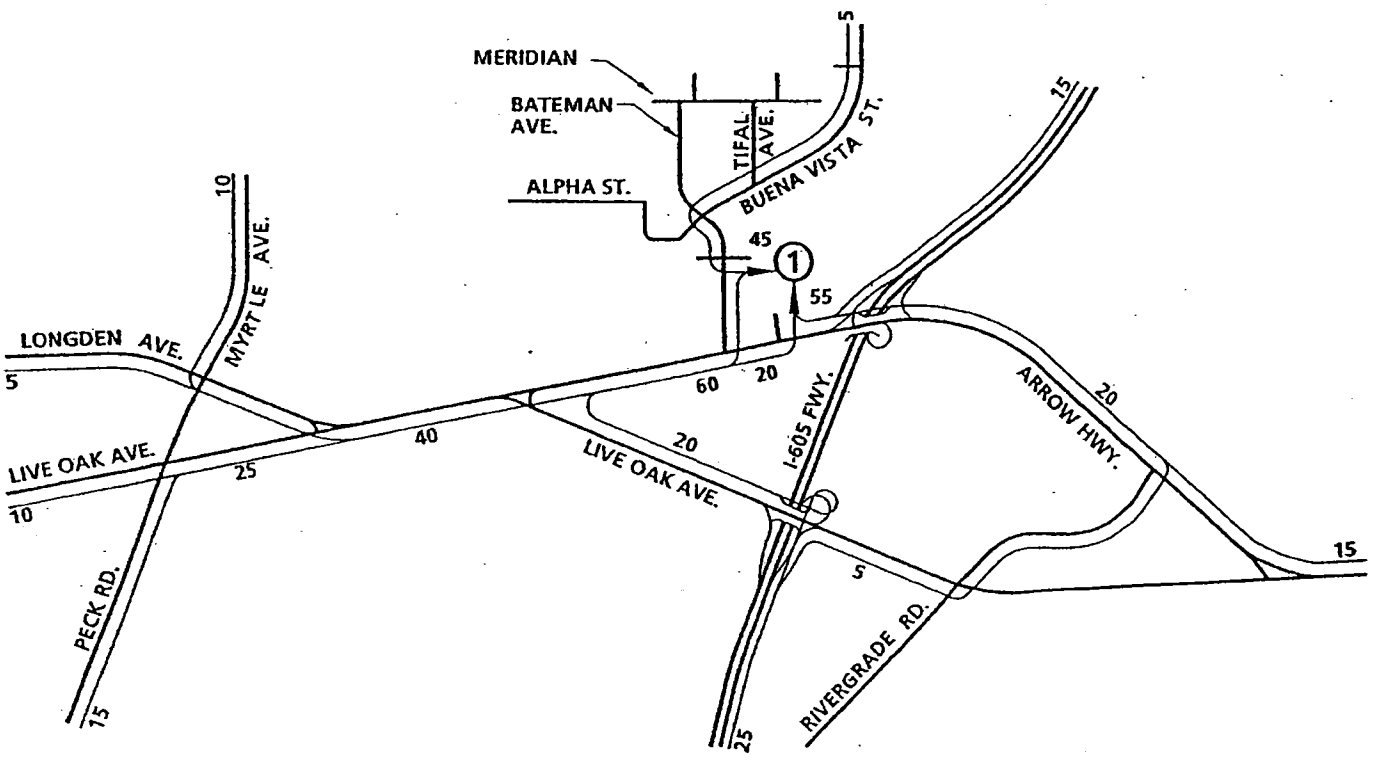
10 = PERCENT FROM PROJECT

(1) = PLANT SITE

N

Source: Urban Crossroads, 2004

**Figure 3.8-**
**Plant Site Outbound Trip Distribution**




**LEGEND:**

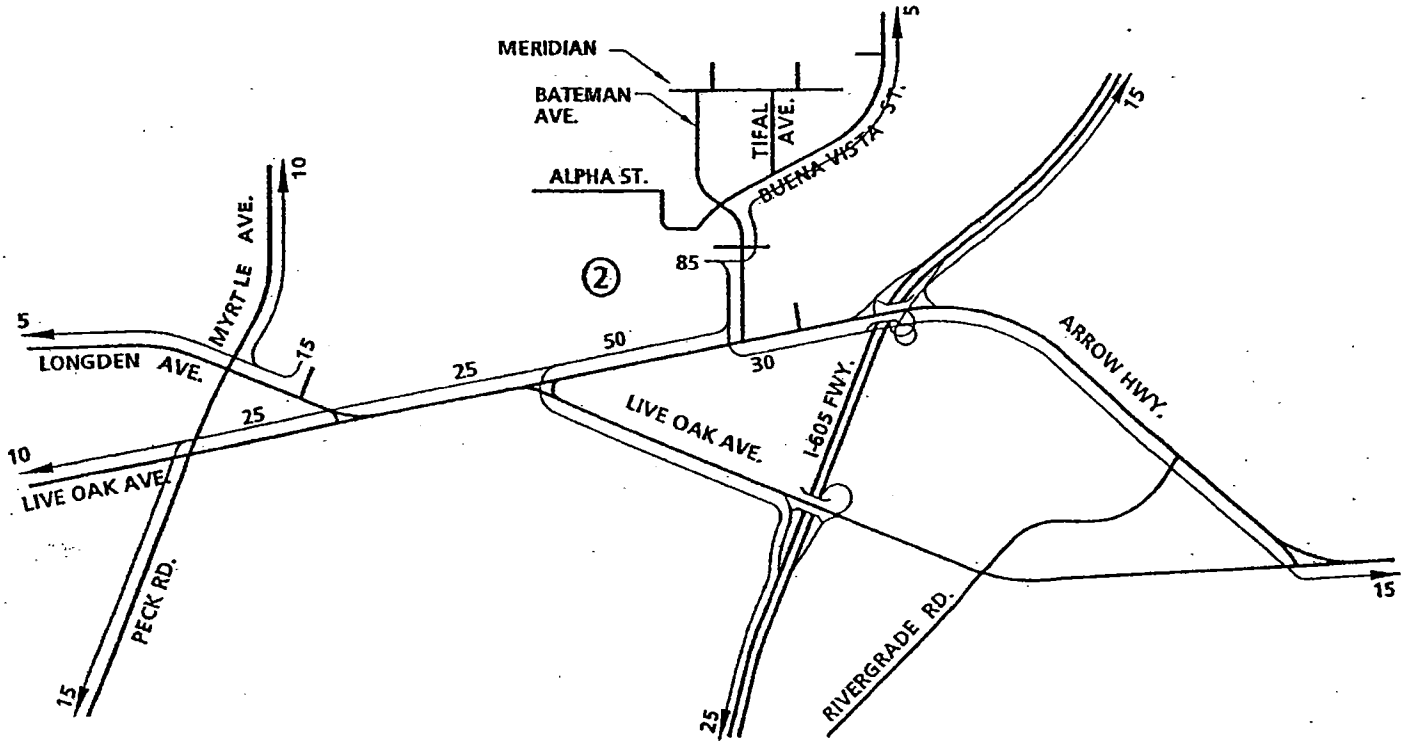
10 = PERCENT TO PROJECT

(1) = PLANT SITE

GREYSTONE®

Source: Urban Crossroads, 2004

**Figure 3.8-9**
**Plant Site Inbound Trip Distribution**




**LEGEND:**

10 = PERCENT FROM PROJECT

② = UNITED ROCK PIT 2

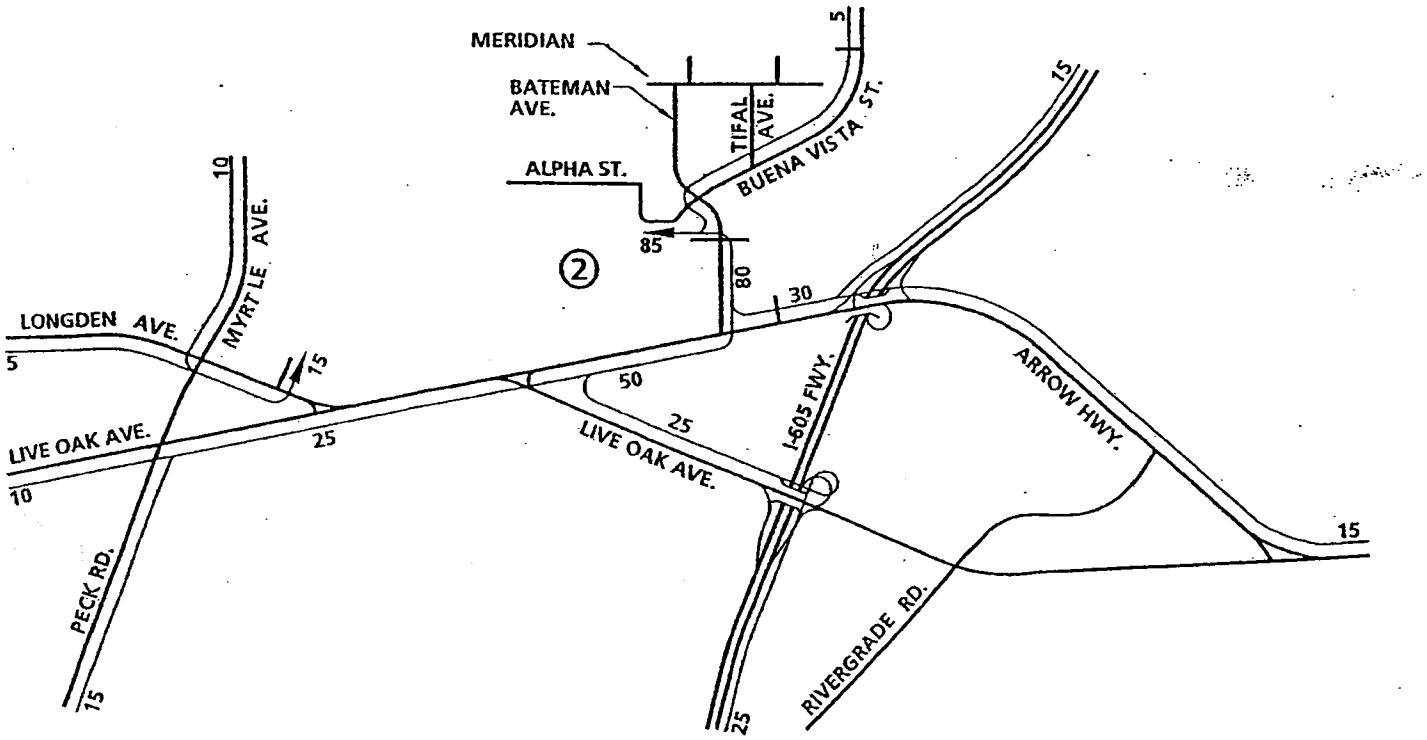
N

GREYSTONE®

Source: Urban Crossroads, 2004

**Figure 3.8-1(**

**United Rock Pit 2 Outbound Trip Distribution**




**LEGEND:**

10 = PERCENT FROM PROJECT

(2) = UNITED ROCK PIT 2

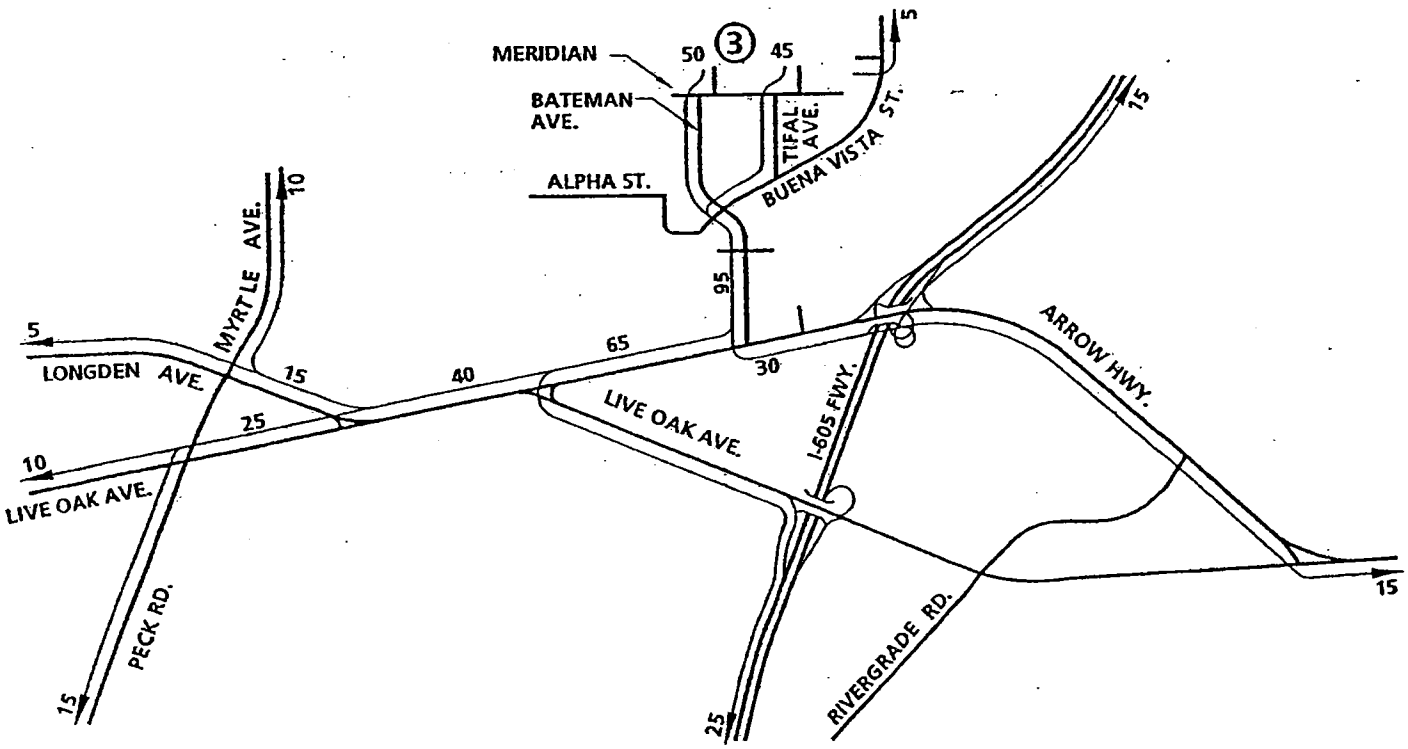
N

GREYSTONE®

Source: Urban Crossroads, 2004

**Figure 3.8-11**

**United Rock Pit 2 Inbound Trip Distribution**




**LEGEND:**

10 = PERCENT FROM PROJECT

(3) = UNITED ROCK PIT 3

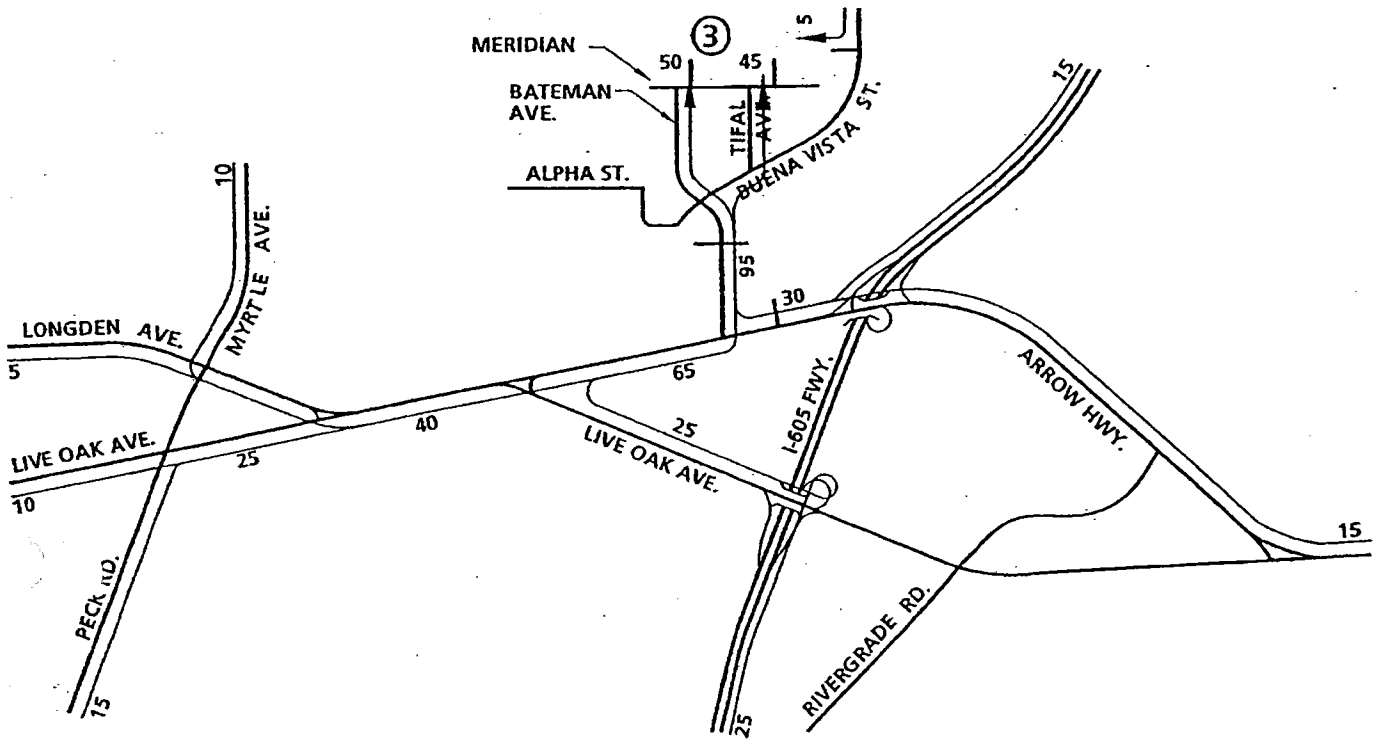
N

GREYSTONE®

Source: Urban Crossroads, 2004

**Figure 3.8-12**

**United Rock Pit 3 Outbound Trip Distribution**




**LEGEND:**

10 = PERCENT FROM PROJECT

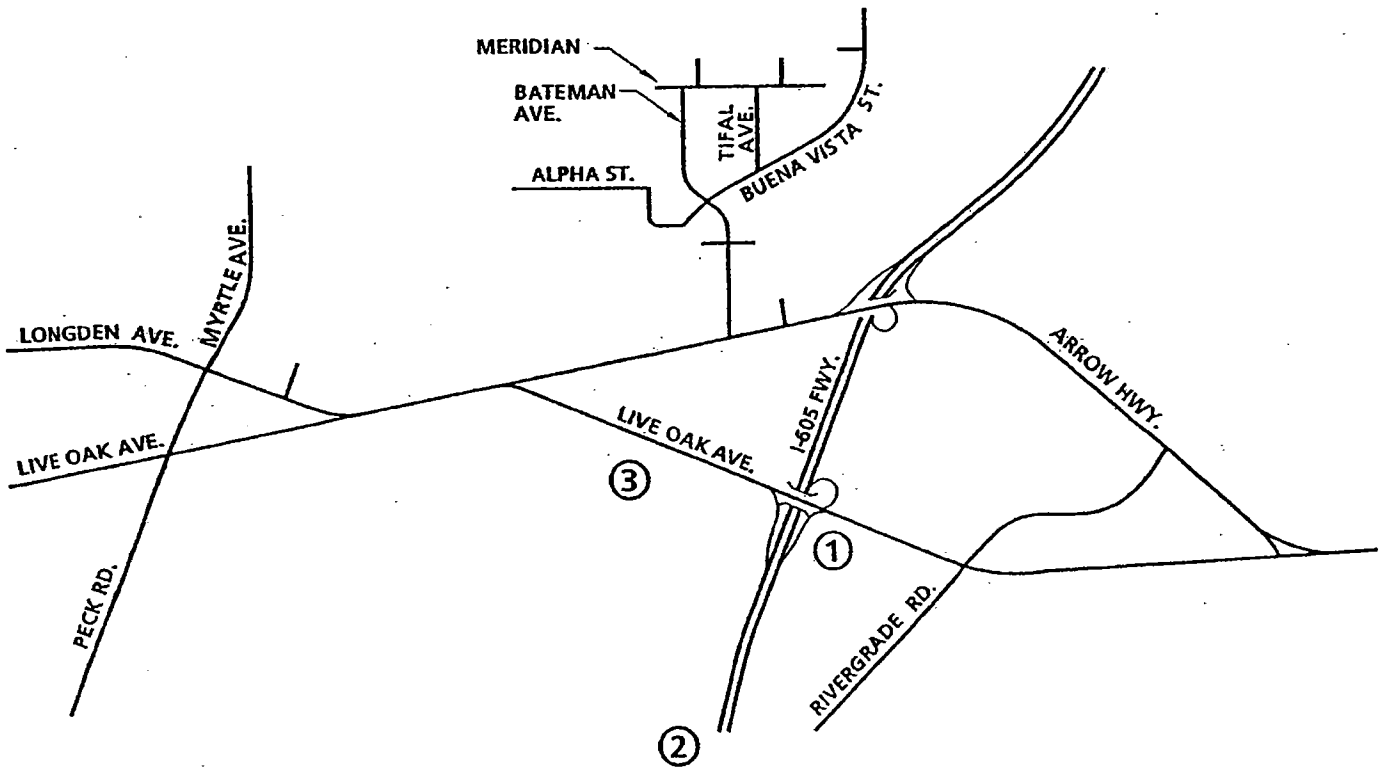
(3) = UNITED ROCK PIT 3

GREYSTONE®

Source: Urban Crossroads, 2004

**Figure 3.8-13**

**United Rock Pit 3 Inbound Trip Distribution**




**LEGEND:**

(1) = EDISON PUBLIC STORAGE

(2) = RIVERGRADE BOAT MANUFACTURING

(3) = HANSON AGGRERATES QUARRY

N

GREYSTONE®

Source: Urban Crossroads, 2004

**Figure 3.8-14**
**Other Development Location Map**

**Table 3.8-6**
**Other Development Project Trip Generation**

| Land Use[1] | Proposed Quantity[2] | | Peak-Hour AM In | Peak-Hour AM Out | Peak-Hour PM In | Peak-Hour PM Out | Daily |
|---|---|---|---|---|---|---|---|
| Edison Public Storage/Mini-Warehouse | 10.0 | AC | 17 | 12 | 20 | 18 | 389 |
| Rivergrade Boat Manufacturing | 5.0 | AC | 35 | 3 | 22 | 20 | 194 |
| **Hanson Aggregates Northern Portion** | | | | | | | |
| Hotel | 400 | RM | 136 | 88 | 128 | 116 | 3,292 |
| Hotel | 100 | RM | 34 | 22 | 32 | 29 | 823 |
| General Light Industrial | 35 | AC | 218 | 45 | 56 | 198 | 1,813 |
| Building Materials and Lumber Site | 21.4 | AC | 17 | 15 | 29 | 33 | 754 |
| Commercial Retail (50 TSF) | 50.0 | TSF | 65 | 41 | 191 | 207 | 4,366 |
| • Pass-By Trips | 30 | % | -20 | -12 | -57 | -62 | -1,310 |
| *SUBTOTAL (Northern Portion)* | | | *450* | *199* | *379* | *521* | *9,738* |
| **Hanson Aggregates Southern Portion** | | | | | | | |
| Commercial Retail (10.7 AC Site) | 53.5 | TSF | 67 | 43 | 200 | 216 | 4,559 |
| • Pass-By Trips | 30 | % | -20 | -13 | -60 | -65 | -1,368 |
| Boat Launch/Docks | 100 | SLIP | 37 | 3 | 3 | 36 | 388 |
| Commercial Retail (9.3 AC Site) | 46.5 | TSF | 62 | 40 | 182 | 197 | 4,166 |
| • Pass-By Trips | 30 | % | -19 | -12 | -55 | -59 | -1,250 |
| Boat Launch/Docks | 100 | SLIP | 37 | 3 | 3 | 36 | 388 |
| Recreational Lake/Regional Park | 330.0 | AC | 10 | 10 | 30 | 36 | 1,508 |
| *SUBTOTAL (Southern Portion)* | | | *174* | *74* | *303* | *397* | *8,391* |
| **TOTAL** | | | **676** | **288** | **724** | **956** | **18,712** |

[1] Land Use Assumptions:
Hotel = 10 Rooms per AC
General Light Industrial = General Light Industrial (ITE 110)
Building Materials and Lumber Site = Building Material and Lumberyard (ITE 812)
Commercial Retail = 10 TSF Per AC
10.7 AC Commercial/Recreation Use = 50% (53.5 TSF) Commercial Retail (ITE 820) with a Boat Launch
9.3 AC Commercial/Recreation Use = 50% (46.5 TSF) Commercial Retail (ITE 820) with a Boat Launch
The 10.7 AC and the 9.3 AC Commercial/Recreation sites are each assumed to have a boat launch with 100 slips
Boat Launch data based on similar development: Diamond Valley Lake Marina Cove in Menifee, CA with 380 slips

[2] RM = room; AC = Acre; TSF = thousand square feet

Source: United Rock Product Corporation Traffic Impact Analysis, 2004

The trip distributions for the cumulative projects are graphically depicted on **Figures 3.8-15 through 3.8-22**. Based on the cumulative projects trip generation and distributions, ADT, AM and PM peak hour volumes of the above mentioned cumulative projects are collectively shown on **Figures 3.8-23 and 3.8-24**, respectively.

**Figure 3.8-25** shows ADT volumes for Future without Project plus Ambient Growth traffic conditions.

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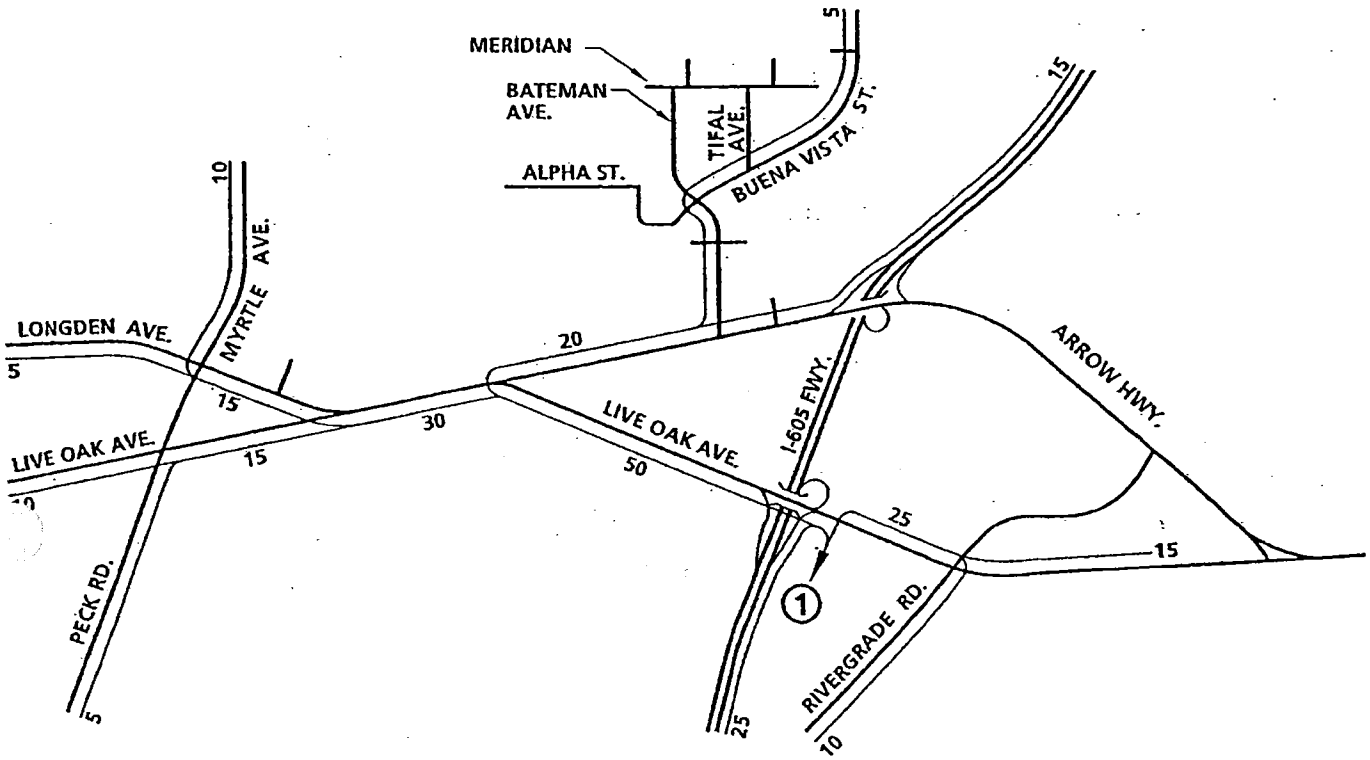



**LEGEND:**

10 = PERCENT TO PROJECT

(1) = EDISON PUBLIC STORAGE

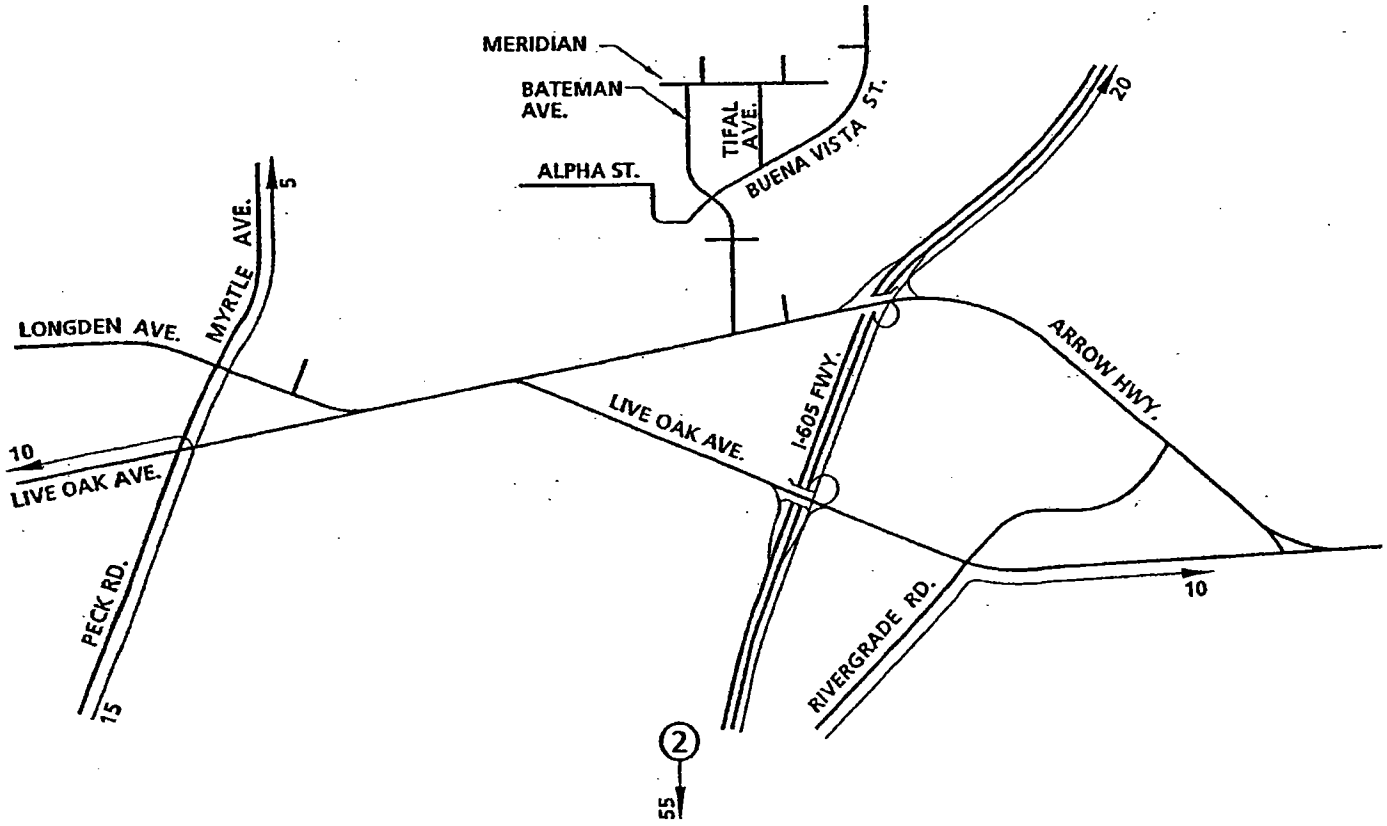
N

GREYSTONE®

ource: Urban Crossroads, 2004

**Figure 3.8-15**

**Edison Public Storage Inbound Trip Distribution**




**LEGEND:**

10 = PERCENT FROM PROJECT

(2) = RIVERGRADE BOAT MANUFACTURING

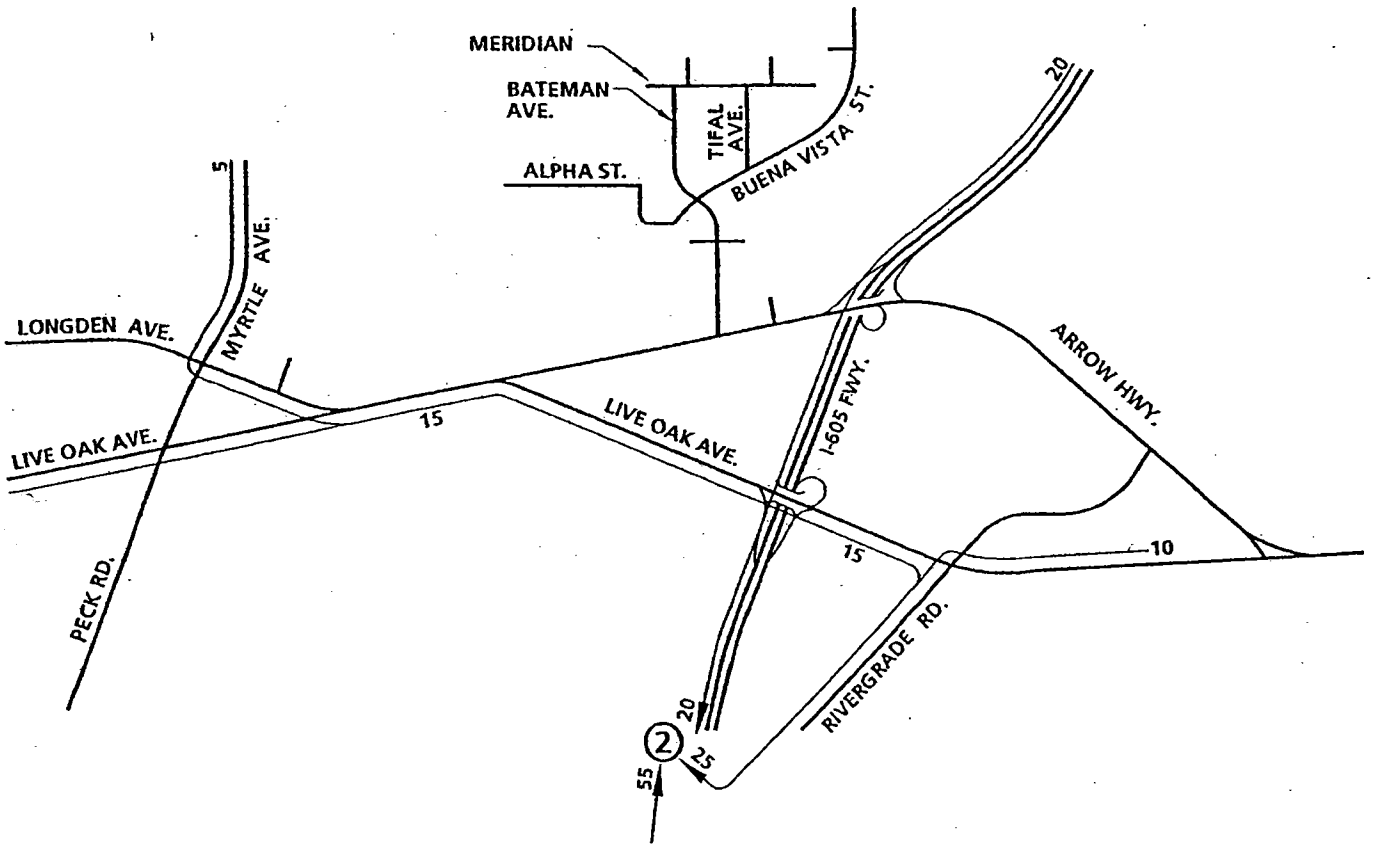
N

**Figure 3.8-16**

**Rivergrade Boat Manufacturing Outbound Trip Distribution**

GREYSTONE®

Source: Urban Crossroads, 2004




**LEGEND:**

10 = PERCENT TO PROJECT

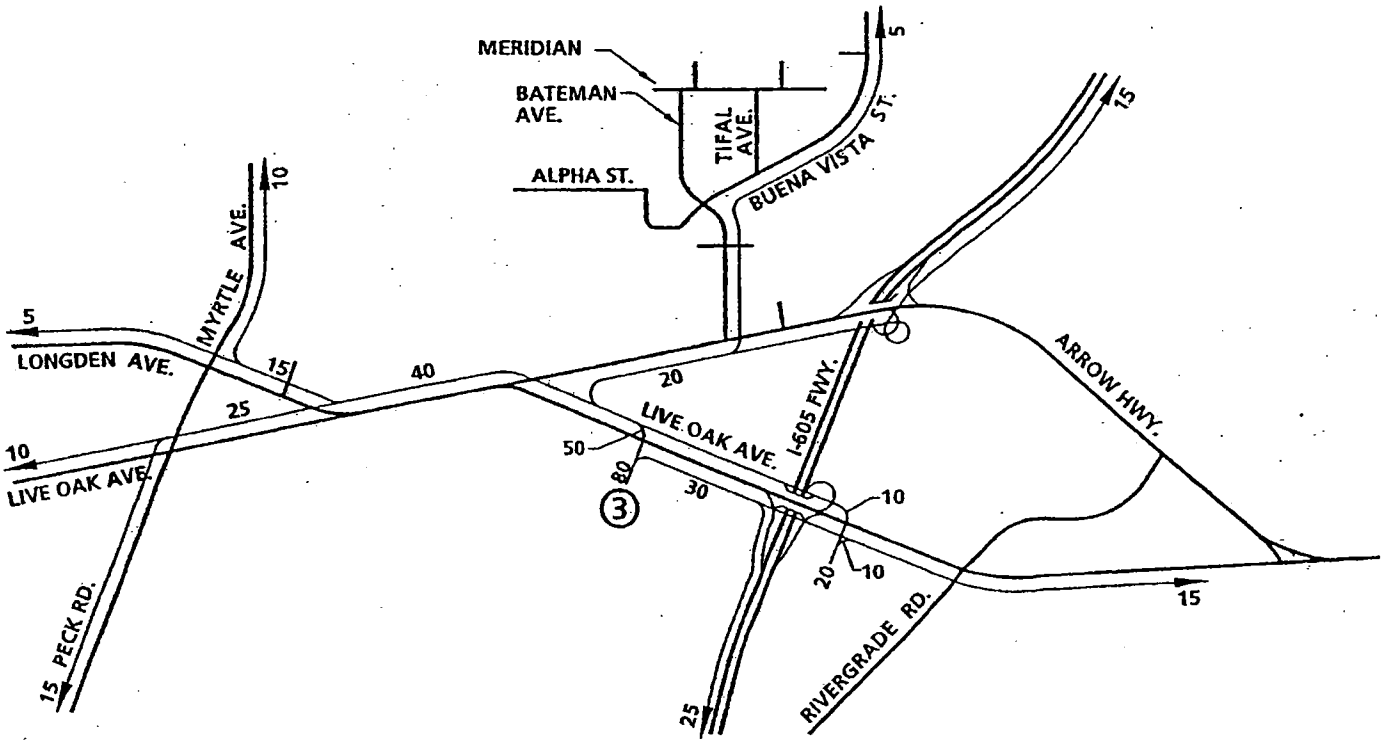
(2) = RIVERGRADE BOAT MANUFACTURING

GREYSTONE®

Source: Urban Crossroads, 2004

**Figure 3.8-17**

**Rivergrade Boat Manufacturing Inbound Trip Distribution**




**LEGEND:**

10 = PERCENT FROM PROJECT

(3) = HANSON AGGREGATES

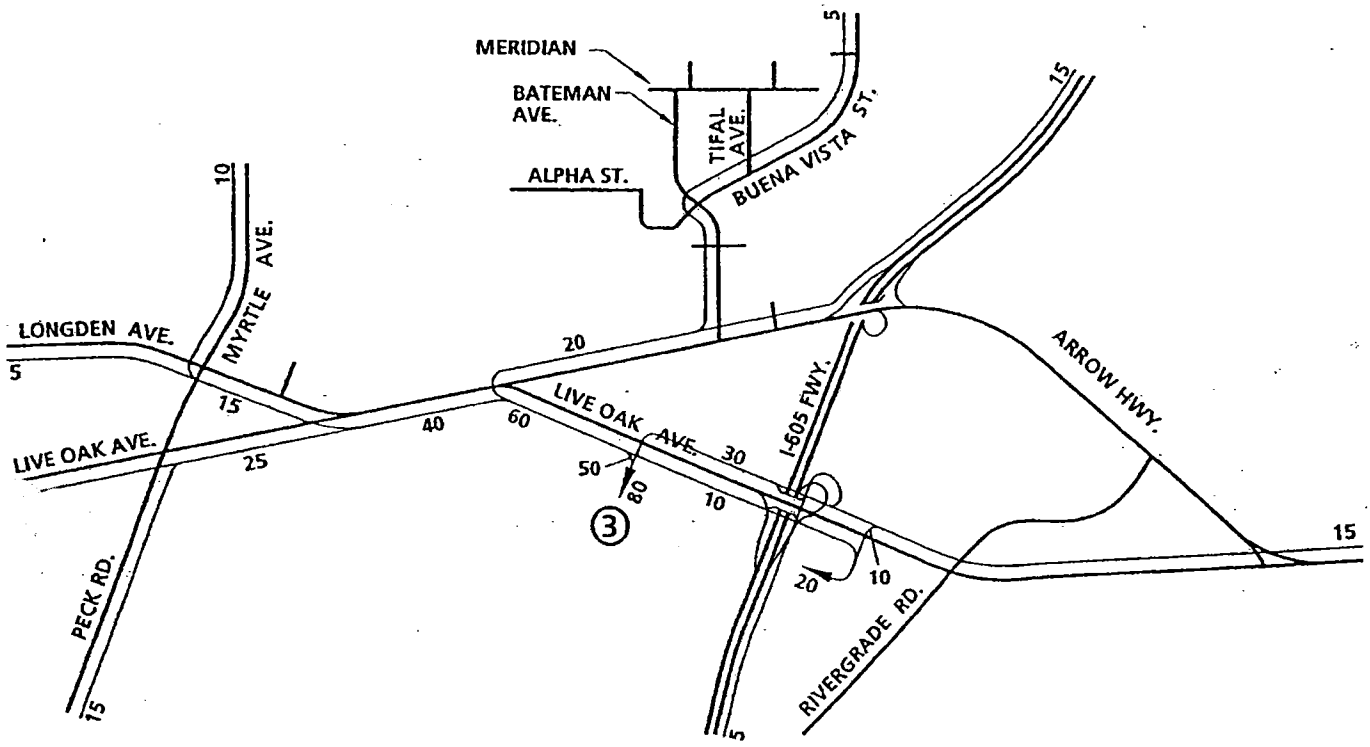
N

**Figure 3.8-18**

GREYSTONE®

Source: Urban Crossroads, 2004

**Hanson Aggregates (Northerly Portion) Outbound Trip Distribution**




**LEGEND:**

10 = PERCENT TO PROJECT

(3) = HANSON AGGREGATES

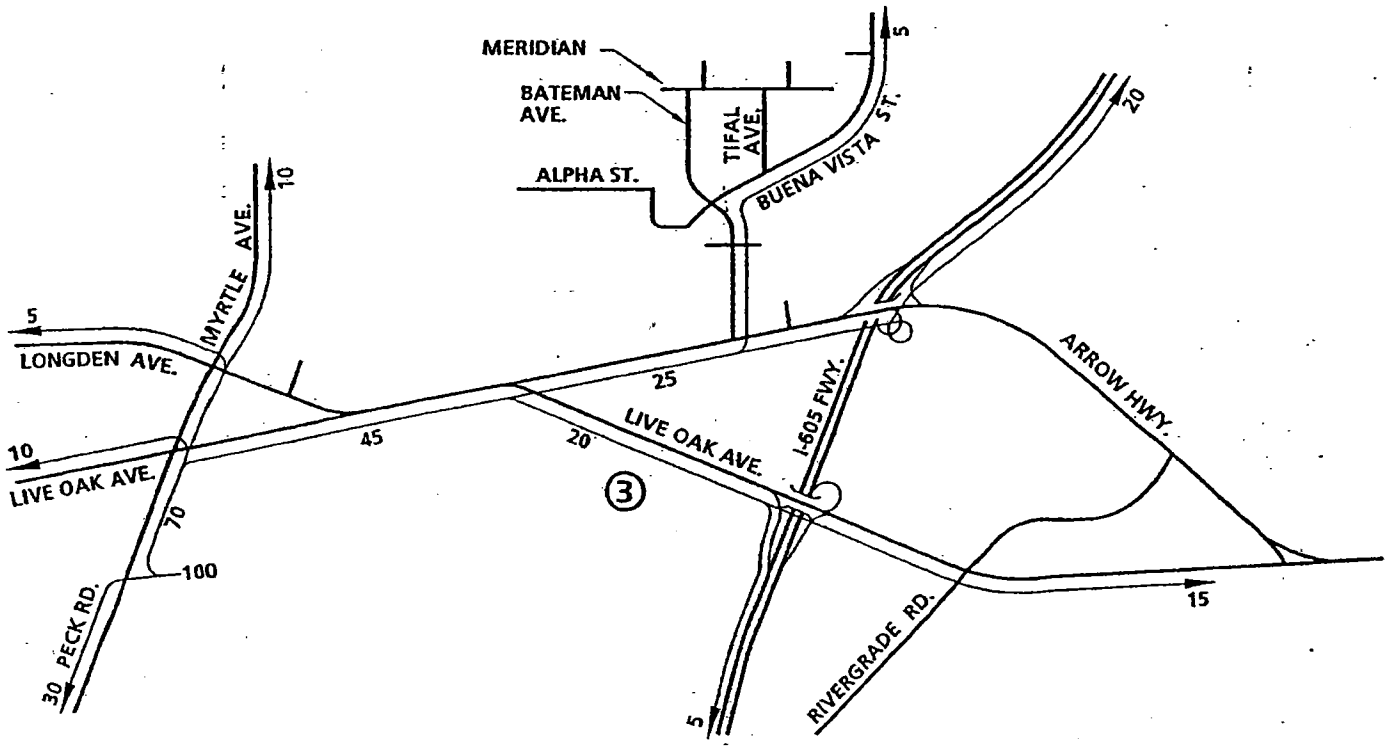
N

GREYSTONE®

Source: Urban Crossroads, 2004

**Figure 3.8-19**

**Hanson Aggregates (Northerly Portion) Inbound Trip Distribution**




**LEGEND:**

10 = PERCENT FROM PROJECT

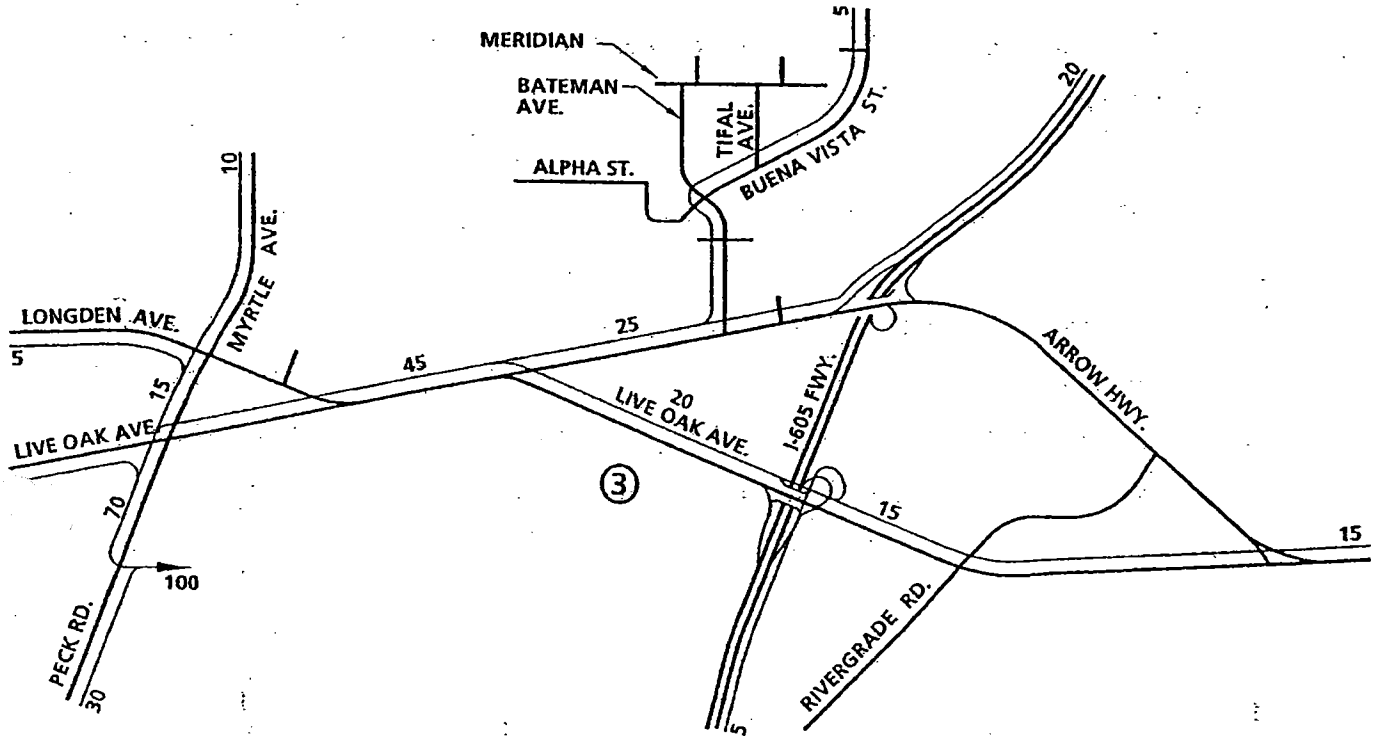
③ = HANSON AGGREGATES

N

Source: Urban Crossroads, 2004

**Figure 3.8-20**

**Hanson Aggregates (Southerly Portion) Outbound Trip Distribution**




**LEGEND:**

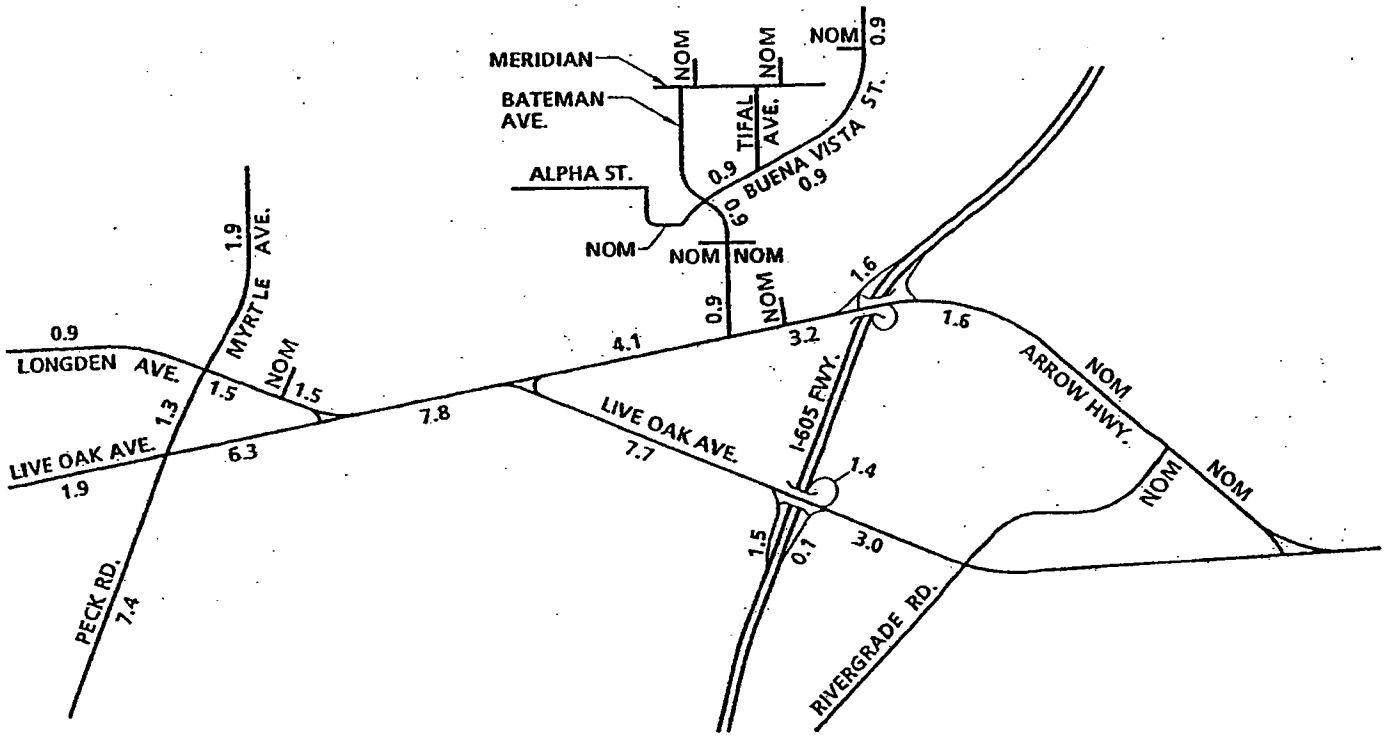
10 = PERCENT TO PROJECT

③ = HANSON AGGREGATES

Source: Urban Crossroads, 2004

**Figure 3.8-21**

**Hanson Aggregates (Southerly Portion) Inbound Trip Distribution**




**LEGEND:**

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

**Figure 3.8-22**
**Other Development Average Daily Traffic (ADT)**

GREYSTONE®
Source: Urban Crossroads, 2004

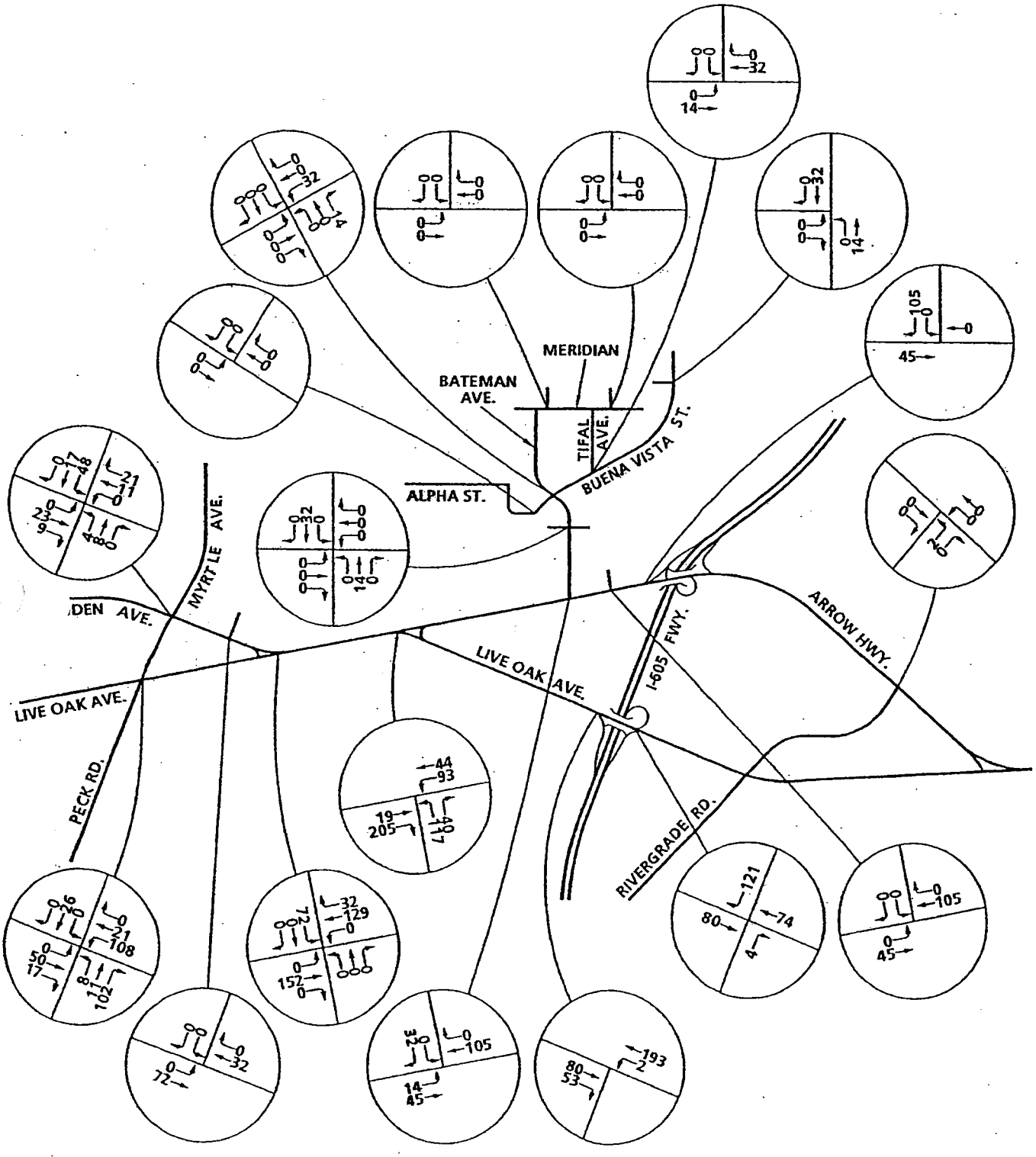



**Figure 3.8-23**
**Other Development AM Peak Hour Intersection Volumes**

GREYSTONE®
Source: Urban Crossroads, 2004

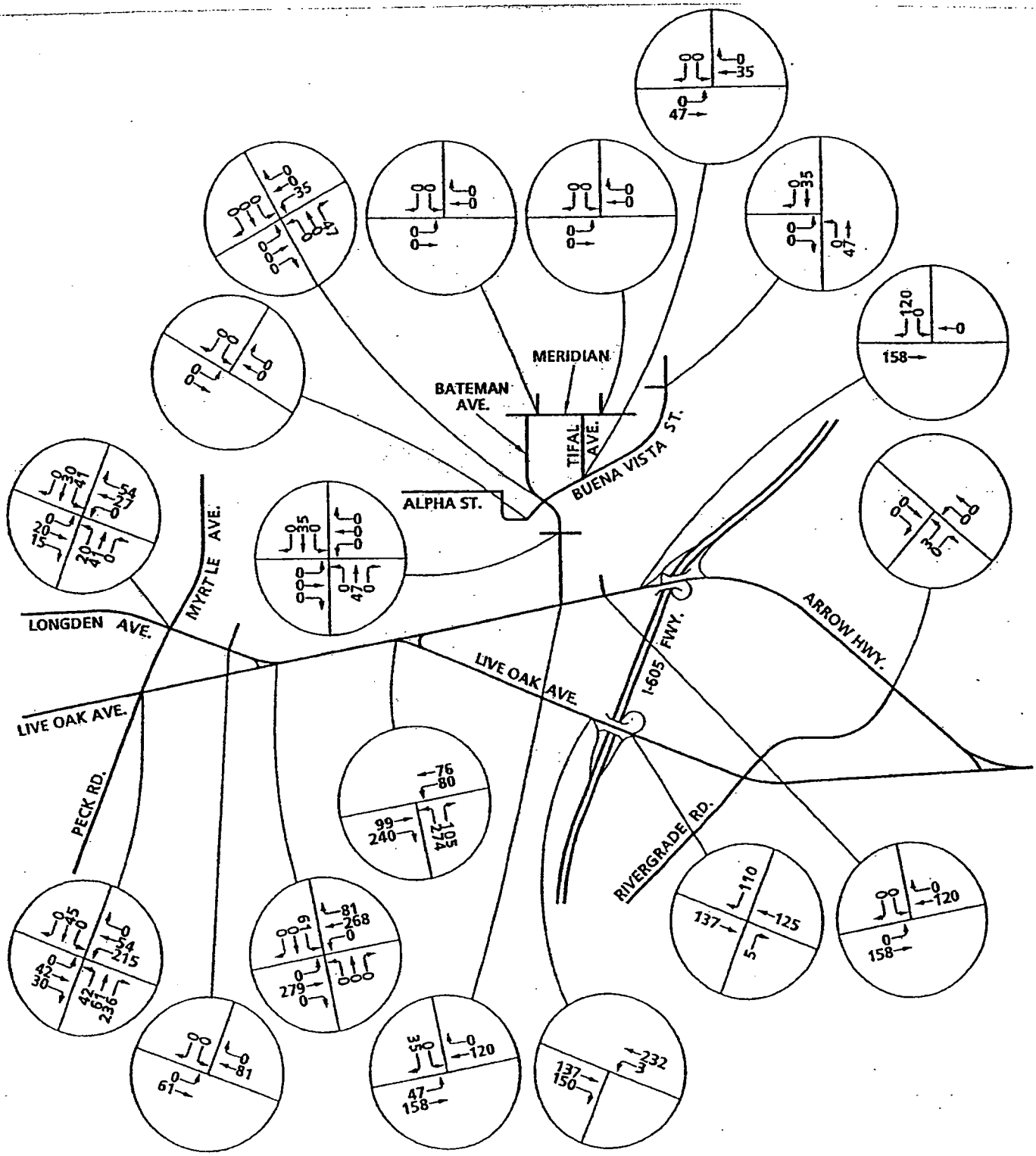
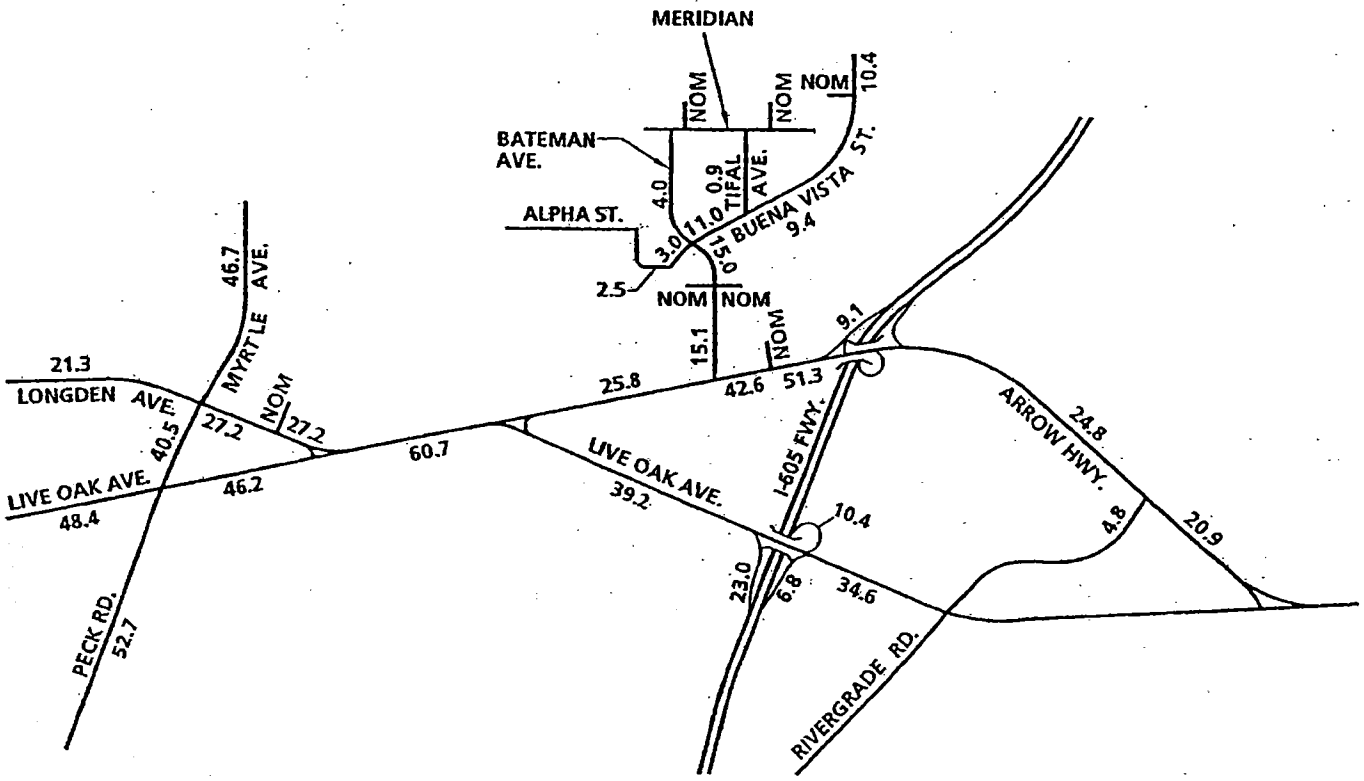



**Figure 3.8-24**
**Other Development PM Peak Hour Intersection Volumes**

GREYSTONE®
Source: Urban Crossroads, 2004




**LEGEND:**

10.0 = VEHICLES PER DAY (1000'S)

GREYSTONE®

Source: Urban Crossroads, 2004

**Figure 3.8-25**

**Year 2025 Without Project Average Daily Traffic (ADT)**

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Intersection levels of service for Year 2025 Without Project traffic conditions have been calculated and are shown in **Table 3.8-7**. As shown in the Table, the following study area intersections are projected to operate at an unacceptable level of service (LOS "E" or "F") during the peak hours for Year 2025 without Project conditions:

- Myrtle Avenue at Longden Avenue and Live Oak Avenue
- Longden Avenue at Live Oak Avenue
- Live Oak Avenue at Arrow Highway
- Buena Vista Street at Arrow Highway
- I-605 SB On-Ramp at Live Oak Avenue
- I-605-NB Off-Ramp at Live Oak Avenue
- I-605 SB Off-Ramp at Arrow Highway
- Rivergrade Road (NS) at Arrow Highway
- Plant Site Main Project Access (NS) at Arrow Highway

**Table 3.8-7**
**Intersection Analysis for 2025 without Project Conditions**

| Intersection | Traffic Control[3] | Intersection Approach Lanes[1] | | | | | | | | | | | | ICU/Delay[2] (secs.) | | Level of Service | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | North-bound | | | South-bound | | | East-bound | | | West-bound | | | | | | |
| | | L | T | R | L | T | R | L | T | R | L | T | R | AM | PM | AM | PM |
| Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Longdon Ave (EW) | TS | 1 | 2 | 1 | 1 | 2 | 1 | 0.5 | 1.5 | 1 | 0.5 | 1.5 | 0 | 1.250 | 1.432 | F | F |
| • Live Oak Ave. (EW) | TS | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1.228 | 1.760 | F | F |
| Longdon Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Live Oak Ave. (EW) | TS | 1 | 0 | 0 | 2 | 0 | 1 | 1 | 2 | 0 | 1 | 2 | 2>> | 0.884 | 1.195 | D | F |
| Live Oak Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Arrow Hwy. (EW) | TS | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 2>> | 1 | 2 | 0 | 1.462 | 1.083 | F | F |
| New Buena Vista St. (NS) at: | | | | | | | | | | | | | | | | | |
| • Alpha St. (EW) | CSS | 0 | 0 | 0 | 1 | 0 | 1 | 0.5 | 0.5 | 0 | 0 | 1 | 0 | 9.6 | 9.5 | A | A |
| • Arrow Hwy. (EW) | TS | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 2 | 0 | 0 | 2 | 1 | 1.084 | 0.872 | F | D |
| Bateman Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Buena Vista St. (EW) | TS | 1 | 1 | 1 | 0.5 | 0.5 | 1 | 0.5 | 1.5 | 1 | 0.5 | 1.5 | 1 | 0.630 | 0.691 | B | B |
| Tifal Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Buena Vista St. (EW) | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 2 | 1 | 14.5 | 14.9 | B | B |
| I-605 SB On-Ramp (NS) at: | | | | | | | | | | | | | | | | | |
| • Live Oak Ave. (EW) | TS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1>> | 1 | 2 | 0 | 0.916 | 1.186 | E | F |
| I-605 NB Off-Ramp (NS) at: | | | | | | | | | | | | | | | | | |
| • Live Oak Ave. (EW) | CSS | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 2 | 0 | --[4] | --[4] | F | F |
| I-605 SB Off-Ramp (NS) at: | | | | | | | | | | | | | | | | | |
| • Arrow Hwy. (EW) | TS | 0 | 0 | 0 | 1 | 0 | 1>> | 0 | 2 | 0 | 0 | 2 | 0 | 0.963 | 0.818 | E | D |
| Rivergrade Rd. (NS) at: | | | | | | | | | | | | | | | | | |
| • Arrow Hwy. (EW) | TS | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 2 | 0 | 0.894 | 0.603 | D | B |

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; 1>> = Free-Right Turn Lane; TS = Improvement

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; CSS = Cross Street Stop; AWS = All Way Stop.
lay high, intersection unstable. LOS = "F".

S United Rock Product Corporation Traffic Impact Analysis, 2004

### 3.8.2.2.2 Future Traffic With Project

To assess Year 2025 Plus-Project conditions, project-related traffic volumes are combined with Year 2025 Without Project traffic volumes. **Figure 3.8-26** shows ADT volumes for Year 2025 With Project traffic conditions. **Figures 3.8-27 and 3.8-28** show the AM and PM peak hour intersection volumes with the project.

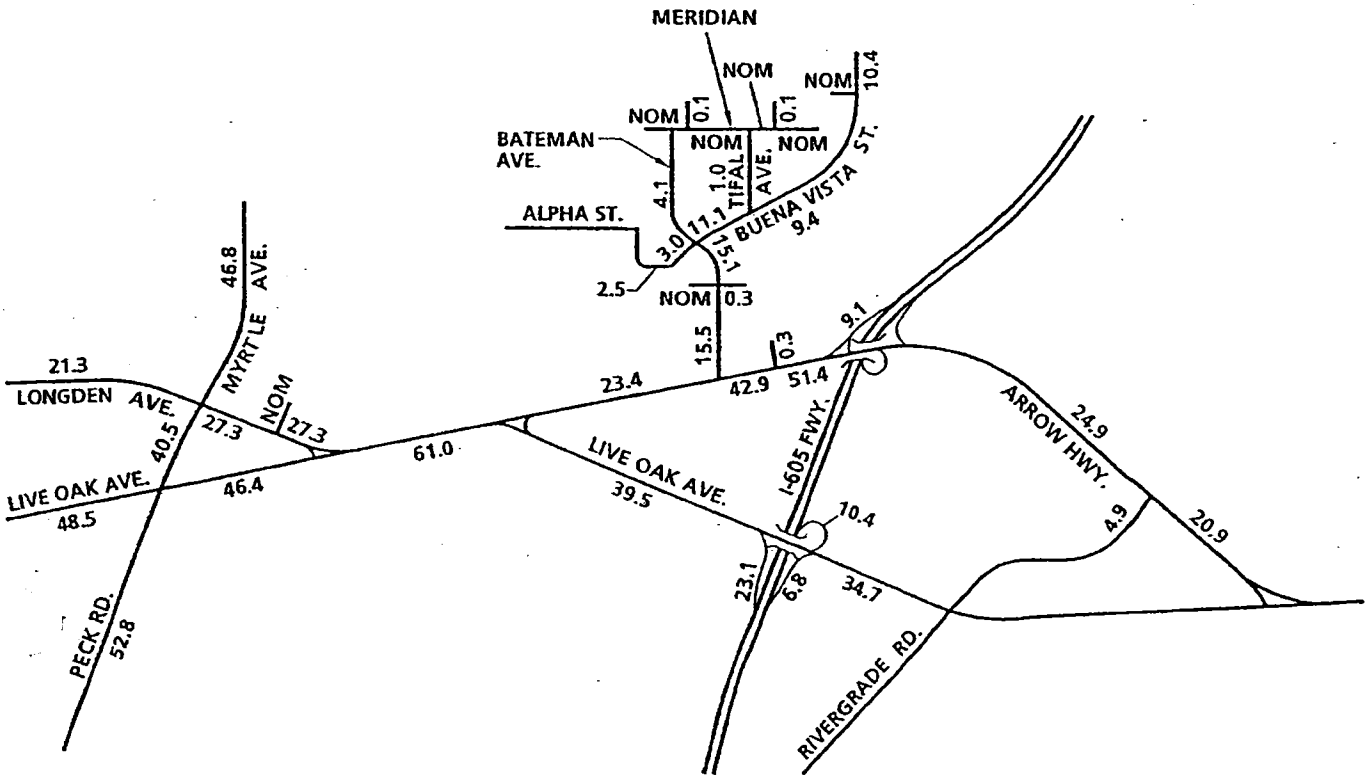
Intersection levels of service for Year 2025 With Project traffic conditions have been calculated and are shown in **Table 3.8-8**. As shown in the Table, the following intersections are projected to operate at an unacceptable Level of Service "E" or "F" during the AM and PM peak hours:

- Myrtle Avenue at Longden Avenue and Live Oak Avenue
- Longden Avenue at Live Oak AvenueLive Oak Avenue at Arrow Highway
- Buena Vista Street at Arrow Highway
- I-605 SB On-Ramp at Live Oak Avenue
- I-605-NB Off-Ramp at Live Oak Avenue
- I-605 SB Off-Ramp at Arrow Highway
- Rivergrade Road (NS) at Arrow Highway
- Plant Site Main Project Access (NS) at Arrow Highway

**Table 3.8-8**
**Year 2025 with Project Traffic Conditions**

| Intersection | Traffic Control[3] | 2025 Without Project | | | | 2025 With Project | | | | Change in ICU | | Significant Impact[2] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ICU/Delay[1] (secs.) | | Level of Service | | ICU/Delay (secs.) | | Level of Service | | | | |
| | | AM | PM | AM | PM | AM | PM | AM | PM | | | |
| Myrtle Ave. (NS) at: | | | | | | | | | | | | |
| Longdon Ave. (EW) | TS | 1.250 | 1.432 | F | F | 1.259 | 1.435 | F | F | 0.009 | 0.003 | NO |
| Live Oak Ave. (EW) | TS | 1.228 | 1.760 | F | F | 1.232 | 1.766 | F | F | 0.004 | 0.006 | NO |
| Longdon Ave. (NS) at: | | | | | | | | | | | | |
| Arrow Hwy. (EW) | | | | | | | | | | | | |
| -With Improvements | TS | 0.884 | 1.195 | D | F | 0.895 | 1.198 | D | F | 0.011 | 0.003 | NO |
| Live Oak Ave. (NS) at: | | | | | | | | | | | | |
| Arrow Hwy. (EW) | TS | 1.462 | 1.083 | F | F | 1.483 | 1.103 | F | F | 0.021 | 0.020 | YES |
| -With Improvements | | | | | | 1.252 | 1.005 | F | F | -0.210 | -0.078 | NO |
| New Buena Vista St. (NS) at: | | | | | | | | | | | | |
| Alpha St. (EW) | CSS | 9.6 | 9.5 | A | A | 9.6 | 9.5 | A | A | | | NO |
| Arrow Hwy. (EW) | TS | 1.084 | 0.872 | F | D | 1.142 | 0.887 | F | D | 0.058 | 0.015 | YES |
| -With Improvements | | | | | | 1.092 | 0.887 | F | D | 0.008 | 0.015 | NO |
| Bateman Ave. (NS) at: | | | | | | | | | | | | |
| Buena Vista Ave. (EW) | TS | 0.630 | 0.691 | B | B | 0.641 | 0.696 | B | B | 0.011 | 0.005 | NO |
| Tifal Ave. (NS) at: | | | | | | | | | | | | |
| Buena Vista St. (EW) | CSS | 14.5 | 14.9 | B | B | 14.5 | 14.7 | B | B | | | NO |
| I-605 SB On-Ramp (NS) at: | | | | | | | | | | | | |
| Live Oak Ave. (EW) | TS | 0.916 | 1.186 | E | F | 0.922 | 1.190 | E | F | 0.006 | 0.004 | NO |
| I-605 NB Off-Ramp (NS) at: | | | | | | | | | | | | |
| Live Oak Ave. (EW) | CSS | --[4] | --[4] | F | F | --[4] | --[4] | F | F | | | NO |
| I-605 SB Off-Ramp (NS) at: | | | | | | | | | | | | |
| Arrow Hwy. (EW) | TS | 0.963 | 0.818 | E | D | 0.969 | 0.819 | E | D | 0.006 | 0.001 | NO |
| Rivergrade Rd. (NS) at: | | | | | | | | | | | | |
| Arrow Hwy. (EW) | TS | 0.894 | 0.603 | D | B | 0.903 | 0.606 | E | B | 0.009 | 0.003 | NO |

[1] ICU = Intersection Capacity Utilization
[2] A significant impacts is defined as a change in the Level of Service value from "D" to "E" or "F" with the additional traffic from the project or, an increase in the ICU value of 0.01 or greater if the intersection is operating at LOS "E" or "F"
[3] TS = Traffic Signal; CSS = Cross Street Stop; AWS = All Way Stop.
[4] -- Delay high, intersection unstable. LOS = "F".
Source: United Rock Product Corporation Traffic Impact Analysis, 2004

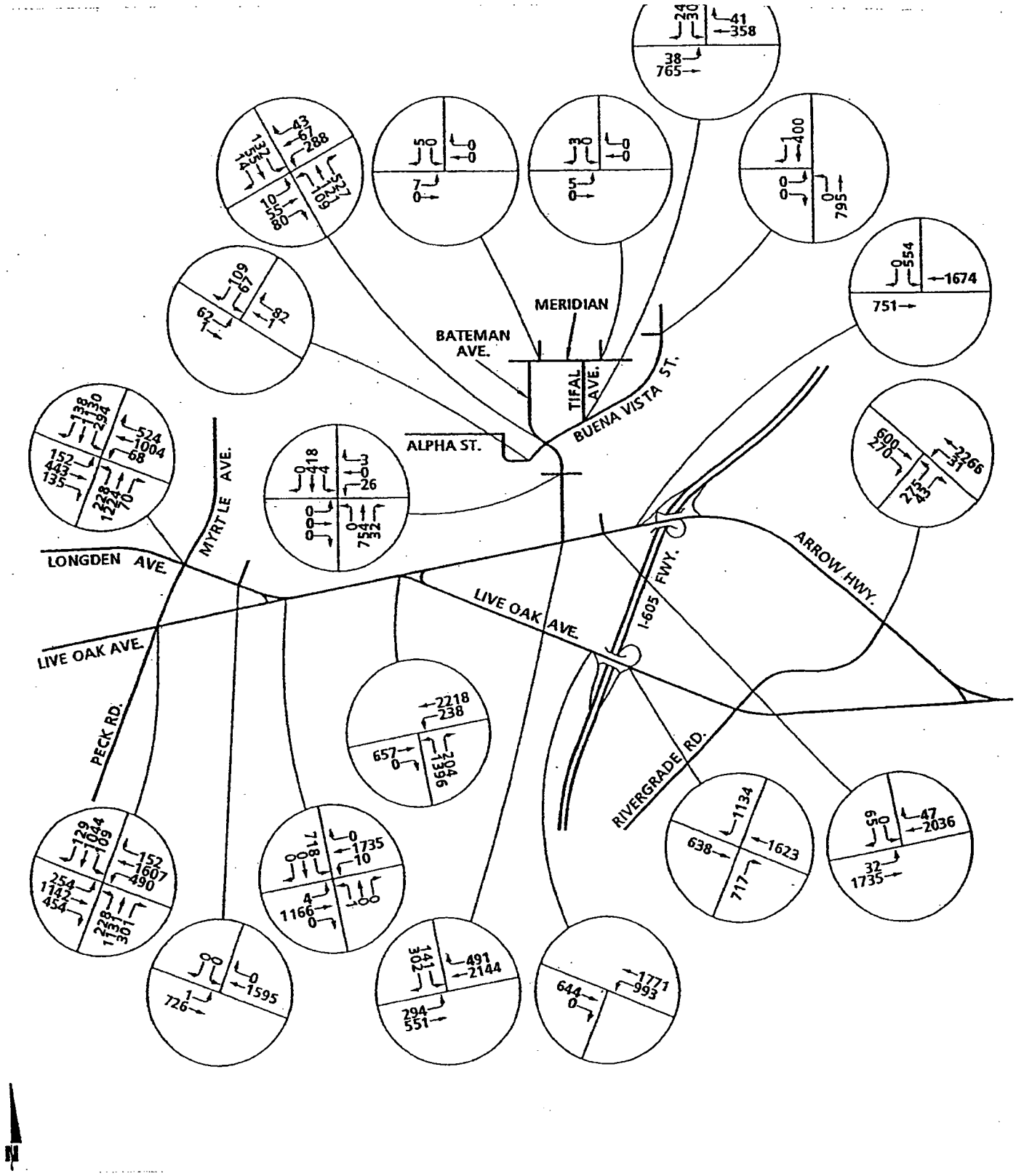



**LEGEND:**

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

GREYSTONE®
Source: Urban Crossroads, 2004

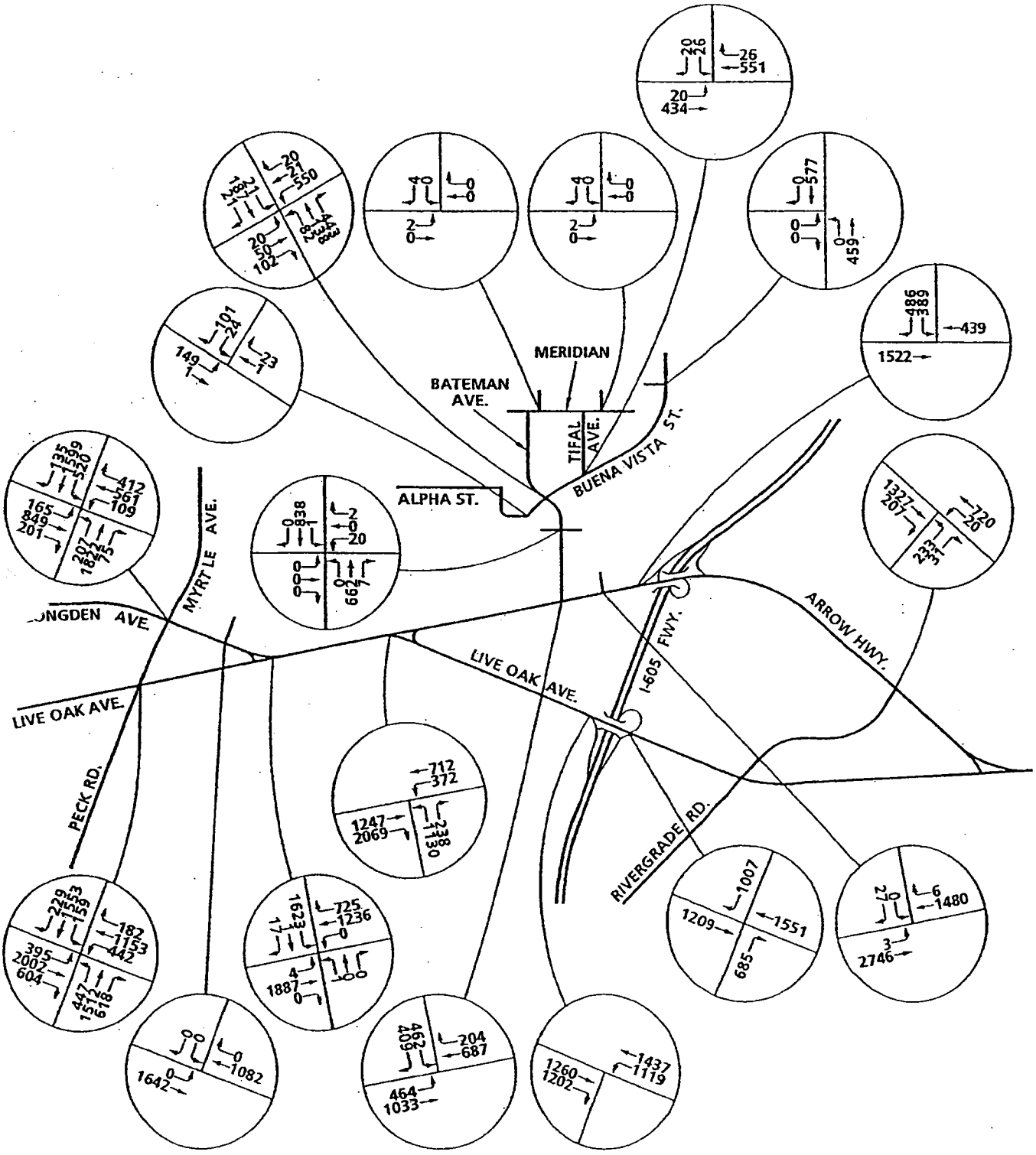
**Figure 3.8-26**
**Year 2025 With Project Average Daily Traffic (ADT)**




N

**Figure 3.8-27**
**Year 2025 With Project AM Peak Intersection Volumes**

GREYSTONE®
Source: Urban Crossroads, 2004




Source: Urban Crossroads, 2004

**Figure 3.8-28**
**Year 2025 With Project PM Peak Intersection Volumes**

*This page intentionally left blank.*

**Table 3.8-8** summarizes the change in the ICU values for the signalized study area intersections for the Proposed Project. As indicated in the Table, Live Oak Avenue/Arrow Highway and new Buena Vista Street/Arrow Highway will have significant impacts due to projected traffic.

### 3.8.2.3 Reclamation Impact Analysis

Currently Quarry No. 1 is being reclaimed with approximately 264 truck trips being made to this location daily. As such, these are existing trips and have been accounted for in the discussion of the existing traffic conditions for the project area. The reclamation of Quarry No. 1 will be completed about the same time as the cessation of mining operations at Quarry No. 2. These truck trips would continue, but would shift within the area from Quarry No. 1 to Quarry No. 2 and subsequently to Quarry No. 3. Because the reclamation of the quarries would occur in sequence rather than concurrently, no new reclamation trips would occur and the trips would discontinue upon completion of reclamation of the last quarry.

Although these trips would shift their termination points within the project area as existing trips, the potential impacts associated with the reclamation of Quarries No. 2 and 3 have been identified in Section 3.8.2.2. No additional traffic impacts would occur during the reclamation phase of the Project. Likewise, no mitigation measures beyond those identified to mitigate mining impacts would be required.

### 3.8.2.4 Post-Reclamation Impact Analysis

Because post-reclamation activities are subject to forecasting and speculation as to future conditions and specific post-reclamation land development projects, qualitative analysis of post-reclamation impacts will be presented in this section.

Although the specific use or uses of the Project Area once reclamation is completed are not known, the Draft of the Irwindale General Update has designated the future land uses types as Industrial and Regional Commercial. Generally, the Floor- Area-Ratio (FAR) would be 1.0:0.5 standard. For example, one acre of land could support up to one-half acre of development. Since no development plans are available, the presumed traffic generated by future development of the proposed Project site will result from the maximum allowable development envelope in the post-reclamation area. **Table 3.8-9** shows the post-reclamation development area for each of the quarries.

**Table 3.8-9**
**Post Reclamation Project Development Area**

| Quarry Number | Area Mined/Used | Post Reclamation Development Available | Amount Developable |
|---|---|---|---|
| Quarry No. 2 | 135 Acres | 121 Acres | 60.5 Acres |
| Quarry No. 3 | 110 Acres | 96 Acres | 48 Acres |
| **Total** | **245 Acres** | **217 Acres** | **108.5 Acres** |

The Sixth Edition of the ITE Trip Generation Manual provides daily vehicle trip generation rates for a number of uses. However, many of these rates are based on either the number of employees, total building square footage or number of parking spaces. Two likely uses for the Project Area that present rates on a per acre basis are Industrial Park and Business Park. **Table 3.8-10** shows the potential number of trips that could be generated with the build out of the Project Area for each land use type.

**Table 3.8-10**
**Post Reclamation Project Trip Generation**

| Quarry Number | 2 | 3 | Total |
|---|---|---|---|
| Developable Area (Acres) | 60.5 | 48 | 108.5 |
| ITE Trip Generation Rate for Industrial Park (63.11 trips/acre) whole numbers | 3,818 | 3,029 | 6,847 |
| ITE Trip Generation Rate for Business Park (149.79trips/acre) whole numbers | 9,062 | 7,190 | 16,252 |

As can be seen in **Table 3.8-10** the number of trips generated by post- reclamation development would exceed the number of trips occurring during both the mining and reclamation phases. However, there are a number of factors that need to be considered before a determination of significance could be made. These factors include:

- Time of day (are the trips occurring during the A.M. or P.M. peak periods?);
- Distribution of the trips;
- Volume of traffic from other development and the natural rate of growth; and
- Level of Service on the surrounding roadways (the impacts of increasing the number of trips on a system with a LOS of A would be less than on a system operating at a LOS of C or worse).

The numbers of trips shown in **Table 3.8-10** are potential maximums; the actual number of trips would likely be less since not all of the locations would be developed at the maximum trip level. In addition, Quarry No. 3 may not be developed at all, but used as a water recharge basin, thereby reducing the maximum. Furthermore, other transportation such as bus or rail services (e.g. the Gold Line extension) may be more widely available and used to reduce trips. Another factor that could reduce potential impacts of post-reclamation development is that these trips would not be generated all at once, but would be gradually added sequentially over decades as the quarries are reclaimed and then developed. Roadway and other traffic mitigation would be identified and incorporated, as build out of the Project Area would occur.

The Los Angles County CMP would require analysis of the land use proposals of for these sites as well as any other proposed projects that would affect Interstate-210, I-605 and Arrow Highway as designated CMP facilities. Any land use proposal that would affect traffic on these roadways would be required to mitigate the impacts.

The City has determined and evaluated the potential environmental impacts of the Proposed Project in this Draft EIR based on best available data and the abilities and limitations of current impact assessment practices, recognizing that potential effects of future activities and land uses decades in the future necessarily exceeds the limits of reasonable forecasting and is too speculative to warrant detailed analysis. It is further assumed that all future post-reclamation phases of development will be subject to subsequent discretionary approvals and therefore will be subject to the requirements of CEQA.

## 3.8.3 MITIGATION MEASURES

During the mining phase of the Proposed Project, there would be potentially significant impacts related to traffic at the intersections of Live Oak Avenue and Arrow Highway and Buena Vista Street and Arrow Highway. With the improvements described below, the project-related impacts at these intersections can be mitigated to a less than significant level with implementation of the following measures:

**On-Site Improvements:**

- Provide adequate sight distance at the project access roadways where they intersect with the public roadways. The minimum sight distance should be provided to meet the City of Irwindale and Caltrans requirements.
- Provide a 200-foot minimum northbound and southbound pocket lane at the Quarry No. 4/Production Plant access along Buena Vista Street.
- Provide a 200-foot minimum eastbound left turn pocket lane at the Quarry No. 4/Production Plant access along Arrow Highway.
- Provide a 150-foot minimum westbound right turn pocket lane at the Quarry No. 4/Production Plant access along Arrow Highway.
- Restrict the Quarry No. 4/Production Plant access to right turn in and out, and left turn in only.
- Off-site Improvements:
- A second westbound left turn lane and a third through-lane shall be constructed at the intersection of Live Oak Avenue and Arrow Highway,
- The Buena Vista southbound left turn lane shall be restriped to provide a shared left-right turn lane at the intersection of Buena Vista Street and Arrow Highway.

Traffic related impacts associated with post reclamation land development projects could result in an adverse impact on local roadways and intersections. However, these impacts will depend upon the type of facility industrial/commercial activity at the site. Development of these future land uses is dependent upon the City of Irwindale's approval of zoning, land use, and project specific approval which will be subject to independent environmental review in the decades ahead.

Post-reclamation development of the Project Site will result in an increased number of trips that would have the potential to be significant. However, any development, either of the Project area or of the surrounding communities, will be subject to specific environmental review, which would include a traffic impact analysis that would take into consideration the existing conditions, and would propose mitigation measures or project modification to reduce impacts to a level that is less than significant.

## 3.8.4 LEVEL OF SIGNIFICANCE AFTER MITIGATION

With the mitigation measures proposed, the impacts to traffic from the implementation of the Project would be less than significant.

# SECTION 4.0 OTHER ENVIRONMENTAL CONSIDERATIONS

CEQA requires consideration and discussion of a range of issues extending beyond analysis of project-specific impacts to a single resource or topical area. This section of the Draft EIR contains analysis of the following additional CEQA mandated discussions:

- Significant Irreversible Environmental Changes - CEQA Guidelines §15126.2(c);
- Growth Inducing Impacts of the Proposed Project - CEQA Guidelines §15126.2(d);
- Cumulative Impacts of the Proposed Project- CEQA Guidelines §15130; and,
- Unavoidable Adverse Impacts of the Proposed Project - CEQA §15126.2(b).

## 4.1 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

This section considers the effects of the Proposed Project that would result in a commitment of resources and uses of the environment that could not be recovered if the project were constructed. An irreversible or irretrievable commitment of resources would occur when resources are consumed, committed, or otherwise permanently lost as a result of the Proposed Project. The commitment of a resource would be "*irreversible*" if the project started a process (chemical, biological, or physical) that could not be stopped. As a result, the resource, or its productivity or utility, would be consumed, committed, used or lost forever. Commitment of a resource would be considered "*irretrievable*" when the project would directly eliminate the resource, its productivity, or its utility for the life of the project.

As discussed in Section 3 of this Draft EIR, the Proposed Project would result in permanent changes to the existing environment as the mineral extraction activities in Quarry No. 2 are completed over the next 15 years, after which reclamation of Quarry No. 2 commences concurrent with initiation of full-scale mining in Quarry No. 3. Extraction of these mineral resources will be followed by processing and sale for ultimate use as road base materials and in the production of concrete and other rock products.

Although the extraction of mineral resources is essentially irreversible, the act of reclamation through backfill of the quarry with inert material does reverse the most prominent effects of mining. Upon cessation of mining activities at Quarry No. 3, it will be reclaimed concurrent with dismantling and disposal of equipment, and clearing and grading of Quarry No. 4/Production Plant. Changes would include the depth and slopes of Quarry Nos. 2 and 3 as they are excavated and subsequently reclaimed. Finally, post-reclamation development of the three quarry sites will include conversion to industrial and commercial uses, and possibly open space – groundwater recharge basin for Quarry No. 3.

In addition to the commitment of land to urban uses, implementation of the Proposed Project would involve the consumption of energy derived from nonrenewable sources, such as fossil and nuclear fuels for electricity to power on-site equipment and project-related vehicle trips. Building materials could be considered permanently consumed, although these are recyclable in part at some future date. These changes would be, however, irreversible.

## 4.2 GROWTH INDUCING IMPACTS

Pursuant to CEQA Guidelines Section 15126.2(d), an EIR must "*discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment*". The purpose of this section is to evaluate the potential for growth-inducing effects of the Proposed Project.

The CEQA Guidelines require a discussion of growth inducement; but, the Guidelines do not require speculation as to exactly when and where growth may or may not occur, and what form that growth may take. Speculation does not provide the reader with accurate or useful information about the proposed Project's potential effects.

The following sections will evaluate whether the Mining, Reclamation, and Post-Reclamation phases of the proposed Project will directly or indirectly induce economic, population, or housing growth in the surrounding environment.

### 4.2.1 Mining

A project would directly induce growth if it would remove barriers to population growth, such as a change to a jurisdiction's General Plan and Zoning Ordinance to allow new residential development. The Proposed Project's modifications to the allowed mining depth will not directly or indirectly result in the development of new housing or population generating uses. Because changes to the mining depth will only result in the continuation of current mining operations, it will not contribute to growth-inducing impacts.

### 4.2.2 Reclamation

The Proposed Project's reclamation phase does not include the development of new housing or other population-generating uses. The reclamation phase will involve backfilling and compaction. Reclamation of Quarry No. 2 will extend over approximately 40 years, as will subsequent reclamation of Quarry No. 3. This phase would not generate direct growth-inducing impacts.

### 4.2.3 Post-Reclamation

The post-reclamation phase of the Proposed Project would include redevelopment of the reclaimed quarry sites with alternative future land uses. The City's Draft General Plan Update Land Use Map shows that this project area is designated for future development as "Regional Commercial" and "Industrial". According to the Amended Reclamation Plans prepared for Quarries No. 2 and 3, the sites "will be backfilled to grade and compacted in a manner that will accommodate construction of buildings, roads, and other essential infrastructure improvements, such as water, sewer, drainage and utility lines." Quarry No. 3 is alternatively considered for use as a groundwater recharge basin under an Open Space land use designation.

The post-reclamation phase has the potential to foster economic growth which could indirectly induce population growth if it were to increase the capacity of infrastructure in an area, and therefore may have a potentially indirect growth-inducing impact. Development of future land uses would include commercial and / or industrial land uses which could create jobs and could also foster economic growth in the City of Irwindale. Such growth and economic development is

the expressed goal of the City's draft General Plan. The long-term timeframe over which the Proposed Project would take to reach the post-reclamation phase would generally coincide with the planned buildout of the City of Irwindale and surrounding jurisdictions. Therefore, implementation of the Proposed Project may be more likely to result in some modest amount of redevelopment in the City and not induce substantial *new* population growth.

## 4.3 CUMULATIVE IMPACTS

As defined in the CEQA Guidelines §15130, a cumulative impact may result from the incremental impact of the project when added to other related past, present, and reasonably foreseeable future development projects.

Cumulative impacts are those impacts that are individually less than significant but, when considered together with related impacts of other projects in the affected area, could result in a combined effect that is significant. **Table 4-1** below lists the related projects within the area of potential effects for the United Rock quarries.. To account for the long time frame assessed for this project, a two percent annual growth factor was applied as a means to consider cumulative growth and development to the year 2061 (for a total of 114% growth over the 57-year time span).

**Table 4-1**
**Cumulative Projects**

| Project | Location | Description |
|---|---|---|
| Hanson Aggregates West | South of project area | Continued mining operations and reclamation of quarries to commercial/industrial and open space uses |
| Nuway Pit | East of project area, north of Live Oak Ave, east of I-605 | 70 acres, inert landfill ongoing. Future land uses to include industrial park, recreation, commercial, etc. |
| Kincaid Pit | East of project area, south of I-210, east of I-605 | Closed for mining. 100 acres targeted for commercial/recreation redevelopment. |
| Peck Road Pit (Bubalo Sierra) | Southwest of project area, east of Peck Road, South of Live Oak Ave | Mining, inert landfill, commercial recreation targeted as final use. |
| Edison Public Storage | Southeast of project area, South of Live Oak Ave, East of Graham Access Rd., West of Rivergrade Rd. | Public storage/mini-warehouse. |
| Rivergrade Boat Manufacturing | South of project area, North of Lower Azusa Rd, West of Rivergrade Rd and I-605 | Boat manufacturing. |
| Build out of the Cities of , Duarte, Monrovia, and the Unincorporated section of Los Angeles County known as the Monrovia islands according to their respective General Plans | Cities and County parcels located to the north, south and west of the Proposed Project. | Development of residential, commercial and other land uses that would occur during the approximately 60 year period of mining and reclamation activities on the Project site. |

**Table 4-1**
**Cumulative Projects**

| Project | Location | Description |
|---|---|---|
| Calmate Largo<br>Calmate Durbin<br>Calmate Reliance Quarry No. 2<br>Hanson Aggregate<br>Nu-Way Live Oak | Quarries located within the City of Irwindale and the City of Azusa. | Closure and reclamation and reuse of the mining pits |

## 4.3.1 Air Quality

Cumulative emissions thresholds established by the SCAQMD are the same as project-specific thresholds. Thus, if project emissions fall within the regional emission limits established by SCAQMD for construction and operations, the district considers that the project would not contribute to a cumulatively considerable impact. The project would be considered to have both project-specific and cumulatively considerable impacts on regional air quality if the project's mitigated emissions exceed the district's project-specific thresholds for either construction or operation.

### 4.3.1.1 Mining Phase

The continued mining phase of the project would be subject to the existing Fugitive Dust Control Plan that is in place for all United Rock operations. Given that the Proposed Project would not result in a net increase in the rate of mining or processing activities, compliance with applicable fugitive dust control plans would be consistent with the Air Quality Management Plan and would therefore not be cumulatively considerable.

### 4.3.1.2 Reclamation Phase

The reclamation phase of the project would also be subject to the existing Fugitive Dust Control Plan that is in place for United Rock mining operations. Mine reclamation would proceed in one quarry at a time, and would not result in a greater impact than mining or processing activities, and compliance with applicable fugitive dust control plans would be consistent with the Air Quality Management Plan. Therefore, potential air quality impacts of the reclamation phase would not be cumulatively considerable.

### 4.3.1.3 Post-Reclamation Phase

Once the quarries have been reclaimed, sources of emissions would be related to construction of projects both within the City of Irwindale and the surrounding communities and traffic. Because the timeline for buildout of the quarries and related projects would extend over a period of approximately 60 years, it is likely that advancements in emissions controls and improved transit opportunities (e.g., the Gold Line extension to San Bernardino), as well as specific project mitigation requirements would result in reducing cumulative impacts to air quality, rather than increasing effects. This conclusion is reinforced by the historic trends over the past 40 years in the areas of energy efficiency, emissions reductions, technological advancement, and regional air quality.

## 4.3.2 Geology and Soils

### 4.3.2.1 Mining Phase

Continued mining at the project sites, and other projects in the vicinity of the Proposed Project may result in similar impacts relative to geology and soil, but each project's impacts are independent of one another and are mitigated on a site-specific basis. Regional geologic impacts do not generally compound, and are limited to the site at which they occur. Erosion impacts may be cumulatively significant, but in this case, each quarry drains internally, and sediment transport is limited to deposition within individual pits. Therefore, geologic and soil impacts from continued mining are not cumulatively considerable.

### 4.3.2.2 Reclamation Phase

Reclaiming Quarry Nos. 2 and 3 will not result in an increase in impacts to geology and soils over the existing operations. The project, and all others in the vicinity, will be required to utilize standard engineering practices. The reclamation phase of this project will not compound with other projects to create a cumulatively significant impact to geology and soils.

### 4.3.2.3 Post-Reclamation Phase

New construction on the Proposed Project site following reclamation will be required to incorporate seismic-resistant designs to minimize risks of damage from seismic events to a less than significant level. Future land uses will also be required to meet design standards that would reduce the potential for geological impacts to a less than significant level.

## 4.3.3 Hydrology and Drainage

### 4.3.3.1 Mining Phase

Continued mining at the Project site, considered with other projects in the San Gabriel Valley, will not result in significant cumulative impacts to groundwater quality. The dredge is electrically powered, and the clamshell does not emit any wastes or pollutants into the exposed groundwater.

### 4.3.3.2 Reclamation Phase

As a Class U landfill, only inert materials and other clean fill materials will be allowed to be disposed of in the reclamation landfills planned for Quarries Nos. 2 and 3. All on-site runoff and drainage will be contained through existing structures and implementation of required BMPs. Therefore, the reclamation phase of the Proposed Project will not result in an adverse cumulative impact on surface or groundwater water quality.

### 4.3.3.3 Post-Reclamation Phase

The Proposed Project, when considered with other projects in the same watershed, may result in cumulative impacts to surface and groundwater quality from increased surface impermeability and resultant runoff. Construction projects could result in increased erosion from exposed soil areas, which could contribute sediments into local drainage courses and other waterways. However, it is reasonably assumed that new construction associated with future projects will be

required to meet federal, State, and local construction and operation standards at least as rigorous as those required at present. Therefore, the potential for cumulative impacts is deemed to be less than significant.

## 4.3.4 Land Use and Planning

### 4.3.4.1 Mining Phase

Mining at the United Rock quarries has been ongoing for many decades. Continued mining at the Project Site will not impact land use beyond existing conditions and will not compound with impacts from other related projects in the vicinity to result in a significant cumulative impact to land use.

### 4.3.4.2 Reclamation Phase

Reclamation of the quarries at the end of mining and processing operations will render the former quarries available for other alternative future land uses. However, the process of reclamation, which involves long-term backfilling and compaction activities, would not have a cumulative adverse impact on land use and planning in the area.

### 4.3.4.3 Post-Reclamation Phase

The post-reclamation redevelopment of the quarries and production plant is planned to be consistent with the draft General Plan land use map and related policies. The City's General Plan Update and the proposed modification of the applicant's CUP would permit development of Industrial and Regional Commercial uses on the sites, and includes a Quarry Overlay to accommodate mining and mining related activities through completion of reclamation.

It is important to note that the long-term timeframe in which the Proposed Project would be implemented generally coincides with the planned buildout of the City of Irwindale and surrounding jurisdictions. Therefore, because post-reclamation uses will be consistent with adopted land use plans, and buildout will have occurred locally, implementation of the Proposed Project would not have a significant cumulative impact on land use or planning.

## 4.3.5 Noise

### 4.3.5.1 Mining Phase

Continued mining at the Project site will not significantly increase or otherwise modify the noise level experienced by nearby receptors. Cumulative noise impacts during this phase would generally be limited to impacts within the immediate vicinity of the project area. Noise levels associated with daily mining activities will not increase, but will occur over a greater number of years. Since daily noise levels do not impact nearby residents at present, the extended years of mining would not be considered a significant impact to sensitive receptors. The majority of neighboring land uses consist of commercial and industrial uses, including other mining operations. Therefore, noise impacts would not be cumulatively considerable.

### 4.3.5.2 Reclamation Phase

The shift in vehicular trips as a result of sequentially reclaiming the quarries would not result in an increase in noise levels or result in the generation of new noise sources. The duration (years) over which such noise will be generated would be prolonged, however. Projects located in the vicinity during this phase, such as the reclamation of the Hanson Aggregates pits, will also contribute to equipment and vehicle-related noise effects. The prolonged noise effects of the reclamation phase of the Proposed Project when combined with other past, present, and reasonably foreseeable developments would not create cumulatively significant noise impacts in the City of Irwindale or surrounding communities.

### 4.3.5.3 Post-Reclamation Phase

Implementation of the post-reclamation phase of the Proposed Project would result in short term increases in noise levels in the immediate vicinity of the project area during construction. Once construction of the alternative future land development projects is completed, the future land uses would not be expected to be major sources of increased ambient noise. Noise impacts associated with the future land uses would be related primarily to vehicle traffic, which may compound with the cumulative noise impacts of related land development projects. However, given the level of existing and planned development and proximity of major transportation corridors, noise impacts from the Proposed Project are not likely to be cumulatively significant.

## 4.3.6 Public Health and Safety and Hazardous Materials

### 4.3.6.1 Mining Phase

Potential impacts to public health and safety would remain unchanged as a result of implementation of the Proposed Project. Improvements would be associated with enhancements to quarry wall slope stability. Exposure of people to hazardous materials within the Project sites would remain minimal and unchanged.

### 4.3.6.2 Reclamation Phase

The potential impacts during the reclamation phase would be similar to those discussed above. The potential risk to the public safety from the reclamation of the quarry sites would be less than significant. Implementation of project specific mitigation for landfill operations to ensure that backfill contains allowed inert materials only will prevent further contamination of regional groundwater and avoid significant cumulative impacts.

### 4.3.6.3 Post-Reclamation Phase

Construction of new projects on the reclaimed quarries and production plant and other reasonably foreseeable future projects in the region could result in the exposure of workers or the public to hazardous materials due to disturbance of contaminated sites, or the unintentional release or spill of hazardous materials. These impacts would be reduced to a less than significant level through the implementation of best management practices including the thorough

investigation of sites prior to construction; clean up of known contaminated sites; use of proper personal protective equipment if contamination were encountered; proper use, handling, and storage of hazardous materials to prevent spills; and adequate ERPs that would be implemented in the event of a release or spill. With the implementation of these measures, the potential cumulative impacts would be less than significant.

## 4.3.7 Public Services and Utilities

### 4.3.7.1 Mining Phase

Implementation of the Proposed Project will continue to require minimal commitments of available public services and utilities. Continued mining would not generate additional employment or require additional service or infrastructure. Therefore, implementation of the project would not be expected to cumulatively impact the provision of, or demands placed on, public services and utilities.

### 4.3.7.2 Reclamation Phase

The Proposed Project would not require any additional service or changes to utility infrastructure during the reclamation phase. However, due to the long timeframe over which the quarries would be reclaimed, other reasonably foreseeable land development projects will result in increased demands on existing available public services and utilities. The Proposed Project's contribution to these increased demands, however, would not be cumulatively considerable.

### 4.3.7.3 Post-Reclamation Phase

During the post-reclamation phase the reclaimed quarry sites would be redeveloped as industrial, business and commercial uses. These uses would increase demands placed on law enforcement, fire protection services and on infrastructure including electricity, water, natural gas and the sewer system relative to existing demands for these services and utilities. When combined with other development projects that would be built between now and the planned post-reclamation phase of the United Rock quarries, the increased demands for service and infrastructure capacity may be cumulatively considerable. However, it is reasonable to assume that the decades of planning horizon over which this development will occur will allow the City, surrounding communities, and the affected service agencies to make the adjustments and expansions required to extend services to these new uses.

## 4.3.8 Traffic and Circulation

### 4.3.8.1 Mining Phase

Continued mining and material transportation activities associated with the proposed Project would not contribute to an overall increase in traffic volumes on the existing and planned roadway network as these impacts are already assumed to be part of the traffic baseline. Because excavated materials are transported via conveyor belt to the processing facility and the number of other truck trips is a relatively minor contributor to local roadway traffic volumes, implementation of this phase of the project would not have a cumulatively considerable effect on traffic and circulation.

### 4.3.8.2 Reclamation Phase

During the reclamation phase of the Proposed Project, truck trips would sequentially shift from Quarry No. 2 to Quarry No. 3 as mining is completed and reclamation begins. Material transportation to the quarry site to be used for backfilling should continue at a consistent rate. However, although project-related traffic would continue in duration, the overall number of truck and related vehicle trips would not increase during this phase of the Proposed Project. Therefore, implementation of the Proposed Project will contribute to cumulative traffic volumes as the City and the surrounding communities build out over the next 20-40 years.

### 4.3.8.3 Post-Reclamation Phase

The post-reclamation redevelopment of the quarries and production plant is planned to be consistent with the draft General Plan land use map and related policies. The City's General Plan Update and the proposed modification of the applicant's CUP would permit development of Industrial and Regional Commercial uses on the sites. General Plan buildout conditions are assumed in the County CMP and therefore, necessary roadway improvements will be implemented over the long term. Therefore, because the post-reclamation uses will be consistent with the adopted land use plans of the City of Irwindale and the fact that buildout will generally have occurred in the region, implementation of the post-reclamation Proposed Project would not have a significant cumulative impact on traffic and circulation.

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# SECTION 5.0 ALTERNATIVES TO THE PROPOSED PROJECT

## 5.1 INTRODUCTION

CEQA Guidelines §15126.6 requires consideration and discussion of alternatives to the proposed project in an EIR. The purpose of the alternatives analysis is to identify ways to mitigate or avoid the significant effects a project may have on the environment if implemented.

The EIR must describe a reasonable range of alternatives to the project that would *"...feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives."* (CEQA Guidelines 15126.6(a)).

CEQA provides the following guidelines for discussing alternatives to a proposed project:

- The EIR must identify ways to mitigate or avoid significant effects of the project on the environment: *"...the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly."* [CEQA Guidelines Section 15126.6(b)];
- The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and those that could avoid or substantially lessen one or more of the significant adverse effects. If there is a specific proposed project or a preferred alternative, the EIR must explain why other alternatives considered in developing the proposed project were rejected in favor of the proposal. *"The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination."* [CEQA Guidelines Section 15126.6(c)];
- The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed. [CEQA Guidelines Section 15126.6(c)];
- The specific alternative of "no project" *"shall be evaluated along with its impact."* The purpose of describing and analyzing a no project alternative is to allow *"decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project."* The CEQA Guidelines also stipulate that the "no project" analysis *"shall discuss the existing conditions at the time the (EIR) Notice of Preparation is published...as well as what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans..."* [CEQA Guidelines Section 15126.6(e)];

- If the environmentally superior alternative is the No Project Alternative, the EIR shall also identify the environmentally superior alternative among the other alternatives. [CEQA Guidelines Section 15126.6(e)];
- If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed;
- Under the CEQA Guidelines Section 15126.6(c), the range of alternatives required in an EIR is governed by a "rule of reason" that requires an EIR to set forth only those alternatives necessary to permit a reasoned choice. *"The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making."* [CEQA Guidelines Section 15126.6(f)].

### 5.1.1 Overview of the Alternative Selection Process

The alternative selection process involved the following sequence of steps:

- Identification of project goals and objectives;
- Preparation of an initial study of potential environmental impacts;
- Development of a range of alternatives to reduce potentially significant impacts;
- Development of evaluation criteria for feasibility;
- Evaluation of alternatives; and
- Identification of those alternatives that met the criteria and explanation of why some alternatives were rejected as infeasible.

### 5.1.2 OBJECTIVES OF THE PROPOSED PROJECT

The primary goals and objectives of the Proposed Project are to allow for:

- Continued mining operations at Quarries Nos. 2 and 3;
- Reclamation of the Quarries consistent with SMARA to provide future opportunities for land redevelopment and/or resource management that are compatible with surrounding land uses; and
- Post-reclamation uses that are consistent with City General Plan land use designations and land use policies.

## 5.2 ALTERNATIVES CONSIDERED

Four alternatives to the Proposed Project were considered in the alternatives screening process. These include:

- No Project Alternative;
- Open Space Reclamation Alternative;

- Water Recharge Basin Reclamation Alternative for Quarry No. 3; and,
- Reduced Intensity Post-Reclamation Development Alternative.

A summary description of each alternative is provided below.

## 5.2.1 No Project Alternative

The No Project Alternative assumes continuation of current mining operations with no expansion of the excavation area or depth for either of Quarries Nos. 2 or 3. The 24.63 acres associated with the previous Buena Vista Street would not be transferred from Quarry No. 4 to Quarry No. 2, nor would it be available for mining. In addition, the previous reclamation plans for the quarries have identified Open Space as the ultimate end use. Under this alternative, no reclamation of the former quarries would occur and no post-reclamation land use would be developed. Once mining activities cease the quarries would be abandoned without adequate financial assurances provided to the City to enable reclamation and redevelopment.

## 5.2.2 Open Space Reclamation Alternative

The Open Space Alternative would permit the extension of duration and deepening of Quarries No. 2 and 3. This alternative would also allow the transfer and mining of the 24.63 acres associated with the realigned Buena Vista Street right-of-way from Quarry No. 4 to Quarry No. 2. Once mining operations have been completed at the quarries, they would not be reclaimed, except that full slope remediation and revegetation would be undertaken to ensure public health and safety.

## 5.2.3 Water Recharge Basin Alternative for Quarry No. 3

The Water Recharge Basin Alternative would permit the expansion of mining operations, and would modify the Reclamation Plan for Quarry 2 to permit ultimate post-reclamation development as industrial and commercial uses. The Quarry 3 Reclamation Plan under this Alternative would result in the Quarry undergoing minor backfilling to establish safe and acceptable slopes. The post-reclamation use for Quarry No. 3 would consist of a groundwater recharge basin for the San Gabriel River Watershed and Aquifer. This alternative would require a diversion in the flood control channel of the San Gabriel River through either the Santa Fe Dam Spillway spreading basin, or possibly through connection to the existing Buena Vista Canal. The quarry would then be utilized as a reservoir to store local stormwater runoff and post-storm releases from upstream dams. During non-storm periods, the quarry could be artificially recharged with untreated imported water and reclaimed water.

Additional excavation of materials would be allowed under this alternative compared to the current permitted depth, permit limited economic development, and would address regional water quality issues.

Some general concepts for groundwater recharge spreading grounds were provided to the City by the Los Angeles Department of Public Works (personal communication. from John Burton to Edgar Rojas, April 28, 2004). The quarry offers high potential for recharge since it is located over an unconfined portion of the alluvial aquifer. Implementation of this alternative would include development of a diversion in the flood control channel or river channel to convey the water to Quarry No. 3 when the inflow water quality is acceptable, and use of the recharge quarry in conjunction with existing batteries of recharge basins to avoid reductions of percolation rates over time. Routine ongoing maintenance may be needed, including vegetation management and periodic mechanical clearing to remove accumulations of fine particles and silts that may impede long term percolation rates.

### 5.2.4 Reduced Intensity Post-Reclamation Development Alternative

The Reduced Intensity Alternative would be identical to the Proposed Project for the mining and reclamation phases for Quarries Nos. 2 and 3. However, post-reclamation uses would be developed at an intensity that would be reduced in comparison to that which would be allowed under the Proposed Project. According to the Draft General Plan Update, redevelopment of the quarry sites with future uses would permit a floor-area-ratio (FAR) of 1.0:0.5, meaning that buildout could include one-half acre of commercial-industrial floor space for every one acre of developable land. Under the Reduced Intensity Alternative, the permitted level of development would be reduced so that the floor-area-ratio would be no greater than 1.0:0.25. This alternative would allow post-reclamation economic development to occur, but with roughly correspondingly reduced traffic generation, air emissions, water and sewer demands, and related impacts.

The four alternatives to the Proposed Project were evaluated based on the following two criteria:

- **Criterion 1:** The alternative must avoid or substantially lessen an identified significant effect of the Proposed Project; and
- **Criterion 2:** The alternative must feasibly attain most of the Proposed Project's objectives. This second criterion focuses on identifying which alternatives were capable of serving the same use as the Proposed Project (i.e., meeting the objectives of the Proposed Project) in a feasible manner ("feasible" is defined by CEQA as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors" [Guidelines Sec. 15364].)

An alternative must meet both criteria to be considered in the EIR evaluation. The alternatives that did not meet both criteria were therefore rejected from further consideration. The rejected alternative was the Open Space Alternative, since it would meet the objectives of the continuation of mining and provide compatible land uses, but would not satisfy the City's long term land use and economic development objectives. The remaining alternatives were compared to the proposed Project. The results of the evaluation are presented in **Table 5-1** below.

**Table 5-1**
**Comparison of Alternatives to the Proposed Project**

| Resources | No Project Alternative | Water Recharge Basin Alternative for Quarry No. 3 | Reduced Post-Reclamation Development Intensity Alternative |
|---|---|---|---|
| Air Quality | < | < | < |
| Geology & Soils, Mineral Resources | = | = | = |
| Hydrology & Water Quality | = | < | = |
| Land Use | < | = | = |
| Noise | < | < | < |
| Pubic Health &Safety/Hazardous Materials | < | < | = |
| Public Services & Utilities | < | < | < |
| Transportation Circulation | < | < | < |

= Impact would be approximately equivalent to impact of Proposed Project.
< Impact would be less than the impact of the Proposed Project.
> Impact would be greater than the impact of the Proposed Project

## 5.3 DETERMINATION OF THE ENVIRONMENTALLY SUPERIOR ALTERNATIVE

### 5.3.1 No Project Alternative

The No Project Alternative would allow continuation of current mining operations with no expansion of the excavation area or depth for either Quarry No. 2 or Quarry No. 3. The acreage associated with the realigned Buena Vista Street would not be transferred from Quarry No. 4 to Quarry No. 2, nor would it be available for mining. Under this alternative, no reclamation of the former quarries would be undertaken (except remedial slope treatments), and no post-reclamation land uses would be developed. Once mining activities cease, the quarries would be abandoned without adequate financial assurances provided to the City to enable reclamation and long-term redevelopment. Therefore, while the No Project Alternative would not generate impacts attributed to the Proposed Project in this EIR, this alternative would also fail to meet the primary objectives of the Project.

Based upon the results of the analysis summarized in Table 5-1 above, the No-Project Alternative could be deemed to be the environmentally superior alternative. However, since this alternative would not meet any of the Project goals and objectives, it does not qualify to be selected as the preferred alternative.

### 5.3.2 Water Recharge Basin Alternative for Quarry No. 3

Although post-reclamation commercial-industrial development would occur at Quarry No. 2, under this alternative Quarry No. 3 would not be reclaimed for redevelopment with urban land uses, but would be designated for long-term use as a groundwater recharge basin as a part of the San Gabriel River water conservation and management system. Under this alternative, potential

impacts to air quality, land use, noise, public services/utilities and traffic associated with post-reclamation development would be less than under the Proposed Project. In addition, use of the Quarry No. 3 site as a water recharge basin would permit increased water movement into the San Gabriel Aquifer. Since the aquifer is currently undergoing remediation for previous chemical contamination, the increased recharge would provide dilution and replacement of lower quality water with higher quality water, thereby improving long-term water quality locally and regionally.

### 5.3.3 Reduced Intensity Post-Reclamation Development Alternative

Under the Reduced Intensity Use Alternative, post-reclamation impacts to air quality, land use, noise, public services and traffic would be reduced by up to 50 percent. Since the level of development that would take place would not be as great as that in the Proposed Project, there would be less traffic generated, reduced air emissions, and reduced demands on public services and utilities. However, because post-reclamation development would not occur for decades to come, these potential impacts may be avoided by new technologies (zero-emissions vehicles and/ or wide-spread public transit for example); and/or new resources or resource management (desalinated seawater and more efficient and/or renewable energy sources for example). Therefore, it is uncertain whether reduced floor area would produce significantly lower impacts in the future.

## 5.4 CONCLUSIONS

Based on the reduced impacts to air quality, land use, noise, public services/utilities and traffic during and after reclamation of the quarry sites, the environmentally superior alternative would be the No Project Alternative. CEQA Guidelines Section 15126.6(e) directs that in the case where the No Project Alternative is identified as the environmentally superior alternative the EIR shall also identify the environmentally superior alternative among the other alternatives.

Both the Water Recharge Basin Alternative for Quarry No. 3 and the Reduced Intensity Post-Reclamation Development Alternative have lower levels of impacts to air quality, noise, and traffic than the Proposed Project. The Water Recharge Basin Alternative for Quarry No. 3 would eliminate long-term commercial-industrial uses from being developed at Quarry No. 3, and would produce lower levels of impact to traffic, air quality, and public services/utilities at both reclamation and post-reclamation stages than the Reduced Intensity Post-Reclamation Development Alternative. In addition, the Water Recharge Basin Alternative for Quarry No. 3 provides the means to recharge and replenish the groundwater table, and by adding higher quality water to the presently contaminated aquifer, to improve water quality through long-term dilution in the San Gabriel Aquifer. Therefore, the Water Recharge Basin Alternative for Quarry No. 3 would qualify as the environmentally superior alternative.

# SECTION 6.0 MITIGATION SUMMARY

This section presents the conclusions of the impact analysis performed for each resource area and identifies mitigation measures recommended to reduce significant adverse impacts to affected resources to a less than significant level. **Table 6-1** lists the recommended mitigation measures.

## Table ES-1
## Recommended Mitigation Measures

| Resource Area & Potential Impacts | Recommended Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|
| **Air Quality:**<br><br>Potential for fugitive dust and emissions contributing to local non-attainment for CO, NO, SO, and $PM_{10}$ | The following mitigation measures are recommended as best management practices (BMPs) during mining operations, reclamation, and post-reclamation phases of the Proposed Project to reduce tailpipe exhaust emissions of CO, NOx, SOx, and PM10, and fugitive dust.<br><br>The following mitigation measures are recommended as best management practices to reduce fugitive dust and tailpipe exhaust emissions of CO, $NO_x$, $SO_x$, and $PM_{10}$ throughout various stages of the project.<br><br>***Operation:***<br>• Heavy-duty diesel trucks shall be properly tuned and maintained to manufacturers' specifications to ensure minimum emissions under normal operations.<br>• Vehicles hauling dirt or fill shall comply with CHP requirements and all applicable rules and regulations.<br>• Vehicle speeds on site shall be limited to 15 mph.<br><br>In addition to the above, the following specific measures have already been agreed to by United Rock as part of settlement of the Notice of Violation #P34396 issued by SCAQMD based on ambient upwind/downwind tests conducted by SCAQMD pursuant to Rule 403.<br>• Purchase and operate a Tymco vacuum sweeper to reduce and prevent trackout onto Arrow Highway.<br>• Operate a full-time water truck onsite to water all unpaved roads inside the property.<br>• Improve dust controls on transfer points.<br>• Monitor and control dust from storage piles.<br>• Operate a wash rack for drivers to wet down material before leaving facility.<br>• Operate a wheel washer to remove soil from vehicle tires as needed.<br>• Purchase and install a second clean track for the landfill quarry.<br><br>***Reclamation:***<br>• Heavy-duty diesel trucks and other mobile equipment shall be properly tuned and maintained to manufacturers' specifications to ensure minimum emissions under normal operations.<br>• Apply water or chemical dust suppressants to unstabilized disturbed areas and/or unpaved roadways in sufficient quantity and frequency to maintain a stabilized surface; minimum of three times per day on days with no precipitation. | Less than Significant |

## Table ES-1
## Recommended Mitigation Measures

| Resource Area & Potential Impacts | Recommended Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|
| **Air Quality** *(continued)* | Water or water-based chemical additives shall be used in such quantities to control dust on areas with extensive traffic including unpaved surfaces.<br><br>• Vehicles hauling dirt or fill shall comply with California Highway Patrol (CHP) requirements and all applicable rules and regulations.<br>• Vehicle speeds on site shall be limited to 15 mph.<br>• Continue to operate a vacuum sweeper to reduce and prevent trackout onto Arrow Highway.<br>• Operate a full-time water truck onsite to water all unpaved roads inside the property.<br>• Improve dust controls on transfer points.<br>• Monitor and control dust from storage piles.<br>• Operate a wheel washer to remove soil from vehicle tires as needed.<br>• Purchase and install a second clean track for the landfill quarry.<br><br>***Post-Reclamation Construction:***<br><br>• Heavy-duty diesel trucks and other mobile equipment shall be properly tuned and maintained to manufacturers' specifications to ensure minimum emissions under normal operations.<br>• Apply water or chemical dust suppressants to unstabilized disturbed areas nd/or unpaved roadways in sufficient quantity and frequency to maintain a stabilized surface; minimum of three times per day on days with no precipitation.<br>• Water or water-based chemical additives shall be used in such quantities to control dust on areas with extensive traffic including unpaved surfaces.<br>• Prevent or promptly remove mud or soil tracked out onto public roadways.<br>• All clearing and grading activities shall cease during periods of forecasted high winds (greater than 20 mph averaged over 1 hour). | |

## Table ES-1
## Recommended Mitigation Measures

| Resource Area & Potential Impacts | Recommended Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|
| **Geology & Soils:**<br><br>Slope stability issues associated with an increase in mining depth, over steepened walls, and insufficient setback distances is a potentially significant impact. | Geologic and Soil Mitigation – 1:<br>• Under no circumstances will slopes be allowed to pose a temporary or long-term hazard to the quarry or to off-site locations. All slopes will be cut at an angle of repose, engineered, designed, and/or benched or otherwise protected to ensure long-term stability in accordance with engineering design requirements.<br>• Current slopes, safety factors, and setbacks not in compliance with permit provisions will be corrected. These corrections can either be backfilled with properly compacted materials, utilization of benches, and/or an engineered correction. All improvements shall be in place prior to project approval.<br>• As directed by the City Engineer, United Rock will retain a qualified geotechnical engineering consultant to evaluate the potential for geotechnical hazards and unstable soil for all corrective actions. The consultant will evaluate the nature of the steep slope and/or unstable soil hazard for the quarry sites. The evaluation shall be based on guidelines of the December 2003 Irwindale Slope Stability Committee report. Soil testing will be conducted, if needed, to ascertain the depth, lateral extent of unstable materials, and potential.<br>• The geotechnical engineering consultant will prepare a report that includes recommendations for stabilizing the locations considered to be hazardous. This report shall be submitted to the City for review, comment, and approval prior to implementation.<br>• The mine depth, slopes, and setback distances will be monitored on an annual basis. The City of Irwindale will be notified of all situations found to be out of compliance with permit requirements. Areas found to be out of compliance will be corrected by United Rock prior to project approval. | Less than Significant |
| Inadequate soil compaction during backfill operation could occur resulting in an increased risk of liquefaction and other earthquake induced hazards. | Geologic and Soil Mitigation – 2:<br>• All areas of fill or backfill operations in the quarry during mining and reclamation shall be compacted in accordance with Chapter 33 of the 2002 Los Angeles County Building Code or its latest version. (Previous identified as Chapter 70 of the Uniform Building Code, established by the International Conference of Building Officials), or other methods approved by the City of Irwindale; and shall meet criteria stated in the April 2004 Irwindale performance Specification for Proposed Mine Backfills. .<br>• Quarterly results of compaction samples shall be submitted to the City of Irwindale. | Less than Significant |

## Table ES-1
## Recommended Mitigation Measures

| Resource Area & Potential Impacts | Recommended Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|
| **Geology & Soils** *(continued)*<br><br>Seismic activity in the United Rock facility area could cause damage to Post-Reclamation facilities. | Geologic and Soil Mitigation – 3:<br><br>All practicable precautions will be taken to design and construct post-reclamation facilities to withstand the projected ground shaking associated with the maximum probable earthquake (MPE) in the area. This includes secondary hazards induced by earthquakes (liquefaction, lurching, lateral spreading, rapid differential settlement, induced landslides, and rock-fall avalanche). The MPE represents the strongest earthquake likely to occur over the design life of the post-reclamation facilities. The geotechnical engineering investigation, prepared by a California licensed geotechnical engineer, shall be in accordance with the April 2004 Irwindale Backfill Performance Specifications for Existing Mine Backfill Operations, to provide seismic design criteria for site development and building. . | Less than Significant |
| Wave action induced erosion effect to quarry walls at groundwater surface. | Geologic and Soil Mitigation – 4:<br><br>• To minimize the potential damage from wave action induced erosion effects, quarry walls at groundwater surface shall be reinforced using the recommended practices and procedures of the Army Corps of Engineers, or implement detailed remediation developed in accordance with the May 2004 Guidelines for drainage, erosion control, and water quality control for open pit mines in Irwindale. Such remediation shall receive Lead Agency approval prior to construction. | Less than Significant |
| **Hydrology & Drainage:**<br><br>During reclamation, surface water runoff has the potential to cause erosion and transport pollutants. | Hydrology and Drainage Mitigation – 1<br><br>• Prior to the reclamation phase of the Proposed Project, United Rock shall develop a SWPPP in accordance to NPDES guidelines and submitted it to the City for review and approval. At a minimum, the SWPPP will identify erosion minimization and control BMPs and pollution elimination/minimization BMPs, as well as stormwater runoff water quality monitoring procedures.<br><br>• Surface and groundwater samples shall continue to be collected on an annual basis from Quarries No. 2 and 3 as long as groundwater is exposed. Results will be provided to the City, the Watermaster and the RWQCB.<br><br>• Erosion control measures shall be designed and implemented in accordance with May 2004 Guidelines for drainage, erosion control, and water quality control for open pit mines in Irwindale.<br><br>• United Rock shall implement measures to reduce the potential for hazardous constituents in fill material or to later reclaimed areas through compliance with all Waste Discharge Requirements as established by the RWQCB and prohibit:<br><br>a. the use of hazardous, designated or liquid wastes; | Less than Significant |

## Table ES-1
## Recommended Mitigation Measures

| Resource Area & Potential Impacts | Recommended Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|
| | b. the use of toxic wastes (i.e., insecticides, poisons and radioactive materials)<br>c. the use of asbestos or asbestos products;<br>d. the use of asphalt products unless places below the high-high water mark | |
| **Land Use & Planning:** No significant land use impacts are identified, however, the following measure is recommended to ensure that future land use plans and zoning designations are internally consistent with regard to regulating future post-reclamation land uses. | Land Use & Planning Recommended Measures:<br>• The City of Irwindale shall establish a Regional Commercial zoning designation within Title 17 (Zoning) of the Irwindale Municipal Code. Adoption of said zone will be consistent with the definition of the Regional Commercial land use designation in the City General Plan Update. | |
| **Noise:**<br>**Mining Operations:** Noise generated during mining could result in temporary or long-term increases in noise levels at sensitive receptors. | Noise Impact Mitigation – 1:<br>a. If noise impacts exceed the applicable noise standard as measured at the property line of a nearby sensitive receptor, the use of construction type of equipment near residential dwellings shall be limited to a Monday through Friday work schedule of 7:00 a.m. to 7:00 p.m. and between 7:00 a.m. to 12:00 p.m. Saturday.<br>b. Construction equipment shall be equipped with manufacturer recommended mufflers or equivalent.<br>c. Construction equipment shall be turned off when not in operation.<br>d. Maintain the earthen berm around the facilities to reduce noise impacts at nearby residential areas.<br>e. Visits to the site by trucks shall be minimized.<br>f. Use heavy equipment with low manufactured noise levels whenever practical.<br>g. The dredge used at the site shall be electrically powered.<br>h. If dredge noise levels exceed 60 dBA CNEL as measured at the property line of the nearest residential property, the dredge shall be operated on a Monday through Friday work schedule of 7:00 a.m. to 7:00 p.m. and between 7:00 a.m. to 12:00 p.m. Saturday to reduce sleep interference. | Less than Significant |

## Table ES-1
## Recommended Mitigation Measures

| Resource Area & Potential Impacts | Recommended Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|
| **Reclamation and Post Reclamation Construction Operations:** Noise generated during reclamation and post reclamation construction could result in temporary or long-term increases in noise levels at sensitive receptors. | Noise Impact Mitigation – 2:<br>a. Use of equipment near residential dwellings shall be limited to a Monday through Friday work schedule of 7:00 a.m. to 7:00 p.m. and between 7:00 a.m. to 12:00 p.m. Saturday to reduce sleep interference or operations shall take place away from residential locations to ensure noise levels do not exceed City General Plan and zoning prescribed noise levels at the residential location.<br>b. Construction equipment shall be equipped with manufacturer recommended mufflers or equivalent.<br>c. Construction equipment shall be turned off when not in operation.<br>d. Maintain the earthen berm around the facilities to reduce noise impacts at nearby residential areas.<br>e. Maintain truck traffic along major traffic arteries (e.g., Arrow Highway, Buena Vista Street, and Interstate 605) and away from residential streets. | Less than Significant |
| **Noise** ***(continued)***<br><br>**Post Reclamation:** Operational noise associated with post reclamation construction of industrial/commercial facilities could result in an increase in noise levels at the site. | No Mitigation Required:<br><br>Post-reclamation noise levels will depend upon the type of facility industrial/commercial activity at the site. Development of these future land uses is dependent upon the City of Irwindale's approval of zoning, land use, and project specific approval which will be subject to independent environmental review in the decades ahead. | |

## Table ES-1
## Recommended Mitigation Measures

| Resource Area & Potential Impacts | Recommended Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|
| **Public Services & Utilities:**<br><br>Impacts to public services and utilities are not anticipated to be significant with implementation of the mining and reclamation phases of the Proposed Project. Measures are recommended to reduce the potential for adverse impacts on services and utilities for post-reclamation land uses. | Public Services and Utilities Recommended Measures:<br><br>• Prior to the approval of any post-reclamation land development project, the Applicant shall demonstrate to the City that a sufficient amount of water exists to adequately service the proposed land use development project.<br><br>• Prior to the approval of any post-reclamation land development project, the Applicant shall demonstrate that the Los Angeles County Sanitation District has adequate capacity to handle the wastewater needs of the proposed land use. | |
| **Traffic & Circulation:**<br><br>During the mining and reclamation phases of the proposed project there are potentially significant traffic impacts at the intersections of Live Oak Avenue and Arrow Highway, and Buena Vista Street and Arrow Highway. | Traffic & Circulation Mitigation Measures:<br><br>**On-Site Improvements:**<br><br>• Provide adequate sight distance at the project access roadways where they intersect with the public roadways. The minimum sight distance should be provided to meet the City of Irwindale and Caltrans requirements.<br><br>• Provide a 200-foot minimum northbound and southbound pocket lane at the Quarry No. 4 / Production Plant access along Buena Vista Street.<br><br>• Provide a 200-foot minimum eastbound left turn pocket lane at the Quarry No. 4 / Production Plant access along Arrow Highway.<br><br>• Provide a 150-foot minimum westbound right turn pocket lane at the Quarry No. 4 / Production Plant access along Arrow Highway.<br><br>• Restrict the Quarry No. 4 / Production Plant access to right turn in and out, and left turn in only.<br><br>• Off-site Improvements: | |

## Table ES-1
## Recommended Mitigation Measures

| Resource Area & Potential Impacts | Recommended Mitigation Measures | Level of Significance After Mitigation |
|---|---|---|
| | • A second westbound left turn lane and a third through-lane shall be constructed at the intersection of Live Oak Avenue and Arrow Highway,<br>• The Buena Vista southbound left turn lane shall be restriped to provide a shared left-right turn lane at the intersection of Buena Vista Street and Arrow Highway.<br>• Traffic related impacts associated with post reclamation land development projects could result in an adverse impact on local roadways and intersections. However, these impacts will depend upon the type of facility industrial/commercial activity at the site. Development of these future land uses is dependent upon the City of Irwindale's approval of zoning, land use, and project specific approval which will be subject to independent environmental review in the decades ahead. | |

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# SECTION 7.0 ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| µg/L | Micrograms Per Liter |
| µg/$m^3$ | Micrograms Per Cubic Meter |
| mg/L | Milligrams Per Liter |
| ADT | Average Daily Trips |
| AF | Acre-Feet |
| Air Basin | South Coast Air Basin |
| AST | Aboveground Storage Tank |
| AWP | Annual Work Plan |
| BACM | Best Available Control Measures |
| Basin | Main San Gabriel Groundwater Basin |
| bgs | Below Ground Surface |
| BMPs | Best Management Practices |
| BNSP | Burlington Northern Southern Pacific Railroad |
| CAA | Clean Air Act |
| CAAQS | California Ambient Air Quality Standards |
| Caltrans | California Department of Transportation |
| CARB | California Air Resources Board |
| CBC | California Building Code |
| CCR | California Code of Regulations |
| CDE | Community Development Element |
| CDFG | California Department of Fish and Game |
| CEQA | California Environmental Quality Act of 1970 |
| CERCLA | Comprehensive Environmental Resource, Compensation, and Liability Act |
| CERCLIS | Comprehensive Environmental Resource, Compensation, and Liability Information System |
| CFR | Code of Federal Regulations |
| City | City of Irwindale |
| CMP | Congestion Management Plan |
| CMS | Congestion Management System |
| CNEL | Community Noise Equivalent Level |
| CO | Carbon Monoxide |
| CUP | Conditional Use Permit |
| CUPA | Certified Unified Program Agency |
| CWA | Clean Water Act |
| dB | Decibels |
| dBA | Decibels on the A-weighted Scale |
| DTSC | Department of Toxic Substances Control |
| EDR | Environmental Data Resources Inc. |
| EIR | Environmental Impact Report |
| ERP | Emergency Response Plan |
| ESA | Environmental Site Assessment |
| FAR | Floor Area Ratio |
| FHWA | Federal Highway Administration |

| | |
|---|---|
| H&SC | Health & Safety Code |
| HAPs | Hazardous Air Pollutants |
| HCM | Highway Capacity Manual |
| HMBP | Hazardous Materials Business Plan |
| ICU | Intersection Capacity Utilization |
| IPD | Irwindale Police Department |
| ISTEA | Intermodal Surface Transportation Efficiency Act |
| LORS | Laws, Ordinances, Regulations and Standards |
| LOS | Level of Service |
| LUST | Leaking Underground Storage Tank |
| $M_W$ | Moment Magnitude |
| MCE | Maximum Credible Earthquake |
| MCL | Maximum Contaminant Level |
| MCY | Million Cubic Yards |
| MPE | Maximum Probable Earthquake |
| MSCP | Multiple Species Conservation Program |
| MSL | Mean Sea Level |
| MT | Million Tons |
| MTA | Los Angeles County Metropolitan Transportation Agency |
| MTY | Million Tons Per Year |
| NA | Not Applicable |
| NAAQS | National Ambient Air Quality Standards |
| $NO_2$ | Nitrogen Dioxide |
| NOA | Notice of Availability |
| NOC | Notice of Completion |
| NOD | Notice of Determination |
| NOP | Notice of Preparation |
| NOV | Notice of Violation |
| NPDES | National Pollutant Discharge Elimination System |
| NPL | National Priority List |
| $O_3$ | Ozone |
| OSHA | Occupational Safety and Health Act of 1970 |
| Pb | Lead |
| PCE | Passenger Car Equivalent |
| PID | Photoionization Detector |
| $PM_{2.5}$ | Aerodynamic Diameter of 2.5 Microns or Less |
| $PM_{10}$ | Aerodynamic Diameter of 10 Microns or Less |
| Ppbv | Parts Per Billion by Volume |
| Pphm | Parts Per Hundred Million |
| Ppm | Parts per million |
| PRC | Public Resources Code |
| RCRA | Resource Conservation and Recovery Act |
| ROG | Reactive Organic Gases |
| RWQCB | Regional Water Quality Control Board |
| SCAG | Southern California Association of Governments |
| SCAQMD | South Coast Air Quality Management District |

| | |
|---|---|
| SCE | Southern California Edison |
| SMARA | Surface Mining and Reclamation Act |
| SMGB | State Mining and Geology Board |
| $SO_2$ | Sulfur Dioxide |
| SPCC | Spill Prevention Control and Countermeasure |
| SUSMP | Standard Urban Stormwater Management Plan |
| SWPPP | Storm Water Pollution Prevention Program |
| SWRCB | State Water Resources Control Board |
| TACs | Toxic Air Contaminants |
| TDM | Transportation Demand Management |
| TEA-21 | Transportation Equity Act for the 21st Century |
| TIA | Traffic Impact Analysis |
| TSM | Traffic Systems Management Program |
| UBC | Uniform Building Code |
| United Rock | United Rock Products Corporation |
| USDOT | United States Department of Transportation |
| USEPA | United States Environmental Protection Agency |
| USFWS | United States Fish and Wildlife Service |
| UST | Underground Storage Tank |
| VPH | Vehicles Per Hour |
| Watermaster | Main San Gabriel Watermaster |
| WDR | Waste Discharge Requirements |

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# SECTION 8.0 ORGANIZATIONS AND PERSONS CONSULTED

This section identifies City staff that participated directly in development of the draft EIR and those individuals who either provided or participated in the exchange of information used in this Draft EIR for the Proposed Project. Individuals are identified by affiliation, name, and title. All organizations and persons were consulted between March 2004 and April 2004 during the course of preparation of this Draft EIR.

## City of Irwindale

| Name | Position/Title |
|---|---|
| Mr. Steve Blancarte | City Manager |
| Mr. Fred Galante | City Attorney |

## Irwindale Planning Department

| Name | Position/Title |
|---|---|
| Mr. Vicente Mas | Acting Director |
| Ms. Paula Kelly | Contract Planning Associate |

## Irwindale Public Works Department

| Name | Position/Title |
|---|---|
| Mr. Kwok Tam | Director/City Engineer |
| Mr. Edgar Rojas | Civil Engineering Associate |

## Irwindale Police Department

| Name | Position/Title |
|---|---|
| Ms. Grace Cox | Statistics Manager |
| Mr. Rick Woodmansee | Lieutenant |

## Los Angeles County Fire Department

| Name | Position/Title |
|---|---|
| Mr. Larry Taplet | Station 48 |

## United Rock Products Corporation

| Name | Position/Title |
|---|---|
| Mr. Frank Keohane | General Manager |

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# SECTION 10.0 LIST OF PREPARERS

This section identifies the individuals involved in the preparation of this Draft Environmental Impact Report for the City of Irwindale.

| Name | Education | Responsibility |
|---|---|---|
| Jeff Harvey, Ph.D. | Ph.D., Geography, Environmental Policy<br>M.A., Geography, Impact Assessment<br>B.A., Geography, Physical Environments | Project Director<br>& Senior Scientist |
| Leslea Meyerhoff, M.A., AICP | M.A., Environmental Policy and Analysis<br>B.A., Government/Environmental Studies | Project Manager |
| Eric Cowan | Drafting, Computer and Business Studies | Graphics/GIS |
| Leon Crain | B.S., General Engineering | Noise, Geology & Soils, Public Health & Safety/Hazardous Materials |
| Julia Dumars | B.S., Environmental Resource Science | Biological Resources |
| Matthew Durham | Computer Science, Graphic Design | Word Processing, Production |
| Holly Grover | B.S., Environmental Resource Science | Hydrology & Drainage, Public Health & Safety/Hazardous Materials, Alternatives Analysis, Other Environmental Considerations |
| Gary Halsey | Graduate studies in Natural Resource Management/ Environmental Planning<br>B.S., Biology & Physical Geography | Hydrology & Drainage |
| Jennifer Harvey | B.A., Communications | Report Preparation, Production QA/QC Leader |
| Debbie Jenke | Business Administration | Word Processing |
| Caitlin Nielsen | A.A.S., Microsoft Systems Engineer | QA/QC, Production Leader |
| Joel Reisman, M.S. | M.S. and B.S., Mechanical Engineering | Air Quality |
| Kurtis Steinert, M.S. | M.S., Environmental Science<br>B.S., Marine Biology | Land Use, Traffic/Circulation, Alternatives Analysis, Other Environmental Considerations |
| Susan Yogi | B.A., Urban Studies and Planning | Land Use, Other Environmental Considerations |

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# APPENDIX A
## Notice of Preparation (NOP), Distribution List, NOP Comment Letters

NOP and
MND 1102

# Notice of Preparation and Initial Study for the United Rock Products Operations and Reclamation Plan

*Prepared for:*

City of Irwindale
5050 N. Irwindale Avenue
Irwindale, CA 91706
Contact: Reuben Arceo
626/430-2209

*Prepared by:*

Jones & Stokes
17310 Red Hill Avenue, Suite 320
Irvine, CA 92614-5600
Contact: John Coy
949/260-1080

October 2003

# Notice of Preparation

**TO:** Agencies, Organizations, and Interested Parties

**SUBJECT:** Notice of Preparation of a Draft Environmental Impact Report in Compliance with Title 14, Sections 15082(a), 15103, and 15375 of the California Administrative Code.

The City of Irwindale (City) will be the lead agency under the California Environmental Quality Act (CEQA) in the preparation of an environmental impact report (EIR) for the implementation of the United Rock Products (United) Aggregate Mining/Processing Operations and Reclamation Plans for Pits No. 2 and 3.

**Agencies:** We request the view of your agency as to the scope and content of the environmental information relevant to your agency's statutory responsibilities in connection with the proposed project. Your agency could need to use the EIR prepared by the City when considering the permit that your agency must issue or when authorizing other approvals for the project.

**Organizations and Interested Parties:** Comments and concerns regarding the environmental issues associated with construction and buildout of this project are requested from organizations and individuals.

CEQA requires a 30-day public review of the notice of preparation. The public review period is scheduled to begin on October 17, 2003 and close on November 16, 2003. Due to the time limits mandated by state law, your response must be received **no later than 30 days** after receipt of this notice. Please indicate a contact person in your response and send your response to the following:

Reuben Arceo, Director of Planning
City of Irwindale
5050 N. Irwindale Avenue
Irwindale, CA 91706
Fax: (626) 962-2018

**PROJECT TITLE:** United Aggregate Mining/Processing Operations and Reclamation Plans

**PROJECT LOCATION:** The proposed project area is within the City of Irwindale, adjacent to and east of the Cities of Duarte and Monrovia. The proposed project area is located west of Interstate 605, and north of Arrow Highway (Live Oak Avenue), approximately 20 miles east of downtown Los Angeles.

**PROJECT DESCRIPTION:** United proposes to modify its mining operations and reclamation plans for its activities at Pits No. 2 and 3 in the City of Irwindale. United currently operates aggregate mines in accordance with a Conditional Use Permit (CUP) issued in July 1994, which permits United to mine Pit No. 2 to a depth of 275 feet above mean sea level, and permits mining at Pit No. 3 until December 31, 2003. United has applied for a CUP to modify its operations and the duration of mining activities, and has submitted new reclamation plans. The project also includes merging the un-mined western portion of quarry Pit No. 4 that is now located to the east of the newly constructed Buena Vista Street with the existing quarry Pit No. 2. This would increase the boundary of Pit No. 2 by approximately 25 acres and decreasing the boundary of Pit No. 4. The extended mining component includes extending the permitted quarry depth in Pit No. 2 to between approximately 410 and 450 below ground surface (bgs), and extending the allowable depth in Pit No. 3 to between 490 and 500 bgs, or mining both pits until December 31, 2020, whichever is first with the proposed project depth to be established prior to issuance of the Draft EIR. The modified reclamation plans call for reclaiming Pit No. 2 by backfilling the pit to an average depth of 25 feet below street level, and a maximum of 75 feet below street level, which would require approximately 31.5 million cubic yards (mcy) of backfill of inert material at a rate of approximately 500,000 tons per year. Reclamation of Pit No. 3 would include backfilling the pit to surface grade at curb level, which would require approximately 29.3 mcy of inert material at a rate of approximately 500,000 tons per year. The planned reclamation land uses for both Pits No. 2 and 3 is commercial/industrial.

Reuben Arceo, Director of Planning

10/16/03
Date

64 John Cay

# Initial Study and CEQA Checklist

1. **Project Title:**

   United Rock Products Aggregate Mining/Processing Operations and Reclamation Plan

2. **Lead Agency Name and Address:**

   City of Irwindale
   5050 N. Irwindale Avenue
   Irwindale, CA 91706

3. **Contact Person and Phone Number:**

   Reuben Arceo, Director of Planning
   (626) 430-2209

4. **Project Location:**

   The project site consists of United Pits No. 2 and No. 3, which are located within the boundaries of the City of Irwindale, in Los Angeles County, California. Specifically, the project is located in the Southeast Quarter of Section 36, Township 1 North, Range 11 West, of the San Bernardino Baseline and Meridian. The project area is regionally located west of Interstate 605 and south of Interstate 210. Figure 1 shows the regional location of the project area, and Figure 2 illustrates the local vicinity of the project area.

   Pit No. 2 currently includes approximately 110 acres, north of Arrow Highway and west of Buena Vista Street. Access to Pit No. 2 is via a gated entrance on Buena Vista Street, approximately 500 feet north of the intersection of Buena Vista Street and Arrow Highway. A second gated entrance is also located on Buena Vista Street near the northeast corner of the site, approximately 900 feet north of the principal entrance.

   Pit No. 3 includes approximately 110 acres, north of Meridian Street, and west of Buena Vista Street. Principal access to Pit No. 3 is via a gated entrance from Meridian Street, approximately 2,000 feet east of the intersection of Meridian Street and Mountain Avenue. Other gated entrances are located approximately 1,000 feet east of the principal entrance on Meridian Street and at the northeast corner of the site on Buena Vista Street.

5. **Project Sponsor's Name and Address:**

   United Rock Products Corporation
   1245 East Arrow Highway
   Irwindale, CA 91706

6. **General Plan Designation:** Industrial

7. **Zoning:** Q (Quarry)

8. **Description of Project:**

**Project Background and Objectives**

United Rock Products Corporation (United) currently operates and manages aggregate mining activities within the City of Irwindale (City) consisting of several sand and gravel mine pits and a processing plant as follows:

- Pit No. 1 – Mining has been completed and the pit is currently undergoing reclamation at an annual refilling rate of 1.2 million tons per year or 3.6 million tons every 3 years.
- Pit No. 2 – Currently being mined. The applicant currently has entitlements to mine the site up to December 31, 2003. The current depth of mining is approximately 305 feet at the deepest point.
- Pit No.3 – No mining is currently occurring in this pit, which has been previously mined. The applicant currently has entitlements to mine the site to a depth of 275.
- Pit No. 4 – This is currently the "plant site" and the current location of United's construction and mining processing activities, including processing plants, recycling, concrete and asphalt manufacturing, and accessory activities that support operations at all the pits, including storage, repair, transportation, mechanical, and administration of United's facilities.

The project consists of extending operations at two quarry mine pits (Pits No. 2 and 3) from which sand and gravel are mined and subsequently processed, and reclamation of the two pits following the closure of the mines. No changes are proposed for Pit No. 1. The proposed project would not affect existing operations at Pit No. 4, but would include transferring – approximately 25 acres of land from Pit No. 4, which is located west of the newly constructed Buena Vista Street, to Pit No. 2.

Under the provisions of the Surface Mining and Reclamation Act of 1975 (SMARA), regulations promulgated there under ("SMARA Regulations") and City of Irwindale Ordinance No. 534, an updated, revised or amended reclamation plan for the site must be filed with the City every 5 years or following a significant modification or change to project operations. The City is the Lead Regulatory Agency for the project.

A Reclamation Plan for Pit No. 2 was first prepared in January 1986, which covered both Pit No. 2 and the western portion of the former Blue Diamond Pit No. 1, located south of Arrow Highway. In May 1990, Supplement No. 1 to the Reclamation Plan covering only Pit No. 2 was prepared because the western portion of the former Blue Diamond Pit No. 1 was no longer owned by United. A Reclamation Plan for Pit No. 3 was first prepared in October 1972, and Supplement No. 1 to the Reclamation Plan was prepared in 1990 along with Pit No 2. Supplements No. 2 were prepared in December 1999 for Pits No. 2 and 3, respectively.

Amended Reclamation Plans have been prepared for both Pits No. 2 and No. 3, which are being considered as part of the proposed project. The purpose of the Amended Reclamation Plans is to describe the methods for reclamation and the proposed future use of the sites after the termination of aggregate mining and processing. Information in the Amended Plans supersedes that in the original Reclamation Plans and Supplements.

Major objectives that are proposed by this project include the following:

- allow continued mining operations as appropriate,
- provide end uses that are compatible with and do not conflict with surrounding land uses,
- provide future commercial and industrial uses that are commercially and financially viable and bring revenue to the City.

## Existing Mining and Processing Operations

Mining at Pit No. 2

Sand and gravel mining at Pit No. 2 began in approximately 1910 and is scheduled to terminate in December 2003. This pit currently comprises 110 acres, and it is estimated that approximately 28.5 million cubic yards (mcy) has been removed as of October 2002. Current groundwater level in Pit No. 2 is estimated at 200 feet msl, with average level at approximately 250 feet msl, and historic high levels reaching up to 324 feet msl. The property is operated as an open pit sand and gravel operation, involving the excavation of the pit floor and transport of the excavated material by conveyor to the plant site for processing. Excavation proceeds under water via clamshell dredging across the entire pit bottom.

Mining at Pit No. 3

Sand and gravel mining at Pit No. 3 began in approximately 1946 and is entitled for mining to a depth of 275 feet bgs. Mining and processing operations were intermittent through the 1970's, when an aggregate processing plant was in operation at the Project site. This pit currently comprises approximately 110 acres, and it is estimated that approximately 19.9 mcy has been removed as of October 2002. Current groundwater level in Pit No. 2 is estimated at 200 feet msl, with average level at approximately 250 feet msl, and historic high levels reaching up to 332 feet msl. The property is operated as an open pit sand and gravel operation similar to Pit No. 2.

Existing Processing Operations

Processing currently takes place at the United plant site (Pit No. 4), located east of the project area across Buena Vista Street. The sand and gravel plant processes excavated material into construction aggregate.

The excavated material is moved by belt conveyor from the active pits into a surge pile on the plant site. The material is then drawn from the bottom of the surge pile onto another belt conveyor and taken to the plant for processing. The first separation is made on a large shaking screen with the rocks larger than 1½ inches in diameter being sent to the crushers and the rocks smaller than 1½ inches in diameter and part of the sand being sent to the washing facility. The large rocks are crushed in a series of crushers and taken by belt conveyors to additional shaking screens where they are separated into products by size.

Each product is stockpiled separately above a tunnel containing a belt conveyor. The product is withdrawn from the stockpile and moved to one of a series of bins built over long platform scales. As a truck moves onto the scale, it is loaded from the overhead bin and driven to the delivery site. Aggregates are delivered to the asphalt plant by conveyor belt directly from the stockpiles of the sand and gravel plant. The smaller material moves by belt conveyor to the washing facility where it is cleaned by high-pressure sprays while being passed across shaking screens. The screens separate the material into gravel (particles larger than 1/4 inch in diameter) and sand that contains a specified percent of each size fraction. The sand is then drained in large dewatering screws, and the gravel and sand are stockpiled above another scale. The washed products are mostly used as aggregates in Portland cement concrete.

Fines from the washing process are directed to the siltation pond on the URPC plant site. The siltation pond is used for the settling out of fines. Once the fines have settled, the water is recycled. Only local materials have been deposited in the siltation pond and that policy will continue in all future operations. Only silt and other fines from present washing operations are or will be added to the pond.

Water Use

Approximately 4,000 gallons per day of water is used for road dust suppression within Pit No. 4 at the plant site. The chemical quality of the water is not critical for dust suppression uses. The water is obtained by pumping from two deep wells located at United's plant site. Due to the nature of the use, most of the water evaporates and is not known to be discharged to any body of surface water or groundwater. United periodically inspects and verifies water quality. These inspections have not yielded any indications of significant contaminants.

Air Quality Protection and Dust Control

Dust is controlled on site through the use of water and operating controls. Measures include:

- using a water truck to spray roadway surfaces;
- watering surface piles;
- limiting vehicular speeds on site to 19 miles per hour; and
- washing trucks at the site exit.

**Proposed Project**

The proposed project includes two distinctive components, which are each discussed herein: (1) the continued mining operations at both Pits No. 2 and No. 3, and (2) the reclamation plans involving backfilling the pits in a manner that would allow for future land use consistent with the City's intended land use designations for the pits following the cessation of mining operations and reclamation. Pit No. 2 is zoned for Heavy Industrial/ Commercial use and Pit No. 3 is zoned for Regional Commercial use. Post-reclamation land uses would be identified and planned for in the future closer to the cessation of mining activities and would be subject to a subsequent CEQA process.

**Continued Mining Operations**

The continued mining at Pit No. 2 would involve extending mining to a depth of between approximately 410 and 450 bgs, or to December 31, 2020, whichever comes first. This would also include mining the unmined portion of land west of the newly constructed Buena Vista Street following the transfer of approximately 25 acres from Pit No. 4. If approved, this would result in approximately 36.9 mcy of total material removed at termination of mining operations. The continued mining at Pit No. 3 would involve extending mining to a depth of between approximately 490 and 500 bgs, or to December 31, 2020, whichever comes first. This would result in approximately 29.3 mcy of total material removed at termination of mining operations at Pit No. 3. Production from these quarries is expected to be over 2,000,000 and up to 3,000,000 tons/year (actual production will depend on market conditions and may vary greatly in the future). Side slopes of the pit are to have gradients no steeper than 1:1 (horizontal:vertical), based on recent slope stability studies prepared for the City.

All mining operations would continue using the same processes that are currently used at the quarry for the foreseeable future, as described above under "Existing Mining and Processing Operations." All applicable water quality protection measures, air quality and dust protection measures, and security and monitoring measures will continue to be implemented throughout the mining phases of the proposed project.

**Site Reclamation and Future Land Use**

Overview of Reclamation

United intends to reclaim Pits No. 2 and No. 3 upon termination of resource extraction on these properties. Due to the nature of the mining method, which relies upon gradual lowering of the pit floor over the entire pit, concurrent mining and reclamation are not possible and no staging or phasing of reclamation is proposed.

Backfill and Compaction

Pit No. 2 would be reclaimed by backfilling the pit to an average depth of 25 feet below street level, and a maximum of 75 feet below street level, with at least 3/4 of the pit filled to street level and 1/4 (west end) filled to 75 feet below street level. Any residual slopes will be regraded to inclinations no steeper than 1:1. The entire site will be resoiled and revegetated by importing topsoil during the latter stages of the reclamation process. Reclamation activities are expected to require approximately 45 years to complete, and would require approximately 31.5 mcy of backfill at a rate of approximately 500,000 tons per year. With the exception of surface areas intended to support vegetation, the backfill would be compacted in 1-foot lifts to 90-95% with inert landfill materials.

Pit No. 3 would also be reclaimed by backfilling the pit, but the pit would be filled to surface grade at curb level. Reclamation activities are expected to require approximately 42 years to complete, and would require approximately 29.3 mcy of backfill at a rate of approximately 500,000 tons per year. The backfill would be compacted to 90-95% with inert landfill materials. The entire site will be resoiled and revegetated by importing soil during the reclamation process. The site would be graded and there will be no residual slopes following filling Pit No. 3 to street level.

Backfill materials for both pits may include construction debris or other Class U (inert) waste, soil removed from sedimentation, flood control, or debris reservoirs, exported soil from grading operations in the Los Angeles area, or similar acceptable inert materials. The pits will be filled in accordance with the requirements of the Main San Gabriel Basin Watermaster, as set forth in its Resolution No. 3-99-57 (amends Resolution No. 7-85-45). Notwithstanding the foregoing, asphalt material will be acceptable for fill above the historic high water level. Restrictions on the availability of such materials in the volumes required will govern the rate at which backfill will be placed in the pit. As the pits are deepened, the backfill material required will be determined on a yearly basis.

United shall provide specifications for backfill placement that, at a minimum, will require:

- That backfill will be as compact and homogeneous as possible to eliminate the potential for settlement, particularly differential settlement. The backfill shall be compacted in 1-foot lifts to a minimum level of compaction of ninety percent (90%) or greater in locations where future buildings and infrastructure would be constructed.
- That only materials certified as inert and free of contamination (consisting of aggregate mining wastes not considered useable product, including fine sand, silt, and clay, or non-durable rock material) will be used as backfill. Periodic and regular testing of the backfill for contaminants will be undertaken by the URPC as filling progresses, with the results provided to the City for review.. Site access will be tightly controlled, as described in below, until reclamation is complete.
- The inert waste disposed of at the site will consist of soil, asphalt, dirt, excavated earth, concrete from demolition and construction projects and other inert materials. Organic or other unacceptable materials shall be screened out and not accepted.
- Any large slabs of concrete, asphalt, or other inert material will be either crushed or spread out and covered with soil to prevent accumulations of large debris in one area, and formation of voids within the fill mass.
- A geotechnical engineer will establish placement parameters for inert landfill and engineered soil backfill. At the time of development, a geotechnical engineer will determine alternative foundation options for special conditions.
- Beginning at a level immediately above the historic high groundwater level (as defined at the time of initiating reclamation), inert fill will be engineered fill, with the material spread in lifts of approximately one-foot in depth, and compacted to ninety percent (90%) or greater per ASTM D-698 using a large sheepsfoot roller.
- Ongoing backfill and compaction operations will be annually verified by a geotechnical engineer.
- A certified ground surface contour map will be provided to the City in January and July of each year.

Proposed Slopes and Slope Treatment

Final designed steepness and proposed treatment of the mined lands' reclaimed slopes will take into consideration the physical properties of the slope material, its probable maximum water content, landscaping requirements, and other factors. Final reclaimed slopes shall have a minimum slope stability factor of safety that is suitable for the proposed post mining end use of the reclaimed site, and is in conformance with existing ordinances and regulations. Currently, it has been determined that 1:1 slopes would provide adequate stability for the pits within the project area. The pit will be backfilled to grade with material compacted to a 90% or greater standard. Stabilization of slopes will not be required.

Rehabilitation of Drainages

The pre-mining drainage systems within the project area were a series of poorly defined distributary channels on the surface of the alluvial fan. This drainage system has been completely obliterated by urban development on the fan and cannot be effectively rehabilitated. Local drainage from surrounding areas has been diverted around the sites by small ditches and storm drains. United proposes to rehabilitate drainage systems consistent with commercial and industrial uses. Toward this end, at the time of commencement of reclamation on the site, United will submit a proposed drainage plan to the City for its review and approval.

Where backfilling operations are to a level below street grade, United will provide a drainage system that shall be designed to prevent the ponding of water, or shall designate a portion of the sites as a suitably sized storm water detention pond.

Control of Contaminants

Erosion and sedimentation will be controlled during all phases of construction, operation, reclamation and closure of the mining operation. Surface runoff and drainage from mining operations will be controlled by berms, silt fences, sediment ponds, revegetation, hay bales, or other erosion control measures, to ensure that surrounding land and water resources are protected from erosion, gullying, sedimentation and contamination. Currently, the pits are bermed to control erosion and prevent surface water from flowing over the pit walls. Existing and future erosion control measures will be maintained in such a manner to control erosion and prevent surface water from flowing over the pit walls. Specific control measures will be subject to approval by the City.

At the termination of mining operations, areas in which fuel, oil, or other contaminants may be present will be identified and mitigated in a manner consistent with the laws and practices effective at the time. This mitigation may involve the removal and disposal or treatment of small areas of contaminated sand and gravel. Water on the sites will be storm runoff originating on the property itself and is not expected to contain contaminants other than sediment. As this water will leave the sites via infiltration or evaporation, no adverse impacts to either surface water or groundwater resources are expected. If infiltration or evaporation proves insufficient, United will devise and submit a drainage program that shall be subject to City approval.

The following measures are proposed by United to be implemented to reduce dust emissions:

- Water sprays to keep materials moist. Documentation of the location of individual spray systems will be maintained, and will include the maintenance schedule of these systems and the frequency of downtime due to scheduled maintenance or malfunction.
- Setting low speed limits on unpaved roads onsite. A "low speed limit" of 10 MPH shall be established at the site, and speed limit signs shall be posted in a manner to provide full and sufficient notice to drivers of the maximum allowable speed onsite.
- Watering of storage piles. Records shall be maintained which will indicate which storage piles are watered, the planned and actual frequency of watering, and any conditions when watering is not required.
- Use of spray wash racks to wash trucks prior to leaving the site. The location of the racks will be documented and mapped. All trucks shall be washed before leaving the site unless conditions (precipitation, etc.) preclude said washing.
- Constructing wind fencing (berms, shrubbery, constructed walls, etc.). Wind fencing shall be constructed in a manner to minimize dust emissions originating from the site. The locations of all wind fencing should be documented and mapped.
- High wind conditions. URPC shall require additional watering or cessation of operations when winds exceed 25 mph. Records shall indicate how many times additional water was applied or when operations ceased.
- Street Sweeping: URPC shall use mobile wet process street sweepers to maintain entrance/exit areas at city streets. The locations where sweeping is done shall be documented and mapped.
- Revegetation. URPC shall revegetate inactive disturbed areas at the site. Revegetation activities shall be documented and mapped.

If mining or reclamation equipment will be operated at the edge of the pit, within 500 feet of residential property boundaries, United will first construct a berm to separate surrounding residential areas from the noise associated with mining and reclamation operations. Throughout the implementation of the reclamation plan, water will be used to control dust production from haul roads, working areas, and other areas where dust is likely to be produced. Service roads, machinery and working areas will be sprayed down on a scheduled basis.

Currently, the pits are bermed to prevent surface water from flowing over the pit walls. Prior to installation of the berms, some gullying occurred on the pit slopes. United will address the surface erosion during operations. Berms will be maintained to prevent surface water from flowing over the pit walls or into the street. New berms will be constructed as necessary to accomplish this objective.

Site Security Measures

The likely sources of contamination will be the illegal, inadvertent and/or malicious dumping of contaminants into the pits. United shall perform the following measures to reduce the risk of contamination:

*Controlled Access*

- Restrict pit areas to authorized vehicles and equipment;
- Monitor entrances continuously for unauthorized vehicles; and
- Secure all gates with locks, except at entrances during business hours.

*Security*

- Construct and maintain in good, first-class condition, appropriate berms, walls and fences around the properties and maintain in good order and in accordance with City zoning ordinances; and
- Repair any damage to berms, walls and/or fences within two days of discovery.

*Daily Patrolling*

- Inspect security berms, walls and fences on a daily basis; and
- Police pit areas and remove any deleterious/hazardous materials in accordance with governmental requirements.

Emergency Procedures

Within 30 days of the approval of the approval of the Amended Reclamation Plan, United proposes to prepare and submit an Emergency Plan to the City. Required remedial actions would be established in the Emergency Plan, which will minimize the time period between the discovery of the contamination and the completion of remediation. If, at any time, contamination is found to be at or above established action levels, the City shall be immediately notified and URPC shall be required to take (and pay for) all necessary remedial actions.

Groundwater Monitoring

Groundwater beneath the site is part of the San Gabriel Aquifer, which recharges the base of the pit. As such, surface water within the pit is in direct communication with groundwater and, therefore, is representative of upper groundwater conditions surrounding the pit area. On the basis of this condition, United proposes that water samples be collected from within the pit and tested quarterly to identify potential impacts to the surrounding aquifer.

Surface water sample collection will consist of slowly lowering a sterile, disposable, polyethylene bailer on a monofilament line approximately one to two feet below the air-water interface. The bailer will then be raised to the surface and fitted with a low-flow velocity sampling port to minimize sample turbulence and volatilization. Each sample container will be slowly filled with a water sample at a maximum rate of 100 mL/min. During sample collection, water collected from the pit will also be monitored for field parameters, including temperature, pH, and electrical conductivity.

Sample containers and handling procedures will conform to the established protocols for each specific parameter as described in EPA SW-846. The sample bottles, once filled and preserved as required, will be properly labeled. Each label will include pit identification number, sample number, date and time sampled, job number, site name and location, and sampling personnel's initials. The sealed and labeled samples will be placed in ice chests containing blue ice and transported to a California Department of Health Services-certified testing laboratory. Chain-of-custody records will be maintained throughout the sampling program.

The types of analyses and reporting requirements will be determined in consultation with the Watermaster and the City Engineer.

Future Reclaimed Land Uses

The presently planned ultimate physical condition for both Pit sites is for commercial and industrial uses, consistent with surrounding land use patterns and the City's General Plan, redevelopment plan, and zoning ordinance. To attain this reclamation standard, the sites will be backfilled and compacted in a manner that will accommodate construction of buildings, roads, and other essential infrastructure improvements, such as water, sewer, drainage and utility lines.

The City is currently exploring the feasibility of reclaiming Pit 3 for groundwater recharge. This option will be evaluated as an alternative in the EIR. Under this alternative limited, or no fill, would be placed in the Pit and the Pit lake would remain and would be used for recharge purposes.

**9. Surrounding Land Uses and Setting**

Most of the land surrounding the project area is used for the mining and processing of sand, gravel, and related construction products, and has been intermittently mined for this purpose since about 1910. The area surrounding the site is developed with industrial, manufacturing, wholesaling, distribution, service and commercial land uses that depend upon immediate highway access and visibility. This land use corridor is a significant regional employment center.

**10. Other Agencies:**

California Department of Conservation, Division of Mines & Geology
Los Angeles Regional Water Quality Control Board
U.S. Army Corps of Engineers
San Gabriel Basin Watermaster

**Environmental Factors Potentially Affected:**

The environmental factors checked below would be potentially affected by the project and involve at least one impact that is a "potentially significant impact" as indicated by the checklist on the following pages.

| | | |
|---|---|---|
| ☐ Aesthetics | ☐ Agricultural Resources | ☒ Air Quality |
| ☐ Biological Resources | ☐ Cultural Resources | ☒ Geology/Soils |
| ☐ Hazards and Hazardous Materials | ☒ Hydrology/Water Quality | ☒ Land Use/Planning |
| ☐ Mineral Resources | ☒ Noise | ☐ Population/Housing |
| ☒ Public Services | ☐ Recreation | ☒ Transportation/Traffic |
| ☒ Utilities/Service Systems | ☒ Mandatory Findings of Significance | |

**Environmental Determination**

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. ☐

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the applicant. A MITIGATED NEGATIVE DECLARATION will be prepared. ☐

I find that the proposed project COULD have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. ☒

I find that the proposed project COULD have a "potentially significant impact" or "potentially significant unless mitigated" on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. ☐

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the project, nothing further is required. ☐

Reuben J. Arceo

Reuben Arceo, Director of Planning

By John G. Cay

10/16/03

Date

| Issues & Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **I. AESTHETICS** – Would the project: | | | | |
| a. Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☐ | ☒ |
| b. Damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | ☐ | ☐ | ☐ | ☒ |
| c. Substantially degrade the existing visual character or quality of the site and its surroundings? | ☐ | ☐ | ☒ | ☐ |
| d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | ☐ | ☐ | ☒ | ☐ |

**Discussion:**

a. **No Impact.** The proposed project area is not located within a scenic vista or along a scenic corridor. The site is located adjacent to the I-605 Freeway, and is visible from the Freeway for a short distance (approximately 0.6 mile). Views of the site from other areas are constrained by adjacent urban development due to the relatively flat topography of the immediate area. Distant views of the site could be available from limited areas at higher elevations within the San Gabriel Mountains. No impacts would occur.

b. **No Impact.** The proposed project would not damage scenic resources within a state scenic highway. The nearest highway, and only highway from which the site is visible, is the I-605 Freeway. This is not designated as a scenic highway or eligible scenic highway by the California Department of Transportation (California Department of Transportation 2000). No impacts would occur.

c. **Less Than Significant Impact.** The project area is currently supporting aggregate mining operations, which are permitted through 2003. The visual character of the site is dominated by a large pits with steep slopes, and the area has been mined since 1910.

The continued mining operation phase of the project would not result in significant physical changes to the visual character of the site. Mining would continue at the bottom of the pits, and the sites would remain in a similar visual condition as the existing conditions. Minor changes to Pit No. 2 would occur to incorporate part of Pit No. 4 and to accommodate the realignment of Buena Vista Street. This would make Pit No. 2 approximately 25 acres larger, but would essentially eliminate mining at Pit No. 4. Additionally, the duration in which the site would remain in its current condition prior to reclamation would be extended, which would increase the amount of time that the site remains in its current visual condition.

The reclamation phase of Pits No. 2 and No. 3 would result in improvements to the visual character of the site. The mining activities and facilities would be eliminated from the sites, and the sites would be backfilled as described in the project description. Prior to development of the site, the site will be cleared of all equipment and structures related to aggregate production, and all batching and loading facilities, conveyance and dredging equipment, and trucking will be removed. Stockpiles, berms, and fines will be removed, and the fill material will be graded to accommodate redevelopment. Thus, the reclamation phase of the proposed project is determined to result in a beneficial aesthetic impact.

d. **Less Than Significant Impact.** The continued mining phase of the proposed project would not introduce new lighting or glare into the area. Existing lighting is provided onsite for nighttime mining activities. These lighting sources would not change. Impacts would be less than significant

| Issues & Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **II. AGRICULTURAL RESOURCES** - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies could refer to the California Agricultural Land Evaluation and Site Assessment Model prepared by the California Department of Conservation as an optional model to use in assessing impacts on agricultural farmland. Would the project: | | | | |
| a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program in the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ☐ | ☒ |
| b. Conflict with existing zoning for agricultural use, or a Williamson Act contract? | ☐ | ☐ | ☐ | ☒ |
| c. Involve other changes in the existing environment which, due to their location or nature, could individually or cumulatively result in loss of Farmland, to non-agricultural use? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

a. **No Impact.** The project area is located within the urban portion of Los Angeles County, and is not within the survey boundaries of Important Farmland as inventoried by the California Department of Conservation, Farmland Mapping and Monitoring Program (California Department of Conservation 1999). Therefore, the site is not designated as Farmland and no impacts would occur.

b. **No Impact.** The project site is not zoned for agricultural use and no Williamson Act contracts are associated with this site.

c. **No Impact.** Surrounding land uses include industrial, residential and other mining operations. No farmland or agricultural uses are located in the vicinity of the project site.

| Issues & Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **III. AIR QUALITY** - Where available, the significance criteria established by the applicable air quality management or pollution control district could be relied upon to make the following determinations. Would the project: | | | | |
| a. Conflict with or obstruct implementation of the applicable air quality plan? | ☒ | ☐ | ☐ | ☐ |
| b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | ☒ | ☐ | ☐ | ☐ |
| c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emission which exceed quantitative thresholds for ozone precursors)? | ☒ | ☐ | ☐ | ☐ |
| d. Expose sensitive receptors to substantial pollutant concentrations? | ☒ | ☐ | ☐ | ☐ |
| e. Create objectionable odors affecting a substantial number of people? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

a. **Potentially Significant Impact.** The mining operations portion of the project is not expected to result in significant air quality effects that conflict or obstruct the Air Quality Management Plan (AQMP). Mining at the site has been conducted for many years and the existing operations have been in compliance with the South Coast Air Quality Management District (SCAQMD) requirements, and a Fugitive Dust Emission Control Plan is in place that involves the use of water and operating controls. Measures include:

- Spraying roadways surfaces with water using a water truck;
- Watering of surface piles;
- Limiting vehicular speeds onsite to 19 miles per hour; and
- Truck washing at site exit.

However, a detailed evaluation of consistency of both the mining and reclamation phases of the project with the AQMP will be provided in the Draft EIR.

b. **Potentially Significant Impact.** The proposed project site is located in the South Coast Air Basin (SCAB), which is in non-attainment for several criteria air pollutants, including carbon monoxide, $PM_{10}$, and ozone. Emissions resulting from the project will be evaluated in accordance with SCAQMD thresholds, and will consider the proposed Fugitive Dust Control Plans. A detailed evaluation of air quality impacts will be provided in the Draft EIR.

c. **Potentially Significant Impact.** The proposed project could potentially result in cumulatively considerable air quality impacts due to the magnitude of other mining activities occurring within the City and the phasing for reclamation of each of the remaining mines. The cumulative air quality effects will be evaluated in the Draft EIR.

d. **Potentially Significant Impact.** Sensitive receptors include land uses, such as schools, day care centers, medical facilities, recreational facilities, and other land uses that could contain young children, elderly persons, or people with existing respiratory health problems. The proposed project could result in significant air emissions, which could expose sensitive receptors, if nearby, to substantial pollutants. These impacts will be evaluated in detail within the Draft EIR.

e. **No Impact.** The proposed project would not create objectionable odors. The mining operations do not generate objectionable odors. Additionally, the future planned land uses are typical of urban uses, and would not be expected to generate significant odors. No impacts would occur.

| Issues & Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **IV. BIOLOGICAL RESOURCES** – Would the project: | | | | |
| a. Have a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the Califomia Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☐ | ☐ | ☒ |
| b. Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☐ | ☒ | ☐ |
| c. Adversely impact federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) either individually or in combination with the known or probable impacts of other activities through direct removal, filling, hydrological interruption, or other means? | ☐ | ☐ | ☒ | ☐ |
| d. Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites? | ☐ | ☐ | ☒ | ☐ |
| e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☐ | ☐ | ☒ |
| f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

a. **No Impact.** The proposed project would not result in a substantial adverse impact on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by DFG or the U.S. Fish and Wildlife Service. Natural vegetation onsite has been altered from its native conditions due to the 90 years of mining activities, and the construction of the Santa Fe Dam and channelization of the San Gabriel River. Once composed of Riversidian sage scrub habitat, the sites encompass patches of various stands of disturbance-adapted plant species.

Due to the urban and highly disturbed nature of the sites, wildlife presence is extremely limited. However, due to the proximity of the San Gabriel River and the Santa Fe Dam spillway channel east of Pit No. 2 and south of Pit No. 3, wildlife occasionally use the sites for movement through the area. Migratory birds are not known to utilize the open water, and no fish are known to be present in the lake.

The proposed project would involve continued disturbance of the sites and subsequent back filling during reclamation prior to development for commercial purposes. Due to the existing limited value of the sites to wildlife and on-going disturbance that would prevent establishment of important habitat in the future, the sites are unlikely to ever provide conditions favorable to wildlife. No adverse impacts are anticipated.

b. **Less Than Significant Impact.** The proposed project would not result in a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by DFG or the U.S. Fish and Wildlife Service. The project area consists of heavily disturbed mined land and open water resulting from interception of ground water. The ongoing mining activity has precluded establishment of riparian habitat or marshland vegetation. The on-going disturbance from continued mining and subsequent reclamation of the site for future development will prevent establishment of important habitat in the future, the sites are unlikely to ever support sensitive natural communities. No adverse impacts would occur.

c. **Less Than Significant Impact.** The proposed project would not adversely impact federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) either individually or in combination with the known or probable impacts of other activities through direct removal, filling, hydrological interruption, or other means. The project area consists of heavily disturbed mined land and open water resulting from interception of ground water. The ongoing mining activity has precluded establishment of protected jurisdictional wetlands. The on-going disturbance from continued mining and subsequent reclamation of the site for future development will prevent establishment of such habitat in the future. No adverse impacts would occur.

d. **Less Than Significant Impact.** The proposed project would not interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites. The sites are not currently used as nursery sites and have only very limited use by wildlife due to their lack of suitable habitat and the continued disturbance related to mining activity. As discussed above due to the proximity of the San Gabriel River and the Santa Fe Dam spillway channel east of Pit No. 2 and south of Pit No. 3, wildlife occasionally use the sites for movement through the area. The sites do not constitute and important migratory or movement corridor. Migratory birds are not known to utilize the open water, and no fish are known to be present in the lake. No significant impacts are anticipated.

e. **No Impact.** The proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. The project area is located within an industrial area that contains minimal natural resources. No local ordinances exist that protect biological resources, and no sensitive biological resources are known to exist onsite. No impacts would occur.

f. **No Impact.** The proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan. The project area is not located within an NCCP jurisdictional area. No impacts would occur.

| Issues & Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **V. CULTURAL RESOURCES** – Would the project: | | | | |
| a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5? | ☐ | ☐ | ☐ | ☒ |
| b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? | ☐ | ☐ | ☐ | ☒ |
| c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ☐ | ☐ | ☒ |
| d. Disturb any human remains, including those interred outside of formal cemeteries? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

a. **No Impact.** The proposed project would not cause a substantial adverse change in the significance of a historical resource. The project site does not have any buildings, structures, or sites that are designated as a significant historical resource. Due to the relatively modern structures associated with mining activities, none of the onsite structures have the potential to be eligible for listing as a historic resource. No impacts would occur.

b. **No Impact.** The proposed project would not cause a substantial adverse change in the significance of an archaeological resource. The project site has been mined to a depth below groundwater levels. Any archaeological resources that would have existed would have been removed and would no longer be present. No impacts would occur.

c. **No Impact.** The proposed project would not destroy a unique paleontological resource or unique geologic feature. The project area is covered by alluvial materials to a depth of 500-700 feet at the project site. Paleontological resources would not exist in alluvial soils due to the relatively young age of such soils.. No impacts would occur.

d. **No Impact.** The proposed project would not disturb any human remains. Any human remains that would have been located onsite would have been discovered during previous mining activities. Continued mining below groundwater would not have the potential to encounter human remains. No impacts would occur.

| Issues & Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **VI. GEOLOGY AND SOILS** - Would the project: | | | | |
| a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | ☐ | ☐ | ☐ | ☒ |
| ii) Strong seismic ground shaking? | ☐ | ☐ | ☒ | ☐ |
| iii) Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ☒ | ☐ |
| iv) Landslides? | ☐ | ☐ | ☒ | ☐ |
| b. Would the project result in substantial soil erosion or the loss of topsoil? | ☒ | ☐ | ☐ | ☐ |
| c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | ☒ | ☐ | ☐ | ☐ |
| d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating substantial risks to life or property? | ☐ | ☐ | ☐ | ☒ |
| e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems, where sewers are not available for the disposal of wastewater? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

ai. **No Impact.** Impacts from fault rupture are limited to the immediate area of the fault zone where the fault breaks along the surface. Such a rupture could potentially displace and/or deform the ground surface. The project site is located in the Los Angeles Basin between the Transverse Range and the Peninsular Range geological provinces. There are 25 known active faults within a 100-kilometer (km) radius (62 miles), which makes the area subject to seismic activity. However, none of these faults are located in proximity to the immediate project area. Therefore, the proposed project would not be subject to impacts from fault rupture.

aii. **Less Than Significant Impact.** Southern California is a seismically active region that experiences earth movements capable of damage to persons and property. Impacts from seismic ground shaking could occur many miles away from the epicenter of a seismic event. Several faults are located within the vicinity of the project area, including:

- Sierra Madre Fault – is located 5.5 km (3.4 miles) north of the site, extending along the southern edge of the San Gabriel Mountains. The western end of this fault last broke in 1971, causing the 6.6 magnitude San Fernando earthquake. The remaining segments have a maximum credible magnitude of 7.2 if they break as a unit.
- Duarte Fault – is a branch of the Sierra Madre Fault, which is closer to the site, but has less earthquake potential than the main fault.

- Raymond Fault – is located approximately 5.5 km (3.4 miles) northwest of the project area. This fault caused the 1988 4.9-magnitude Pasadena earthquake. It has an estimated maximum credible magnitude of 6.5.

- San Gabriel Fault – is located 13 km northwest of the project area. There have been no major earthquakes on this fault in recent history, but it is considered active. Maximum potential magnitude for an earthquake on this fault is 7.0.

- Whittier Fault – is located 14 km southwest of the project area, and has a potential to produce a 7.0 magnitude earthquake. There has been no recent major activity, but it is considered active.

The project area has also been shaken by other recent major earthquakes, including the Whittier Narrows earthquake in 1988 and the 6.4-magnitude Northridge Earthquake. The San Andreas Fault, located 38 km (24 miles) north of the site, also has the potential to shake the area if large earthquakes on the magnitude of 7.5-8.2 are produced.

Earthquakes are very likely to occur during the next 50 years. Damage to structures could occur when they are subjected to stresses of up to 80 percent of their mass applied horizontally and vertically. Continued mining operations at the sites would not increase the potential risks or hazards from earthquakes or seismic shaking. However, reclamation of the site and future development could potentially be exposed to potential damage from seismic activities. Adherence to building codes is expected to prevent structural failure and loss of human life. Implementation of the appropriate design and engineering standards is considered to minimize potential impacts, which would be considered less than significant. Earthquakes could also potentially cause damage to natural slopes and failure of filled slopes. Damage to slopes would be reparable by bulldozer or grader. No significant impacts would occur.

aiii. **Less Than Significant Impact.** The potential for liquefaction depends on the levels of shaking, groundwater conditions, the relative density of the soils, and the age of the geologic units. Seismic-induced liquefaction occurs when a saturated, granular deposit of low relative density is subject to extreme shaking and loses strength or stiffness due to increased pore water pressure. The consequences of liquefaction are expected to be predominantly characterized by settlement, uplift on structures and increase in lateral pressure on buried structures. If building foundations are not designed properly, the effects of severe liquefaction during seismic conditions could produce failure, leading to substantial structural damage and injury or loss of life. The project area is located adjacent to, and partially within, an area designated as potential liquefaction hazard by the California Department of Conservation, Division of Mines & Geology (CDMG 1999). However, the slope stability study prepared on behalf of the City shows that the potential for liquefaction is low and that slopes of 1:1 are safe. Reclamation of the site would be required to recompact soils onsite and on revegetated/recompacted slopes. Impacts would be less than significant.

aiv. **Less Than Significant Impact.** The proposed project would not be exposed to significant landslide hazards. The CDMG does not designate the site as containing significant landslide hazards (1999). Slope stability studies for the project area indicate that slopes of 1:1 would be adequate to ensure slope stability and would prevent landslide hazards and slope instability. Additionally, as part of the reclamation plan, slopes within Pit No. 2 would be reconstructed and revegetated/recompacted to maximize stability. Post-reclamation conditions are expected to improve upon existing slope conditions. No significant impacts are anticipated.

b. **Potentially Significant Impact.** The mining portion of the proposed project involves continued dredging beneath the groundwater level. Erosion poses a potential hazard to slope stability, if not properly controlled. During the reclamation phase, slopes are proposed to be revegetated and recompacted to reduce erosion. The proposed slope treatment and erosion control plan will be further addressed in the EIR to ensure that safety impacts would be reduced to less than significant levels.

c. **Potentially Significant Impact.** As discussed above, the project area would not be subject to significant liquefaction hazards. However, the proposed project involves steepening slopes to 1:1, which have been determined to be safe to prevent slope instability. The reclamation includes reconstruction and revegetation/recompaction of soils on slopes, which is expected to increase slope stability throughout the site. The proposed slope treatment plan will be further addressed in the EIR to ensure that safety impacts would be reduced to less than significant levels.

d. **No Impact.** The project area is comprised of alluvial materials of rock, sand, and gravel, with relatively little silts or clays. These types of soils are not characteristic of expansive soils. No impacts would occur.

e. **No Impact.** The proposed project does not involve the use of septic tank systems. Future land uses would be connected to the sewer infrastructure in the area. No impacts would occur.

| Issues & Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **VII. HAZARDS AND HAZARDOUS MATERIALS** – Would the project: | | | | |
| a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ☐ | ☒ | ☐ |
| b. Create a significant hazard to the public or the environment through the reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment? | ☐ | ☐ | ☒ | ☐ |
| c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | ☐ | ☐ | ☐ | ☒ |
| d. Is the project located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☐ | ☐ | ☐ | ☒ |
| e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☐ | ☒ |
| h. Expose people or structures to the risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

a. **Less Than Significant Impact.** The proposed project would not create a significant hazard from the routine transport, use, or disposal of hazardous materials. The mining operations component of the project involves transport of aggregate materials, which are not considered hazardous. Fuels, Solvents, and Lubricants are used during the normal mining and processing and transport process. These are stored handled and used according to MSDS stipulations. No significant impacts are anticipated.

b. **Less Than Significant Impact.** The proposed project would not involve the release of hazardous materials into the environment. As discussed above, aggregate mining operations do not use or store significant quantities of hazardous materials. Construction activities during the reclamation phase could use limited quantities of hazardous materials, which are not expected to result in significant hazards if accidentally spilled or released.

c. **No Impact.** The proposed project is located within one-quarter mile of existing schools. However, the project would not emit hazardous materials that would affect offsite receptors. No impacts would occur.

d. **Less Than Significant Impact.** Groundwater in portions of the San Gabriel Basin and the Irwindale area is known to be contaminated, and the proximity of contamination plumes relative to the project site is a dynamic variable. Although the VOC plume was reported to be located on the south side of the San Gabriel River, the Draft EIR will address this matter through discussions with the San Gabriel Basin Water Control Authority, The San Gabriel River Water Master, the Regional Water Quality Control Board, and review of recent water quality information from wells up gradient and proximate to the project site. There is no information at this time that would support a finding of a significant impact associated with the project being located on a known contaminated site. No significant impact is anticipated.

e. **No Impact.** The proposed project site is not located within 2 miles of a public airport or airport land use plan.

f. **No Impact.** The proposed project site is not located within 2 miles of a private airstrip.

g. **No Impact.** The project would not prevent access for emergency vehicles or interfere with an adopted emergency response or evacuation plan. No emergency response or evacuation plans have been adopted for the project area. Access is currently provided via Arrow Highway and Buena Vista Street. Adequate access would be provided as part of the project to satisfy Fire Department and emergency response requirements. No impacts would occur.

h. **No Impact.** The proposed project is surrounded by urban development and is not located adjacent to wildlands. The proposed project would therefore not be exposed to, nor expose other structures, to a significant risk of wildland fires.

| Issues & Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **VIII. HYDROLOGY AND WATER QUALITY** - Would the project: | | | | |
| a. Violate any water quality standards or waste discharge requirements? | ☒ | ☐ | ☐ | ☐ |
| b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | ☒ | ☐ | ☐ | ☐ |
| c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? | ☒ | ☐ | ☐ | ☐ |
| d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? | ☒ | ☐ | ☐ | ☐ |
| e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | ☒ | ☐ | ☐ | ☐ |
| f. Otherwise substantially degrade water quality? | ☒ | ☐ | ☐ | ☐ |
| g. Place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | ☐ | ☐ | ☐ | ☒ |
| h. Place within a 100-year floodplain structure which would impede or redirect flood flows? | ☒ | ☐ | ☐ | ☐ |
| i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? | ☒ | ☐ | ☐ | ☐ |
| j. Inundation by seiche, tsunami, or mudflow? | ☐ | ☐ | ☒ | ☐ |

**Discussion:**

a. **Potentially Significant Impact.** The water quality at the site is currently monitored in compliance with Waste Discharge Requirements (WDR), Regional Water Quality Control Board (RWQCB) Los Angeles Region monitoring and reporting program, and the San Gabriel Basin Watermaster Resolution. The mining operations at the site are required to meet requirements set by these regulatory standards. The impact of the project from continued mining operations and reclamation are not currently known. The EIR will include a detailed hydrologic analysis to determine potential impacts from the proposed project.

b. **Potentially Significant Impact.** The proposed project would use groundwater supplies for dust suppression and processing activities. Additionally, the groundwater is currently exposed in the two pits due to the mining activities that have already taken place below the groundwater level. The reclamation following mining would slightly reduce groundwater recharge area by increasing impervious surfaces on the sites. Additionally, the use of groundwater as part of the project will need to be assessed in greater detail in the EIR. Impacts are potentially significant.

c. **Potentially Significant Impact.** The proposed project would alter the existing drainage pattern of the sites that would result in erosion or siltation on or offsite. The processing of mined materials results in fines from the washing process that are currently directed to a siltation pond on United's plant site. The additional volume that would be generated by the proposed project may have to be transported offsite and could potentially increase siltation from running off the site. Onsite and offsite runoff is currently controlled through the use of dikes and fill. These methods would continue to be used throughout the continued mining operations at the site. During construction of the site for the post-reclamation future uses, erosion of the site could occur, conveying silts and polluted runoff from the site. Construction would be required to comply with the National Pollutant Discharge Elimination Systems (NPDES) program to reduce construction-related discharges. The contractor would be required to develop a Stormwater Pollution Prevention Plan (SWPPP) and implement Best Management Practices (BMPs) during construction, such as sandbagging, silt screening, hay bails, or other means to control pollutant and sediment runoff. Impacts are potentially significant and will be further evaluated in the EIR.

d. **Potentially Significant Impact.** Implementation of the proposed project would not substantially alter the existing drainage pattern of the site or area, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or offsite. The continued mining operations phase would maintain runoff through the use of dikes and fill materials. Post-reclamation of the site would include drainage facilities that would be connected to storm drainage systems. The potential impact from increased flooding and runoff is potentially significant and will be further evaluated in an EIR.

e. **Potentially Significant Impact.** The continued mining operations phase of the project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems, or provide substantial additional sources of polluted runoff. However, following reclamation of the project, onsite and offsite stormwater drainage facilities will be required. The implications of the drainage plan will need to be addressed in the EIR and are considered potentially significant.

f. **Potentially Significant Impact.** The proposed continuation of mining could potentially degrade water quality. Potential impacts to water quality from mining operations will be assessed in detail within the EIR.

g. **No Impact.** The proposed project would not place housing within a 100-year floodplain. No housing is proposed as part of the project.

h. **Potentially Significant Impact.** The project would place structures within an area that could potentially impede flood flows. Pit No. 2 is in the direct path of the Sante Fe Dam spillway channel. It is possible that flood flows could exceed the capacity of the spillway channel. Impacts are potentially significant. The design capacities of the sites following reclamation will be addressed and analyzed within the EIR in terms of 100- and 500-year flood events.

i. **Potentially Significant Impact.** The project would place structures within an area that could potentially impede flood flows. Pit No. 2 is in the direct path of the Sante Fe Dam spillway channel, and is within approximately ½ mile west of the Santa Fe Dam at the Santa Fe Flood Control Basin. According to the California Department of Emergency Services *Dam Inundation Map for Santa Fe Dam,* The proposed project site is within a potential flood zone if the dam were to fail while full. It is possible that flood flows could exceed the capacity of the spillway channel. Impacts are potentially significant and design capacities will be addressed and analyzed within the EIR in terms of 100- and 500-year flood events.

j. **Less Than Significant Impact.** The proposed project would not expose people to significant hazards resulting from inundation by seiche, tsunami, or mudflow. The project is not located within a hillside area or downstream of an area that would carry mudflows to the project site. A tsunami would not have the capacity to impact the site because the project area is inland of the coast, which are the only areas potentially endangered by tsunamis. A seiche can occur in isolated water bodies, such as the exposed lakes within the mining pits, which would result in a sloshing effect from one side to another. However, The proposed project would not increase the likelihood of this occurring during mining activities. Additionally, the pits would be filled in during reclamation, which would prevent seiches from occurring post-reclamation. Impacts are considered less than significant.

| Issues & Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **IX. LAND USE AND PLANNING** - Would the project: | | | | |
| a. Physically divide an established community? | ☐ | ☐ | ☐ | ☒ |
| b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | ☐ | ☐ | ☒ | ☐ |
| c. Conflict with any applicable habitat conservation plan or natural communities conservation plan? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

a. **No Impact.** The proposed project would not physically divide an established community. The sites have been operating as active mines for many years, and by United for over 25 years. The proposed project involves continued operations of the mines, and reclamation of the sites. The site is surrounded by other commercial and industrial uses, and would not divide the community by future development with commercial and industrial uses.

b. **Less Than Significant Impact.** The proposed project site is designated for "Industrial" land use in the City's current General Plan. The majority of the Industrial-designated lands within the City are occupied by quarries. The City's General Plan update is currently in process and proposes that these lands ultimately be developed for a mix of uses, including industrial and commercial facilities. The proposed project involves the continued mining operations of the sites to the years 2020, and reclamation of the site with a combination of commercial and industrial uses. The ultimate future land uses as part of reclamation would be consistent with the updated General Plan.

The project site is zoned Q (Quarry), and M-2 (Heavy Industrial). While mining operations are permitted within the Q zone, the M-2 zone requires approval of a Conditional Use Permit (CUP). The project involves modification to the existing CUP for the extension of mining operations. The CUP application also includes the reclamation plan, which has been developed in accordance with the California Surface Mining and Reclamation Act (SMARA). Approval of the current application for the modification to the CUP would ensure compliance with the City's zoning ordinance. Future development of the site following reclamation would require a zone change, which can be processed separate from the proposed project application and would be subject to a separate CEQA review. Impacts are considered less than significant.

c. **No Impact.** The project would not conflict with applicable habitat conservation plans or NCCPs. No habitat conservation plans or NCCPs have jurisdiction within the project area.

| Issues & Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| X. MINERAL RESOURCES – Would the project: | | | | |
| a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | ☐ | ☐ | ☒ | ☐ |
| b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | ☐ | ☐ | ☒ | ☐ |

**Discussion:**

a–b. **Less Than Significant Impact.** The proposed project site is currently used for aggregate mineral production. The CDMG classifies the project area as MRZ-2 for sand and gravel resources. This zone is defined as "areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence." Additionally, the United sites are shown as Permitted Portland Cement Concrete aggregate pits (California Department of Conservation 1994).

Given the value of the resource to the local and regional economy, halting of mining activity at the quarry prior to full utilization of the aggregate deposit would result in the loss of availability of important mineral resources. Continuing operation will allow full realization of the resource's benefits to the local and regional economy. The proposed project involves continued mining operations to the years 2020, continuing aggregate production of the mine, followed by reclamation of the site for commercial and industrial use. The project's effects are anticipated to be beneficial regarding mineral resources. Therefore, no significant impacts would occur.

| Issues & Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XI. NOISE** - Would the project result in: | | | | |
| a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☒ | ☐ | ☐ | ☐ |
| b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | ☒ | ☐ | ☐ | ☐ |
| c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | ☒ | ☐ | ☐ | ☐ |
| d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | ☒ | ☐ | ☐ | ☐ |
| e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ |
| f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

a. **Potentially Significant Impact.** The continued mining operations phase of the proposed project would not expose persons to or generate noise levels in excess of local noise standards. The mining activities are currently operating in compliance with local noise ordinances. The mining would be conducted using a dredge under the surface of the water, which would not generate significant noise impacts. Additionally, operations are not anticipated to increase trucking activities to the site, as production would remain relatively similar to existing conditions. Construction phases and backfilling operations for the reclamation could, however, generate significant noise impacts. Construction activities would involve the use of construction equipment, such as graders, tractors, cranes, jackhammers, and other noisy equipment. These impacts are potentially significant, and will be further evaluated in the EIR.

b. **Potentially Significant Impact.** The proposed project may generate significant ground-borne noise levels. Groundborne noise could be associated with extensive grading or pile driving onsite. The proposed project involves these elements, and, thus could generate substantial ground-borne noise impacts. These issues will be further studied and will be addressed in the EIR.

c. **Potentially Significant Impact.** The proposed could potentially result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. As discussed above, the project could result in increased noise generation from construction activities and backfilling operations. These impacts will be further studied and will be addressed in the EIR.

d. **Potentially Significant Impact.** The proposed project could result in temporary or periodic increase in noise levels during construction for reclamation phases. While construction noise is considered temporary, due to the duration of reclamation, impacts could be significant. These potentially significant impacts will be further evaluated in the EIR.

e. **No Impact.** The proposed project would not expose people residing or working in the project area to excessive noise levels from airport activities. The project site is not located within an airport land use plan or within 2 miles of a public airport or public use airport.

f. **No Impact.** The proposed project would not expose people residing or working in the project area to excessive noise levels from aircraft activities. The project site is not located in the vicinity of a private airstrip.

| Issues & Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XII. POPULATION AND HOUSING** - Would the project: | | | | |
| a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | ☐ | ☐ | ☒ | ☐ |
| b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |
| c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

a. **Less Than Significant Impact.** The proposed project would not induce substantial population growth since it involves the continuation of an existing activity, mining, followed by a related activity, reclamation. The project does not involve the direct provision of housing.

b. **No Impact.** The proposed project would not displace a substantial number of housing units. No housing is currently located onsite.

c. **No Impact.** The proposed project would not displace substantial numbers of people. No people currently reside on or occupy the site.

| Issues & Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XIII. PUBLIC SERVICES** | | | | |
| a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | | |
| Fire protection? | ☐ | ☐ | ☒ | ☐ |
| Police protection? | ☐ | ☐ | ☒ | ☐ |
| Schools? | ☐ | ☐ | ☐ | ☒ |
| Parks? | ☐ | ☐ | ☐ | ☒ |
| Other public facilities? | ☒ | ☐ | ☐ | ☐ |

**Discussion:**

**Fire Protection**

**Less Than Significant Impact.** The continued mining operations phase of the proposed project would not affect fire protection services. The mining operations have been ongoing for over 25 years, with presumably adequate emergency response. Mining operations would continue the same as the current practice. Reclamation activities would also not be expected to increase demand for fire protection since the site devoid of fire hazards. No significant impacts would occur.

**Police Protection**

**Less Than Significant Impact.** The continued mining operations phase of the proposed project would not affect police protection services. The mining operations have been ongoing for over 25 years, with presumably adequate police protection. Mining operations would continue the same lines as existing activities. Reclamation activities would also not be expected to increase demand for police protection since the site would be secured and would include private security measures. No significant impacts would occur.

**Schools**

**No Impact.** The proposed project would not adversely affect school facilities. The project would not generate new students that could contribute to the capacity at existing schools.

**Parks**

**No Impact.** The proposed project would not adversely affect park facilities. The project would not contribute to performance problems of other parks.

**Other Public Facilities**

**Potentially Significant Impact.** The proposed project may result in the need for more frequent pavement repair and/or replacement as a result of extending mining operations. These potential impacts to roadways and the ability to provide these public services will be evaluated in the EIR.

| Issues & Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XIV. RECREATION** | | | | |
| a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | ☐ | ☐ | ☐ | ☒ |
| b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

a. **No Impact.** The proposed project would not increase the use of existing parks such that physical deterioration would occur or be accelerated. The proposed project would involve continued mining, and development with commercial and industrial uses following reclamation. No impacts to existing parks or other recreational facilities would occur.

b. **No Impact.** The proposed project does not include recreation facilities or require expansion of recreation facilities. The proposed project would involve continued mining, and development with commercial and industrial uses following reclamation. No impacts from recreational facilities would occur.

| Issues & Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XV. TRANSPORTATION/TRAFFIC** – Would the project: | | | | |
| a. Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? | ☒ | ☐ | ☐ | ☐ |
| b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? | ☒ | ☐ | ☐ | ☐ |
| c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | ☐ | ☐ | ☐ | ☒ |
| d. Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☒ | ☐ | ☐ | ☐ |
| e. Result in inadequate emergency access? | ☒ | ☐ | ☐ | ☐ |
| f. Result in inadequate parking capacity? | ☐ | ☐ | ☒ | ☐ |
| g. Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)? | ☐ | ☐ | ☐ | ☒ |

**Discussion:**

a. **Potentially Significant Impact.** The proposed project could potentially cause a substantial increase in traffic on local and regional transportation facilities, which could significantly impact existing operating conditions. The continued mining and operations phase of the project is not anticipated to result in a significant change in traffic patterns or volumes over existing operations. However, truck trips associated with mining would extend out to the year 2020 until the mining ceases, and could result in an increase in future traffic volumes. Additionally, truck trips associated with backfilling the pits during reclamation will need to be assessed. A detailed traffic impact study will be conducted for this project, and the results will be included within the EIR.

b. **Potentially Significant Impact.** Implementation of the proposed project could exceed the level of service standards for roadways designated by the County Congestion Management Program (CMP). CMP intersections within the project area include the on- and off-ramps of I-605. Traffic effects on surrounding roadways, resulting from the project will be discussed in greater detail within the EIR.

c. **No Impact.** The proposed project is not located within the vicinity of any airports or heliports. Additionally, the project does not involve the development of any tall structures. Therefore, the project would not have the capacity to affect air traffic patterns.

d. **Potentially Significant Impact.** The proposed project could potentially generate hazards from design features. Internal and external circulation patterns would change substantially and could increase the frequency of accidents. A traffic assessment will be conducted as part of the EIR to determine traffic flow and public safety considerations for the public.

e. **Potentially Significant Impact.** The proposed project could result in inadequate emergency access. Access is currently provided via Arrow Highway and Buena Vista Street. This is adequate for the mining operations phase of the

project. However, implementation of the reclamation plan would likely require additional ingress and egress locations. Acquisition of access to the west could be required, and it is not currently secured. These issues will be further addressed in the EIR.

f. **No Impact.** The proposed project would not result in the need for additional parking areas onsite or offsite. No impacts are anticipated.

g. **No Impact.** The proposed project would not conflict with alternative transportation policies. No impacts on existing or planned alternative transportation modes would occur.

| Issues & Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XVI. UTILITIES AND SERVICE SYSTEMS** – Would the project: | | | | |
| a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | ☐ | ☐ | ☐ | ☒ |
| b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☐ | ☐ | ☐ | ☒ |
| c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | ☒ | ☐ | ☐ | ☐ |
| d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | ☒ | ☐ | ☐ | ☐ |
| e. Result in a determination by the wastewater treatment provider, which serves or could serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | ☐ | ☐ | ☐ | ☒ |
| f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | ☐ | ☐ | ☒ | ☐ |
| g. Comply with federal, state, and local statues and regulations related to solid waste? | ☐ | ☐ | ☒ | ☐ |

**Discussion:**

a. **No Impact.** The proposed project would not exceed treatment requirements of the RWQCB. The continued mining and reclamation phases of the project would not require wastewater treatment. No impacts would occur.

b. **No Impact.** Continued mining and reclamation at the sites would not require water or wastewater treatment. Therefore, no impacts to utilities would occur.

c. **Potentially Significant Impact.** Mining operations at the sites would not require any changes to the use or demand on utilities or service systems. Mining activities would continue in the same manner as they are presently operating. However, reclamation of the site would require controlling stormwater runoff and would involve construction of drainage facilities to adequately serve the sites. The reclamation could potentially require upgrading of stormwater infrastructure in the area. These impacts will be further evaluated in the EIR.

d. **Potentially Significant Impact.** Continued mining operations at the sites may require additional water usage for processing and dust suppression. The impacts on water usage are potentially significant and will be further evaluated in the EIR.

e. **No Impact.** Continued mining operations at the sites would not require any changes to the use or demand on wastewater treatment systems. Reclamation of the sites would also not increase wastewater from the site, thereby increasing demands on treatment providers. No impacts would occur.

f. **Less Than Significant Impact.** Continued mining operations at the sites would not require an increase in refuse or a demand for additional landfill requirements. Reclamation of the site could potentially benefit existing landfills, by

diverting inert waste from landfills to help backfill the mining pits. Impacts would be less than significant.

g. **Less Than Significant Impact.** The proposed project will comply with all local, state, and federal requirements for integrated waste management (e.g., recycling) and solid waste disposal. Backfill material as part of site reclamation would use only inert materials in accordance with federal and state requirements. Impacts would be less than significant.

| Issues & Supporting Information Sources | Potentially Significant Impact | Less Than Significant With Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| **XVII. MANDATORY FINDINGS OF SIGNIFICANCE** | | | | |
| a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory? | ☐ | ☐ | ☒ | ☐ |
| b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, effects of other current projects, and the effects of probable future projects.) | ☒ | ☐ | ☐ | ☐ |
| c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | ☒ | ☐ | ☐ | ☐ |

**Discussion:**

a. **Less Than Significant Impact.** The proposed project would not affect significant biological resources or cultural resources. No sensitive plant or wildlife species are known to occur onsite, and no cultural resources are known to exist onsite.

b. **Potentially Significant Impact.** The proposed project could potentially contribute to cumulatively considerable impacts from continued mining and future development of the site. The project could result in cumulative impacts to traffic, air quality, noise, water quality, public services, and utilities. These impacts will be further disclosed in the EIR.

c. **Potentially Significant Impact.** The proposed project could potentially cause significant impacts on human beings, such as air quality impacts, noise impacts, and water quality impacts. These issues will be further evaluated in the Draft EIR.

## REFERENCES


California Department of Conservation, Division of Mines and Geology. 1994. Update of mineral land classification of Portland cement concrete aggregate in Ventura, Los Angeles, and Orange Counties, California: Part II – Los Angeles County. Open File Report 94–14. Sacramento, CA.

California Department of Conservation, Division of Mines & Geology. 1999. Official Map of Seismic Hazard Zones: Baldwin Park Quadrangle, Released March 25, 1999. Available at: http://www.consrv.ca.gov/dmg/shezp/maps/m_baldp.htm. Accessed April 1, 2002.

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Caltrans (California Department of Transportation). 2000. The California scenic highway system: a list of eligible (E) and officially designated (OD) routes (by route). Last revised: July 25, 2000. Available: <http://www.dot.ca.gov/hq/LandArch/scenic/cahisys.htm>. Accessed: September 24, 2002.

HDR Inc. 2003a. Amended Reclamation Plan, United Rock Products Corporation Pit No. 2, Irwindale, California. January 2003. Orange, CA.

HDR Inc. 2003b. Amended Reclamation Plan, United Rock Products Corporation Pit No. 3, Irwindale, California. January 2003. Orange, CA.

Irwindale, City of. 1999. City of Irwindale Mining and Reclamation Impact Study. Volume I: Executive Summary and Technical Overview. March 1999 (Revised). Prepared by Greystone. Sacramento, CA.

Irwindale, City of. 1973. General Plan Program. Prepared by Neal Irving & Associates, Norwalk, CA.

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse

Gray Davis
Governor

Tal Finney
Interim Directo

**Notice of Preparation**

RECEIVED

OCT 2 3 2003

CITY OF IRWINDALE
PLANNING DEPARTMENT

October 17, 2003

To: Reviewing Agencies

Re: United Rock Products Aggregate Mining/Processing Operations and Reclamation Plan
SCH# 2003101088

Attached for your review and comment is the Notice of Preparation (NOP) for the United Rock Products Aggregate Mining/Processing Operations and Reclamation Plan draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

**Reuben Areceo**
**City of Irwindale**
**5050 North Irwindale Avenue**
**Irwindale, CA 91706**

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

for

Scott Morgan
~~Associate~~ Planner, State Clearinghouse

Attachments
cc: Lead Agency

# State Clearinghouse Data Base

**SCH#** 2003101088
**Project Title** United Rock Products Aggregate Mining/Processing Operations and Reclamation Plan
**Lead Agency** Irwindale, City of

**Type** NOP Notice of Preparation

**Description** United proposes to modify its mining operations and reclamation plans for its activities at Pits No. 2 and 3 in the City of Irwindale. Untied has applied for a CUP to modify its operations and the duration of mining activities, and has submitted new reclamation plans. The project also includes merging the un-mined western portion of quarry Pit No. 4 that is now located to the east of the newly constructed Buena Vista Street with the existing quarry Pit No. 2 (increasing the boundary of Pit No. 2 by approximately 25 acres and decreasing the boundary of Pit No. 4); extending the permitted quarry depth in Pit No. 2 to between approximately 410 and 450 below ground surface (bgs), and extending the allowable depth in Pit No. 3 to between 490 and 500 bgs, or mining both pits until December 31, 2020.

## Lead Agency Contact

**Name** Reuben Areceo
**Agency** City of Irwindale
**Phone** 626.430.2200 **Fax**
**email**
**Address** 5050 North Irwindale Avenue
**City** Irwindale **State** CA **Zip** 91706

## Project Location

**County** Los Angeles
**City** Irwindale
**Region**
**Cross Streets** Arrow Highway / Buena Vista Street / Interstate 605
**Parcel No.**
**Township** **Range** **Section** **Base**

## Proximity to:

**Highways** I-605
**Airports**
**Railways**
**Waterways** San Gabriel River
**Schools**
**Land Use** Sand & Gravel Quarry, processing plant/ Q (Quarry), M-2 (Heavy Industrial)/ Industrial

**Project Issues** Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Drainage/Absorption; Cumulative Effects; Flood Plain/Flooding; Geologic/Seismic; Growth Inducing; Landuse; Minerals; Noise; Public Services; Recreation/Parks; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife

**Reviewing Agencies** Resources Agency; Department of Conservation; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Department of Fish and Game, Region 5; Native American Heritage Commission; State Lands Commission; California Highway Patrol; Caltrans, District 7; Air Resources Board, Major Industrial Projects; State Water Resources Control Board, Division of Water Quality; Regional Water Quality Control Board, Region 4

**Date Received** 10/17/2003 **Start of Review** 10/17/2003 **End of Review** 11/17/2003

Note: Blanks in data fields result from insufficient information provided by lead agency.

## NOP Distribution List

County: Los Angeles SCH# [illegible]

### Resources Agency

- [x] **Resources Agency**
  Nadell Gayou
- [ ] **Dept. of Boating & Waterways**
  Suzi Betzler
- [ ] **California Coastal Commission**
  Elizabeth A. Fuchs
- [ ] **Colorado River Board**
  Gerald R. Zimmerman
- [x] **Dept. of Conservation**
  Roseanne Taylor
- [ ] **California Energy Commission**
  Environmental Office
- [ ] **Dept. of Forestry & Fire Protection**
  Allen Robertson
- [x] **Office of Historic Preservation**
  Hans Kreutzberg
- [x] **Dept of Parks & Recreation**
  B. Noah Tilghman
  Environmental Stewardship Section
- [ ] **Reclamation Board**
  Lori Buford
- [ ] **Santa Monica Mountains Conservancy**
  Paul Edelman
- [ ] **S.F. Bay Conservation & Dev't. Comm.**
  Steve McAdam
- [x] **Dept. of Water Resources**
  Resources Agency
  Nadell Gayou

### Fish and Game

- [ ] **Dept. of Fish & Game**
  Scott Flint
  Environmental Services Division
- [ ] **Dept. of Fish & Game 1**
  Donald Koch
  Regior
- [ ] **Dept. of Fish & Game 2**
  Banky Curtis
- [ ] **Dept. of Fish & Game 3**
  Robert Floerke
  Region 3
- [ ] **Dept. of Fish & Game 4**
  William Laudermilk
  Region 4
- [x] **Dept. of Fish & Game 5**
  Don Chadwick
  Region 5, Habitat Conservation Program
- [ ] **Dept. of Fish & Game 6**
  Gabrina Gatchel
  Region 6, Habitat Conservation Program
- [ ] **Dept. of Fish & Game 6 I/M**
  Tammy Allen
  Region 6, Inyo/Mono, Habitat Conservation Program
- [ ] **Dept. of Fish & Game M**
  Tom Napoli
  Marine Region

### Other Departments

- [ ] **Food & Agriculture**
  Steve Shaffer
  Dept. of Food and Agriculture
- [ ] **Dept. of General Services**
  Robert Sleppy
  Environmental Services Section
- [ ] **Dept. of Health Services**
  Wayne Hubbard
  Dept. of Health/Drinking Water

### Independent Commissions,Boards

- [ ] **Delta Protection Commission**
  Debby Eddy
- [ ] **Office of Emergency Services**
  John Rowden, Manager
- [ ] **Governor's Office of Planning & Research**
  State Clearinghouse

---

- [x] **Native American Heritage Comm.**
  Debbie Treadway
- [ ] **Public Utilities Commission**
  Ken Lewis
- [x] **State Lands Commission**
  Jean Sarino
- [ ] **Tahoe Regional Planning Agency (TRPA)**
  Lyn Barnett

### Business, Trans & Housing

- [ ] **Caltrans - Division of Aeronautics**
  Sandy Hesnard
- [ ] **Caltrans - Planning**
  Ron Helgeson
- [x] **California Highway Patrol**
  Lt. Julie Page
  Office of Special Projects
- [ ] **Housing & Community Development**
  Cathy Creswell
  Housing Policy Division

### Dept. of Transportation

- [ ] **Dept. of Transportation 1**
  Mike Eagan
  District 1
- [ ] **Dept. of Transportation 2**
  Don Anderson
  District 2
- [ ] **Dept. of Transportation 3**
  Jeff Pulverman
  District 3
- [ ] **Dept. of Transportation 4**
  Tim Sable
  District 4
- [ ] **Dept. of Transportation 5**
  David Murray
  District 5
- [ ] **Dept. of Transportation 6**
  Marc Birnbaum
  District 6
- [x] **Dept. of Transportation 7**
  Stephen J. Buswell
  District 7
- [ ] **Dept. of Transportation 8**
  Linda Grimes,
  District 8
- [ ] **Dept. of Transportation 9**
  Gayle Rosander
  District 9
- [ ] **Dept. of Transportation 10**
  Tom Dumas
  District 10
- [ ] **Dept. of Transportation 11**
  Bill Figge
  District 11
- [ ] **Dept. of Transportation 12**
  Bob Joseph
  District 12

### Cal EPA

**Air Resources Board**

- [ ] Airport Projects
  Jim Lerner
- [ ] Transportation Projects
  Kurt Karperos
- [x] Industrial Projects
  Mike Tollstrup

- [ ] **California Integrated Waste Management Board**
  Sue O'Leary
- [ ] **State Water Resources Control Board**
  Jim Hockenberry
  Division of Financial Assistance
- [x] **State Water Resources Control Board**
  Student Intern, 401 Water Quality Certification Unit
  Division of Water Quality
- [ ] **State Water Resouces Control Board**
  Mike Falkenstein
  Division of Water Rights
- [ ] **Dept. of Toxic Substances Control**
  CEQA Tracking Center

### Regional Water Quality Control Board (RWQCB)

- [ ] **RWQCB 1**
  Cathleen Hudson
  North Coast Region (1)
- [ ] **RWQCB 2**
  Environmental Document Coordinator
  San Francisco Bay Region (2)
- [ ] **RWQCB 3**
  Central Coast Region (3)
- [x] **RWQCB 4**
  Jonathan Bishop
  Los Angeles Region (4)
- [ ] **RWQCB 5S**
  Central Valley Region (5)
  - [ ] **RWQCB 5F**
    Central Valley Region (5)
    Fresno Branch Office
  - [ ] **RWQCB 5R**
    Central Valley Region (5)
    Redding Branch Office
- [ ] **RWQCB 6**
  Lahontan Region (6)
  - [ ] **RWQCB 6V**
    Lahontan Region (6)
    Victorville Branch Office
- [ ] **RWQCB 7**
  Colorado River Basin Region (7)
- [ ] **RWQCB 8**
  Santa Ana Region (8)
- [ ] **RWQCB 9**
  San Diego Region (9)

- [ ] **Other** _____

South Coast
Air Quality Management District
AQMD
21865 E. Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 · www.aqmd.gov

For your review/info
cc: ~~Steve~~
~~Camille~~
→ ~~Kwok~~
→ Vicente
Edgar
→ Fred Galante
→ Susan O'Carroll
→ John Coy
11/4/03
Ch

October 23, 2003

RECEIVED
OCT 2 7 2003
CITY OF IRWINDALE
PLANNING DEPARTMENT

Mr. Reuben Arceo, Director of Planning
City of Irwindale
5050 N. Irwindale Avenue
Irwindale, CA 91706

Comments in response to the United Rock draft EIR. 11/4/03 Ch

Dear Mr. Arceo:

**Notice of Preparation of a Draft Environmental Impact Report for**
**United Aggregate Mining/Processing Operations and Reclamation Plans**

The South Coast Air Quality Management District (AQMD) appreciates the opportunity to comment on the above-mentioned document. The AQMD's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the Draft Environmental Impact Report (EIR).

**Air Quality Analysis**

The AQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The AQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the AQMD's Subscription Services Department by calling (909) 396-3720.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction and operations should be considered. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the evaluation. An analysis of all toxic air contaminant impacts due to the decommissioning or use of equipment potentially generating such air pollutants should also be included.

**Mitigation Measures**

In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures be utilized during project construction and operation to minimize or eliminate significant adverse air quality impacts. To assist the Lead Agency with identifying possible mitigation measures for the project, please refer to Chapter 11 of the AQMD CEQA Air Quality Handbook for sample air quality mitigation measures. Additionally, AQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook contain numerous measures for controlling construction-related emissions that should be considered for use as CEQA mitigation if not otherwise required. Pursuant to state CEQA Guidelines §15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed.

**Data Sources**

AQMD rules and relevant air quality reports and data are available by calling the AQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available via the AQMD's World Wide Web Homepage (http://www.aqmd.gov).

The AQMD is willing to work with the Lead Agency to ensure that project-related emissions are accurately identified, categorized, and evaluated. Please call Charles Blankson, Ph.D., Air Quality Specialist, CEQA Section, at (909) 396-3304 if you have any questions regarding this letter.

Sincerely,

Steve Smith

Steve Smith, Ph.D.
Program Supervisor, CEQA Section
Planning, Rule Development and Area Sources

SS:CB:li

LAC031021-01LI
Control Number

)EPARTMENT OF TRANSPORTATION
)I` `ICT 7, REGIONAL PLANNING
IG. `QA BRANCH
120 SO. SPRING ST.
LOS ANGELES, CA 90012
PHONE (213) 897-6536
FAX (213) 897-1337
E-Mail:NersesYerjanian@dot.ca.gov

RECEIVED
OCT 2 7 2003
CITY OF IRWINDALE
PLANNING DEPARTMENT

*Flex your power!*
*Be energy efficient!*

Mr. Reuben Areceo
City of Irwindale
5050 N. Irwindale Ave.
Irwindale, CA. 91706

IGR/CEQA# 031054NY
NOP/United Rock Products Aggregate Mining Plan
SCH#2003101088
LA/605/23.52

October 22, 2003

Dear Mr. Areceo:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the United Rock Products Aggregate Mining Plan.

Based on the information received, and to assist us in our efforts to completely evaluate and assess the impacts of this project on the State transportation system, a traffic study in advance of the DEIR should be prepared to analyze the following information:

Please reference the Department's **Traffic Impact Study Guideline** on the Internet at http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/reports/tisguide.pdf

1. Presentations of assumptions and methods used to develop trip generation, trip distribution, choice of travel mode, and assignments of trips to state route 605.

2. Consistency of project travel modeling with other regional and local modeling forecasts and with travel data. The IGR/CEQA office may use indices to check results. Differences or inconsistencies must be thoroughly explained.

3. Analysis of ADT, AM, and PM peak-hour volumes for both existing and future conditions in the affected area. This should include freeways, interchanges, and intersections, and all HOV facilities. Interchange Level of Service should be

specified (HCM2000 method requested). Utilization of transit lines and vehicles, and of all facilities, should be realistically estimated. Future conditions would include build-out of all projects (see next item) and any plan-horizon years.

4. Inclusion of all appropriate traffic volumes. Analysis should include traffic from the project, cumulative traffic generated from all specific approved developments in the area, and traffic growth other than from the project and developments. That is, include: existing + project + other projects + other growth.

5. Discussion of mitigation measures appropriate to alleviate anticipated traffic impacts. These mitigation discussions should include, but not be limited to, the following:

- description of transportation infrastructure improvements
- financial costs, funding sources and financing
- sequence and scheduling considerations
- implementation responsibilities, controls and monitoring

Any mitigation involving transit, HOV, or TDM must be rigorously justified and its effects conservatively estimated. Improvements involving dedication of land or physical construction may be favorably considered.

6. Specification of developer's percent share of the cost, as well as a plan of realistic mitigation measures under the control of the developer. The ratio should be estimated, of additional traffic due to the project, to that amount of increase in traffic for which real mitigation must be provided (see Traffic Impact Study Guidelines). We note for purposes of determining project share of costs, the number of trips from the project on each traveling segment or element is estimated in the context of forecasted traffic volumes which include build-out of all approved and not yet approved projects, and other sources of growth. Analytical methods such as select-link travel forecast modeling might be used.

The Department as a commenting agency under CEQA has jurisdiction superceding that of MTA in identifying the freeway analysis needed for this project. Caltrans is responsible for obtaining measures that will off-set project vehicle trip generation that worsens Caltrans facilities and hence, it does not adhere to the CMP guide of 150 or more vehicle trips added before freeway analysis is needed. MTA's Congestion Management Program in acknowledging the Department's role, stipulates that Caltrans must be consulted to identify specific locations to be analyzed on the State Highway System.

We look forward to reviewing the DEIR. We expect to receive a copy from the State Clearinghouse. However, to expedite the review process, you may send two copies in advance to the undersigned at the following address:

Stephen Buswell
IGR/CEQA Branch Chief
Caltrans District 07
Regional Transportation Planning Office
120 S. Spring St., Los Angeles, CA 90012

If you have any questions regarding this response, please call the Project Engineer/Coordinator Mr. Yerjanian at (213) 897-6536 and refer to IGR/CEQA # 031054NY.

Sincerely,

STEPHEN J. BUSWELL
IGR/CEQA Branch Chief
Transportation Planning Office

MainSanGabrielBasin
WATERMASTER

725 North Azusa Avenue
Azusa, CA 91702
(626) 815-1300 FAX (626) 815-1303

DATE: February 18, 2003

TO:

Name: Vicente Mas

Company: City of Irwindale

Fax Number:

FROM:

Name: Mark Velazquez for Carol Williams

We are transmitting 18 page(s), including this page. If received material is incomplete or illegible, please call sender as soon as possible at (626) 815-1300.

Comments:

Mr. Mas – Attached are Watermaster's comments to the Notice of Preparation/Initial Study for Hanson Mining/Reclamation Plan.

Mark

Main San Gabriel Basin
WATERMASTER

February 13, 2003

Mr. Vicente Mas, Planning Associate
City of Irwindale
5050 N. Irwindale Avenue
Irwindale, CA 91706

RE: Notice of Preparation of Draft Environmental Impact Report
Hanson Aggregate Mining/Processing Operations and
Reclamation Plan

Dear Mr. Mas:

Thank you for furnishing the Main San Gabriel Basin Watermaster (Watermaster) with a copy of the Notice of Preparation (NOP) for the subject project and the Environmental Checklist form. Watermaster's response to these documents follows.

Watermaster's primary concern is the protection of the water quality of the groundwater basin. While Watermaster generally considers gravel mining operations to be consistent with Watermaster's basinwide water quality and water supply objectives, the proposal to allow gravel mining to extend from 200 feet below ground surface (bgs) to 350 feet bgs is a concern. The development and/or the enlargement of sand and gravel pits could increase the risk of future contamination, especially when the upper horizon of the area's groundwater table remains exposed for extended periods. If illegal, inadvertent and/or malicious dumping of contaminants were to occur, the public drinking water supply wells downstream of the site would be jeopardized.

If groundwater contamination were to occur, the required remediation could be extremely difficult and expensive. To minimize the risk of health hazards and to ensure appropriate cleanup efforts, the Draft Environmental Impact Report (DEIR) should address (1) methods to reduce risk of future contamination (site security), (2) monitoring programs, (3) emergency remedial measures in the event of contamination discharge and (4) establishment of financial assurances in the event the applicant becomes financially insolvent.

The NOP stated "Laboratory and field analysis in 1998 indicated that all wells meet California primary drinking water standards for organic and inorganic parameters except for aluminum...". Watermaster would like to point out that on May 2, 2000, five surface water samples apparently collected by the Department of Toxic Substance Control from the quarry lake were all determined to contain the contaminant Methyl-tert-butyl ether (MTBE) ranging from 1.8 to 4.5 micrograms per liter (ug/l), see Attachment A (The

Maximum Contaminant Level for MTBE is 13 ug/l). The DEIR should address the efforts to identify the potential source(s) that contributed to the MTBE contamination and preventative measures to eliminate any further exposure of the quarry lake to contaminants.

The reclamation plan for this pit is also very important. The NOP discussed the possible use of the exposed groundwater as a recreational lake once the gravel mining is discontinued. Watermaster has reservations about subjecting the exposed groundwater to contamination from restricted or unrestricted recreation activities. As a potential recreation lake, there are a multitude of potential activities that may jeopardize water quality. Watermaster previously provided the City of Irwindale with recommendations concerning the reclamation of gravel pits in a letter dated October 19, 1998, which is included as Attachment B for your use.

We appreciate the opportunity of reviewing the NOP and look forward to receiving the DEIR. If you have any questions, please feel free to call me.

Sincerely,

For

Carol Williams
Executive Officer

cc: Stetson Engineers Inc.

# ATTACHMENT A

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

1

RECEIVED
00 MAY -4 PM 1:33
CALIFORNIA REGIONAL WATER
QUALITY CONTROL BOARD
LOS ANGELES REGION

## CASE NARRATIVE

1. THIS ANALYTICAL REPORT PACKAGE WAS PREPARED FOR SCL SAMPLE(S) 18424-18425, 18427-18429

2. SAMPLES WERE COLLECTED ON 4/27/00 AT HANSON

3. COLLECTOR'S NAME ON THE SAMPLE ANALYSIS REQUEST FORM IS DAVID RASMUSSEN

4. SAMPLES WERE:

   RECEIVED ON 4/27/00 BY HAZARDOUS MATERIALS LABORATORY-SO. CAL

   EXTRACTED AND ANALYZED ON 4/28/00 BY EPA METHOD 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

   DATA PACKAGE WAS COMPLETED ON 5/2/00

5. DURING THE COURSE OF THESE ANALYSES, NO MAJOR PROBLEMS WERE ENCOUNTERED. SAMPLE 18426 WAS LOST BY ACCIDENT.

6. QC PARAMETERS/INDICATORS WERE WITHIN CONTROL LIMITS.

7. INSTRUMENT INITIAL CALIBRATION & CONTINUING CALIBRATION CRITERIA WERE MET.

8. SAMPLE HOLDING TIME WAS MET.

2

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

# INDEX

EPA 8260 FOR SAMPLE (S) 18424-18425, 18427-18429

| | | PAGE |
|---|---|---|
| 1. | CASE NARRATIVE | 1 |
| 2. | INDEX | 2 |
| 3. | HAZARDOUS MATERIALS SAMPLE ANALYSIS REQUEST FORMS | 3 |
| 4. | LABORATORY ANALYTICAL REPORT (S) | 4 - 9 |
| | QC REPORT FOR a. Sample Duplicate Analysis<br>b. Matrix Spike/Matrix Spike Duplicate Analysis | 10 |
| 6. | QC REPORT FOR SURROGATE SPIKE % RECOVERY | 11 |

TOTAL PAGES = 11

State of California-California Environmental Protection Agency

Department of Toxic Substances Control
Hazardous Materials Laboratory

# HAZARDOUS MATERIALS SAMPLE ANALYSIS REQUEST

1. Authorization Number: S C P 4 1 1 8

HML No. To:

2. Page of

3. Requestor: David Rasmussen

4. Phone: (213) 576-6811

5. Address (To Receive Results): RWQCB 320 W. 4th St. #200 LA, CA 90013

6. FAX (213) 576-6717

7. TAT Level: (check one) 1 2 3 4

*Unit Chief's Signature

8. Date Sampled: 4-27-00

9. Codes (fill in all applicable codes)
a. Office
b. INDEX
c. PCA
d. MPC
e. SITE
f. County

10. Activity: ☐ SCD ☐ SRPD ☐ SMB ☐ FPB ☐ SPPT ☐ ER/CL ☒ Others

11. SAMPLING LOCATION
a. EPA ID No.
b. Site: Hanson
c. Address: 13550 Live Oak Ave Irwindale

12. SAMPLES:

| a. ID | b. Collector's No. | c. Lab No. | Sample d. Type | Container e. Type | Container f. Size | g. Field Information |
|---|---|---|---|---|---|---|
| A | VC960429 | 18424 | WATER | 40 ML | 40 ML | HANSON QUARRY SITE |
| B | VC981211 | 18425 | ↓ | ↓ | ↓ | ↓ |
| C | VT980406 | 18426X | ↓ | ↓ | ↓ | ↓ |
| D | VT990527 | 18427 | ↓ | ↓ | ↓ | BOAT RAMP |
| E | VT981210 | 18428 | ↓ | ↓ | ↓ | ↓ |
| F | VC970515 | 18429 | ↓ | ↓ | ↓ | ↓ |

13. ANALYSIS REQUESTED: (X desired analysis and enter I.D.'s from 12.a.)

| NORGANIC ANALYSIS | Sample(s) ID |
|---|---|
| Metals Scan (6010) | |
| Metal(s) Specific: | |
| WET | |
| pH | |
| Cyanides | |
| (others, write in) | |
| (others, write in) | |
| TCLP Analysis (see footnotes) (only if necessary) (do TCLP regardless) | |
| Metals | |
| Mercury | |
| Volatiles | |
| Semivolatiles | |
| (others, write in) | |

| ORGANIC ANALYSIS | Sample(s) ID |
|---|---|
| CL-Pest (8081) | |
| OP-Pest (8141) | |
| PCBs (8082) | |
| G R O (8015B) | |
| D R O/ Motor Oil (HML-816) | |
| n-Hexane Extractables (1664) | |
| Flash Point (1020) | |
| X VOCs including BTEX (8260) MTBE | A-F |
| SVOCs (8270) | |
| PAHs (8270) | |
| (others, write in) | |
| (others, write in) | |
| (others, write in) | |

14. Analysis Objective: (check box) ☒ Drinking H2O Standards (applied to DW only) ☐ Treatment Standards ☐ Waste Characterization ☐ PRGs ☐ Others (contact Lab supervisors if needed)

15. Detection Limit Requirements: (Specify if known and contact lab)

16. SUPPLEMENTAL REQUESTS ☐ ☐ ☐ ☐ Initials Date

17. CHAIN OF CUSTODY

a. [signature] Signature — Janice Wekakuwa Name/Title — 4/27/00 Inclusive Dates

[signature] Signature — Dave Rasmussen Name/Title — ES II 4/27/00 Inclusive Dates

c. Signature — Name/Title — Inclusive Dates

18. LAB REMARKS:

FIELD

DEPARTMENT OF TOXIC SUBSTANCE CONT
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

4



REQUESTER: DAVID RASMUSSEN

SCL NO. 18424-18425,18427-18428

SAMPLE LOCATION: HANSON
13530 LIVE OAK AVE., IRWINDALE
RIVERSIDE 92509

DATE REPORTED: 5/2/00

METHOD(S): EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

**VOCs BY GC/MS**

| | SCL NO. | | 18424 | 18425 | 18427 | 18428 | DETECTION LIMIT | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | COL. NO. | METHOD BLANK | VC9604 29 | VC9812 11 | VT9905 27 | VT9812 10 | METHOD BLANK | 18424 | 18425 | 18427 | 18428 |
| | MATRIX | WATER | WATER | WATER | WATER | WATER | | | | | |
| ANALYTE | UNIT | UG/L | UG/L | UG/L | UG/L | UG/L | UG/L | UG/L | UG/L | UG/L | UG/L |
| FREON-12 | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| CHLOROMETHANE (SPCC) | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| VINYL CHLORIDE (CCC6) | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| METHYL BROMIDE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| CHLOROETHANE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| FREON-11 | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| ACETONE | | ND | ND | ND | ND | ND | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 1,1-DICHLOROETHENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| METHYLENE CHLORIDE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| trans-1,2-DICHROETHENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 1,1-DICHLOROETHANE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 2-BUTANONE (MEK) | | ND | ND | ND | ND | ND | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| cis-1,2-DICHLOROETHENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 2,2-DICHLOROPROPANE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| CHLOROFORM | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| BROMOCHLOROMETHANE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 1,1,1-TRICHLOROETHANE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 1,2 DICHLOROETHANE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| BENZENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 1,1-DICHLOROPROPENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| MTBE | | ND | 1.8 | 1.8 | 4.2 | 4.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| CARBONTETRACHLORIDE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |

NOTES: ND = NOT DETECTED UG = MICROGRAM MG = MILLIGRAM

QUANTITATION LIMIT (QL) = (CONCENTRATION OF LOWEST CALIBRATION STANDARD) X (DILUTION FACTOR)

* = ANALYTE WAS QUANTITATED BELOW THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE.

~ = ANALYTE WAS QUANTITATED ABOVE THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE.

ANALYST

INGE ANG 5/3/00
DATE

SUPERVISOR

RUSS CHIN 5/3/00
DATE

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

5



SCL NO.: 18424-18425, 18427 - 18428

## VOCs BY GC/MS

| | SCL NO. | | 18424 | 18425 | 18427 | 18428 | DETECTION LIMIT | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | COL. NO. | METHOD BLANK | VC9604 29 | VC9812 11 | VT9905 27 | VT9812 10 | METHOD BLANK | 18424 | 18425 | 18427 | 18428 |
| | MATRIX | WATER | WATER | WATER | WATER | WATER | | | | | |
| ANALYTE | UNIT | UG/L | UG/L | UG/L | UG/L | UG/L | UG/L | UG/L | UG/L | UG/L | UG/L |
| 1,2-DICHLOROPROPANE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| TRICHLOROETHENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| DIBROMOMETHANE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| BROMODICHLOROMETHANE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 4-METHYL-2-PENTANONE (MIBK) | | ND | ND | ND | ND | ND | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 1,1,2-TRICHLOROETHANE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| TOLUENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 2-HEXANONE (MBK) | | ND | ND | ND | ND | ND | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 1,3-DICHLOROPROPANE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| DIBROMOCHLOROMETHANE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 1,2-DIBROMOETHANE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| TETRACHLOROETHENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| CHLOROBENZENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 1,1,1,2-TETRACHLOROETHANE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| ETHYLBENZENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| M & P - XYLENES | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| BROMOFORM | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| STYRENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| O - XYLENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 1,1,2,2-TETRACHLOROETHANE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 1,2,3-TRICHLOROPROPANE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| ISOPROPYLBENZENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| BROMOBENZENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |

NOTES: ND = NOT DETECTED UG = MICROGRAM MG = MILLIGRAM

QUANTITATION LIMIT (QL) = (CONCENTRATION OF LOWEST CALIBRATION STANDARD) X (DILUTION FACTOR)

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~ = ANALYTE WAS QUANTITATED ABOVE THE ESTABLISHED LINEAR CALIBRATION RANGE. AMOUNT REPORTED IS AN ESTIMATE.

ANALYST

INGE ANG 9/3/00
DATE

SUPERVISOR

RUSS CHIN 9/3/0
DATE

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

6



SCL NO.: 18424-18426, 18427-18428

## VOCs BY GC/MS

| | SCL NO. | | 18424 | 18425 | 18427 | 18428 | DETECTION LIMIT | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | COL. NO. | METHOD BLANK | VO9804 29 | VO9812 11 | VT9805 27 | VT9812 10 | METHOD BLANK | 18424 | 18425 | 18427 | 18428 |
| | MATRIX | WATER | WATER | WATER | WATER | WATER | | | | | |
| ANALYTE | UNIT | UG/L | UG/L | UG/L | UG/L | UG/L | UG/L | UG/L | UG/L | UG/L | UG/L |
| 2-CHLOROTOLUENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| N-PROPYLBENZENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 4-CHLOROTOLUENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 1,3,5-TRIMETHYLBENZENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| TER-BUTYLBENZENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 1,2,4-TRIMETHYLBENZENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 1,3-DICHLOROBENZENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| SEC-BUTYLBENZENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 1,4-DICHLOROBENZENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| P-ISOPROPYLTOLUENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 1,2-DICHLOROBENZENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| N-BUTYLBENZENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 1,2,4-TRICHLOROBENZENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| NAPHTHALENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 1,2,3-TRICHLOROBENZENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| HEXACHLOROBUTADIENE | | ND | ND | ND | ND | ND | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| TENTATIVELY IDENTIFIED COMPOUNDS: | | NONE DETECTED | | | | | | | | | |

NOTES: ND = NOT DETECTED UG = MICROGRAM MG = MILLIGRAM

QUANTITATION LIMIT (QL) = (CONCENTRATION OF LOWEST CALIBRATION STANDARD) X (DILUTION FACTOR)

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ANALYST

INGE ANG DATE

SUPERVISOR

RUSS CHIN DATE 5/3/00

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

7



REQUESTER: DAVID RASMUSSEN

SCL NO. 18429

SAMPLE LOCATION: HANSON
13550 LIVE OAK AVE., IRWINDALE
RIVERSIDE 92509

DATE REPORTED: 5/2/00

METHOD(S): EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

VOCs BY GC/MS

| | SCL NO. | | 18429 | | | | DETECTION LIMIT | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | COL. NO. | METHOD BLANK | VC970515 | | | | METHOD BLANK | 18429 | | | |
| | MATRIX | WATER | WATER | | | | | | | | |
| ANALYTE | UNIT | UG/L | UG/L | | | | UG/L | UG/L | | | |
| FREON-12 | | ND | ND | | | | 0.5 | 0.5 | | | |
| CHLOROMETHANE (SFCC1) | | ND | ND | | | | 0.5 | 0.5 | | | |
| VINYL CHLORIDE (CCC6) | | ND | ND | | | | 0.5 | 0.5 | | | |
| METHYL BROMIDE | | ND | ND | | | | 0.5 | 0.5 | | | |
| CHLOROETHANE | | ND | ND | | | | 0.5 | 0.5 | | | |
| FREON-11 | | ND | ND | | | | 0.5 | 0.5 | | | |
| ACETONE | | ND | ND | | | | 5.0 | 5.0 | | | |
| 1,1-DICHLOROETHENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| METHYLENE CHLORIDE | | ND | ND | | | | 0.5 | 0.5 | | | |
| trans-1,2-DICHROETHENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| 1,1-DICHLOROETHANE | | ND | ND | | | | 0.5 | 0.5 | | | |
| 2-BUTANONE (MEK) | | ND | ND | | | | 5.0 | 5.0 | | | |
| cis-1,2-DICHLOROETHENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| 2,2-DICHLOROPROPANE | | ND | ND | | | | 0.5 | 0.5 | | | |
| CHLOROFORM | | ND | ND | | | | 0.5 | 0.5 | | | |
| BROMOCHLOROMETHANE | | ND | ND | | | | 0.5 | 0.5 | | | |
| 1,1,1-TRICHLOROETHANE | | ND | ND | | | | 0.5 | 0.5 | | | |
| 1,2 DICHLOROETHANE | | ND | ND | | | | 0.5 | 0.5 | | | |
| BENZENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| 1,1-DICHLOROPROPENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| MTBE | | ND | 4.3 | | | | 0.5 | 0.5 | | | |
| CARBONTETRACHLORIDE | | ND | ND | | | | 0.5 | 0.5 | | | |

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ANALYST

INGE ANG DATE 5/3/00

SUPERVISOR

RUSS CHIN DATE 5/3/00

8

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795



SCL NO.: 18429

## VOCs BY GC/MS

| | | | | | | | DETECTION LIMIT | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | SCL NO. | | 18429 | | | | | 18429 | | | |
| | COL. NO. | METHOD BLANK | VC970515 | | | | METHOD BLANK | | | | |
| | MATRIX | WATER | WATER | | | | | | | | |
| ANALYTE | UNIT | UG/L | UG/L | | | | UG/L | UG/L | | | |
| 1,2-DICHLOROPROPANE | | ND | ND | | | | 0.5 | 0.5 | | | |
| TRICHLOROETHENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| DIBROMOMETHANE | | ND | ND | | | | 0.5 | 0.5 | | | |
| BROMODICHLOROMETHANE | | ND | ND | | | | 0.5 | 0.5 | | | |
| 4-METHYL-2-PENTANONE (MIBK) | | ND | ND | | | | 5.0 | 5.0 | | | |
| 1,1,2-TRICHLOROETHANE | | ND | ND | | | | 0.5 | 0.5 | | | |
| TOLUENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| 2-HEXANONE (MBK) | | ND | ND | | | | 5.0 | 5.0 | | | |
| 1,3-DICHLOROPROPANE | | ND | ND | | | | 0.5 | 0.5 | | | |
| DIBROMOCHLOROMETHANE | | ND | ND | | | | 0.5 | 0.5 | | | |
| 1,2-DIBROMOETHANE | | ND | ND | | | | 0.5 | 0.5 | | | |
| TETRACHLOROETHENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| CHLOROBENZENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| 1,1,1,2-TETRACHLOROETHANE | | ND | ND | | | | 0.5 | 0.5 | | | |
| ETHYLBENZENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| M & P - XYLENES | | ND | ND | | | | 0.5 | 0.5 | | | |
| BROMOFORM | | ND | ND | | | | 0.5 | 0.5 | | | |
| STYRENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| O - XYLENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| 1,1,2,2-TETRACHLOROETHANE | | ND | ND | | | | 0.5 | 0.5 | | | |
| 1,2,3-TRICHLOROPROPANE | | ND | ND | | | | 0.5 | 0.5 | | | |
| ISOPROPYLBENZENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| BROMOBENZENE | | ND | ND | | | | 0.5 | 0.5 | | | |

NOTES: ND = NOT DETECTED UG = MICROGRAM MG = MILLIGRAM

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ANALYST

INGE ANG 9/10 DATE

SUPERVISOR

RUSS CHIN 5/3/00 DATE

DEPARTMENT OF TOXIC SUBSTANCE CONTROL
HAZARDOUS MATERIALS LABORATORY-SOUTHERN CALIFORNIA
1449 W. TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5705

9



SCL NO.: 18429

## VOCs BY GC/MS

| | SCL NO. | | 18429 | | | | DETECTION LIMIT | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | COL. NO. | METHOD BLANK | VC970515 | | | | METHOD BLANK | 18429 | | | |
| | MATRIX | WATER | WATER | | | | | | | | |
| ANALYTE | UNIT | UG/L | UG/L | | | | UG/L | UG/L | | | |
| 2-CHLOROTOLUENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| N-PROPYLBENZENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| 4-CHLOROTOLUENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| 1,3,5-TRIMETHYLBENZENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| TER-BUTYLBENZENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| 1,2,4-TRIMETHYLBENZENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| 1,3-DICHLOROBENZENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| SEC-BUTYLBENZENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| 1,4-DICHLOROBENZENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| P-ISOPROPYLTOLUENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| 1,2-DICHLOROBENZENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| N-BUTYLBENZENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| 1,2,4-TRICHLOROBENZENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| NAPHTHALENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| 1,2,3-TRICHLOROBENZENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| HEXACHLOROBUTADIENE | | ND | ND | | | | 0.5 | 0.5 | | | |
| TENTATIVELY IDENTIFIED COMPOUNDS: | | NONE DETECTED | | | | | | | | | |

NOTES: ND = NOT DETECTED UG = MICROGRAM MG = MILLIGRAM

QUANTITATION LIMIT (QL) = (CONCENTRATION OF LOWEST CALIBRATION STANDARD) X (DILUTION FACTOR)

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ANALYST

INGE ANG 9/3/00
DATE

SUPERVISOR

RUSS CHIN 9/3/00
DATE

10

QUALITY CONTROL (QC) REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580 - 6785

REQUESTER: DAVID RASMUSSEN

DATE SAMPLE RECEIVED: 18424-18426, 18427-18428

SAMPLING LOCATION: HANSON
13530 LIVE OAK AVE., IRWINDALE
RIVERSIDE, 92509

DATE SAMPLE ANALYZED: 4/28/00

METHOD(S): EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

## QC REPORT FOR SAMPLE DUPLICATE ANALYSIS

PERFORMED ON SCL NO.: 18427, 18428

[X] NOT ANALYZED (SEE NOTES)

TYPE OF MATRIX: WATER

| ANALYTE | SAMPLE UG/L | SAMPLE DUPLICATE UG/L | AVERAGE UG/L | REL % DIFF(R&D) % | CONTROL LIMIT % |
|---|---|---|---|---|---|
| MTBE | 4.2 | 4.5 | 4.35 | 6.9 | 0-25 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

## QC REPORT FOR MATRIX SPIKE(MS)/MATRIX SPIKE DUPLICATE(MSD) PERCENT RECOVERY

MATRIX SPIKE PERFORMED ON

[X] NOT ANALYZED SEE NOTES

TYPE OF MATRIX

| COMPOUND | AMOUNT OF ANALYTE IN SAMPLE MG/KG | AMOUNT OF ANALYTE ADDED MG/KG | MATRIX SPIKE AMOUNT RECOVERED MG/KG | MATRIX SPIKE %REC % | MATRIX SPIKE DUPLICATE AMOUNT RECOVERED MG/KG | MATRIX SPIKE DUPLICATE %REC % | AVE % REC % | CONTROL LIMITS FOR % REC % | R % D BETWEEN MS/MSD % | CONTROL LIMITS FOR RPD % |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-DICHLOROETHENE | <1 | 10 | | | | | | | | <25 |
| TRICHLOROETHENE | <1 | 10 | | | | | | | | <25 |
| CHLOROBENZENE | <1 | 10 | | | | | | | | <25 |
| TOLUENE | <1 | 10 | | | | | | | | <25 |
| BENZENE | <1 | 10 | | | | | | | | <25 |

NOTES: NDY = NOT DETERMINED YET.
X = MS/MSD WERE NOT ANALYZED. SAMPLES WERE TREATED AS INDIVIDUAL SAMPLES AND ANALYZED SEPARATELY BASED ON THE COLLECTOR'S NO. GIVEN.

ANALYST

INGE ANG DATE

SUPERVISOR

RUSS CHIN 5/3/00 DATE

11

QUALITY CONTROL (QC) REPORT
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
HAZARDOUS MATERIALS LABORATORY - SOUTHERN CALIFORNIA
1449 WEST TEMPLE STREET, LOS ANGELES, CA 90026
TELEPHONE (213) 580-5795

REQUESTER: DAVID RASMUSSEN

DATE SAMPLE RECEIVED: 4/27/00

SAMPLING LOCATION: HANSON
13860 LIVE OAK AVE.,
IRWINDALE

DATE SAMPLE ANALYZED: 4/28/00

METHODS: EPA 8260 VOLATILE ORGANIC COMPOUNDS BY GC/MS

## QC REPORT FOR SURROGATE SPIKE % RECOVERY

| | DIBROMOFLUOROETHANE | | | TOLUENE - D8 | | | 4 - BROMOFLUOROBENZENE | | |
|---|---|---|---|---|---|---|---|---|---|
| | ADDED | RECOVERED | | ADDED | RECOVERED | | ADDED | RECOVERED | |
| QC/SAMPLES / SAMPLE NO. | UG/L | UG/L | % REC | UG/L | UG/L | % REC | UG/L | UG/L | % REC |
| BLANK | 10 | 10.1 | 101 | 10 | 10 | 100 | 10 | 10.0 | 100 |
| SCL 18424 | 10 | 10.1 | 101 | 10 | 10.1 | 101 | 10 | 9.8 | 98 |
| SCL 18425 | 10 | 10.2 | 102 | 10 | 10 | 100 | 10 | 9.9 | 99 |
| SCL 18427 | 10 | 10.5 | 105 | 10 | 9.9 | 99 | 10 | 9.9 | 99 |
| SCL 18429 | 10 | 10.3 | 103 | 10 | 9.8 | 98 | 10 | 9.9 | 99 |
| SCL 18428 | 10 | 10 | 100 | 10 | 10 | 100 | 10 | 9.9 | 99 |
| | | | | | | | | | |
| | | | | | | | | | |
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| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| CONTROL LIMIT FOR %REC | 71.8 - 107 | | | 72.9 - 130 | | | 80.5 - 103 | | |

NOTES:

ANALYST

INGE ANG 5/3/00 DATE

SUPERVISOR

RUSS CHIN 5/3/00 DATE

# ATTACHMENT B

Main San Gabriel Basin
WATERMASTER

October 19, 1998

RECEIVED
OCT 21 1998
STETSON ENGINEERS INC.

Ms. Jennifer A. Lilley
Project Planner
City of Irwindale
5050 North Irwindale Avenue
Irwindale, CA 91706

Subject: Reclamation of Gravel Pits

Dear Ms. Lilley:

Thank you for your letter concerning quarry sites within the City of Irwindale. The Main San Gabriel Basin Watermaster appreciates your efforts to include our comments and concerns in your evaluation process.

Watermaster has been and continues to be involved with the protection and preservation of surface and groundwater quality in the San Gabriel Valley. Watermaster's involvement is very broad and includes basin management plans for water supply and water quality, identification and implementation of groundwater contamination clean-up projects, contaminant migration modeling studies, and technical review of existing and proposed projects that may pose a threat to surface and/or groundwater quality. Therefore, the existing quarry sites and their proposed reclamation plans are a serious concern for Watermaster.

One common reclamation option involves filling the site with waste material. Watermaster has taken a strong position opposing proposed landfills, except those that will accept only inert material. This position is stated in Watermaster's Resolution No. 3-88-57, regarding operation of inert waste landfills in former or existing quarry sites. Watermaster also diligently opposed the Azusa Land Reclamation Landfill and succeeded in closing it to municipal solid waste.

The potential use of quarry sites for recreational lakes poses a unique set of concerns and issues. Generally, any exposure of the groundwater in quarry or other sites presents serious concerns with water quality protection. Groundwater would no longer be protected by a substantial depth of soil cover, which would otherwise provide a safety margin for accidental or intentional contamination.

725 North Azusa Avenue • Azusa, California 91702 • Telephone (626) 815-1300 • Fax (626) 815-1303
http://www.watermaster.org

A controlled recreational use may be acceptable, providing adequate levels of monitoring and protection programs are implemented. The use of quarry sites for diversion and storage of excess storm runoff for water conservation purposes is another common use.

If recreational uses are proposed, the following general concerns must be considered during the review process:

1. No body contact permitted.
2. Self-contained restroom facilities with off-site disposal.
3. No oil, gas or petroleum products on site.
4. Fishing boats limited to electric motor, oars or paddles. No jet skis or other types of recreational watercraft.
5. No concession facilities below natural grade.
6. Entire site fenced with 24-hour security provided.
7. Develop and implement a water quality monitoring program.
8. Post a security bond to guarantee the remediation of any future contamination impacts.

You should be aware that the groundwater levels in this portion of the basin have varied as much as 90 to 100 feet, depending upon hydrologic conditions.

If you have any questions or if you have any concerns regarding a plan for quarry site reclamation, please contact me at (626) 815-1300 to set up a meeting to further discuss Watermaster concerns.

Sincerely,

MAIN SAN GABRIEL BASIN WATERMASTER

Carol Williams
Executive Officer

CW/jw

bcc: Stetson Engineers

# APPENDIX B
## Notice of Public Scoping Meeting for EIR

# SCOPING MEETING NOTICE

## ENVIRONMENTAL IMPACT REPORT FOR UNITED AGGREGATE MINING/PROCESSING OPERATIONS AND RECLAMATION PLANS FOR PITS 2 AND 3

The City of Irwindale is beginning the process of preparing the Environmental Impact Report (EIR) for a proposed extension of time and depth for mining activities and for the adoption of Reclamation Plans for United Rock Pits 2 and 3. Members of the public and responsible agencies are invited to attend a Scoping Meeting for the EIR. The purpose of the meeting is to: provide information on the EIR process and a brief explanation of the project to interested parties, and to get their feedback on the proposed list of environmental topics and alternatives to be addressed in the EIR. Written and oral comments on the scope of the EIR will be accepted at the meeting.

**Date and Time:** November 19, 2003, at 6:30 p.m.

**Location:** City Council Chamber
City of Irwindale
5050 N. Irwindale Avenue
Irwindale, CA 91706

The City issued a Notice of Preparation and Initial Study (NOP/IS) with the preliminary scope for the EIR on October 17, 2003. Copies of NOP/IS are available for review in the Planning Department, at the scoping meeting, or are available upon request from the Planning Department at the above address or by contacting Cathy Huicochea, Planning Department Secretary, at the Planning Counter or at (626) 430-2208. For information on the EIR and the Scoping Meeting, please contact Vicente L. Mas, Planning Associate, at (626) 430-2209.

**IRWINDALE COUNCIL CHAMBER**
**5050 N. IRWINDALE AVENUE**
**IRWINDALE, CALIFORNIA 91706**

**NOVEMBER 19, 2003**
**THURSDAY**
**6:40 P.M.**

# UNITED ROCK PRODUCTS CORPORATION
# MODIFICATION NO. 2-02 TO CONDITIONAL USE PERMIT NO. 3-92
# ENVIRONMENTAL IMPACT REPORT
# SCOPING MEETING

Present: Interim Director of Planning Vicente Mas, City Attorney Fred Galante, Planning Secretary Cathy Huicochea, EIR Consultant Dr. Susan O'Carroll, and EIR Consultant John Coy.

The United Rock Scoping Meeting was convened by City Attorney Fred Galante at the above time and place for the purpose of providing members of the public and responsible agencies with information on the Environmental Impact Report (EIR) process for United Rock's mining/processing operations and reclamation plans for Pits 2 and 3. City Attorney Galante provided a brief overview of the project before turning the meeting over to Dr. Susan O'Carroll. Dr. O'Carroll provided a power point presentation which covered an explanation of the EIR process and the preliminary scope of the EIR. (Copies of the power point presentation and the Scoping Meeting Notice are attached.)

Upon completion of the presentation, the meeting was opened for public input. Since there were no members of the general public or responsible agencies present, City Attorney Galante adjourned the meeting at 6:55 p.m.

Attest: Vicente L. Mas Date: 11/20/03

Vicente L. Mas,
Interim Director of Planning

# APPENDIX C
## EIR Distribution List

Michael A. Martin, Director of Planning
City of Alhambra
Dev ment Services Dept.
th First Street
A. nbra, CA 91801

Roy Bruckner
Community Development Director
City of Azusa
Planning Division
213 East Foothill Blvd.
Azusa, CA 91702

David Meyer, Planning Director
City of Bradbury
600 Winston Avenue
Bradbury, CA 91010

Ed Cox, Director
City of Duarte
Planning Department
1600 East Huntington Drive
Duarte, CA 91010

Stan Wong, Director
City of Glendora
Dept. of Planning & Redevelopment
116 st Foothill Blvd.
G a, CA 91741

Donald R. Hooper, Asst. City Manager
City of Monrovia
Community Development Dept.
Planning Division
415 South Ivy Avenue
Monrovia, CA 91016-2888

Larry Stevens, Director of Planning
City of San Dimas
Planning Division
245 East Bonita Avenue
San Dimas, CA 91773

Don Penman, Deputy City Manager
City of Arcadia
240 W. Huntington Drive
Arcadia, CA 91007

Amy Harbin, City Planner
City of Baldwin Park
Planning Division
14403 East Pacific Ave., 2nd Floor
Baldwin Park, CA 91706

H dford, City Planner
City of Covina
Planning Division
125 East College Street
Covina, CA 91723-2199

James Troyer
City of El Monte
Planning Division
11333 Valley Blvd.
El Monte, CA 91731

Peter Lyons, Director of Planning
City of Rosemead
Planning Department
8838 East Valley Blvd.
Rosemead, CA 91770

John Ornelas, Deputy City Manager
City of San Gabriel
Planning Department
425 South Mission Drive
San Gabriel, CA 91776

David L. Saldana, Director of Planning
City of San Marino
Department of Planning & Building
2200 Huntington Drive
San Marino, CA 91108

Douglas N. McIsaac
Director of Planning
City of West Covina
1444 West Garvey Avenue South
West Covina, CA 91793

Calif. Regional Water Quality Control Board
Los Angeles Region
Attn: Landfill Unit
101 Centre Plaza Drive
Monterey Park, CA 91754-2156

Richard Hanson, Director
County of Los Angeles
Department of Health Services
Solid Waste Management Program
5050 Commerce Drive
Baldwin Park, CA 91706

Henry Hogo, Planning Manager
South Coast Air Quality Mgmt. District
21867 East Copley Drive
P.O. Box 4939
Diamond Bar, CA 91765-4182

Carol Williams, Executive Officer
Main San Gabriel Basin Watermaster
725 North Azusa Avenue
Azusa, CA 91702

L.A. County Dept. of Public Works
Attn: Building & Safety
125 South Baldwin Avenue
Arcadia, CA 91007

County of Los Angeles
Department of Health Services
5050 Commerce Drive
Baldwin Park, CA 91706

California Dept. of Health Services
601 North 7th Street, MS 92
P.O. Box 942732
Sacramento, CA 94234-7320

County of Los Angeles Fire Dept.
1320 North Eastern Avenue
Los Angeles, CA 90063

Robert Dawson, Director of Planning
City of Temple City
Planning Department
9701 Las Tunas Drive
Temple City, CA 91780

Office of Planning & Research
State Clearinghouse
1400 Tenth Street
Sacramento, CA 98512-3044

Raymond M. Seamans
California Integrated Waste Mgmt. Board
Permitting & Enforcement Division
Environmental Review, Region 4
PO Box 4025
Sacramento, CA 95812-4025

Steven J. Buswell, Program Manager
(IGR/CEQA)
California Dept. of Transportation
District 7
120 South Spring Street
Los Angeles, CA 90012-2601

Frank Meneses, Section Head
County of Los Angeles
Department of Regional Planning
Impact Analysis Section
320 West Temple Street
Los Angeles, CA 90012

SCAG
Intergovernmental Review Section
818 West Seventh Street, 12th Floor
Los Angeles, CA 90017-3435

County of Los Angeles Fire Dept.
Fire Prevention Building
Plan Check Division
5823 Rickenbacker Road
Commerce, CA 90040-3027

L.A. Regional Water Quality
Control Board
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Azusa Water Department
213 E. Foothill Blvd.
Azusa, CA 91702

San Gabriel Basin
Water Quality Authority
858 Oak Park Road, Suite 200
Covina, CA 91724

Mark Grajeda
Valley County Water District
14521 Ramona Blvd.
Baldwin Park, CA 91706

Upper San Gabriel Valley
Municipal Water District
8366 E. Grand Avenue
Rosemead, CA 91770

Next Label for
Residential Assessments Only

Edward Butikofer
San Gabriel Valley Water Company
14404 Valley Blvd.
City of Industry, CA 91746

Ronald Murrey, Chief Business Official
Covina-Valley Unified School District
519 E. Badillo Street
Covina, CA 91723

Tom Ries
Southern California Water Company
115-121 Exchange Place
P.O. Box 9016
San Dimas, CA 91773

Lilly Cusick
5823 Rockenbacker Road
Room 123
Commerce, CA 90040-3027

Jackie Macleod
Cal American Water Company
2200 Huntington Drive
San Marino, CA 91108

U.S. Environmental Protection Agency
Office of Regional Counsel
75 Hawthorne Street
San Francisco, CA 94105

James F. Stahl
Chief Engineer & General Manager
Los Angeles County Sanitation District
P.O. Box 4998
Whittier, CA 90607

Los Angeles County Sanitation District
PO Box 4998
Whittier, CA 90607

David Fike
Monrovia Water Division
415 S. Ivy Avenue
Monrovia, CA 91016

# APPENDIX D
## SCAQMD Rule 403

(Adopted May 7, 1976)(Amended November 6, 1992)
(Amended July 9, 1993)(Amended February 14, 1997)
(Amended December 11, 1998)

## RULE 403. FUGITIVE DUST

(a) Purpose

The purpose of this rule is to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (man-made) fugitive dust sources by requiring actions to prevent, reduce or mitigate fugitive dust emissions.

(b) Applicability

The provisions of this rule shall apply to any activity or man-made condition capable of generating fugitive dust.

(c) Definitions

(1) ACTIVE OPERATIONS shall mean any activity capable of generating fugitive dust, including, but not limited to, earth-moving activities, construction/demolition activities, or heavy- and light-duty vehicular movement.

(2) ANEMOMETERS are devices used to measure wind speed and direction in accordance with the performance standards, and maintenance and calibration criteria as contained in the most recent Rule 403 Implementation Handbook, now or hereafter adopted by the Governing Board.

(3) BEST AVAILABLE CONTROL MEASURES represent fugitive dust control actions which are required to be implemented within the boundaries of the South Coast Air Basin. A detailed listing of best available control measures for each fugitive dust source type shall be as contained in the most recent Rule 403 Implementation Handbook, now or hereafter adopted by the Governing Board.

(4) BULK MATERIAL is sand, gravel, soil, aggregate material less than two inches in length or diameter, and other organic or inorganic particulate matter.

(5) CHEMICAL STABILIZERS mean any non-toxic chemical dust suppressant which must not be used if prohibited for use by the Regional Water Quality Control Boards, the California Air Resources Board, the U.S. Environmental Protection Agency (U.S. EPA), or any applicable law,

rule or regulation; and should meet any specifications, criteria, or tests required by any federal, state, or local water agency. Unless otherwise indicated, the use of a non-toxic chemical stabilizer shall be of sufficient concentration and application frequency to maintain a stabilized surface.

(6) CONSTRUCTION/DEMOLITION ACTIVITIES are any on-site mechanical activities preparatory to or related to the building, alteration, rehabilitation, demolition or improvement of property, including, but not limited to the following activities; grading, excavation, loading, crushing, cutting, planing, shaping or ground breaking.

(7) CONTINGENCY NOTIFICATION means that the U.S. EPA has determined and notified the District in writing that $PM_{10}$ contingency requirements must be implemented based on a finding that: (1) $PM_{10}$ and $PM_{10}$ precursor emissions reductions were less than required at any three-year milestone reporting interval, or (2) the region failed to attain the $PM_{10}$ standards within the time frames allotted under the Federal Clean Air Act, or (3) if as part of an Attainment/Maintenance Plan, the region is no longer in attainment of the $PM_{10}$ standards.

(8) CONTRACTOR means any person who has a contractual arrangement to conduct an active operation for another person.

(9) DISTURBED SURFACE AREA means a portion of the earth's surface which has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural soil condition, thereby increasing the potential for emission of fugitive dust. This definition excludes those areas which have:

(A) been restored to a natural state, such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby natural conditions;

(B) been paved or otherwise covered by a permanent structure; or

(C) sustained a vegetative ground cover over at least 95 percent of an area for a period of at least 6 months.

(10) DUST SUPPRESSANTS are water, hygroscopic materials, or non-toxic chemical stabilizers used as a treatment material to reduce fugitive dust emissions.

(11) EARTH-MOVING ACTIVITIES shall include, but not be limited to, grading, earth cutting and filling operations, loading or unloading of dirt or

bulk materials, adding to or removing from open storage piles of bulk materials, landfill operations, or soil mulching.

(12) FUGITIVE DUST means any solid particulate matter that becomes airborne, other than that emitted from an exhaust stack, directly or indirectly as a result of the activities of man.

(13) INACTIVE DISTURBED SURFACE AREA means any disturbed surface area upon which active operations have not occurred or are not expected to occur for a period of ten consecutive days.

(14) LARGE OPERATIONS means any active operations on property which contains in excess of 100 acres of disturbed surface area; or any earth-moving operation which exceeds a daily earth-moving or throughput volume of 7,700 cubic meters (10,000 cubic yards) three times during the most recent 365-day period.

(15) MEDIUM OPERATIONS means any active operations on property which contains between 50 and 100 acres of disturbed surface area; or any earth-moving operation with a daily earth-moving or throughput volume of between 3,850 cubic meters (5,000 cubic yards) and 7,700 cubic meters (10,000 cubic yards) three times during the most recent 365-day period.

(16) NON-ROUTINE means any non-periodic active operation which occurs no more than three times per year, lasts less than 30 cumulative days per year, and is scheduled less than 30 days in advance.

(17) OPEN STORAGE PILE is any accumulation of bulk material with 5 percent or greater silt content which is not fully enclosed, covered or chemically stabilized, and which attains a height of three feet or more and a total surface area of 150 or more square feet. Silt content level is assumed to be 5 percent or greater unless a person can show, by sampling and analysis in accordance with ASTM Method C-136 or other equivalent method approved in writing by the Executive Officer, the California Air Resources Board, and the U. S. EPA, that the silt content is less than 5 percent. The results of ASTM Method C-136 or equivalent method are valid for 60 days from the date the sample was taken.

(18) PARTICULATE MATTER means any material, except uncombined water, which exists in a finely divided form as a liquid or solid at standard conditions.

(19) PAVED ROAD means an improved street, highway, alley, public way, or easement that is covered by typical roadway materials excluding access

roadways that connect a facility with a public paved roadway and are not open to through traffic. Public paved roads are those open to public access and that are owned by any federal, state, county, municipal or any other governmental or quasi-governmental agencies. Private paved roads are any paved roads not defined as public.

(20) $PM_{10}$ is particulate matter with an aerodynamic diameter smaller than or equal to 10 microns as measured by the applicable State and Federal reference test methods.

(21) PROPERTY LINE means the boundaries of an area in which either a person causing the emission or a person allowing the emission has the legal use or possession of the property. Where such property is divided into one or more sub-tenancies, the property line(s) shall refer to the boundaries dividing the areas of all sub-tenancies.

(22) REASONABLY AVAILABLE CONTROL MEASURES are appropriate techniques and procedures used to prevent or reduce the emission and airborne transport of fugitive dust, outside the boundaries of the South Coast Air Basin. These include, but are not limited to, application of dust suppressants, use of coverings or enclosures, paving, enshrouding, planting, reduction of vehicle speeds, and other measures as specified by the Executive Officer. A detailed listing of reasonably available control measures for each fugitive dust source type shall be as contained in the most recent Rule 403 Implementation Handbook, now or hereafter adopted by the Governing Board.

(23) SILT means any aggregate material with a particle size less than 74 micrometers in diameter which passes through a No. 200 Sieve.

(24) SIMULTANEOUS SAMPLING means the operation of two $PM_{10}$ samplers in such a manner that one sampler is started within five minutes of the other, and each sampler is operated for a consecutive period which must be not less than 290 minutes and not more than 310 minutes.

(25) SOUTH COAST AIR BASIN means the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange County as defined in California Code of Regulations, Title 17, Section 60104. The area is bounded on the west by the Pacific Ocean, on the north and east by the San Gabriel, San Bernardino, and San Jacinto Mountains, and on the south by the San Diego county line.

(26) STABILIZED SURFACE means:

(A) any disturbed surface area or open storage pile which is resistant to wind-driven fugitive dust;

(B) any unpaved road surface in which any fugitive dust plume emanating from vehicular traffic does not exceed 20 percent opacity.

(27) UNPAVED ROADS are any unsealed or unpaved roads, equipment paths, or travel ways that are not covered by one of the following: concrete, asphaltic concrete, recycled asphalt, asphalt or other materials with equivalent performance as determined by the Executive Officer, the California Air Resources Board, and the U.S. EPA. Public unpaved roads are any unpaved roadway owned by Federal, State, county, municipal or other governmental or quasi-governmental agencies. Private unpaved roads are all other unpaved roadways not defined as public.

(28) VISIBLE ROADWAY DUST means any sand, soil, dirt, or other solid particulate matter which is visible upon paved road surfaces and which can be removed by a vacuum sweeper or a broom sweeper under normal operating conditions.

(29) WIND-DRIVEN FUGITIVE DUST means visible emissions from any disturbed surface area which is generated by wind action alone.

(30) WIND GUST is the maximum instantaneous wind speed as measured by an anemometer.

(d) Requirements

(1) A person shall not cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area such that the presence of such dust remains visible in the atmosphere beyond the property line of the emission source.

(2) A person conducting active operations within the boundaries of the South Coast Air Basin shall utilize one or more of the applicable best available control measures to minimize fugitive dust emissions from each fugitive dust source type which is part of the active operation.

(3) A person conducting active operations outside the boundaries of the South Coast Air Basin may utilize reasonably available control measures in lieu of best available control measures to minimize fugitive dust emissions from each fugitive dust source type which is part of the active operation.

(4) A person shall not cause or allow $PM_{10}$ levels to exceed 50 micrograms per cubic meter when determined, by simultaneous sampling, as the difference between upwind and downwind samples collected on high-volume particulate matter samplers or other U.S. EPA-approved equivalent method for $PM_{10}$ monitoring. If sampling is conducted, samplers shall be:

(A) Operated, maintained, and calibrated in accordance with 40 Code of Federal Regulations (CFR), Part 50, Appendix J, or appropriate U.S. EPA-published documents for U.S. EPA-approved equivalent method(s) for $PM_{10}$.

(B) Reasonably placed upwind and downwind of key activity areas and as close to the property line as feasible, such that other sources of fugitive dust between the sampler and the property line are minimized.

(5) Any person in the South Coast Air Basin shall:

(A) prevent or remove within one hour the track-out of bulk material onto public paved roadways as a result of their operations; or

(B) take at least one of the actions listed in Table 3 and:

(i) prevent the track-out of bulk material onto public paved roadways as a result of their operations and remove such material at anytime track-out extends for a cumulative distance of greater than 50 feet on to any paved public road during active operations; and

(ii) remove all visible roadway dust tracked-out upon public paved roadways as a result of active operations at the conclusion of each work day when active operations cease.

(e) Contingency Requirements

When a contingency notification has occurred, the requirements of this subdivision shall become effective in the county subject to the notification 60 days after the first publication date in newspapers of general circulation in that county. Such publication shall specify that a contingency notification has occurred, and that any person who conducts or authorizes the conducting of a medium operation shall be required to comply with the provisions of subdivision (f), in addition to the requirements of subdivision (d).

(f) Special Requirements for Large Operations, and Medium Operations Under a Contingency Notification

(1) Any person who conducts or authorizes the conducting of either a large operation which is subject to the requirements of this rule, or a medium operation under a contingency notification as set forth in subdivision (e), shall either:

(A) take the actions specified in Tables 1 and 2 for each applicable source of fugitive dust within the property lines and shall:

(i) notify the Executive Officer not more than 7 days after qualifying as a large operation or as a medium operation under a contingency notification;

(ii) include, as part of the notification, the items specified in subparagraphs (f)(3)(A) and (f) (3)(B);

(iii) maintain daily records to document the specific actions taken;

(iv) maintain such records for a period of not less than 6 months; and

(v) make such records available to the Executive Officer upon request; or

(B) obtain an approved fugitive dust emissions control plan (plan).

(2) Any person subject to paragraph (f)(1) who elects to obtain an approved fugitive dust emission control plan must submit the plan to the Executive Officer no later than 30 days after the activity becomes a large operation.

(3) Any plan prepared pursuant to subparagraph (f)(1)(B) shall include:

(A) The name(s), address(es), and phone number(s) of the person(s) responsible for the preparation, submittal, and implementation of the plan;

(B) A description of the operation(s), including a map depicting the location of the site;

(C) A listing of all sources of fugitive dust emissions within the property lines;

(D) A description of the required control measures as applied to each of the sources identified in subparagraph (f)(3)(C). The description must be sufficiently detailed to demonstrate that the applicable best available control measures or reasonably available control measures

will be utilized and/or installed during all periods of active operations.

(4) In the event that there are special technical (e.g., non-economic) circumstances, including safety, which prevent the use of at least one of the required control measure for any of the sources identified in subparagraph (f)(3)(C), a justification statement must be provided in lieu of the description required in subparagraph (f)(3)(D). The justification statement must explain the reason(s) why the required control measures cannot be implemented.

(5) Within 30 calendar days of the receipt of a plan submitted pursuant to subparagraph (f)(1)(B), the Executive Officer will either approve, conditionally approve, or disapprove the plan , in writing. For a plan to be approved or conditionally approved, three conditions must be satisfied:

(A) All sources of fugitive dust emissions must be identified (e.g., earth-moving, storage piles, vehicular traffic on unpaved roads, etc.).

(B) For each source identified, at least one of the required control measures must be implemented, or an acceptable justification statement pursuant to paragraph (f)(4) must be provided; and

(C) If, after implementation of the required control measures, visible dust emissions are crossing the property line(s), then high wind measures (e.g., increased watering) must be specified for immediate implementation.

(6) Conditional approval will be made if conditions are met, but the stated measures do not satisfactorily conform to the guidance contained in the applicable Rule 403 Implementation Handbook. If a plan is conditionally approved, the conditions necessary to modify the plan will be provided in writing to the person(s) identified in subparagraph (f)(3)(A). Such modifications must be incorporated into the plan within 30 days of the receipt of the notice of conditional approval, or the plan shall be disapproved. A letter to the Executive Officer stating that such modifications will be incorporated into the plan shall be deemed sufficient to result in approval of the plan.

(7) If a plan is disapproved by the Executive Officer:

(A) The reasons for disapproval shall be given to the applicant in writing.

(B) Within 7 days of the receipt of a notice of a disapproved plan, the applicant shall comply with the actions specified in Tables 1 and 2 for each applicable source of fugitive dust within the property lines.

(C) The applicant may resubmit a plan at any time after receiving a disapproval notification, but will not be relieved of complying with subparagraph (f)(7)(B) until such time as the plan has been approved.

(8) Failure to comply with any of the provisions in an approved or conditionally approved plan shall be a violation of subdivision (f).

(9) Any approved plan shall be valid for a period of one year from the date of approval or conditional approval of the plan. Plans must be resubmitted annually, at least 60 days prior to the expiration date, or the plan shall become disapproved as of the expiration date. If all fugitive dust sources and corresponding control measures or special circumstances remain identical to those identified in the previously approved plan, the resubmittal may contain a simple statement of no-change. Otherwise, a resubmittal must contain all the items specified in subparagraphs (f)(3)(A through D).

(10) Any person subject to the requirements of paragraph (f)(1) who no longer exceeds, and does not expect to exceed for a period of at least one year, the criteria for a large operation or a medium operation under a contingency notification may request a reclassification as a non-large operation not subject to subparagraph (f). To obtain this reclassification, a person must submit a request in writing to the Executive Officer specifying the conditions which have taken place to reduce the disturbed surface area and/or the earth-moving or throughput conditions to levels below the criteria for large operations. A person must further indicate that the criteria for large operations are not expected to be exceeded during the subsequent 12-month period. The Executive Officer shall either approve or disapprove the reclassification within 60 days from receipt of the reclassification request. The Executive Officer will disapprove the request if the indicated changes can not be verified to be below the criteria for large operations or a medium operation under a contingency notification. If approved, the person shall be relieved of all requirements under subdivision (f). Any person so reclassified would again be subject to the requirements of subdivision (f) if at any time subsequent to the reclassification the

criteria for large operations or a medium operation under a contingency notification are met.

(11) A person responsible for more than one operation subject to subparagraph (f) at non-contiguous sites may submit one plan covering multiple sites provided that:

(A) the contents of the plan apply similarly to all sites; and

(B) specific information is provided for each site, including, map of site location, address, description of operations, and a listing of all sources of fugitive dust emissions within the property lines.

(g) Compliance Schedule

All the newly amended provisions of this rule shall become effective upon adoption of this Rule Amendment. Pursuant to subdivision (f), any fugitive dust emission control plan which has been approved or conditionally approved prior to the date of adoption of these amendments shall remain in effect and the plan approval date and annual resubmittal date shall remain unchanged. If any changes to such plans are necessary as a result of these amendments, such changes shall not be required until the annual resubmittal date, pursuant to paragraph (f)(9).

(h) Exemptions

(1) The provisions of this rule shall not apply to:

(A) Agricultural operations outside the boundaries of the South Coast Air Basin, agricultural operations directly related to the raising of fowls or animals, and agricultural operations conducted within the boundaries of the South Coast Air Basin provided that the combined disturbed surface area within one continuous property line and not separated by a paved public road is 10 acres or less.

(B) Agricultural operations within the South Coast Air Basin, until June 30, 1999, whose combined disturbed surface area includes more than 10 acres. All provisions of this Rule shall become applicable to agricultural operations exceeding 10 acres beginning July 1, 1999, excluding those listed in (h)(1)(A), unless the person responsible for such operations voluntarily implements the conservation practices contained in the most recent Rule 403 Agricultural Handbook, now or hereafter adopted by the Governing Board. The person responsible for such operations must complete

and maintain the self-monitoring form documenting sufficient conservation practices, as described in the Rule 403 Agricultural Handbook, and must make it available to the Executive Officer upon request.

(C) Any disturbed surface area less than one-half (1/2) acre on property zoned for residential uses.

(D) Active operations conducted during emergency life-threatening situations, or in conjunction with any officially declared disaster or state of emergency.

(E) Active operations conducted by essential service utilities to provide electricity, natural gas, telephone, water and sewer during periods of service outages and emergency disruptions.

(F) Any contractor subsequent to the time the contract ends, provided that such contractor implemented the required control measures during the contractual period.

(G) Any grading contractor, for a phase of active operations, subsequent to the contractual completion of that phase of earth-moving activities, provided that the required control measures have been implemented during the entire phase of earth-moving activities, through and including five days after the final grading inspection.

(H) Weed abatement operations ordered by a county agricultural commissioner or any state, county, or municipal fire department, provided that:

(i) mowing, cutting or other similar process is used which maintains weed stubble at least three inches above the soil; or

(ii) any discing or similar operation which cuts into and disturbs the soil is used and meets the following conditions:

[a] A determination is made by the issuing agency of the weed abatement order that, due to fire hazard conditions, rocks, or other physical obstructions, it is not practical to meet the conditions specified in clause (h)(1)(H)(i); and

[b] Such determination is made in writing and provided to the person conducting the weed abatement operation prior to beginning such activity; and

[c] Such written determination is provided to the Executive Officer upon request from the person conducting the weed abatement operation.

(Note: The provisions of clause (h)(1)(H)(ii) do not exempt the owner of any property from controlling fugitive dust emissions emanating from disturbed surface areas which have been created as a result of the weed abatement actions.)

(I) sandblasting operations.

(2) The provisions of paragraphs (d)(1) and (d)(4) shall not apply:

(A) When wind gusts exceed 25 miles per hour, provided that:

(i) The required control measures for high wind conditions are implemented for each applicable fugitive dust source type, as specified in Table 1, and;

(ii) Records are maintained in accordance with clauses (f)(1)(A)(iii), (f)(1)(A)(iv) and (f)(1)(A)(v); and

(iii) In the event there are technical (e.g., non-economic) reasons, including safety, why any of the required control measures in Table 1 cannot be implemented for one or more fugitive dust source categories, a person submits a "High Wind Fugitive Dust Control Plan" (HW-Plan). The HW-Plan must further provide an alternative measure of fugitive dust control, if technically feasible. Such plan will be subject to the same approval conditions as specified in subparagraphs (f)(5) and (f)(6).

(B) To unpaved roads, provided such roads:

(i) are used solely for the maintenance of wind-generating equipment; or

(ii) are unpaved public alleys as defined in Rule 1186; or

(iii) meet all of the following criteria:

(a) are less than 50 feet in width at all points along the road;

(b) are within 25 feet of the property line; and

(c) have a traffic volume less than 20 vehicle-trips per day.

(C) To any active operation, open storage pile, or disturbed surface area for which necessary fugitive dust preventive or mitigative actions are in conflict with the federal Endangered Species Act.

(D) To non-routine or emergency maintenance of flood control channels and water spreading basins.

(3) The provisions of paragraphs (d)(1), (d)(2), and (d)(4) shall not apply to:

(A) Blasting operations which have been permitted by the California Division of Industrial Safety; and

(B) Motion picture, television, and video production activities when dust emissions are required for visual effects. In order to obtain this exemption, the Executive Officer must receive notification in writing at least 72 hours in advance of any such activity and no nuisance results from such activity.

(4) The provisions of paragraph (d)(4) shall not apply if the dust control actions, as specified in Table 2, are implemented on a routine basis for each applicable fugitive dust source type. To qualify for this exemption, a person must:

(A) maintain records to document the dates of active operations, all applicable fugitive dust source types, and the actions taken consistent with Table 2;

(B) retain such records for a period of at least six months; and

(C) make such records available to the Executive Officer upon request.

(5) The provisions of paragraph (d)(5) shall not apply to earth coverings of public paved roadways where such coverings are approved by a local government agency for the protection of the roadway, and where such coverings are used as roadway crossings for haul vehicles.

(6) The provisions of subdivision (f) shall not apply to:

(A) officially-designated public parks and recreational areas, including national parks, national monuments, national forests, state parks, state recreational areas, and county regional parks;

(B) any construction and/or earth-moving activity in which the completion date is expected to be less than 60 days after the beginning date. To qualify for this exemption, a person must:

(i) notify the Executive Officer not more than 7 days after qualifying as a large operation or a medium operation under a contingency notification;

(ii) include, as part of the notification, the items specified in subparagraphs (f)(3)(A) and (f)(3)(B); and

(iii) take the actions specified in Tables 1 and 2 at such time as the construction and/or earth-moving activities extend more than 60 days after qualifying as a large operation or a medium operation under a contingency notification.

(C) any large operation or a medium operation under a contingency notification which is required to submit a dust control plan to any city or county government which has adopted a District-approved dust control ordinance. To qualify for this exemption, a person must submit a copy of the city- or county-approved dust control plan to the Executive Officer within 30 days of the effective date of this rule or within 30 days of receiving approval from the city or county government, whichever is later.

(D) any large operation or a medium operation under a contingency notification subject to Rule 1158, which has an approved dust control plan pursuant to Rule 1158, provided that all sources of fugitive dust are included in the Rule 1158 plan.

(i) Fees

(1) Any person subject to a plan submittal pursuant to subparagraph (f)(1)(B) or clause (h)(2)(A)(iii) or subparagraph (h)(1)(B) shall be assessed applicable filing and evaluation fees pursuant to Rule 306. Any person who simultaneously submits a plan pursuant to subparagraph (f)(1)(B) and clause (h)(2)(A)(iii) shall, for the purpose of this rule, be deemed to submit one plan.

(2) The submittal of an annual statement of no-change, pursuant to paragraph (f)(9), shall not be considered as an annual review, and therefore shall not be subject to annual review fees, pursuant to Rule 306.

(3) The owner/operator of any facility for which the Executive Officer conducts upwind/downwind monitoring for $PM_{10}$ pursuant to paragraph (d)(4) shall be assessed applicable Ambient Air Analysis Fees pursuant to Rule 304.1. Applicable fees shall be waived for any facility which is

exempted from paragraph (d)(4) or meets the requirements of paragraph (d)(4).

## TABLE 1

## BEST [REASONABLY]* AVAILABLE CONTROL MEASURES FOR HIGH WIND CONDITIONS

| FUGITIVE DUST SOURCE CATEGORY | CONTROL MEASURES |
|---|---|
| **Earth-moving** | (1A) Cease all active operations; OR<br>(2A) Apply water to soil not more than 15 minutes prior to moving such soil. |
| **Disturbed surface areas** | (0B) On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; OR<br>(1B) Apply chemical stabilizers prior to wind event; OR<br>(2B) Apply water to all unstabilized disturbed areas 3 times per day. If there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; OR<br>(3B) Take the actions specified in Table 2, Item (3c); OR<br>(4B) Utilize any combination of control actions (1B), (2B), and (3B) such that, in total, these actions apply to all disturbed surface areas. |
| **Unpaved roads** | (1C) Apply chemical stabilizers prior to wind event; OR<br>(2C) Apply water twice [once] per hour during active operation; OR<br>(3C) Stop all vehicular traffic. |
| **Open storage piles** | (1D) Apply water twice [once] per hour; OR<br>(2D) Install temporary coverings. |
| **Paved road track-out** | (1E) Cover all haul vehicles; OR<br>(2E) Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads. |
| **All Categories** | (1F) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 1 may be used. |

* Measures in [brackets] are reasonably available control measures and only apply to sources not within the South Coast Air Basin.

## TABLE 2
## DUST CONTROL ACTIONS FOR EXEMPTION FROM PARAGRAPH (d)(3)*

| FUGITIVE DUST SOURCE CATEGORY | | CONTROL ACTIONS |
|---|---|---|
| **Earth-moving (except construction cutting and filling areas, and mining operations)** | (1a) | Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; OR |
| | (1a-1) | For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction. |
| **Earth-moving: Construction fill areas:** | (1b) | Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM Method 1557 or other equivalent method approved by the Executive Officer and the California Air Resources Board and the U.S. EPA, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations. |

* Measures in [brackets] are reasonably available control measures and only apply to sources not within the South Coast Air Basin.

**TABLE 2 (Continued)***

| FUGITIVE DUST SOURCE CATEGORY | CONTROL ACTIONS | |
|---|---|---|
| **Earth-moving: Construction cut areas and mining operations:** | (1c) | Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut or mining area unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors. |
| **Disturbed surface areas (except completed grading areas)** | (2a/b) | Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80 [70] percent of the unstabilized area. |
| **Disturbed surface areas: Completed grading areas** | (2c) | Apply chemical stabilizers within five working days of grading completion; OR |
| | (2d) | Take actions (3a) or (3c) specified for inactive disturbed surface areas. |
| **Inactive disturbed surface areas** | (3a) | Apply water to at least 80 [70] percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slope or other safety conditions; OR |
| | (3b) | Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR |
| | (3c) | Establish a vegetative ground cover within 21 [30] days after active operations have ceased. Ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR |
| | (3d) | Utilize any combination of control actions (3a), (3b), and (3c) such that, in total, these actions apply to all inactive disturbed surface areas. |

* Measures in [brackets] are reasonably available control measures and only apply to sources not within the South Coast Air Basin.

**TABLE 2 (Continued)***

| FUGITIVE DUST SOURCE CATEGORY | | CONTROL ACTIONS |
|---|---|---|
| **Unpaved Roads** | (4a) | Water all roads used for any vehicular traffic at least once per every two hours of active operations [3 times per normal 8 hour work day]; OR |
| | (4b) | Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hour; OR |
| | (4c) | Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface. |
| **Open storage piles** | (5a) | Apply chemical stabilizers; OR |
| | (5b) | Apply water to at least 80 [70] percent of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR |
| | (5c) | Install temporary coverings; OR |
| | (5d) | Install a three-sided enclosure with walls with no more than 50 percent porosity which extend, at a minimum, to the top of the pile. |
| **All Categories** | (6a) | Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 2 may be used. |

* Measures in [brackets] are reasonably available control measures and only apply to sources not within the South Coast Air Basin.

## TABLE 3
## TRACK-OUT CONTROL OPTIONS
## PARAGRAPH (d)(5)(B)

CONTROL OPTIONS

| | |
|---|---|
| (1) | Pave or apply chemical stabilization at sufficient concentration and frequency to maintain a stabilized surface starting from the point of intersection with the public paved surface, and extending for a centerline distance of at least 100 feet and a width of at least 20 feet. |
| (2) | Pave from the point of intersection with the public paved road surface, and extending for a centerline distance of at least 25 feet and a width of at least 20 feet, and install a track-out control device immediately adjacent to the paved surface such that exiting vehicles do not travel on any unpaved road surface after passing through the track-out control device. |
| (3) | Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 3 may be used. |

# APPENDIX E
## 2 and 24-Hour Noise Measurement

# Two-Hour Noise Measurement Data

# NOISE MONITORING FORM

**Mine:** CalMat Durbin
**Date:** 19 November 2003
**Start Time:** 1010 Hours
**End Time:** 1210 Hours
**Weather:** Clear, Temperature in Mid to Upper 60 °F, No Wind.
**Location of Measurements:** Vacant Lot at the end of Morgan Street
**Personnel:** Holly Grover and Leon Crain
**Equipment:** Quest Technologies, Model 2700 set on A-Scale and Fast Response
**Calibration:** Yes

| Time (minutes) | Noise Level (dBA) High | Low | Comments: |
|---|---|---|---|
| 5 | 32.4 | 28.0 | Steady weak noise in background |
| 10 | 33.9 | 28.4 | Steady weak noise in background |
| 15 | 33,6 | 20.1 | Steady weak noise in background |
| 20 | 32,8 | 23.3 | Steady weak noise in background |
| 25 | 32.7 | 24.5 | Steady weak noise in background |
| 30 | 34.2 | 27.2 | Steady weak noise in background |
| 35 | 33.8 | 24.5 | Steady weak noise in background |
| 40 | 33.8 | 25.2 | Steady weak noise in background |
| 45 | 33.1 | 27.5 | Steady weak noise in background |
| 50 | 35.3 | 27.5 | Car drove down street, steady weak noise in background |
| 55 | 33.1 | 27.8 | Car drove down street, steady weak noise in background |
| 60 | 34.6 | 28.6 | Steady weak noise in background |
| 65 | 34.6 | 24.1 | Steady weak noise in background |
| 70 | 33.8 | 25.2 | Aircraft flyover, steady weak noise in background |
| 75 | 35.0 | 28.1 | Steady weak noise in background |
| 80 | 34.2 | 28.6 | Aircraft flyover, steady weak noise in background |
| 85 | 36.1 | 29.0 | Car horn in background, steady weak noise in background |
| 90 | 35.0 | 29.1 | Steady weak noise in background |
| 95 | 33.8 | 27.1 | Steady weak noise in background |
| 100 | 34.2 | 29.3 | Steady weak noise in background |
| 105 | 35.3 | 28.8 | Children playing, steady weak noise in background |
| 110 | 35.7 | 27.5 | Children playing, steady weak noise in background |
| 115 | 34.2 | 27.1 | Children playing, steady weak noise in background |
| 120 | 35.0 | 27.1 | Children playing, steady weak noise in background |
| **Average** | **34.2** | **26.8** | |
| **Overall Average** | **30.5** | | |

# NOISE MONITORING FORM

**Mine:** CalMat Azusa Largo
**Date:** 19 November 2003
**Start Time:** 1340 Hours
**End Time:** 1540 Hours
**Weather:** Partially Cloudy, Temperature in Upper 60 °F, Very Slight Breeze
**Location of Measurements:** North Parking Lot of 751 Todd Avenue
**Personnel:** Holly Grover and Leon Crain
**Equipment:** Quest Technologies, Model 2700 set on A-Scale and Fast Response
**Calibration:** Yes

| Time (minutes) | Noise Level (dBA) High | Low | Comments: |
|---|---|---|---|
| 5 | 63.1 | 57.8 | Steady background noise from quarry |
| 10 | 66.5 | 55.0 | Front end loader, steady background noise from quarry |
| 15 | 71.3 | 56.8 | Garbage truck, steady background noise from quarry |
| 20 | 70.6 | 57.2 | Garbage truck, Airplane flyover, steady background noise from quarry |
| 25 | 63.1 | 56.8 | Steady background noise from quarry |
| 30 | 65.7 | 57.4 | Steady background noise from quarry |
| 35 | 64.2 | 57.1 | Steady background noise from quarry |
| 40 | 71.7 | 58.6 | Tail gate from dump truck slamming, steady background noise from quarry |
| 45 | 66.5 | 57.8 | Steady background noise from quarry |
| 50 | 68.0 | 57.8 | Steady background noise from quarry – See Note |
| 55 | 63.8 | 57.7 | Steady background noise from quarry |
| 60 | 66.1 | 58.1 | Steady background noise from quarry |
| 65 | 64.2 | 57.2 | Airplane flyover, steady background noise from quarry |
| 70 | 64.2 | 57.6 | Steady background noise from quarry |
| 75 | 64.6 | 58.2 | Steady background noise from quarry |
| 80 | 63.1 | 56.4 | Steady background noise from quarry |
| 85 | 62.0 | 54.4 | Steady background noise from quarry |
| 90 | 60.8 | 55.6 | Steady background noise from quarry |
| 95 | 64.6 | 55.1 | Steady background noise from quarry |
| 100 | 62.0 | 54.7 | Steady background noise from quarry |
| 105 | 63.1 | 54.8 | Steady background noise from quarry |
| 110 | 61.6 | 53.8 | Steady background noise from quarry |
| 115 | 64.2 | 54.7 | Steady background noise from quarry |
| 120 | 63.1 | 55.7 | Truck air-breaks on street, steady background noise from quarry |
| **Average** | 64.9 | 56.5 | |
| **Overall Average** | 60.7 | | |

Note: Activity at mine from vehicle movement on-site decreased after the 50 minute mark.

# NOISE MONITORING FORM

**Mine:** CalMat Durbin
**Date:** 20 November 2003
**Start Time:** 0805 Hours
**End Time:** 1005 Hours
**Weather:** Slightly Foggy to Clear, Temperature in the Mid 60 °F, No wind
**Location of Measurements:** Between 12961 and 12941 Ramona Boulevard
**Personnel:** Holly Grover and Leon Crain
**Equipment:** Quest Technologies, Model 2700 set on A-Scale and Fast Response
**Calibration:** Yes

| Time (minutes) | Noise Level (dBA) High | Low | Comments: |
|---|---|---|---|
| 5 | 73.3 | 56.5 | Gravel trucks, Mine noise in background – See Note |
| 10 | 67.6 | 56.6 | Gravel trucks, Mine noise in background |
| 15 | 80.3 | 56.6 | Car horn in commercial area, Gravel trucks, Mine noise in background |
| 20 | 73.3 | 57.4 | Gravel trucks, Mine noise in background |
| 25 | 77.7 | 56.5 | Gravel trucks, Dump truck at 100 feet, Mine noise in background |
| 30 | 69.8 | 55.4 | Gravel trucks, Mine noise in background |
| 35 | 71.7 | 55.2 | Gravel trucks, Mine noise in background |
| 40 | 73.6 | 57.1 | Gravel trucks, Mine noise in background |
| 45 | 71.5 | 54.5 | Gravel trucks, Mine noise in background |
| 50 | 74.7 | 53.7 | Gravel trucks, Mine noise in background |
| 55 | 72.5 | 52.4 | Gravel trucks, Mine noise in background |
| 60 | 74.7 | 53.3 | Gravel trucks, Mine noise in background |
| 65 | 73.6 | 52.5 | Gravel trucks, Mine noise in background |
| 70 | 72.9 | 54.4 | Car at 20 feet in commercial area, Gravel trucks, Mine noise in background |
| 75 | 72.5 | 55.2 | Gravel trucks, Mine noise in background |
| 80 | 73.0 | 54.8 | Gravel trucks, Mine noise in background |
| 85 | 69.8 | 53.2 | Gravel trucks, Mine noise in background |
| 90 | 74.3 | 53.3 | Gravel trucks, Mine noise in background |
| 95 | 71.7 | 49.5 | Gravel trucks, Mine noise in background |
| 100 | 75.8 | 48.8 | Gravel trucks, Mine noise in background |
| 105 | 74.7 | 49.5 | Gravel trucks, Mine noise in background |
| 110 | 74.0 | 53.1 | Car at 20 feet in commercial area, Gravel trucks, Mine noise in background |
| 115 | 72.1 | 53.2 | Gravel trucks, Mine noise in background |
| 120 | 68.0 | 52.6 | Gravel trucks, Mine noise in background |
| **Average** | 73.0 | 53.9 | |
| **Overall Average** | 63.4 | | |

Note: Gravel trucks passed about 50 feet from noise measurement site at a speed between 5 and 15 mph. About 3 to 5 trucks passed by the site every 5 minutes. Additionally, this site was shielded from the I-605 freeway by the commercial building located at 12941 Ramona Blvd.

# NOISE MONITORING FORM

**Mine:** CalMat Durbin
**Date:** 20 November 2003
**Start Time:** 1020 Hours
**End Time:** 1220 Hours
**Weather:** Sunny and Clear, Temperature in the Upper 60 °F, No Wind
**Location of Measurements:** Southeast corner of Durbin Quarry, Adjacent to I-605 at 12761 Schabarum Avenue
**Personnel:** Holly Grover and Leon Crain
**Equipment:** Quest Technologies, Model 2700 set on A-Scale and Fast Response
**Calibration:** Yes

| Time (minutes) | Noise Level (dBA) High | Low | Comments: |
|---|---|---|---|
| 5 | 84.9 | 73.1 | Continuous freeway noise from I-605 – See Note |
| 10 | 84.9 | 71.8 | Continuous freeway noise from I-605 |
| 15 | 84.6 | 70.1 | Continuous freeway noise from I-605 |
| 20 | 85.5 | 69.9 | Continuous freeway noise from I-605 |
| 25 | 84.2 | 72.7 | Continuous freeway noise from I-605 |
| 30 | 84.6 | 71.4 | Continuous freeway noise from I-605 |
| 35 | 83.9 | 72.4 | Continuous freeway noise from I-605 |
| 40 | 85.7 | 69.6 | Continuous freeway noise from I-605 |
| 45 | 84.6 | 70.8 | Continuous freeway noise from I-605 |
| 50 | 86.4 | 72.0 | Motor cycle, Continuous freeway noise from I-605 |
| 55 | 83.9 | 74.6 | Continuous freeway noise from I-605 |
| 60 | 83.8 | 72.7 | Continuous freeway noise from I-605 |
| 65 | 84.2 | 71.6 | Continuous freeway noise from I-605 |
| 70 | 85.3 | 71.1 | Continuous freeway noise from I-605 |
| 75 | 84.9 | 72.0 | Continuous freeway noise from I-605 |
| 80 | 84.9 | 72.0 | Continuous freeway noise from I-605 |
| 85 | 85.3 | 74.0 | Continuous freeway noise from I-605 |
| 90 | 85.8 | 72.7 | Continuous freeway noise from I-605 |
| 95 | 85.7 | 71.4 | Continuous freeway noise from I-605 |
| 100 | 85.7 | 71.9 | Continuous freeway noise from I-605 |
| 105 | 84.6 | 72.1 | Continuous freeway noise from I-605 |
| 110 | 84.2 | 74.7 | Continuous freeway noise from I-605 |
| 115 | 84.9 | 70.9 | Continuous freeway noise from I-605 |
| 120 | 84.9 | 73.7 | Continuous freeway noise from I-605 |
| **Average** | 84.9 | 72.1 | |
| **Overall Average** | 78.5 | | |

Note: Approximately 100 feet from east edge of I-605 Freeway.

# NOISE MONITORING FORM

**Mine:** United Rock Quarry No. 4/Production Plant
**Date:** 20 November 2003
**Start Time:** 1315 Hours
**End Time:** 1515 Hours
**Weather:** Slightly Overcast, Temperature in Upper 60 °F to lower 70 °F, No Wind to Slight Breeze
**Location of Measurements:** North of Production Plant in Undeveloped Area
**Personnel:** Holly Grover and Leon Crain
**Equipment:** Quest Technologies, Model 2700 set on A-Scale and Fast Response
**Calibration:** Yes

| Time (minutes) | Noise Level (dBA) High | Low | Comments: |
|---|---|---|---|
| 5 | 65.9 | 62.6 | Normal mining operation background noise |
| 10 | 68.2 | 62.6 | Normal mining operation background noise |
| 15 | 66.1 | 61.9 | Normal mining operation background noise |
| 20 | 68.3 | 62.6 | Pounding on metal at site, Normal mining operation background noise |
| 25 | 65.0 | 62.3 | Normal mining operation background noise |
| 30 | 65.3 | 62.7 | Normal mining operation background noise |
| 35 | 72.1 | 61.8 | Pounding on metal at site, Normal mining operation background noise |
| 40 | 66.1 | 62.2 | Normal mining operation background noise |
| 45 | 71.0 | 61.9 | Whistle from site, Normal mining operation background noise |
| 50 | 66.8 | 62.8 | Normal mining operation background noise |
| 55 | 68.3 | 62.8 | Normal mining operation background noise |
| 60 | 66.7 | 61.8 | Normal mining operation background noise |
| 65 | 71.7 | 62.2 | Normal mining operation background noise |
| 70 | 65.7 | 62.1 | Normal mining operation background noise |
| 75 | 74.7 | 62.0 | Pounding on metal at site, Normal mining operation background noise |
| 80 | 67.2 | 62.6 | Normal mining operation background noise |
| 85 | 68.7 | 62.1 | Normal mining operation background noise |
| 90 | 66.8 | 62.6 | Normal mining operation background noise |
| 95 | 68.0 | 61.9 | Normal mining operation background noise |
| 100 | 70.2 | 62.5 | Airplane flyover, Normal mining operation background noise |
| 105 | 68.1 | 62.3 | Airplane flyover, Normal mining operation background noise |
| 110 | 67.2 | 62.5 | Normal mining operation background noise |
| 115 | 68.3 | 62.8 | Normal mining operation background noise |
| 120 | 66.1 | 62.3 | Normal mining operation background noise |
| **Average** | 68.0 | 62.3 | |
| **Overall Average** | 65.2 | | |

# NOISE MONITORING FORM

**Mine:** Hanson Aggregate
**Date:** 21 November 2003
**Start Time:** 0750 Hours
**End Time:** 0950 Hours
**Weather:** Overcast, Temperature in Low 60 °F, No Wind
**Location of Measurements:** At Quarry Entrance About 200 Feet East of I-605 Freeway on Graham Road
**Personnel:** Holly Grover and Leon Crain
**Equipment:** Quest Technologies, Model 2700 set on A-Scale and Fast Response
**Calibration:** Yes

| Time (minutes) | Noise Level (dBA) High | Low | Number of Trucks | Comments: |
|---|---|---|---|---|
| 5 | 89.8 | 59.4 | 4 | Gravel truck, Freeway noise in background – See Notes |
| 10 | 92.8 | 59.3 | 5 | Gravel trucks, Freeway noise in background |
| 15 | 85.7 | 60.1 | 5 | Gravel trucks, Freeway noise in background |
| 20 | 81.9 | 61.3 | 2 | Gravel trucks, Freeway noise in background |
| 25 | 90.9 | 59.9 | 1 | Gravel trucks, Freeway noise in background |
| 30 | 89.2 | 60.4 | 0 | Gravel trucks, Freeway noise in background |
| .35 | 84.2 | 60.0 | 5 | Gravel trucks, Freeway noise in background |
| 40 | 86.4 | 60.8 | 5 | Gravel trucks, Freeway noise in background |
| 45 | 92.8 | 60.7 | 3 | Gravel trucks, Freeway noise in background |
| 50 | 86.8 | 60.6 | 4 | Gravel trucks, Freeway noise in background |
| 55 | 84.7 | 62.8 | 7 | Gravel trucks, Freeway noise in background |
| 60 | 85.3 | 63.1 | 5 | Gravel trucks, Freeway noise in background |
| 65 | 84.5 | 63.4 | 3 | Gravel trucks, Freeway noise in background |
| 70 | 83.8 | 62.2 | 3 | Gravel trucks, Freeway noise in background |
| 75 | 86.8 | 62.7 | 10 | Gravel trucks, Freeway noise in background |
| 80 | 86.1 | 63.1 | 10 | Gravel trucks, Freeway noise in background |
| 85 | 90.2 | 62.4 | 7 | Gravel trucks, Freeway noise in background |
| 90 | 92.4 | 63.0 | 7 | Gravel trucks, Freeway noise in background |
| 95 | 90.6 | 62.2 | 5 | Gravel trucks, Freeway noise in background |
| 100 | 87.9 | 61.8 | 3 | Gravel trucks, Freeway noise in background |
| 105 | 88.7 | 60.2 | 4 | Gravel trucks, Freeway noise in background |
| 110 | 83.7 | 60.2 | 3 | Gravel trucks, Freeway noise in background |
| 115 | 85.3 | 62.3 | 5 | Gravel trucks, Freeway noise in background |
| 120 | 96.6 | 61.7 | 0 | Gravel truck horn, Gravel trucks, Freeway noise in background |
| **Average** | 87.8 | 61.4 | 4.4 | |
| **Overall Average** | 74.6 | | | |

Note 1: Only gravel trucks exiting the Hanson Aggregate site were counted.
Note 2: Gravel truck speed ranged from 5 to 20 mph. Noise measurements were taken at 30 feet from roadway centerline.
Note 3: Southbound I-605was stop and go until approximately 0830 hours; however northbound I-605 was free flowing.

# 24-Hour Noise Level Measurements

# APPENDIX F
## Watermaster List of Groundwater Contamination

## Contamination Levels Near the City of Irwindale from the Watermaster Data

| Well Owner | Well No. | Contaminate | Historic High | | Most Recent | |
|---|---|---|---|---|---|---|
| | | | Level* | Date | Level* | Date |
| California American Water Company – Duarte | 1900354 | TCE | 3.3 | 04/84 | ND | 09/01 |
| | | CF | 0.5 | 04/87 | ND | 09/01 |
| | | $NO_3$ | 59.0 | 01/80 | 2.3 | 01/02 |
| | | $CLO_4$ | ND | 06/97 | ND | 05/00 |
| | 1900356 | TCE | 16.5 | 07/87 | ND | 09/93 |
| | | PCE | 1.0 | 08/82 | ND | 09/93 |
| | | 1,1,1-TCA | 8.4 | 04/85 | ND | 09/93 |
| | | 1,1-DCE | 3.4 | 07/87 | ND | 09/93 |
| | | t-1,3-DCE | 2.0 | 04/85 | ND | 09/93 |
| | | $NO_3$ | 65.0 | 05/89 | 10.1 | 09/93 |
| | | $CLO_4$ | NA | NA | NA | NA |
| County of Los Angeles | 8000070 | TCE | 4.0 | 07/01 | 4.0 | 07/01 |
| | | PCE | 1.2 | 12/87 | 1.1 | 07/01 |
| | | 1,1-DCE | 1.4 | 12/87 | ND | 07/01 |
| | | $NO_3$ | 13.5 | 11/99 | 12.0 | 07/01 |
| | | $CLO_4$ | ND | 06/97 | ND | 01/98 |
| City of Azusa | 1902537 | TCE | 250.0 | 12/79 | ND | 11/98 |
| | | PCE | 95.0 | 04/80 | 0.7 | 11/98 |
| | | VC | 0.8 | 11/98 | 0.8 | 11/98 |
| | | $NO_3$ | 105.5 | 02/93 | 9.3 | 105/01 |
| | | $CLO_4$ | ND | 11/98 | ND | 11/98 |
| City of Glendora | 1900831 | TCE | 302.1 | 01/81 | ND | 04/98 |
| | | PCE | 25.0 | 01/81 | 1.9 | 04/98 |
| | | 1,1-DCE | 435.0 | 05/84 | ND | 04/98 |
| | | c-1,2-DCE | 21.0 | 05/82 | ND | 04/98 |
| | | 1,1-DCA | 5.0 | 05/84 | ND | 04/98 |
| | | 1,2-DCA | 12.1 | 12/93 | ND | 04/98 |
| | | 1,1,1-TCA | 3,200 | 05/84 | 64.0 | 04/98 |
| | | $NO_3$ | 106.0 | 04/98 | 75.9 | 04/98 |
| | | $CLO_4$ | 5.3 | 04/98 | 5.3 | 04/98 |
| Valley County Water District | 1900027 | TCE | 32.2 | 02/91 | 2.1 | 05/02 |
| | | PCE | 27.5 | 02/91 | 5.0 | 05/02 |
| | | 1,1-DCE | 10.1 | 02/91 | 0.5 | 05/02 |
| | | 1,1,1-TCA | 9.1 | 02/91 | ND | 08/01 |
| | | $NO_3$ | 19.2 | 08/90 | 13.0 | 08/01 |
| | | $CLO_4$ | ND | 05/97 | ND | 04/00 |
| | 1900029 | TCE | 770.0 | 03/80 | 2.6 | 09/96 |
| | | PCE | 100.0 | 02/85 | 3.2 | 09/96 |
| | | CTC | 29.0 | 04/84 | ND | 09/96 |
| | | 1,1-DCE | 2.5 | 04/88 | ND | 09/96 |
| | | 1,1-DCA | 8.5 | 02/85 | 1.0 | 09/96 |
| | | 1,2-DCA | 0.7 | 04/88 | ND | 09/96 |
| | | c-1,2-DCE | 8.1 | 08/95 | 3.3 | 09/96 |
| | | $NO_3$ | 110.8 | 11/90 | 67.9 | 09/96 |
| | | $CLO_4$ | 18.9 | 02/98 | 16.9 | 02/98 |

## Contamination Levels Near the City of Irwindale from the Watermaster Data

| Well Owner | Well No. | Contaminate | Historic High | | Most Recent | |
|---|---|---|---|---|---|---|
| | | | Level* | Date | Level* | Date |
| Valley County Water District (continued) | 1900031 | TCE | 166.0 | 04/94 | 79.0 | 09/96 |
| | | PCE | 42.0 | 11/93 | 17.0 | 09/96 |
| | | CTC | 15.0 | 12/87 | 3.6 | 09/96 |
| | | 1,1-DCE | 17.2 | 11/93 | 4.8 | 09/96 |
| | | c-1,2-DCE | 23.8 | 11/93 | 14.0 | 09/96 |
| | | 1,2-DCA | 4.8 | 01/91 | 2.6 | 09/96 |
| | | $NO_3$ | 41.2 | 11/91 | 31.5 | 09/96 |
| | | $CLO_4$ | 154.0 | 02/98 | 154.0 | 02/98 |
| | 1900035 | TCE | 137.0 | 04/85 | 40.0 | 12/98 |
| | | PCE | 8.0 | 04/85 | 2.5 | 12/98 |
| | | 1,1-DCA | 0.9 | 05/96 | ND | 12/98 |
| | | c-1,2-DCE | 2.0 | 11/95 | 1.8 | 12/98 |
| | | CTC | 9.9 | 04/85 | 2.3 | 12/98 |
| | | 1,2-DCA | 11.0 | 12/98 | 11.0 | 12/98 |
| | | $NO_3$ | 28.4 | 06/84 | 19.5 | 09/97 |
| | | $CLO_4$ | 99.1 | 12/98 | 99.1 | 12/98 |
| Azusa Valley Water Company | 1902113 | VOCs | ND | 09/07 | ND | 09/97 |
| | | $NO_3$ | 55.0 | 08/87 | 32.0 | 09/97 |
| | | $CLO_4$ | 5.6 | 09/97 | 5.6 | 09/97 |
| | 190117 | PCE | 7.4 | 12/87 | 0.6 | 01/99 |
| | | $NO_3$ | 11.7 | 12/89 | 84.0 | 01/99 |
| | | $CLO_4$ | NA | NA | NA | NA |
| City of Arcadia | 1901013 | TCE | 30.0 | 07/89 | 0.7 | 06/02 |
| | | PCE | 2.7 | 07/89 | 0.5 | 06/02 |
| | | 1,1-DCE | 4.1 | 06/87 | ND | 06/02 |
| | | 1,2-DCA | 1.4 | 07/87 | ND | 06/02 |
| | | 1,1,1-TCA | 4.6 | 07/87 | ND | 06/02 |
| | | MC | 25.0 | 09/87 | ND | 06/02 |
| | | $NO_3$ | 33.3 | 02/01 | 20.0 | 06/02 |
| | | $CLO_4$ | ND | 12/97 | ND | 06/02 |
| City of Monrovia | 1940104 | TCE | 5.1 | 01/91 | 2.1 | 04/02 |
| | | PCE | 0.6 | 11/91 | ND | 07/01 |
| | | 1,1-DCE | 0.3 | 05/89 | ND | 07/01 |
| | | MC | 4.9 | 05/89 | ND | 07/01 |
| | | CF | 0.71 | 07/01 | 0.71 | 07/01 |
| | | $NO_3$ | 29.4 | 01/91 | 14.0 | 07/01 |
| | | $CLO_4$ | ND | 08/97 | ND | 08/00 |
| United Rock | 1900106 | VOCs | ND | 08/89 | ND | 07/01 |
| | | $NO_3$ | 6.4 | 07/96 | 3.3 | 07/01 |
| | | $CLO_4$ | ND | 02/98 | ND | 02/98 |
| | 1903062 | VOCs | ND | 07/96 | ND | 07/01 |
| | | $NO_3$ | 4.4 | 03/00 | ND | 07/01 |
| | | $CLO_4$ | ND | 02/98 | ND | 02/98 |
| Hanson Aggregates | 1901492 | VOCs | ND | 05/98 | ND | 07/01 |
| | | $NO_3$ | 17.0 | 02/93 | 2.0 | 07/01 |
| | | $CLO_4$ | ND | 03/98 | ND | 03/98 |
| | 1901493 | VOCs | ND | 06/98 | ND | 07/01 |
| | | $NO_3$ | 22.0 | 05/93 | ND | 07/01 |
| | | $CLO_4$ | ND | 03/98 | ND | 03/89 |
| | 1903006 | VOCs | ND | 12/87 | ND | 07.01 |
| | | $NO_3$ | 6.3 | 06/98 | 2.4 | 07/01 |

## Contamination Levels Near the City of Irwindale from the Watermaster Data

| Well Owner | Well No. | Contaminate | Historic High | | Most Recent | |
|---|---|---|---|---|---|---|
| | | | Level* | Date | Level* | Date |
| Rurban Homes Mutual Water Company | 1900120 | PCE | 16.0 | 11/90 | 0.7 | 06/02 |
| | | CF | 08 | 02/02 | 0.8 | 02/02 |
| | | $NO_3$ | 30.0 | 03/01 | 19.0 | 02/02 |
| | | $CLO_4$ | ND | 09/98 | ND | 11/99 |

* Volatile Organic Compounds (VOC) – micrograms per liter (µg/L) and Nitrated ($NO_3$) – milligrams per liter (mg/L)

Abbreviations:

| | | | |
|---|---|---|---|
| TCE | Trichloroethylene | 1,1,1-TCA | 1,1,1-Trichloroethane |
| PCE | Tetrachloroethylene | CF | Chloroform |
| CTC | Carbon Tetrachloride | MC | Methylene Chloride |
| 1,1-DCE | 1,1-Dichloroethylene | VC | Vinyl Chloride |
| c-1,2-DCE | cis-1,2-Dichloroethylene | $CLO_4$ | Perchlorate |
| t-1,2-DCE | trans-1,2-Dicloroethylene | $NO_3$ | Nitrate as Nitrate |
| 1,1-DCA | 1,1-Dichloroethane | ND | Not Detected |
| 1,2-DCA | 1,2-Dichloroethane | NA | Not Available |

## Contamination Levels Near the City of Irwindale from the EDR Data

| Well Owner | Well No. | Contaminate | Contamination Level* | Date |
|---|---|---|---|---|
| Jeffries Well No. 01 | 1910212011 | DCM | 10.0 | 01/85 |
| | | 1,1,1-TCA | 31.0 | 01/85 |
| | | $NO_3$ | 14.7 | 08/98 |
| | | PCE | 3.00 | 11/93 |
| | | TCE | 72.6 | 11/93 |
| Monrovia City Water Department | 191009006 | TCE | 0.80 | 12/97 |
| | | $NO_3$ | 15.8 | 02/98 |
| Jeffries Well No. 02 | 1910212012 | DCM | 6.00 | 01/85 |
| | | PCE | 6.00 | 01/85 |
| | | 1,1-DCE | 20.0 | 01/85 |
| | | 1,1,1-TCA | 54.0 | 01/85 |
| | | TCE | 140.0 | 01/85 |
| | | $NO_3$ | 54.6 | 04/92 |
| Monrovia City Water Department | 191009003 | PCE | 0.60 | 05/95 |
| | | 1,1,1-TCA | 4.40 | 05/87 |
| | | TCE | 0.98 | 08/96 |
| | | $NO_3$ | 18.6 | 02/98 |
| SCWC- South Arcadia | 1910212013 | PCE | 1.30 | 11/93 |
| | | TCE | 13.6 | 02/96 |
| | | c-1,2-DCE | 0.60 | 02/96 |
| | | $NO_3$ | 18.6 | 02/98 |
| SCWC- South Arcadia | 1910212014 | $NO_3$ | 5.87 | 10/97 |

## Contamination Levels Near the City of Irwindale from the EDR Data

| Well Owner | Well No. | Contaminate | Contamination Level* | Date |
|---|---|---|---|---|
| Cal. American Water Company - Duarte | 1010186006 | PCE | 0.70 | 04/85 |
| | | DCM | 1.30 | 04/85 |
| | | t-1,2-DCE | 2.00 | 04/85 |
| | | 1,1-DCE | 1.20 | 05/97 |
| | | TCE | 9.43 | 04/89 |
| | | 1,1,1-TCA | 0.76 | 04/89 |
| | | Benzene | 10.0 | 04/89 |
| | | CF | 2.60 | 04/89 |

* Volatile Organic Compounds (VOC) – micrograms per liter (µg/L) and Nitrated ($NO_3$) – milligrams per liter (mg/L)

Abbreviations:

| | | | |
|---|---|---|---|
| TCE | Trichloroethylene | 1,1,1-TCA | 1,1,1-Trichloroethane |
| PCE | Tetrachloroethylene | CF | Chloroform |
| 1,1-DCE | 1,1-Dichloroethylene | DCM | Dichloromethane |
| c-1,2-DCE | cis-1,2-Dichloroethylene | $NO_3$ | Nitrate as Nitrate |
| t-1,2-DCE | trans-1,2-Dicloroethylene | | |

# APPENDIX G
## Traffic Impact Analysis

DRAFT

# UNITED ROCK PRODUCT CORPORATION
# TRAFFIC IMPACT ANALYSIS
# CITY OF IRWINDALE, CALIFORNIA

DRAFT

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February 27, 2004

JN:01268-01
JK:SS:AT:js

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# UNITED ROCK PRODUCT CORPORATION
# TRAFFIC IMPACT ANALYSIS
# CITY OF IRWINDALE, CALIFORNIA

## 1.0 INTRODUCTION

The purpose of this traffic impact analysis (TIA) is to evaluate the potential impacts of the United Rock Product Corporation future mining activities from a traffic circulation standpoint. This TIA will provide an evaluation of the following traffic conditions pursuant to the City of Irwindale requirements:

- Existing
- Year 2025 without project
- Year 2025 with project

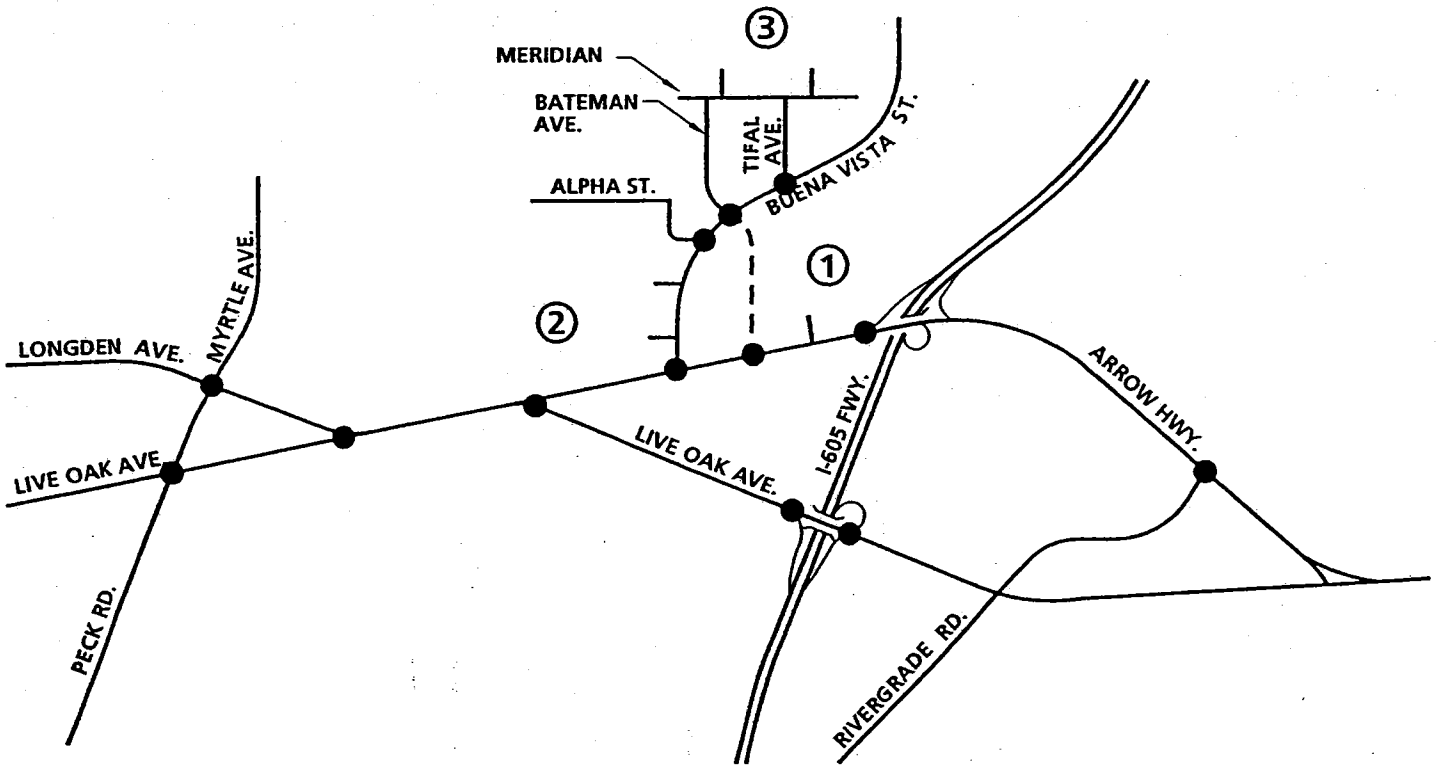
Also included in this TIA will be the recommendations regarding the project access points.

### 1.1 Proposed Project Development

The proposed United Rock Product Corporation project is located west of the Interstate 605 (I-605) Freeway, north of Live Oak Avenue in the City of Irwindale. Exhibit 1-A illustrates the location of the project site in relation to the surrounding roadway system. The site currently consists of aggregate mining that occurs in surrounding pit areas. As a pit area becomes fully excavated, other pits will begin mining operations and changes in project traffic conditions will occur. For the purposes of this analysis, it is anticipated that all mining activity will cease in the Year 2025. Therefore, traffic conditions have been analyzed for the Year 2025 with the anticipated mining operations associated with this timeframe just prior to the cessation of mining.

EXHIBIT 1-A

# LOCATION MAP




**LEGEND:**

- – – – = PROPOSED BUENA VISTA STREET REALIGNMENT
- ● = INTERSECTION ANALYSIS LOCATION
- ① = UNITED ROCK PLANT SITE
- ② = UNITED ROCK PIT 2
- ③ = UNITED ROCK PIT 3

N

URBAN CROSSROADS

## 1.2 Project Access

The mining operations currently take access to Arrow Highway, Buena Vista Street, and Meridian Street. Exhibit 1-B shows the existing access points of the project.

## 1.3 Ambient Growth

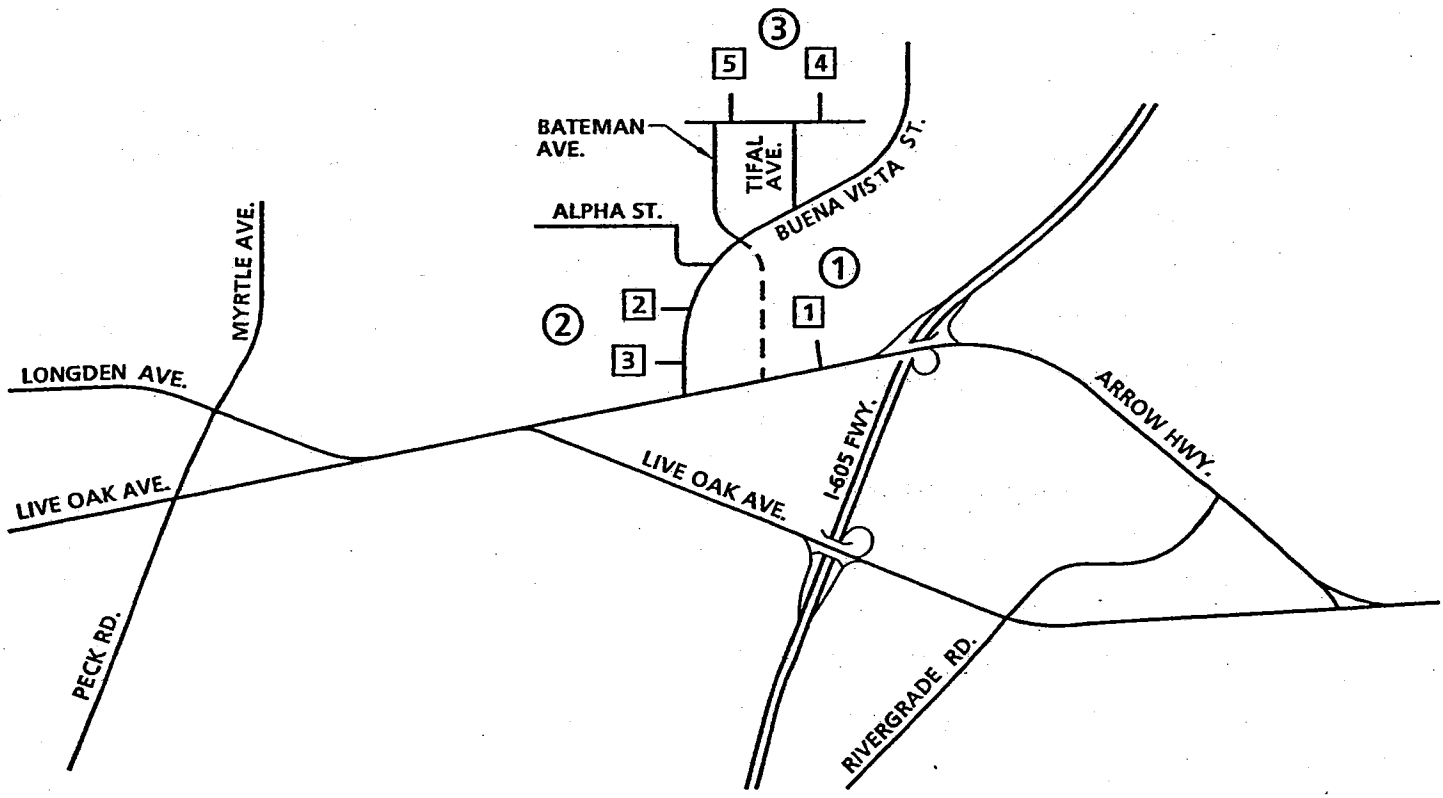
Based on direction from the City, the analysis focuses on future conditions (Year 2025) that represents the expiration of the mining permit. To account for Year 2025 traffic conditions, ambient traffic volumes will be added to the roadway system. An annual growth rate of 2% per year is applied to the existing traffic volumes to reflect the Year 2025 conditions.

## 1.4 Cumulative Development Traffic Volumes

Cumulative projects have been provided by the City of Irwindale. The cumulative projects have been reviewed and field-verified by Urban Crossroads, Inc. staff to ensure that the developments have not been constructed.

EXHIBIT 1-B

# EXISTING DRIVEWAYS




**LEGEND:**

(1) = UNITED ROCK PLANT SITE

(2) = UNITED ROCK PIT 2

(3) = UNITED ROCK PIT 3

[1] = PLANT SITE MAIN ACCESS

[2] = PIT 2 NORTHERLY ACCESS

[3] = PIT 2 SOUTHERLY ACCESS

[4] = PIT 3 EASTERLY ACCESS

[5] = PIT 3 WESTERLY ACCESS

N

URBAN CROSSROADS

## 2.0 EXISTING CONDITIONS

### 2.1 Study Area Street System

Existing roadways in close proximity to the proposed project site include Peck Road/Myrtle Avenue, Buena Vista Street, Rivergrade Road, Longden Avenue, Live Oak Avenue, Arrow Highway, Bateman Avenue, Tifal Avenue, and Meridian Street. Exhibit 2-A illustrates the number of through lanes and intersection controls in the vicinity of the study area.

Peck Road/Myrtle Avenue: is a four-lane divided roadway with a north-south orientation. This roadway currently carries between 27,600 and 31,900 vehicles per day in the vicinity of the site.

Buena Vista Street: is a four-lane divided roadway with a north-south orientation. It currently tees into Arrow Highway and currently carries approximately 10,000 vehicles per day.

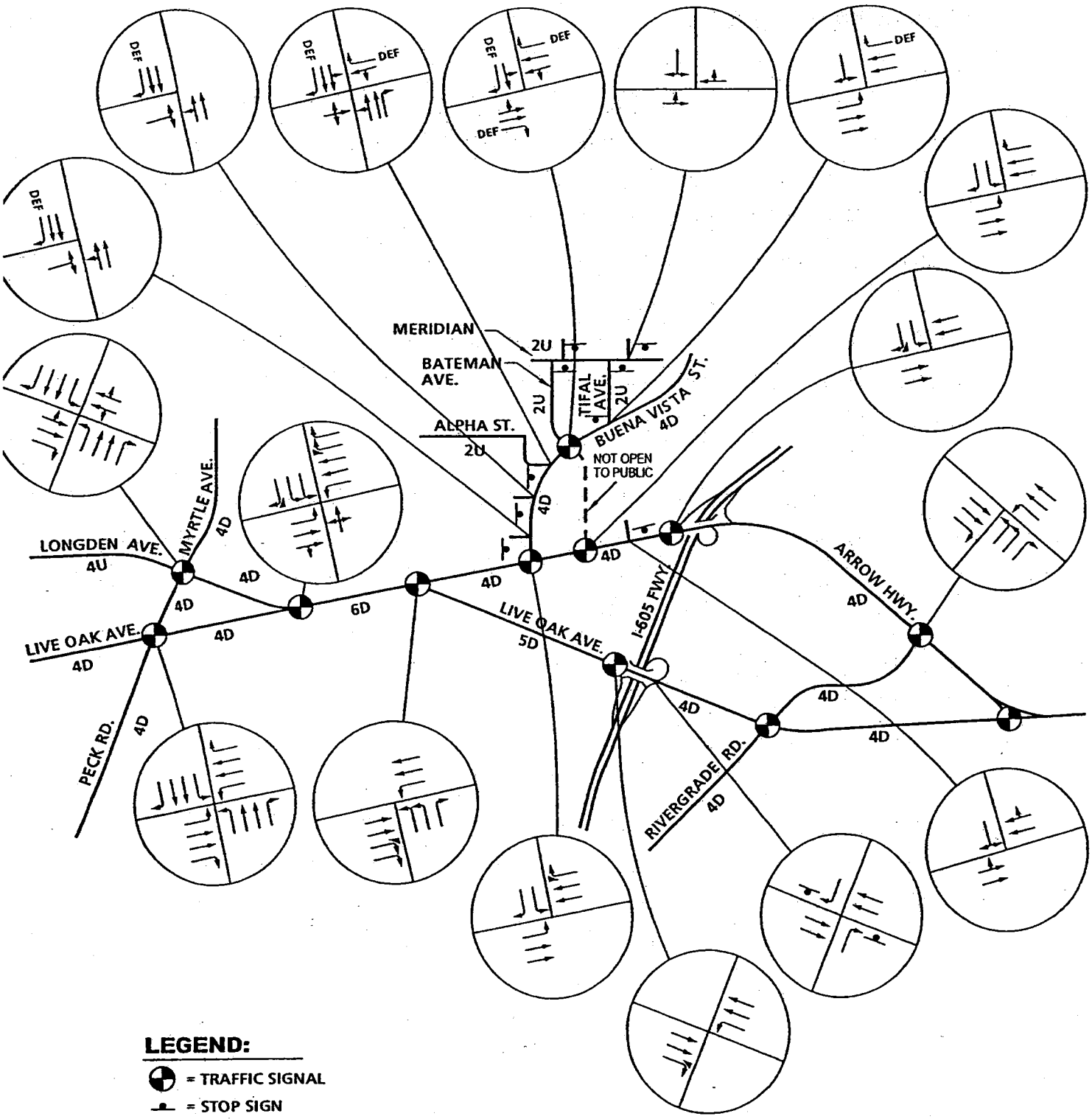
Rivergrade Road: is a four-lane divided roadway east of the I-605 Freeway. Rivergrade Road aligns in a north-south orientation and currently carries approximately 3,400 vehicles per day.

Longden Avenue: is a four-lane divided roadway east of Myrtle Avenue, and a four-lane undivided roadway west of Myrtle Avenue. Longden Avenue runs in an east-west orientation, and it continues east to Arrow Highway. Longden Avenue carries between 14,300 and 16,700 vehicles per day.

Live Oak Avenue: is a four-lane divided roadway west of Longden Avenue and east of the I-605 Freeway with an east-west orientation. Between Longden Avenue at the I-605 Freeway, Live Oak Avenue transitions between a 5 and 6 lane divided roadway. The current daily traffic volumes range from 21,700 to 37,600.

EXHIBIT 2-A

# EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS




**LEGEND:**

- = TRAFFIC SIGNAL
- = STOP SIGN
- 4 = NUMBER OF LANES
- D = DIVIDED
- U = UNDIVIDED
- = FREE RIGHT TURN

N

Arrow Highway: is a four-lane divided roadway with an east-west orientation. Arrow Highway currently carries between 14,800 and 28,000 trips per day.

Meridian Street: is a two-lane undivided roadway with an east-west orientation that currently carries less than 100 vehicles per day.

Bateman Avenue: is a two-lane undivided roadway with a north-south orientation that currently carries 2,800 vehicles per day.

Tifal Avenue: is a two-lane undivided roadway with a north-south orientation that currently carries 600 vehicles per day.

## 2.2 Existing Traffic

Existing daily traffic volumes on arterial highways throughout the study area are shown on Exhibit 2-B. Average daily traffic volumes (ADT) are based upon peak hour intersection counts factored up using the following formula:

Leg Volume = PM peak hour (inbound leg volume + outbound leg volume) * 10

## 2.3 Existing Intersection Operations Analysis

The following intersections have been selected for analysis purposes based on discussions with the City of Irwindale and the Los Angeles County Congestion Management Plan requirements:

Peck Road (NS) at:

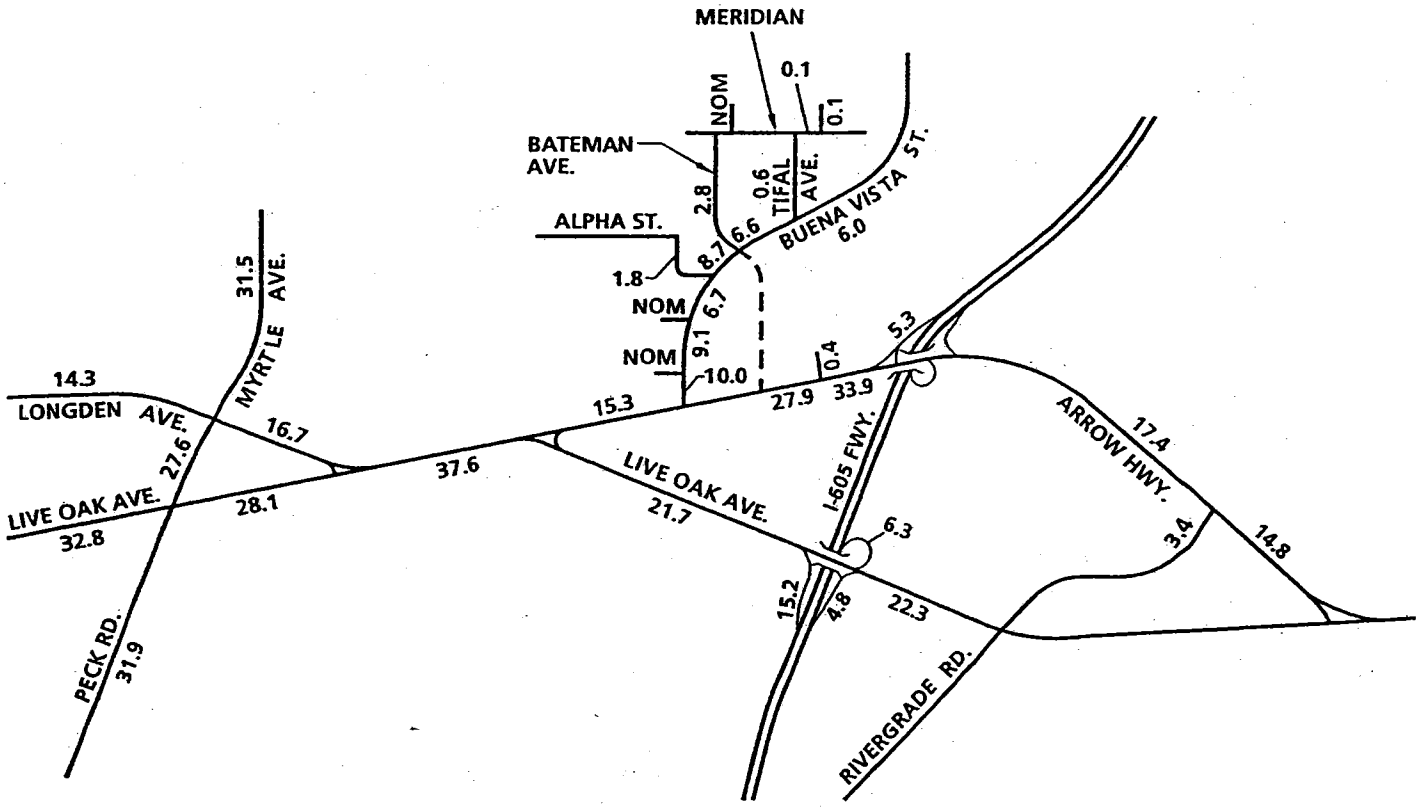
- Longden Avenue (EW)
- Live Oak Avenue (EW)

Longden Avenue (NS) at:

- Live Oak Avenue (EW)

EXHIBIT 2-B

# EXISTING AVERAGE DAILY TRAFFIC (ADT)




**LEGEND:**

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

N

Live Oak Avenue (NS) at:

- Arrow Highway (EW)

Buena Vista Street (NS) at:

- Arrow Highway (EW)
- Alpha Street (EW)

I-605 Southbound Off-Ramp (NS) at:

- Arrow Highway (EW)

I-605 Southbound On-Ramp (NS) at:

- Live Oak Avenue (EW)

I-605 Northbound Off-Ramp (NS) at:

- Live Oak Avenue (EW)

Graham Access Road (NS) at:

- Live Oak Avenue (EW)

Rivergrade Road (NS) at:

- Arrow Highway (EW)

Bateman Avenue (NS) at:

- Buena Vista Street (EW)

Tifal Avenue (NS) at:

- Buena Vista Street (EW)

The technique used to assess the operation of an intersection is known as Intersection Capacity Utilization (ICU). To calculate an ICU the volume of traffic using the intersection is compared with the capacity of the intersection. ICU is

usually expressed as a percent. The percent represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity.

The definitions of level of service for uninterrupted flow (flow unrestrained by the existence of traffic control devices) are:

- LOS "A" represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream.

- LOS "B" is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver.

- LOS "C" is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream.

- LOS "D" represents high-density but stable flow. Speed and freedom to maneuver are severely restricted, and the driver experiences a generally poor level of comfort and convenience.

- LOS "E" represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Small increases in flow will cause breakdowns in traffic movement.

- LOS "F" is used to define forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point. Queues form behind such locations.

Calculation Method:

a. Intersection Capacity Utilization (ICU) for study area signalized intersections; unsignalized intersections have been analyzed using the methodology included in the Highway Capacity Manual (HCM).

b. Daily volume/capacity ratio (V/C) for study links

c. Saturation Flow Rate

Saturation flow value of 1,600 vehicles per lane per hour for intersections; 2,880 vehicles per lane per hour for dual left-tum lanes.

d. Clearance Interval

A clearance interval factor of 10% (0.10) is applied to the ICU calculations.

e. Level of Service Ranges

The following thresholds are used in assigning a letter value to the resulting LOS:

| LOS | CRITICAL VOLUME TO CAPACITY RATIO |
|---|---|
| A | 0.00 - 0.60 |
| B | 0.61 - 0.70 |
| C | 0.71 - 0.80 |
| D | 0.81 - 0.90 |
| E | 0.91 - 1.00 |
| F | > 1.00 |

f. Peak-Periods

Weekday peak-hour analysis periods are defined as follows:

7:00 to 9:00 AM
4:00 to 6:00 PM

g. Peak-Hour

The highest one-hour period in both the AM and PM peak periods, as determined by four consecutive 15-minute count periods are used in the ICU calculations. Both AM and PM peak hours are studied.

h. Peak-Hour Data Consistency

Variations in peak-hour volumes can affect LOS calculations because they vary from day-to-day. To minimize these variations, no counts are taken on Mondays, Fridays, holidays or weekends.

i. Right Turn Movements

If the distance from the edge of the outside through lane is at least 19 feet and parking is prohibited during the peak period, right turning vehicles may be assumed to utilize this "unofficial" right turn lane. Otherwise, all right turn traffic is assigned to the through lane. If a right turn lane exists, right turn activity is checked for conflicts with other critical movements. It is assumed that right turn movements are accommodated during non-conflicting left turn phases (e.g., northbound right turns during westbound left turn phase), as well as non-conflicting through flows (e.g., northbound right turn movements

and north/south through flows). Right turn movements become critical when conflicting movements (e.g., northbound right turns, southbound left turns, and eastbound through flows) represent a sum of V/C ratios which are greater than the normal through/left turn critical movements.

If a free right turn lane exists (right turns do not have to stop for the signal), a flow rate of 1,600 vehicles per hour per lane is assumed. The V/C ratio of the right turn lane is reported but not included in the sum of the critical V/C ratios.

j. Unsignalized Intersections

The study area intersections which are currently stop sign controlled with stop control on the minor street only have been analyzed using the unsignalized intersection methodology of the HCM. For these intersections, the calculation of level of service is dependent on the occurrence of gaps occurring in the traffic flow of the main street. Using data collected describing the intersection configuration and traffic volumes at the study area location, the level of service has been calculated. The level of service criteria for this type of intersection analysis is based on measured or computed control delay per vehicle. The Level of Service is defined/computed for each minor movement. Level of Service is not defined for the intersection as a whole. For this reason the level of service is reported only for the worst minor street movement(s).

The levels of service are defined for the various analysis methodologies as follows:

| LEVEL OF SERVICE | AVERAGE TOTAL DELAY PER VEHICLE (SECONDS) |
|---|---|
| | UNSIGNALIZED |
| A | 0 to 10.00 |
| B | 10.01 to 15.00 |
| C | 15.01 to 25.00 |
| D | 25.01 to 35.00 |
| E | 35.01 to 50.00 |
| F | 50.01 and up |

The ICU's for the intersections in the vicinity of the site are shown in Table 2-1. Existing ICU's are based upon manual AM and PM peak hour turning movement counts conducted for Urban Crossroads, Inc. in April and November 2003 (see Exhibits 2-C and 2-D, respectively). Existing peak hour intersection traffic count sheets are included in Appendix "A".

The following study area intersections are currently operating at an unacceptable Level of Service ("E" or "F") during the peak hours:

Myrtle Avenue (NS) at:

- Longden Avenue (EW)
- Live Oak Avenue (EW)

I-605 Northbound Off-Ramp (NS) at:

- Live Oak Avenue (EW)

Plant Site Main Project Access (NS) at:

- Arrow Highway (EW)

Existing operation analysis worksheets for existing conditions are provided in Appendix "B".

## TABLE 2-1

## INTERSECTION ANALYSIS FOR EXISTING CONDITIONS

| INTERSECTION | TRAFFIC CONTROL[3] | INTERSECTION APPROACH LANES[1] | | | | | | | | | | | | ICU/DELAY[2] (SECS.) | | LEVEL OF SERVICE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NORTH-BOUND | | | SOUTH-BOUND | | | EAST-BOUND | | | WEST-BOUND | | | | | | |
| | | L | T | R | L | T | R | L | T | R | L | T | R | AM | PM | AM | PM |
| Myrtle Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Longden Ave. (EW) | TS | 1 | 2 | 1 | 1 | 2 | 1 | 0.5 | 1.5 | 1 | 0.5 | 1.5 | 0 | 0.880 | 0.993 | D | E |
| • Live Oak Ave. (EW) | TS | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 0.880 | 1.137 | D | F |
| Longden Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Live Oak Ave. (EW) | TS | 1 | 0 | 0 | 2 | 0 | 1 | 1 | 2 | 0 | 1 | 2 | 2>> | 0.606 | 0.797 | B | C |
| Live Oak Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Arrow Hwy. (EW) | TS | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 2>> | 1 | 2 | 0 | 0.885 | 0.676 | D | B |
| Buena Vista St. (NS) at: | | | | | | | | | | | | | | | | | |
| • Alpha St. (EW) | CSS | 0.5 | 1.5 | 1 | 0.5 | 1.5 | 1 | 0 | 1 | 0 | 0.5 | 0.5 | 1 | 18.6 | 17.0 | C | C |
| • Pit 2 North Project Access. (EW) | CSS | 0.5 | 1.5 | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 9.0 | 0.0 | A | A |
| • Pit 2 South Project Access. (EW) | CSS | 0.5 | 1.5 | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | A | A |
| • Arrow Hwy. (EW) | TS | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 2 | 0 | 0 | 2 | 1>> | 0.756 | 0.601 | C | B |
| Bateman Ave.. (NS) at: | | | | | | | | | | | | | | | | | |
| • Buena Vista St. (EW) | CSS | 0 | 0 | 0 | 0.5 | 0.5 | 1 | 0.5 | 1.5 | 1 | 0.5 | 1.5 | 1 | 16.2 | 15.7 | C | C |
| Tifal Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Buena Vista St. (EW) | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 2 | 1 | 11.5 | 11.6 | B | B |
| I-605 SB ON-RAMP. (NS) at | | | | | | | | | | | | | | | | | |
| • Live Oak Ave. (EW) | TS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1>> | 1 | 2 | 0 | 0.658 | 0.835 | B | D |
| I-605 NB OFF-RAMP. (NS) at: | | | | | | | | | | | | | | | | | |
| • ve Oak Ave. (EW) | CSS | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 2 | 0 | ---[4] | — | F | F |
| SB OFF-RAMP. (NS) at | | | | | | | | | | | | | | | | | |
| • Arrow Hwy. (EW) | TS | 0 | 0 | 0 | 1 | 0 | 1>> | 0 | 2 | 0 | 0 | 2 | 0 | 0.710 | 0.571 | C | A |
| Rivergrade Rd. (NS) at | | | | | | | | | | | | | | | | | |
| • Arrow Hwy. (EW) | TS | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 2 | 0 | 0.662 | 0.455 | B | A |
| Pit 3 East Project Access. (NS) at | | | | | | | | | | | | | | | | | |
| • Meridian St. (EW) | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0.5 | 0.5 | 0 | 0 | 1 | 0 | 0.0 | 0.0 | A | A |
| Plant Site Main Project Access. (NS) at | | | | | | | | | | | | | | | | | |
| • Arrow Hwy. (EW) | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0.5 | 1.5 | 0 | 0 | 2 | 0 | 32.2 | 40.9 | D | E |

---

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1>> = Free-Right Turn Lane

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal
CSS = Cross Street Stop
AWS = All Way Stop

[4] – Delay high, intersection unstable. LOS= "F".

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EXHIBIT 2-C

# EXISTING AM PEAK HOUR INTERSECTION VOLUMES

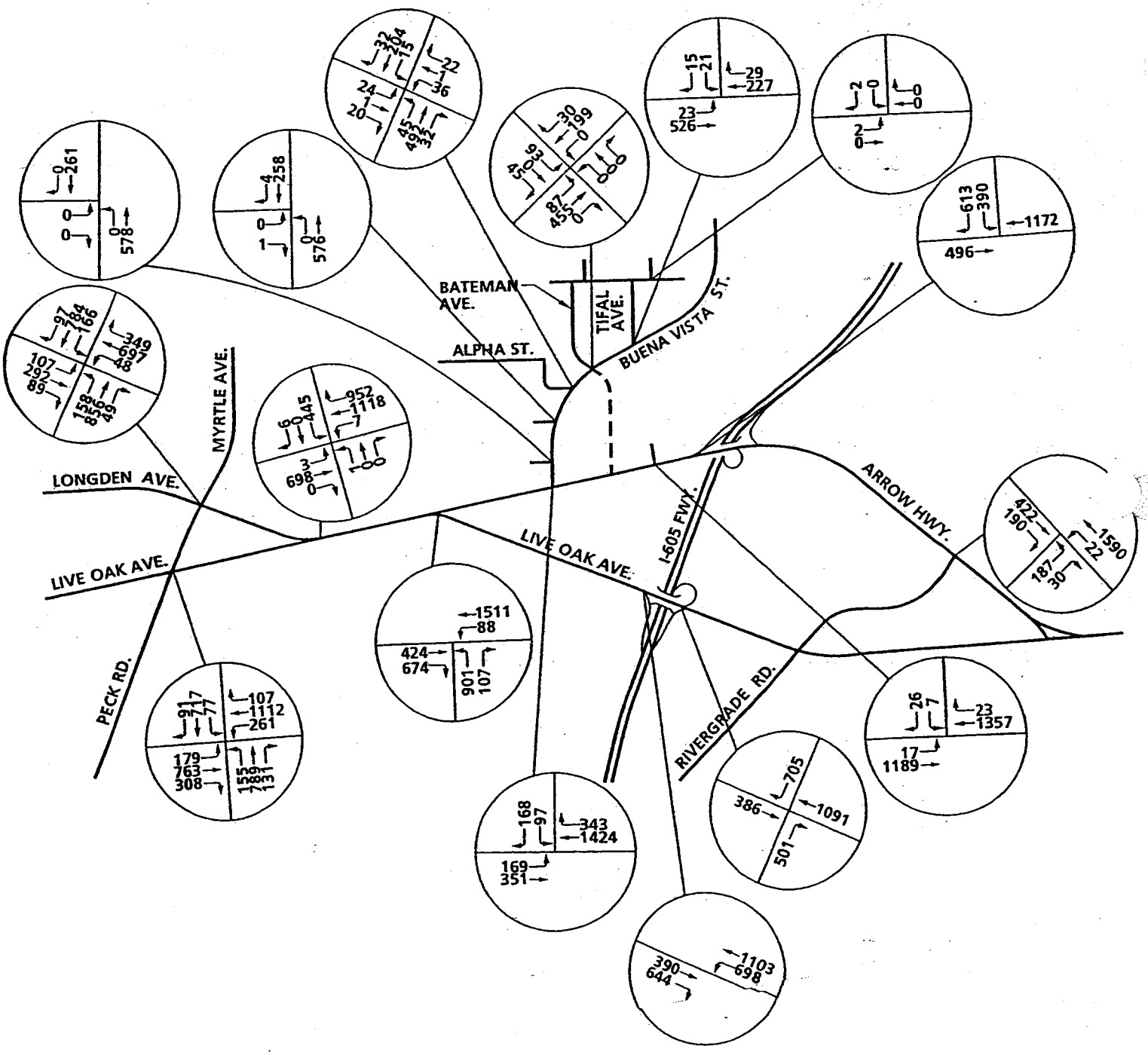
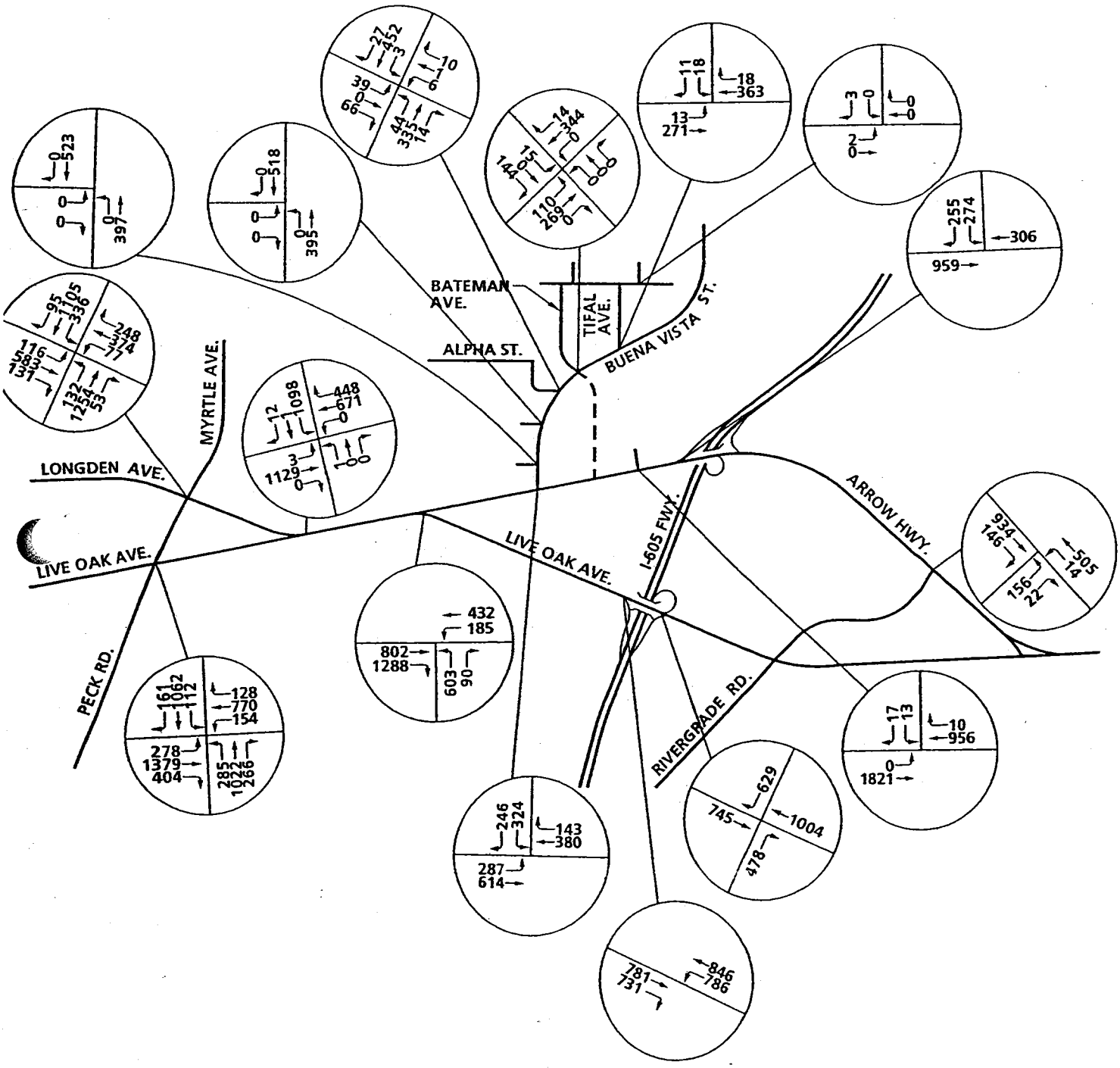


EXHIBIT 2-D

# EXISTING PM PEAK HOUR INTERSECTION VOLUMES



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## 3.0 PROJECT DEVELOPMENT

Buena Vista Street

The current alignment of Buena Vista Street is anticipated to be closed by June 2004 and replaced with a new alignment. This new alignment is located to the east and is nearly complete. This new roadway will provide access for Pits 2 and the Plant site.

Current Mining/Truck Activity

Pit 2 is currently being mined with material transported via a new conveyor belt which goes under both the old and new Buena Vista Street. No trucks enter or exit this site for purposes of transporting product. Rather product is transported to Pit 4 for processing and then from Pit 4 to endusers. Vehicles enter and exit on Buena Vista Street near Arrow Highway.

No mining is currently taking place in Pit 3. A conveyor system similar to the system for Pit 2 is currently in place which would allow for the transport of product to Pit 4 for processing once future mining in Pit 3 commences. As with Pit 2, when Pit 3 is being mined, all of the product will be transported to Pit 4 via conveyor for processing.

### 3.1 Project Trip Generation

The current traffic generation for the site is based on the level of activity occurring at each of the pits. Therefore, traffic counts were conducted at the existing driveways to determine the number of vehicles entering and exiting the site during the peak hours. Table 3-1 presents the number of inbound and outbound peak hour trips for both passenger cars and trucks. For analysis purposes, a passenger car equivalency (PCE) factor of 2.5 has been applied to the truck trips. A PCE factor represents the relative impact of a truck with respect to a passenger car. The 2.5 factor indicates that a truck, because of its size and

TABLE 3-1

EXISTING VEHICULAR ACTIVITY SUMMARY

| DRIVEWAY | LAND USE | | PEAK HOUR AM IN | PEAK HOUR AM OUT | PEAK HOUR PM IN | PEAK HOUR PM OUT |
|---|---|---|---|---|---|---|
| 1 | United Rock Plant Site (Main Access) | Passenger Cars | 8 | 7 | 4 | 14 |
| | | Trucks | 32 | 26 | 6 | 16 |
| | | Trucks (PCE=2.5) | 80 | 65 | 15 | 40 |
| | TOTAL | | 88 | 72 | 19 | 54 |
| 2 | United Rock Pit 2 (Northerly Access) | Passenger Cars | 4 | 1 | 0 | 0 |
| | | Trucks | 0 | 0 | 0 | 0 |
| | | Trucks (PCE=2.5) | 0 | 0 | 0 | 0 |
| | TOTAL | | 4 | 1 | 0 | 0 |
| 3 | United Rock Pit 2 (Southerly Access) | Passenger Cars | 0 | 0 | 0 | 0 |
| | | Trucks | 0 | 0 | 0 | 0 |
| | | Trucks (PCE=2.5) | 0 | 0 | 0 | 0 |
| | TOTAL | | 0 | 0 | 0 | 0 |
| 4 | United Rock Pit 3 (Easterly Access) | Passenger Cars | 0 | 2 | 2 | 3 |
| | | Trucks | 2 | 0 | 0 | 0 |
| | | Trucks (PCE=2.5) | 5 | 0 | 0 | 0 |
| | TOTAL | | 5 | 2 | 2 | 3 |
| 5 | United Rock Pit 3 (Westerly Access) | Passenger Cars | 0 | 0 | 0 | 0 |
| | | Trucks | 0 | 0 | 0 | 0 |
| | | Trucks (PCE=2.5) | 0 | 0 | 0 | 0 |
| | TOTAL | | 0 | 0 | 0 | 0 |
| | United Rock Product Corporation | Passenger Cars | 12 | 10 | 6 | 17 |
| | | Trucks | 34 | 26 | 6 | 16 |
| | | Trucks (PCE=2.5) | 85 | 65 | 15 | 40 |
| | **TOTAL VEHICLES FROM ALL DRIVEWAYS** | | **97** | **75** | **21** | **57** |

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slow moving characteristics, will have an equivalent impact as 2.5 passenger cars. As indicated in Table 3-1, the site currently generates approximately 172 PCE trips during the AM Peak Hour and 78 PCE trips during the PM Peak Hour.

It is our understanding that future (Year 2025) mining activities will not require an increase in the overall number of employees or trucks to/from the site. Therefore, the project trip generation is not anticipated to increase beyond the current levels. However, in the future, the mining activities will shift as the existing pits are excavated and mining of other pits commences. Table 3-2 presents a summary of the vehicular activity at the future project driveways. It should be noted that some of the existing project access points are anticipated to be closed due to the proposed Buena Vista Street alignment.

## 3.2 Project Trip Distribution

Trip distribution represents the directional orientation of traffic to and from the project site. Trip distribution is heavily influenced by the geographical location of the site, the project access points (as indicated in Exhibit 3-A) and the regional freeway system. The directional orientation of traffic was determined by evaluating surrounding land uses within the community.

Trip distribution for this study has been based upon Year 2025 conditions, including the realignment of Buena Vista Street. The trip distribution patterns for each mining pit of the proposed project are graphically depicted on Exhibits 3-B thru 3-G for outbound and inbound directions.

## 3.3 Modal Split

The traffic reducing potential of public transit has not been considered in this report. Essentially the traffic projections are "conservative" in that public transit might be able to reduce the traffic volumes.

TABLE 3-2

FUTURE VEHICULAR ACTIVITY SUMMARY

| DRIVEWAY | LAND USE | | PEAK HOUR AM IN | PEAK HOUR AM OUT | PEAK HOUR PM IN | PEAK HOUR PM OUT |
|---|---|---|---|---|---|---|
| | | Passenger Cars | 4 | 3 | 2 | 7 |
| | | Trucks | 16 | 13 | 3 | 8 |
| | United Rock Plant Site (Main Access) | Trucks (PCE=2.5) | 40 | 32 | 7 | 20 |
| 1 | TOTAL | | 44 | 36 | 9 | 27 |
| | | Passenger Cars | 3 | 3 | 2 | 6 |
| | | Trucks | 13 | 11 | 2 | 6 |
| | United Rock Plant Site (Northerly Access) | Trucks (PCE=2.5) | 32 | 26 | 6 | 16 |
| 8 | TOTAL | | 36 | 29 | 8 | 22 |
| | | Passenger Cars | 3 | 1 | 0 | 0 |
| | | Trucks | 0 | 0 | 0 | 0 |
| | United Rock Pit 2 (Easterly Access) | Trucks (PCE=2.5) | 0 | 0 | 0 | 0 |
| 7 | TOTAL | | 3 | 1 | 0 | 0 |
| | | Passenger Cars | 1 | 0 | 0 | 0 |
| | | Trucks | 0 | 0 | 0 | 0 |
| | United Rock Pit 2 (Westerly Access) | Trucks (PCE=2.5) | 0 | 0 | 0 | 0 |
| 6 | TOTAL | | 1 | 0 | 0 | 0 |
| | | Passenger Cars | 0 | 1 | 1 | 2 |
| | | Trucks | 2 | 1 | 0 | 1 |
| | United Rock Pit 3 (Easterly Access) | Trucks (PCE=2.5) | 6 | 3 | 1 | 2 |
| 4 | TOTAL | | 6 | 4 | 2 | 4 |
| | | Passenger Cars | 0 | 1 | 1 | 2 |
| | | Trucks | 3 | 1 | 0 | 1 |
| | United Rock Pit 3 (Westerly Access) | Trucks (PCE=2.5) | 7 | 3 | 1 | 2 |
| 5 | TOTAL | | 7 | 5 | 2 | 4 |
| | | Passenger Cars | 0 | 0 | 0 | 0 |
| | | Trucks | 0 | 0 | 0 | 0 |
| | United Rock Pit 3 (Northerly Access) | Trucks (PCE=2.5) | 1 | 0 | 0 | 0 |
| 9 | TOTAL | | 1 | 0 | 0 | 0 |
| | | Passenger Cars | 12 | 10 | 6 | 17 |
| | | Trucks | 34 | 26 | 6 | 16 |
| | United Rock Product Corporation | Trucks (PCE=2.5) | 85 | 65 | 15 | 40 |
| | **TOTAL VEHICLES FROM ALL DRIVEWAYS** | | **97** | **75** | **21** | **57** |

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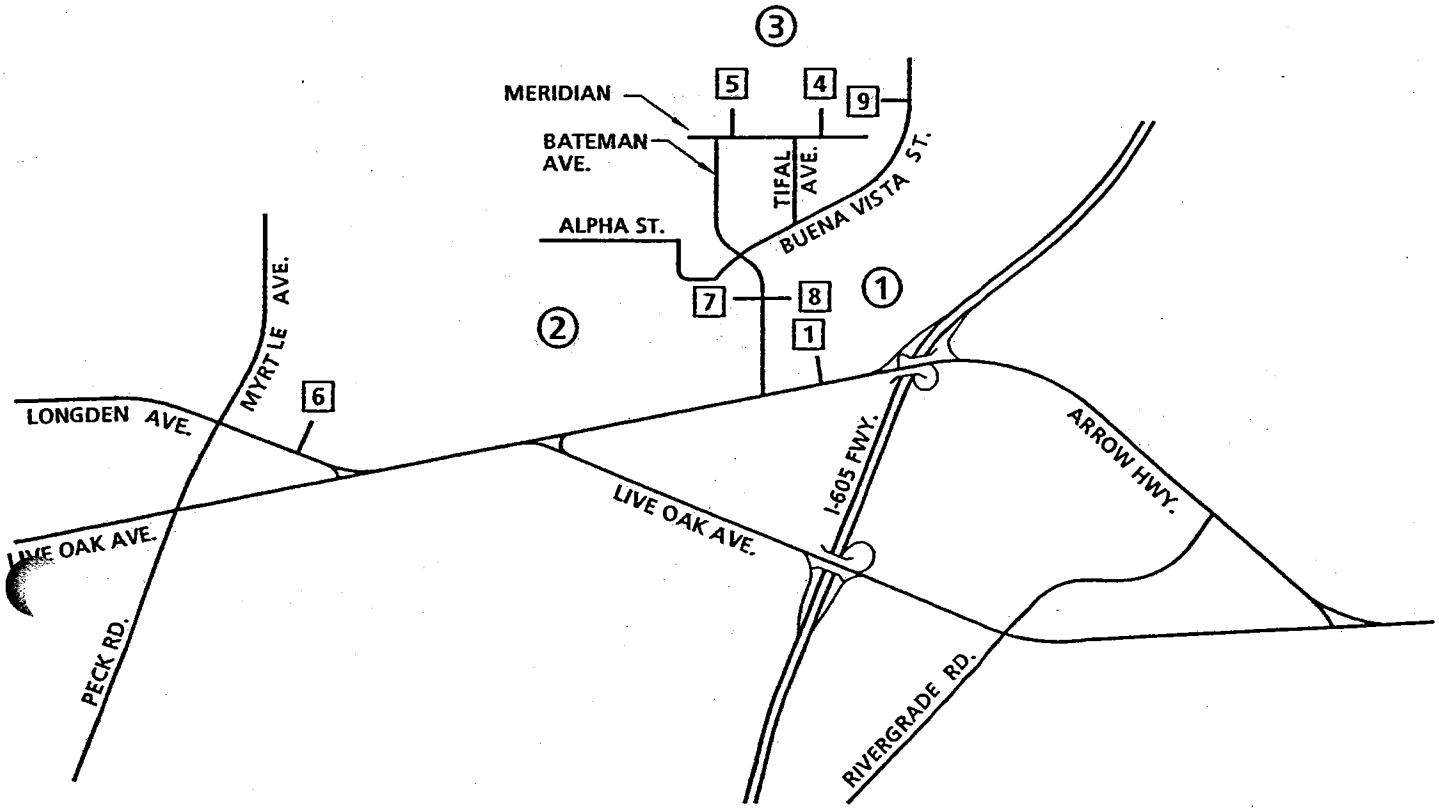
EXHIBIT 3-A

# FUTURE DRIVEWAYS



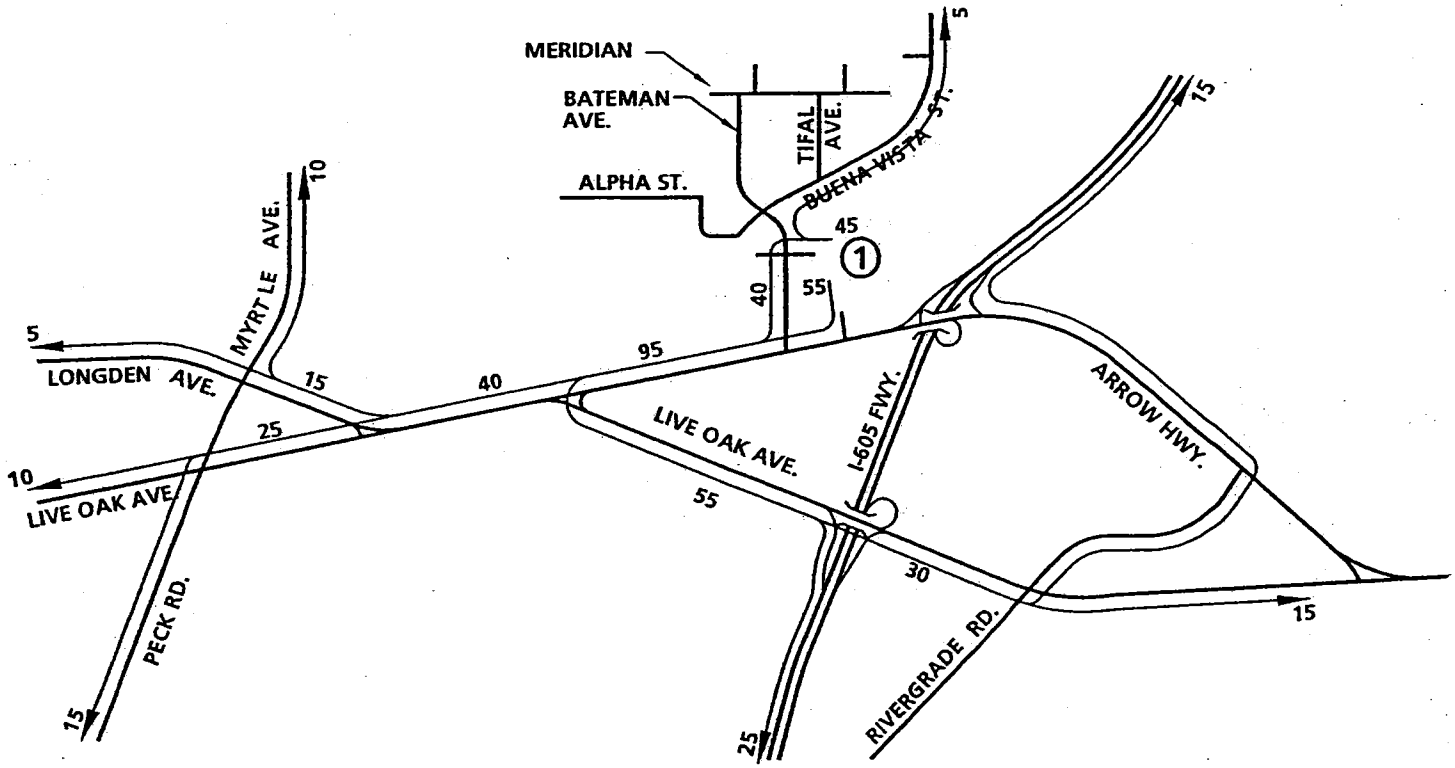

**LEGEND:**

| | |
|---|---|
| (1) = UNITED ROCK PLANT SITE | [5] = PIT 3 WESTERLY ACCESS |
| (2) = UNITED ROCK PIT 2 | [6] = PIT 2 WESTERLY ACCESS |
| (3) = UNITED ROCK PIT 3 | [7] = PIT 2 EASTERLY ACCESS |
| [1] = PLANT SITE MAIN ACCESS | [8] = PLANT SITE NORTHERLY ACCESS |
| [4] = PIT 3 EASTERLY ACCESS | [9] = PIT 3 NORTHERLY ACCESS |

N

EXHIBIT 3-B

# PLANT SITE
# OUTBOUND TRIP DISTRIBUTION




**LEGEND:**

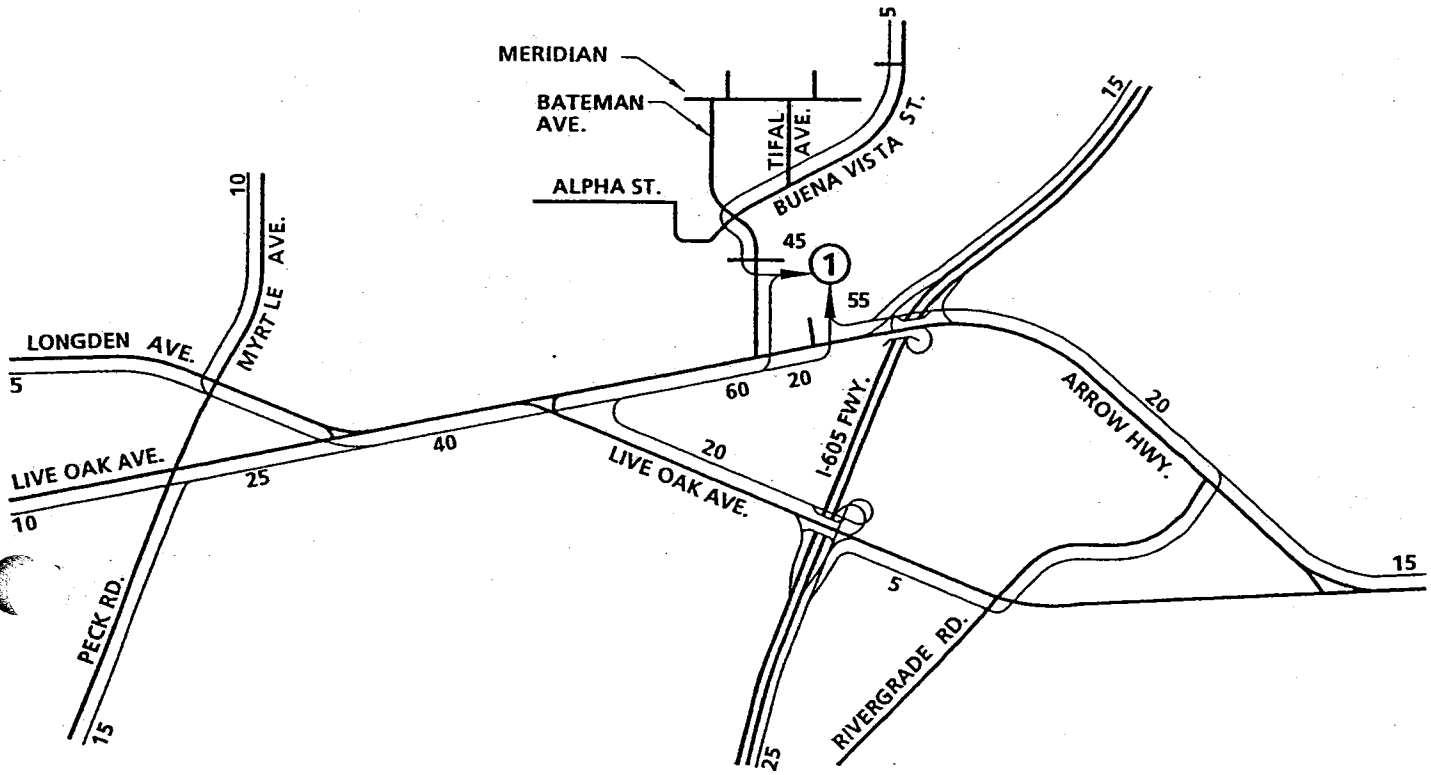
10 = PERCENT FROM PROJECT

(1) = PLANT SITE

N

EXHIBIT 3-C

# PLANT SITE
# INBOUND TRIP DISTRIBUTION




**LEGEND:**

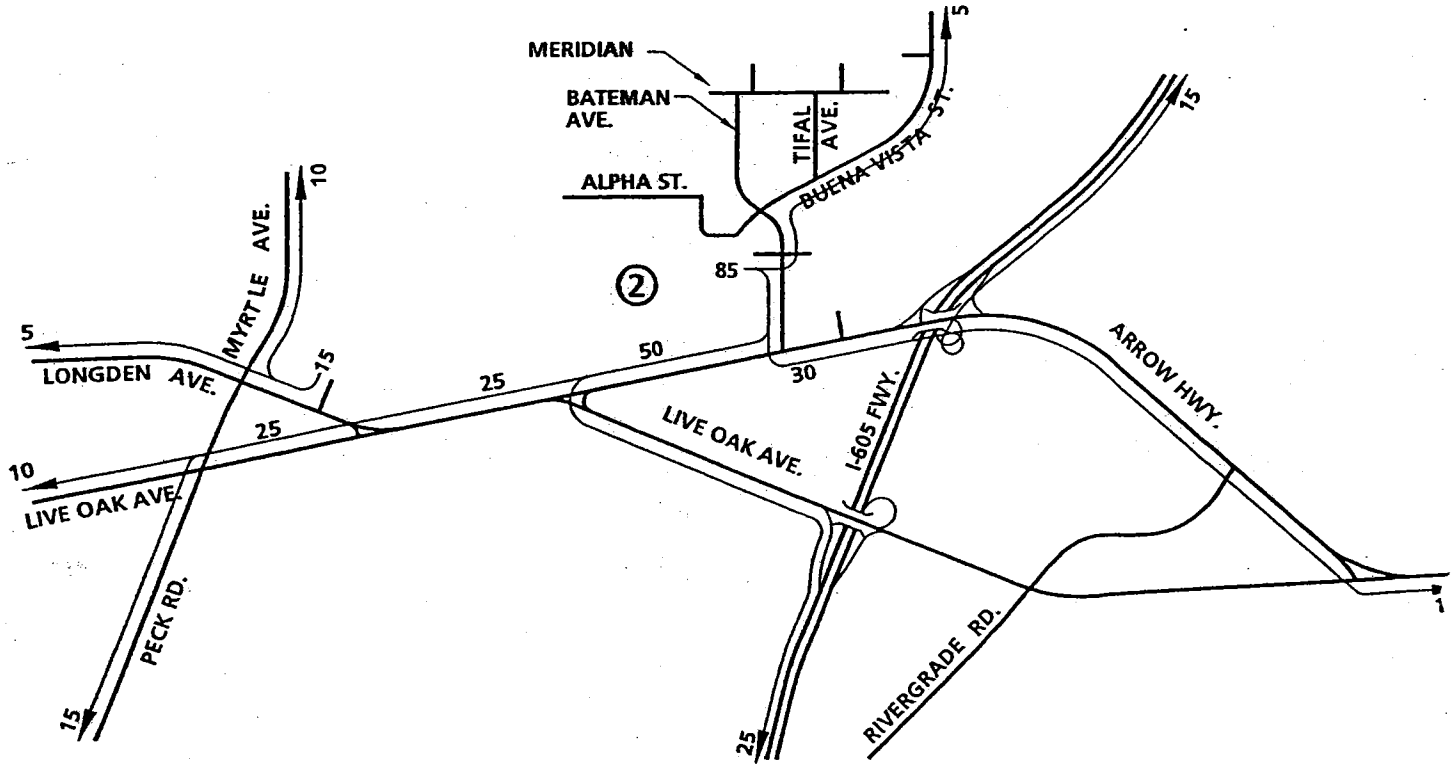
10 = PERCENT TO PROJECT

(1) = PLANT SITE

N

EXHIBIT 3-D

# UNITED ROCK PIT 2
# OUTBOUND TRIP DISTRIBUTION




**LEGEND:**

10 = PERCENT FROM PROJECT

(2) = UNITED ROCK PIT 2

N

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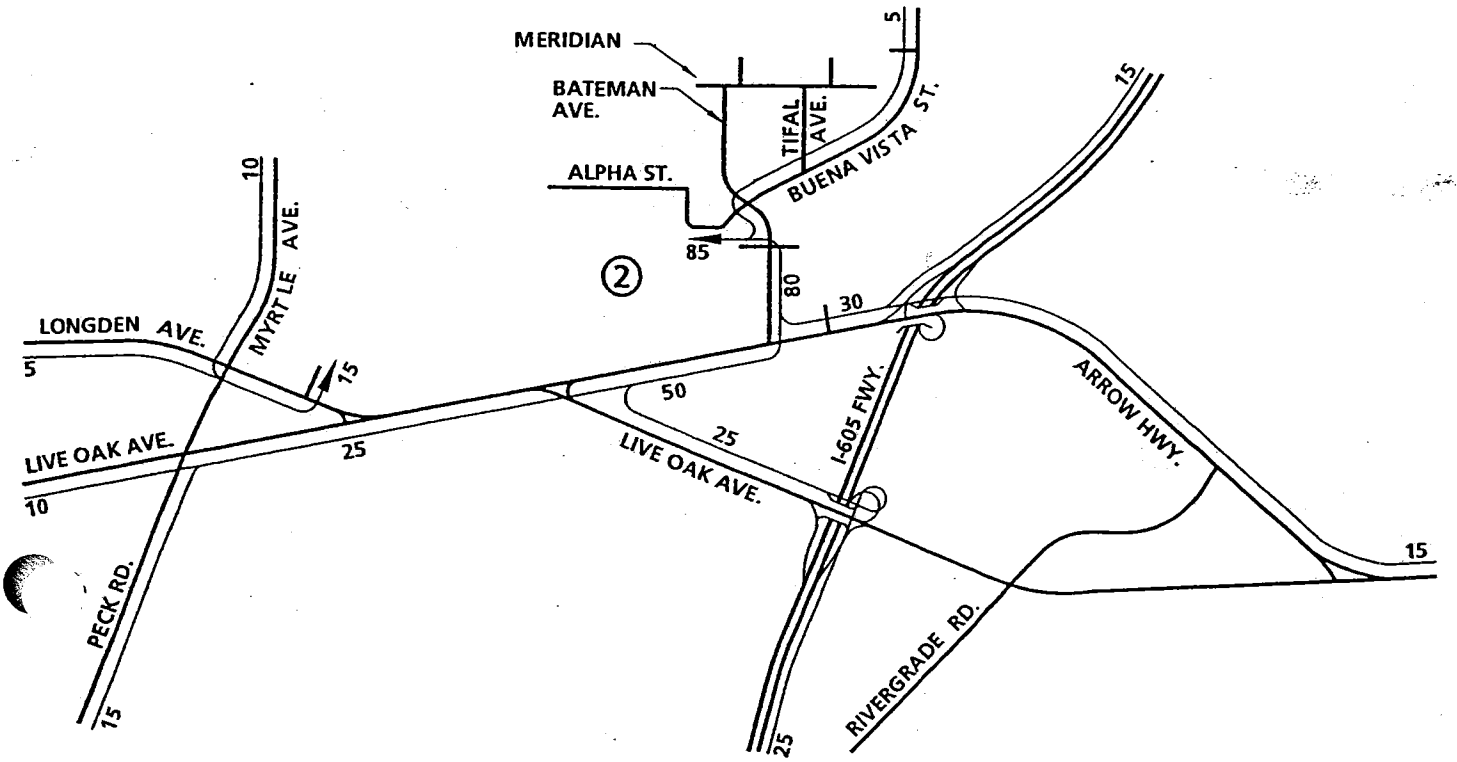
EXHIBIT 3-E

# UNITED ROCK PIT 2
# INBOUND TRIP DISTRIBUTION



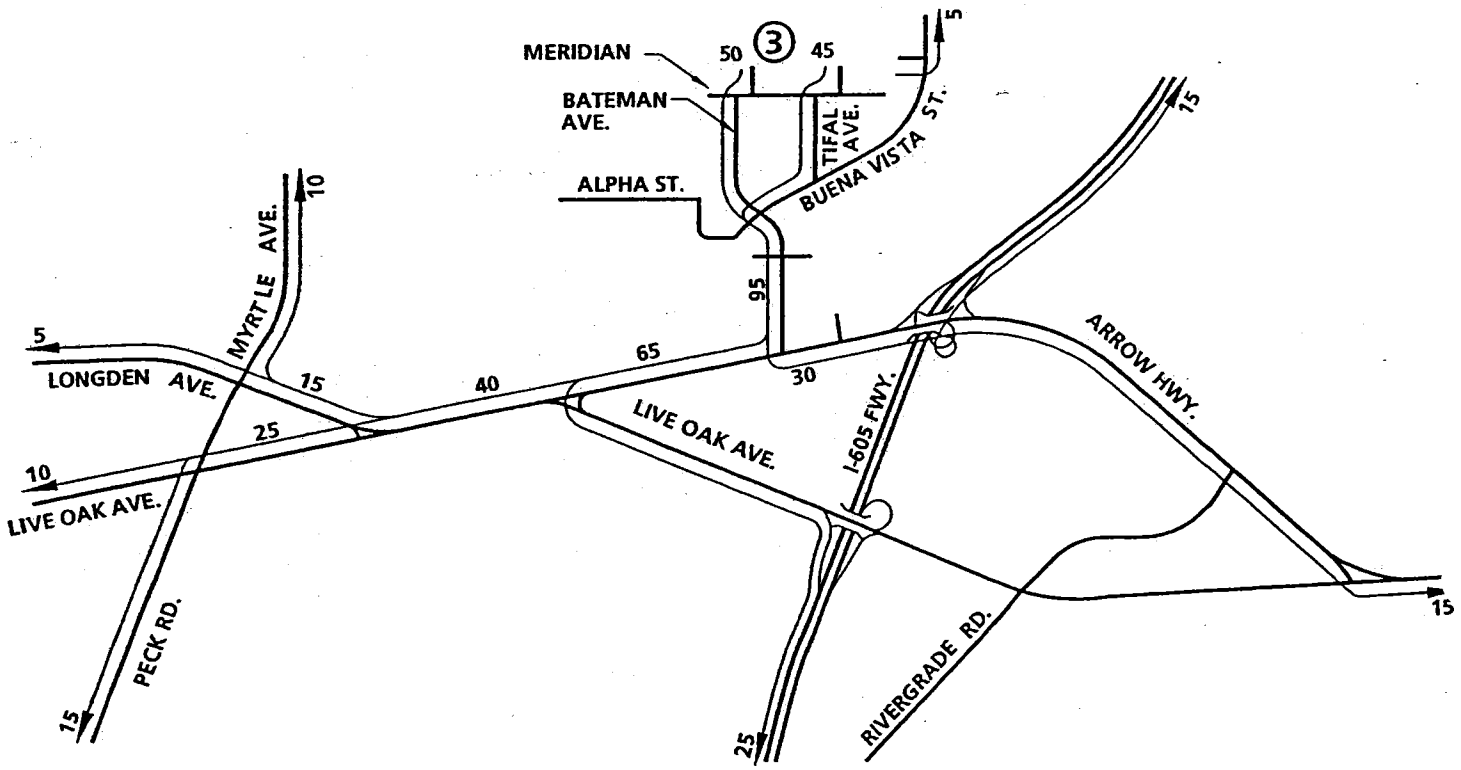

**LEGEND:**

10 = PERCENT FROM PROJECT

(2) = UNITED ROCK PIT 2

EXHIBIT 3-F

# UNITED ROCK PIT 3
# OUTBOUND TRIP DISTRIBUTION




**LEGEND:**

10 = PERCENT FROM PROJECT

(3) = UNITED ROCK PIT 3

N

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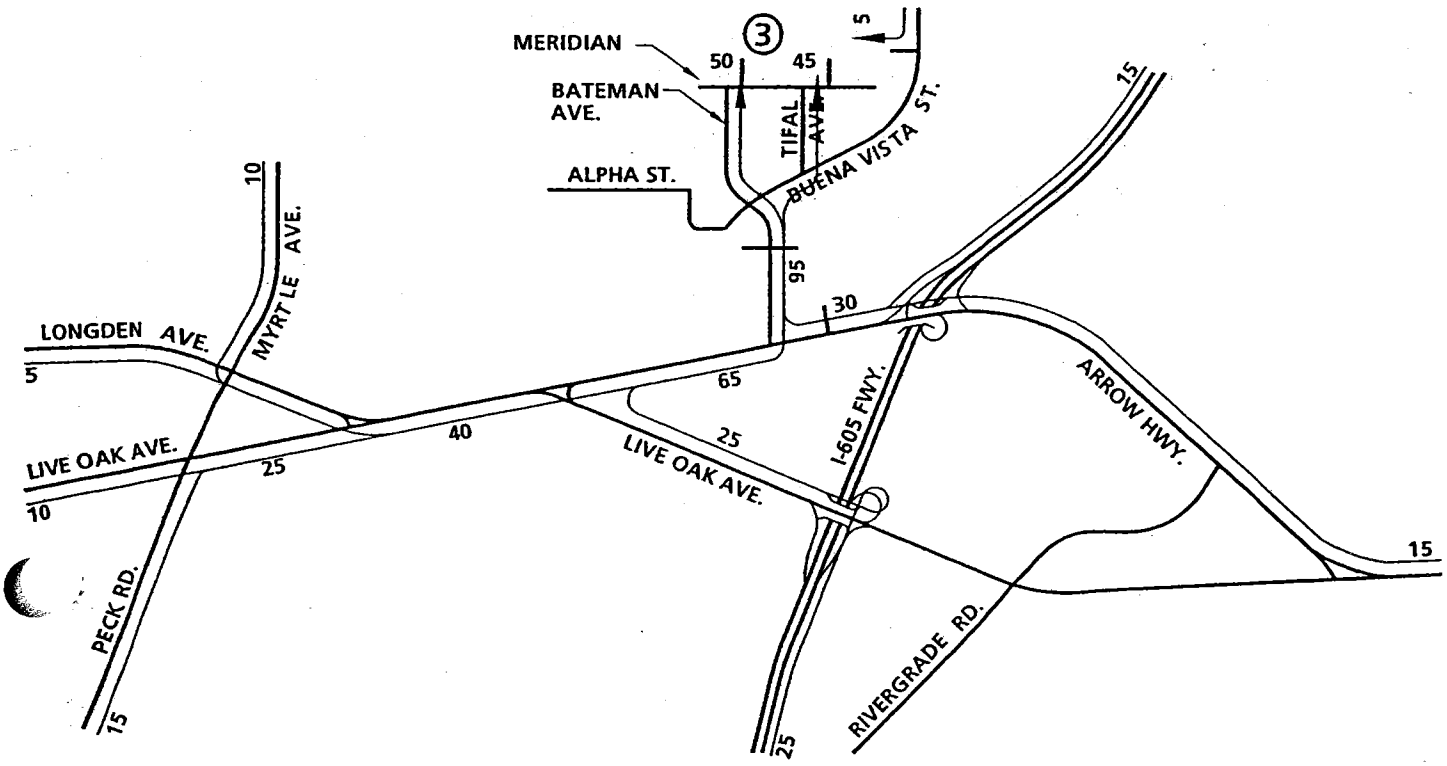
EXHIBIT 3-G

# UNITED ROCK PIT 3
# INBOUND TRIP DISTRIBUTION




**LEGEND:**

10 = PERCENT FROM PROJECT

(3) = UNITED ROCK PIT 3

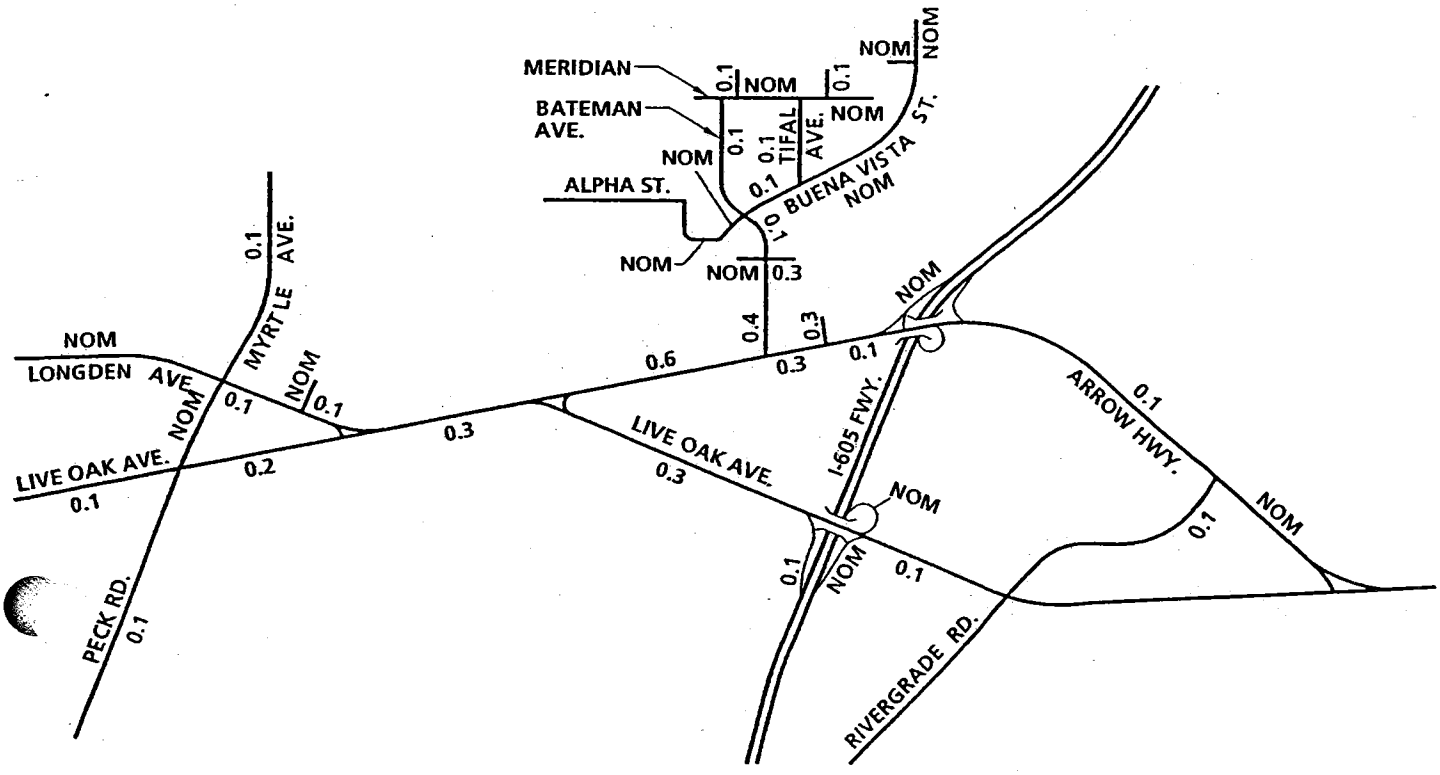
N

## 3.4 Project Trip Assignment

The assignment of traffic from the site to the adjoining roadway system has been based upon the site's trip generation, trip distributions, proposed arterial highway and local street systems, which would be in place by the time of occupancy of the project. The average daily traffic for the project is depicted in Exhibit 3-H. The AM and PM peak hour traffic volumes associated with the project have been assigned to the study area roadway system. These traffic volumes are illustrated on Exhibits 3-I and 3-J for the respective timeframes.

EXHIBIT 3-H

# PROJECT AVERAGE DAILY TRAFFIC (ADT)

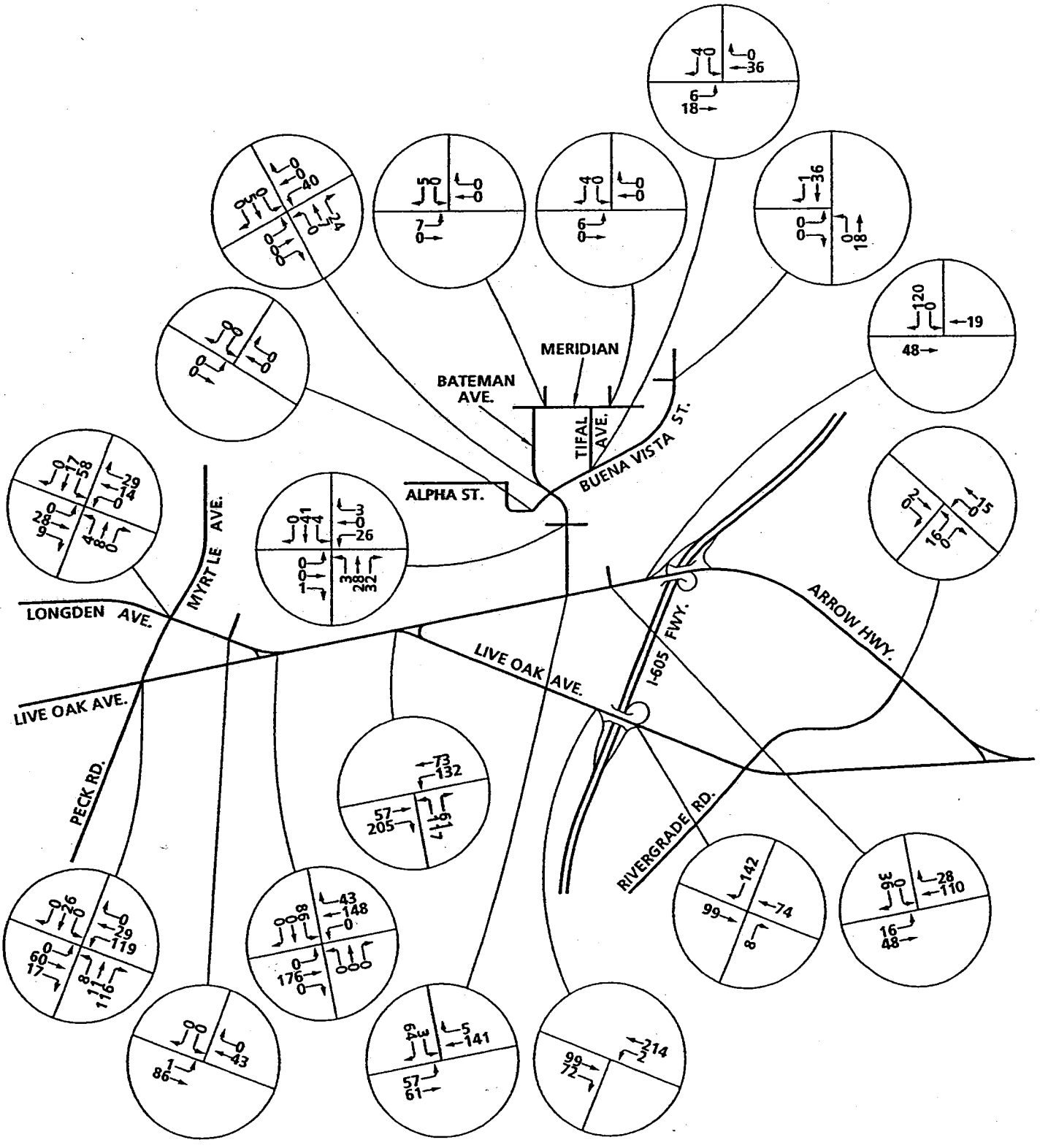



**LEGEND:**

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

EXHIBIT 3-I

# PROJECT AM PEAK HOUR INTERSECTION VOLUMES

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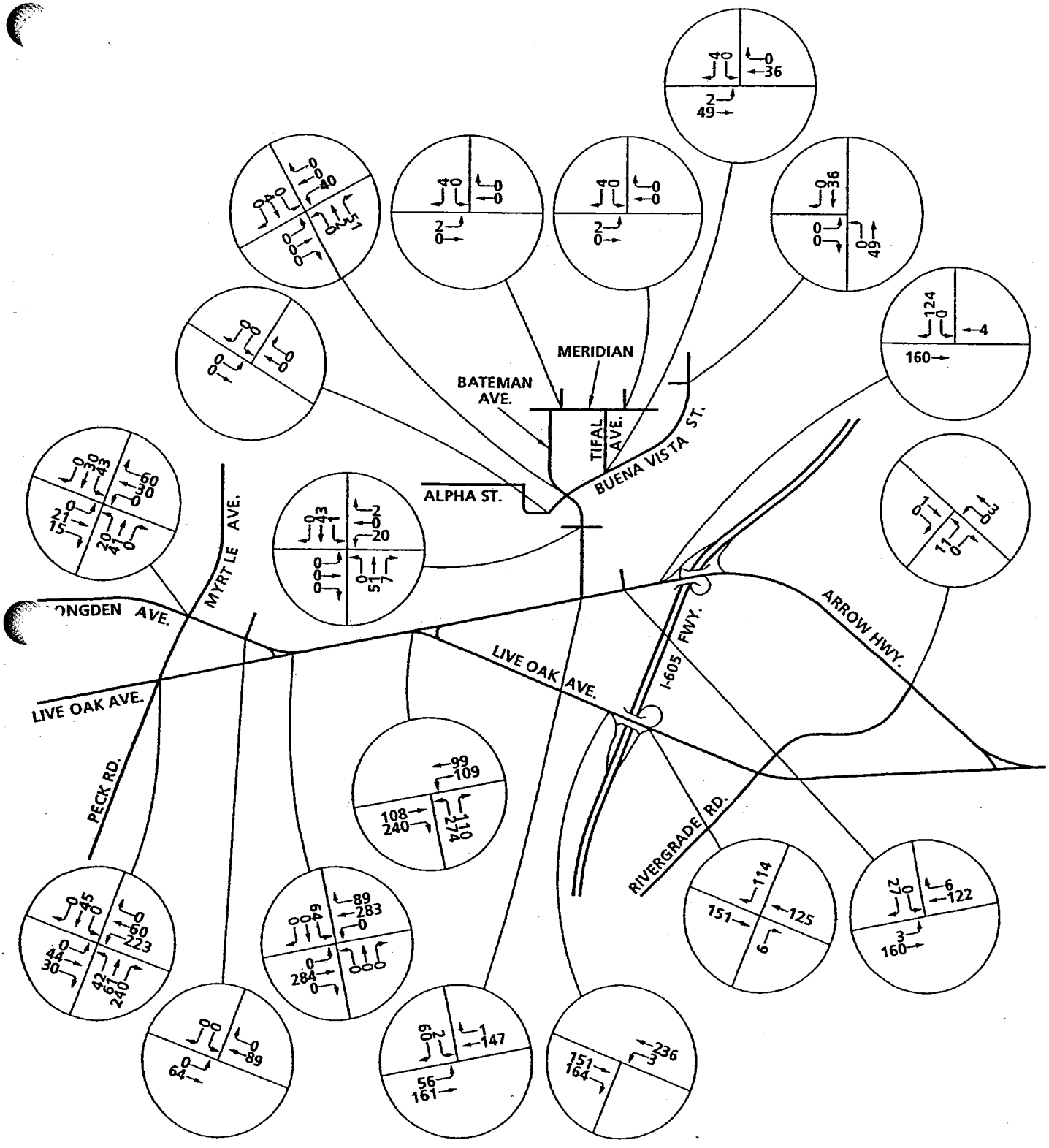
URBAN CROSSROADS

EXHIBIT 3-J

# PROJECT PM PEAK HOUR INTERSECTION VOLUMES



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## 4.0 FUTURE TRAFFIC CONDITIONS

Based on the City of Irwindale traffic impact analysis requirements, the following future traffic scenarios have been analyzed to assess the potential impacts associated with the proposed project:

- Year 2025 without project
- Year 2025 with project

### 4.1 Year 2025 Without Project

#### Method of Projection

To assess Year 2025 Without Project traffic conditions, other development-related traffic volumes are added to the existing traffic after it is combined with ambient growth. The study year for analysis purposes in this report is 2025.

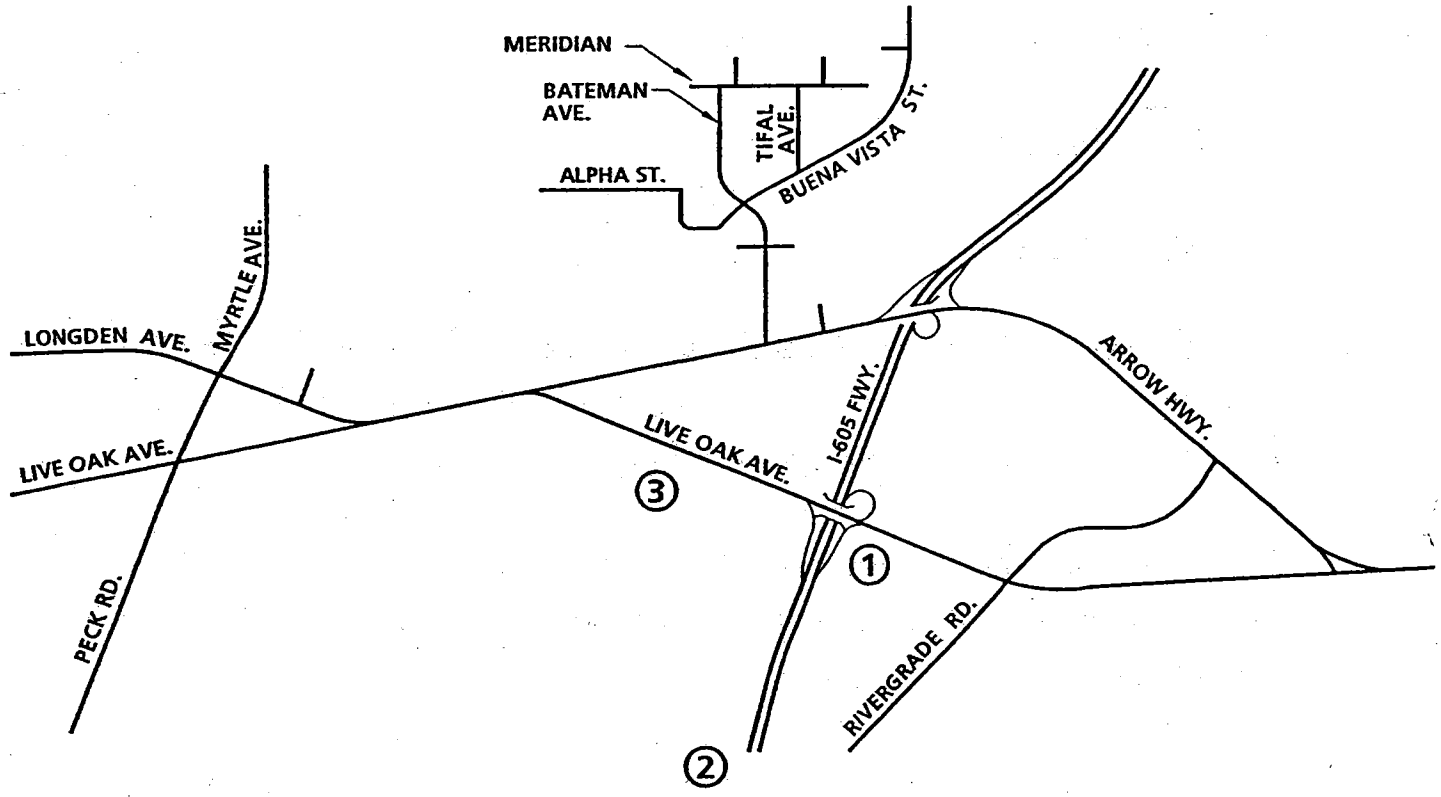
To account for ambient growth on roadways, future traffic volumes have been calculated based on a 2.0 percent annual growth rate of existing traffic volumes over a twenty-one year period (2025).

A list of cumulative projects that could potentially add traffic to the study area intersections were supplied by the City of Irwindale as well as researched by Urban Crossroads, Inc staff. It was determined that traffic from three (3) related, unbuilt projects (see Exhibit 4-A) in the study area were appropriate for this study. The daily, AM and PM peak hour trip generation for the related projects are shown in Table 4-1. The cumulative projects are projected to generate a total of approximately 18,712 trip-ends per day with 964 vehicles per hour during the AM peak hour and 1,680 vehicles per hour during the PM peak hour.

The trip distributions for the cumulative projects are graphically depicted on Exhibits 4-B through 4-I. Based on the cumulative projects trip generation and

EXHIBIT 4-A

# OTHER DEVELOPMENT LOCATION MAP




**LEGEND:**

(1) = EDISON PUBLIC STORAGE

(2) = RIVERGRADE BOAT MANUFACTURING

(3) = HANSON AGGRERATES QUARRY

N

URBAN CROSSROADS

UNITED ROCK PRODUCT CORPORATION, Irwindale, California - 01268:23

**TABLE 4-1**

**OTHER DEVEOPMENT**
**PROJECT TRIP GENERATION**

| LAND USE1 | PROPOSED QUANTITY2 | PEAK-HOUR AM IN | PEAK-HOUR AM OUT | PEAK-HOUR PM IN | PEAK-HOUR PM OUT | DAILY |
|---|---|---|---|---|---|---|
| Edison Public Storage/Mini-Warehouse | 10.0 AC | 17 | 12 | 20 | 18 | 389 |
| Rivergrade Boat Manufacturing | 5.0 AC | 35 | 3 | 22 | 20 | 194 |
| HANSON AGGRETGATES NORTHERN PORTION | | | | | | |
| Hotel | 400 RM | 136 | 88 | 128 | 116 | 3,292 |
| Hotel | 100 RM | 34 | 22 | 32 | 29 | 823 |
| General Light Industrial | 35 AC | 218 | 45 | 56 | 198 | 1,813 |
| Building Materials and Lumber Site | 21.5 AC | 17 | 15 | 29 | 33 | 754 |
| Commercial Retail (50 TSF) | 50.0 TSF | 65 | 41 | 191 | 207 | 4,366 |
| • Pass-By Trips | 30 % | -20 | -12 | -57 | -62 | -1,310 |
| SUBTOTAL (Northern Portion) | | 450 | 199 | 379 | 521 | 9,738 |
| HANSON AGGREGATES SOUTHERN PORTION | | | | | | |
| Commercial Retail (10.7 AC Site) | 53.5 TSF | 67 | 43 | 200 | 216 | 4,559 |
| • Pass-By Trips | 30 % | -20 | -13 | -60 | -65 | -1,368 |
| Boat Launch/Docks | 100 SLIP | 37 | 3 | 3 | 36 | 388 |
| Commercial Retail (9.3 AC Site) | 46.5 TSF | 62 | 40 | 182 | 197 | 4,166 |
| Pass-By Trips | 30 % | -19 | -12 | -55 | -59 | -1,250 |
| Boat Launch/Docks | 100 SLIP | 37 | 3 | 3 | 36 | 388 |
| Recreational Lake/Regional Park | 330.0 AC | 10 | 10 | 30 | 36 | 1,508 |
| SUBTOTAL (Southern Portion) | | 174 | 74 | 303 | 397 | 8,391 |
| **TOTAL** | | **676** | **288** | **724** | **956** | **18,712** |

1 Land Use Assumptions

- Hotel = 10 Rooms Per AC
- General Light Industrial = General Light Industrial (ITE 110)
- Building Materials and Lumber Site = Building Material and Lumberyard (ITE 812)
- Commercial Retail = 10 TSF Per AC
- 10.7 AC Commercial/Recreation Use = 50% (53.5 TSF) Commercial Retail (ITE 820) with a Boat Launch
- 9.3 AC Commercial/Recreation Use = 50% (46.5 TSF) Commercial Retail (ITE 820) with a Boat Launch
- The 10.7 AC and the 9.3 AC Commercial/Recreation sites are each assumed to have a boat launch with 100 slips.
- Boat Launch data based on similar development: Diamond Valley Lake Marina Cove in Menifee, CA with 380 slips.
- Recreational Lake = Regional Park (ITE 417)

2 RM = room; AC = Acre; TSF = thousand square feet

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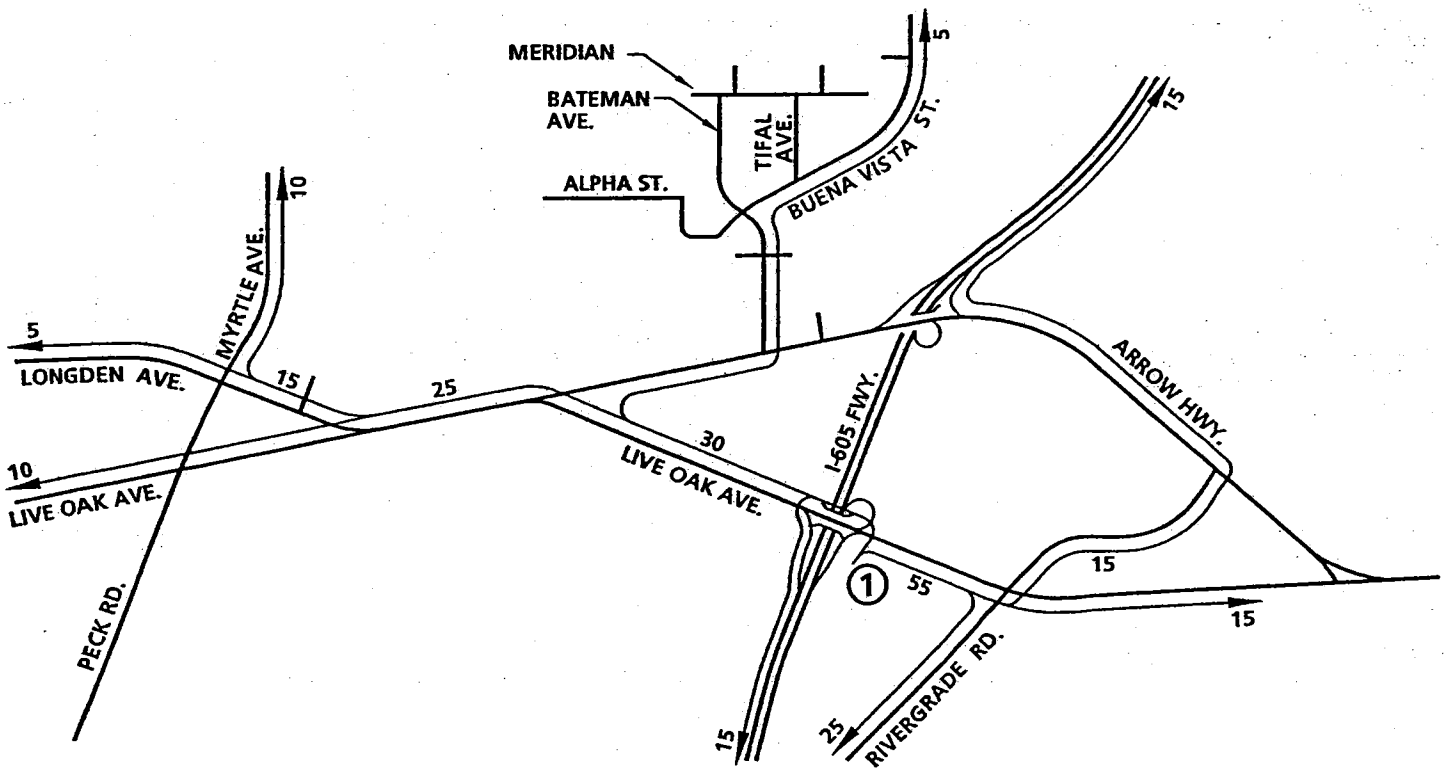
EXHIBIT 4-B

# EDISON PUBLIC STORAGE
# OUTBOUND TRIP DISTRIBUTION




**LEGEND:**

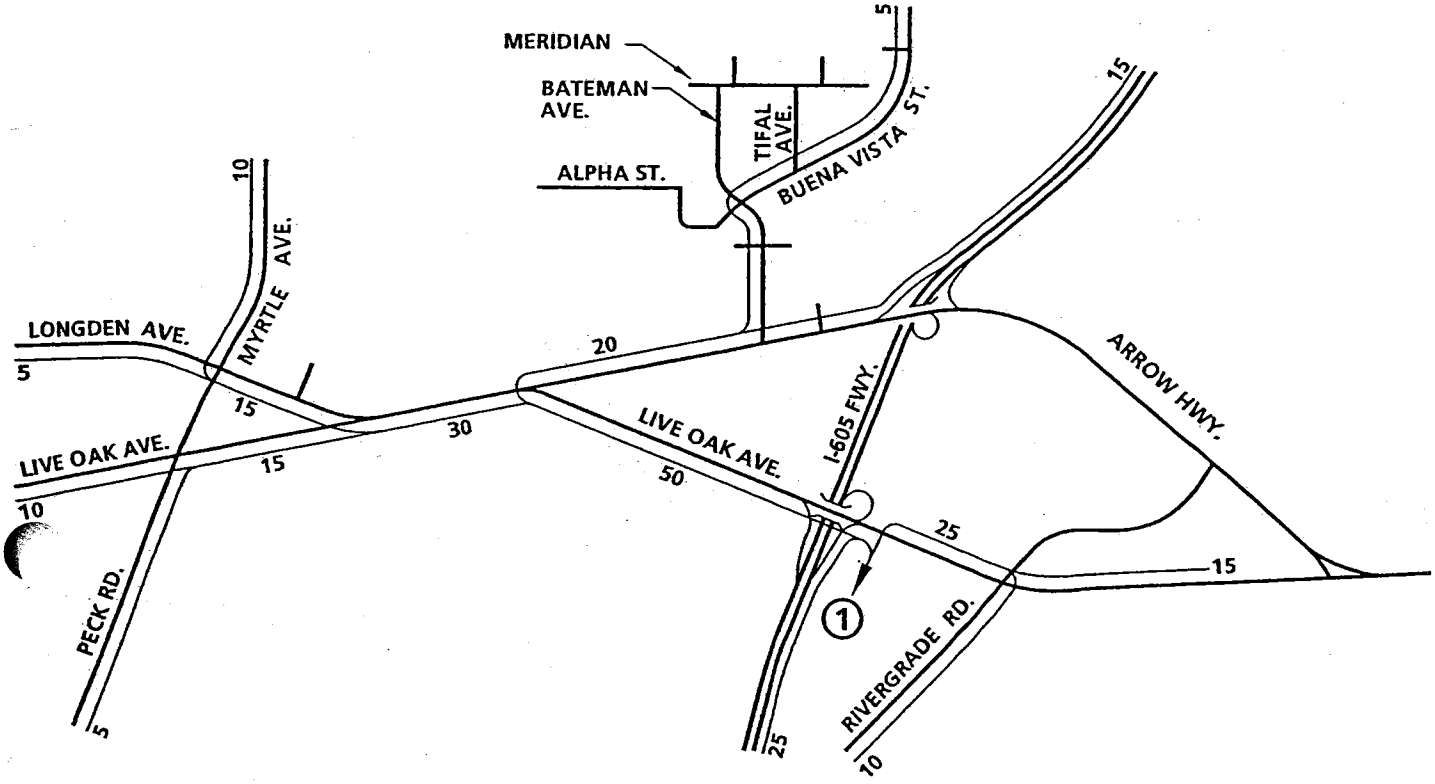
10 = PERCENT FROM PROJECT

(1) = EDISON PUBLIC STORAGE

N

EXHIBIT 4-C

# EDISON PUBLIC STORAGE
# INBOUND TRIP DISTRIBUTION



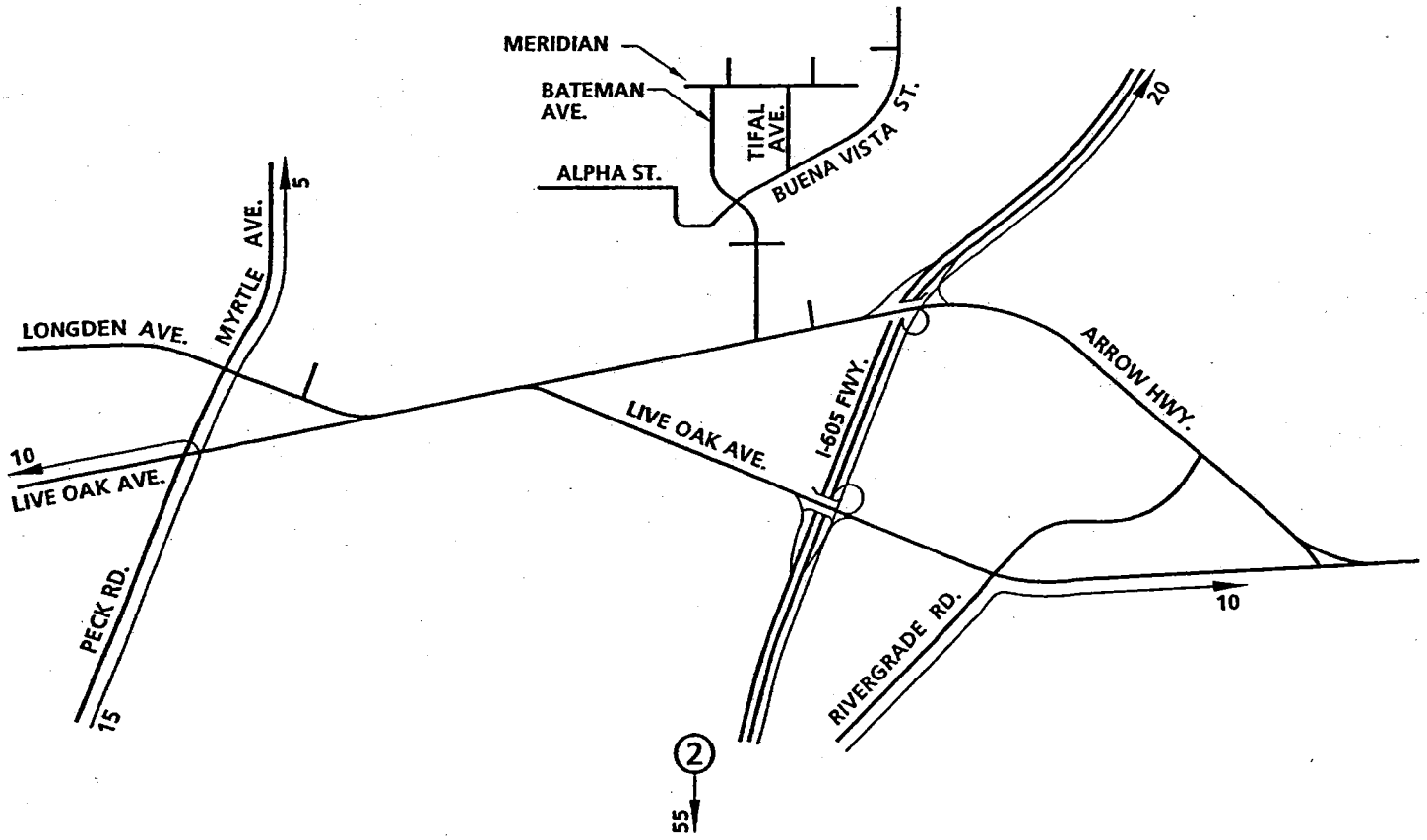

**LEGEND:**

10 = PERCENT TO PROJECT

(1) = EDISON PUBLIC STORAGE

EXHIBIT 4-D

# RIVERGRADE BOAT MANUFACTURING OUTBOUND TRIP DISTRIBUTION




**LEGEND:**

10 = PERCENT FROM PROJECT

(2) = RIVERGRADE BOAT MANUFACTURING

N

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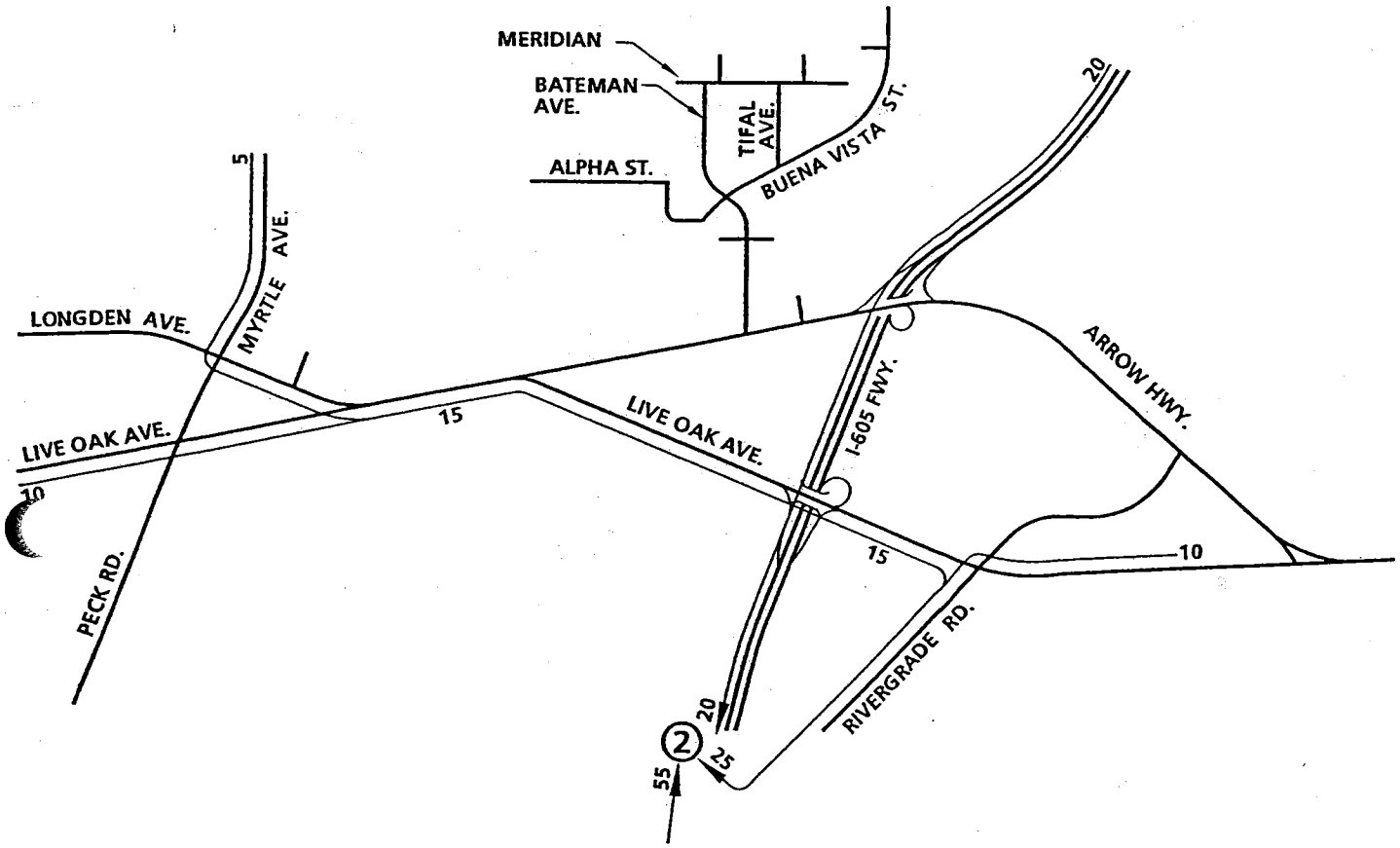
EXHIBIT 4-E

# RIVERGRADE BOAT MANUFACTURING INBOUND TRIP DISTRIBUTION



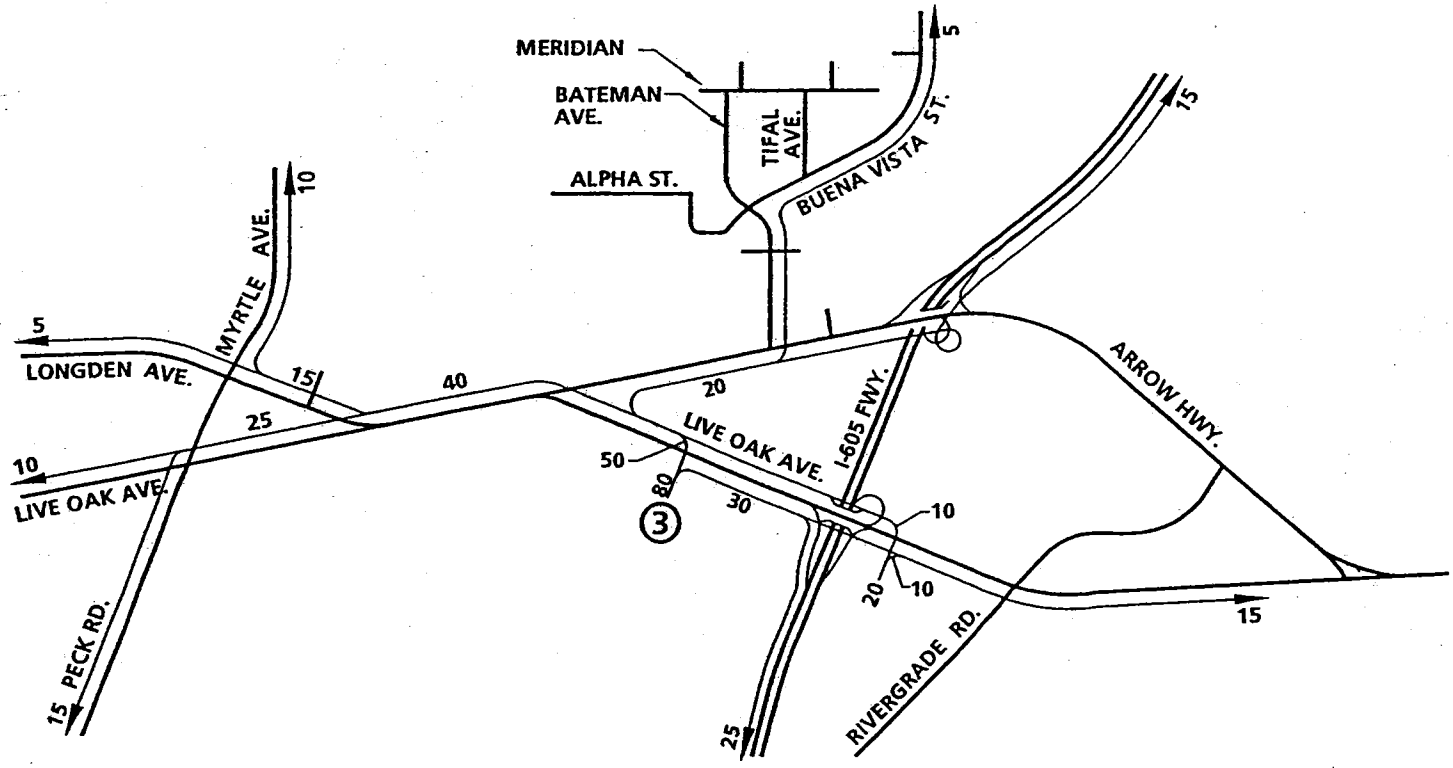

**LEGEND:**

10 = PERCENT TO PROJECT

(2) = RIVERGRADE BOAT MANUFACTURING

EXHIBIT 4-F

# HANSON AGGREGATES (NORTHERLY PORTION) OUTBOUND TRIP DISTRIBUTION



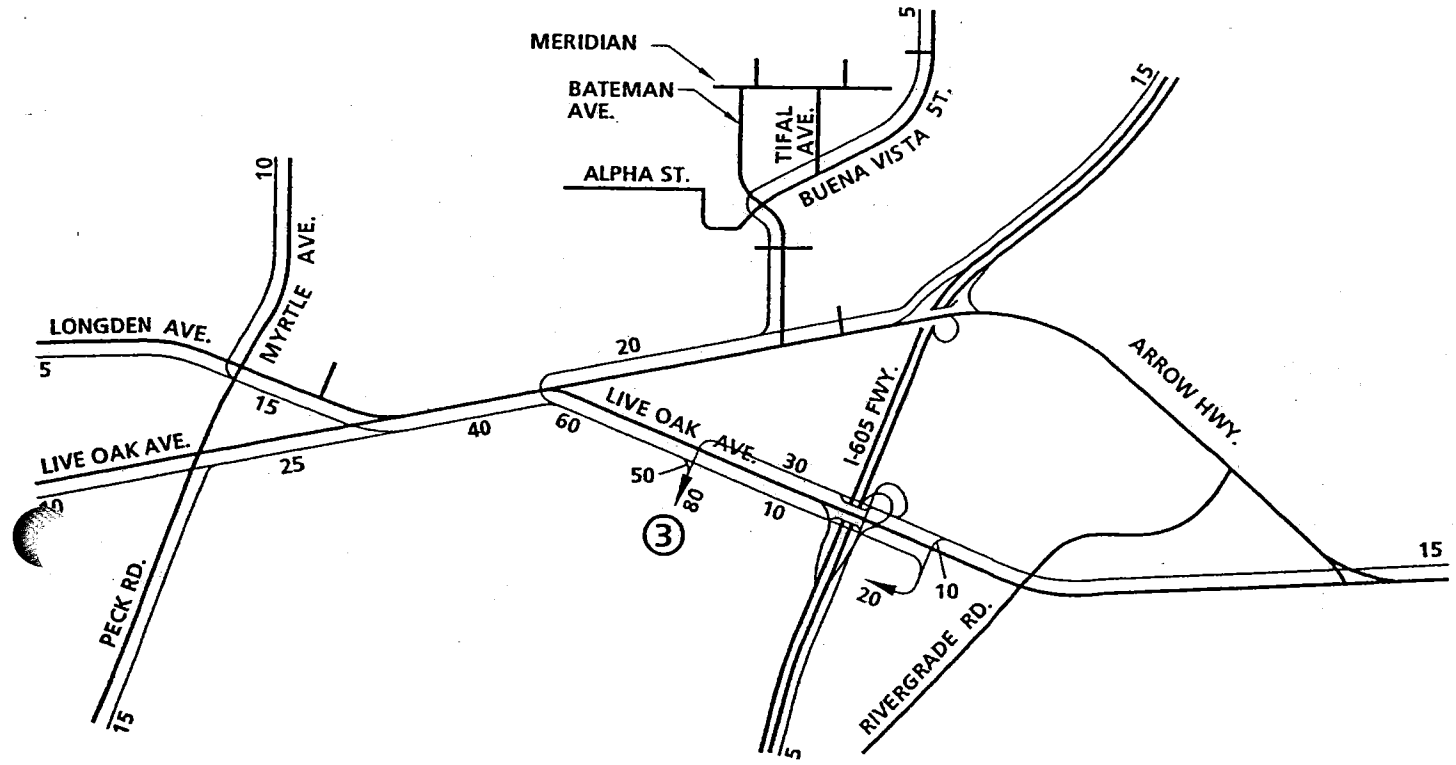

**LEGEND:**

10 = PERCENT FROM PROJECT

(3) = HANSON AGGREGATES

EXHIBIT 4-G

# HANSON AGGREGATES (NORTHERLY PORTION) INBOUND TRIP DISTRIBUTION




**LEGEND:**

10 = PERCENT TO PROJECT

③ = HANSON AGGREGATES

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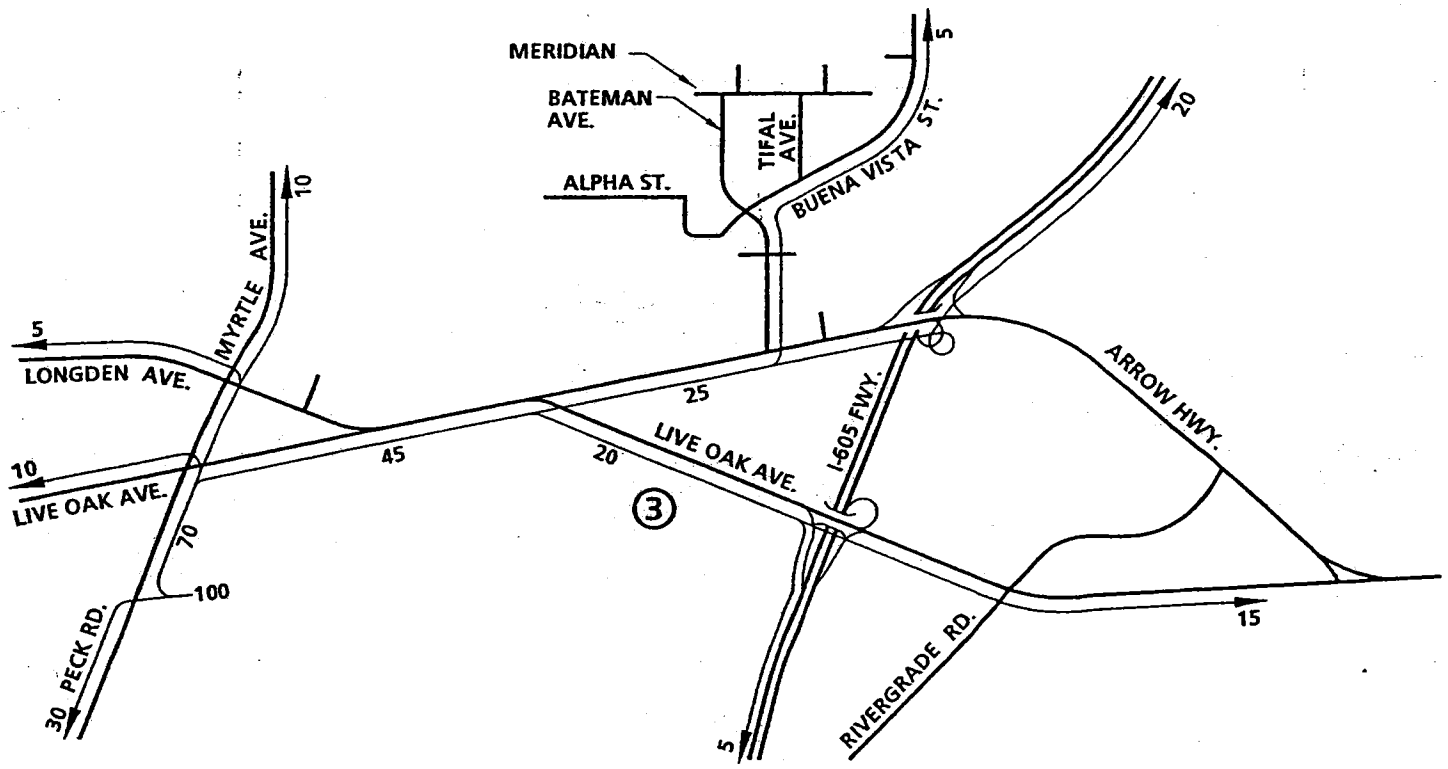
URBAN CROSSROADS

EXHIBIT 4-H

# HANSON AGGREGATES (SOUTHERLY PORTION) OUTBOUND TRIP DISTRIBUTION




**LEGEND:**

10 = PERCENT FROM PROJECT

(3) = HANSON AGGREGATES

N

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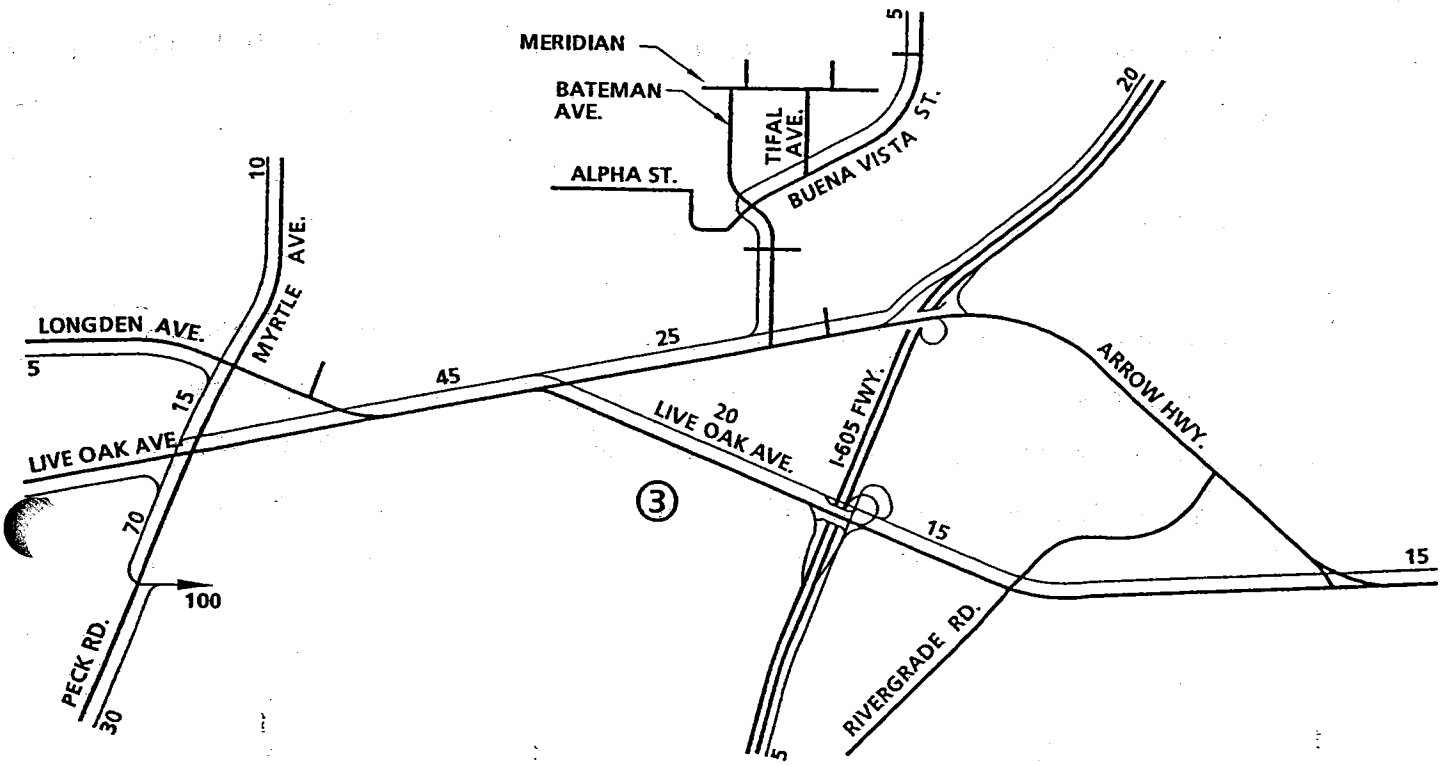
UNITED ROCK PRODUCT CORPORATION, Irwindale, California - 01268:28

EXHIBIT 4-I

# HANSON AGGREGATES (SOUTHERLY PORTION) INBOUND TRIP DISTRIBUTION




**LEGEND:**

10 = PERCENT TO PROJECT

③ = HANSON AGGREGATES

distributions, ADT, AM and PM peak hour volumes of the above mentioned cumulative projects are collectively shown on Exhibits 4-J through 4-L, respectively.

Existing Plus Ambient Growth Average Daily Traffic

Exhibit 4-M shows ADT volumes for Existing With Ambient Growth traffic conditions.

Year 2025 Without Project Intersection Analysis

Intersection levels of service for Year 2025 Without Project traffic conditions have been calculated and are shown in Table 4-2. Table 4-2 shows calculations based on the existing geometrics at the intersections. As shown in Table 4-2, the following study area intersections are projected to operate at an unacceptable level of service (LOS "E" or "F") during the peak hours for Year 2025 without project conditions:

Myrtle Avenue (NS) at:

- Longden Avenue (EW)
- Live Oak Avenue (EW)

Longden Avenue (NS) at:

- Live Oak Avenue (EW)

Live Oak Avenue (NS) at:

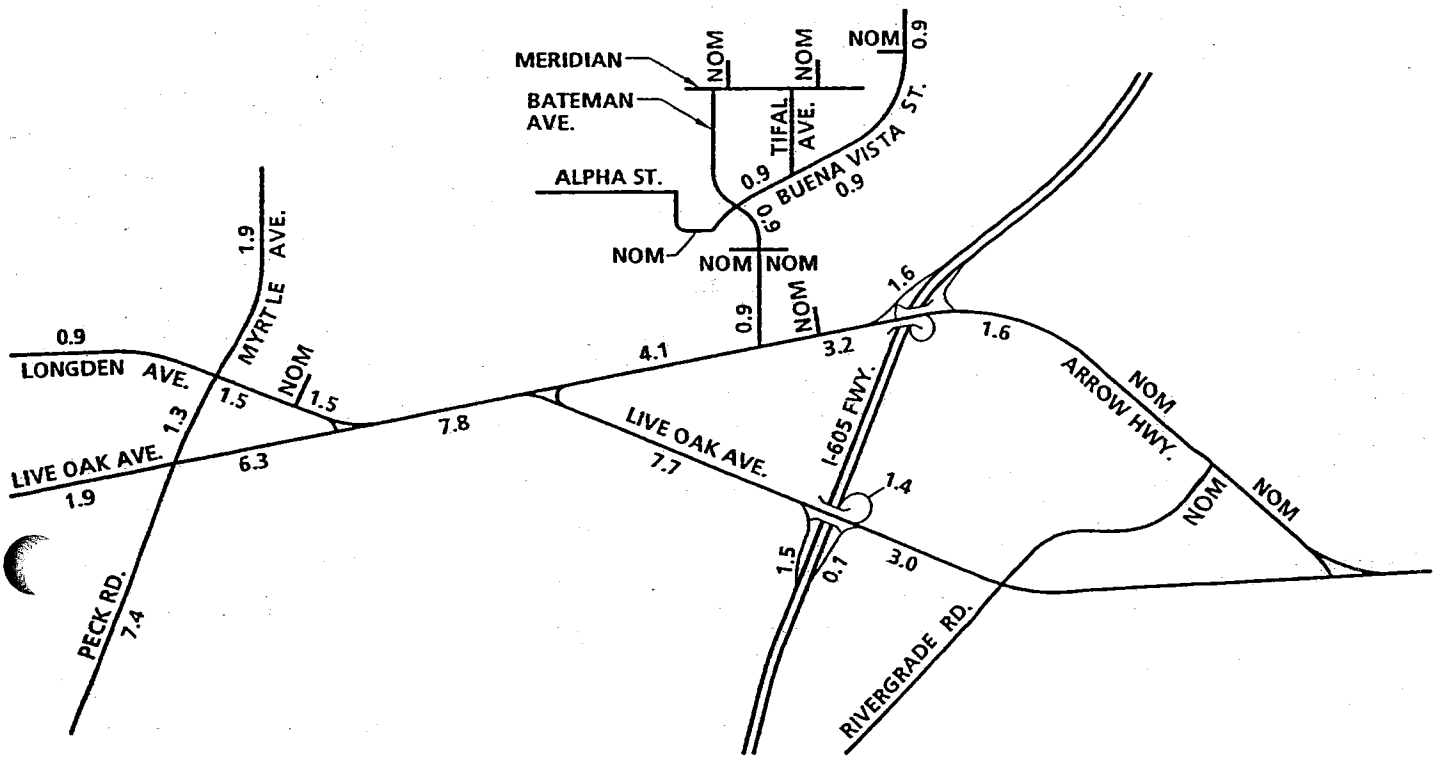
- Arrow Highway (EW)

New Buena Vista Street (NS) at:

- Arrow Highway (EW)

EXHIBIT 4-J

# OTHER DEVELOPMENT AVERAGE DAILY TRAFFIC (ADT)




**LEGEND:**

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

EXHIBIT 4-K

# OTHER DEVELOPMENT AM PEAK HOUR INTERSECTION VOLUMES

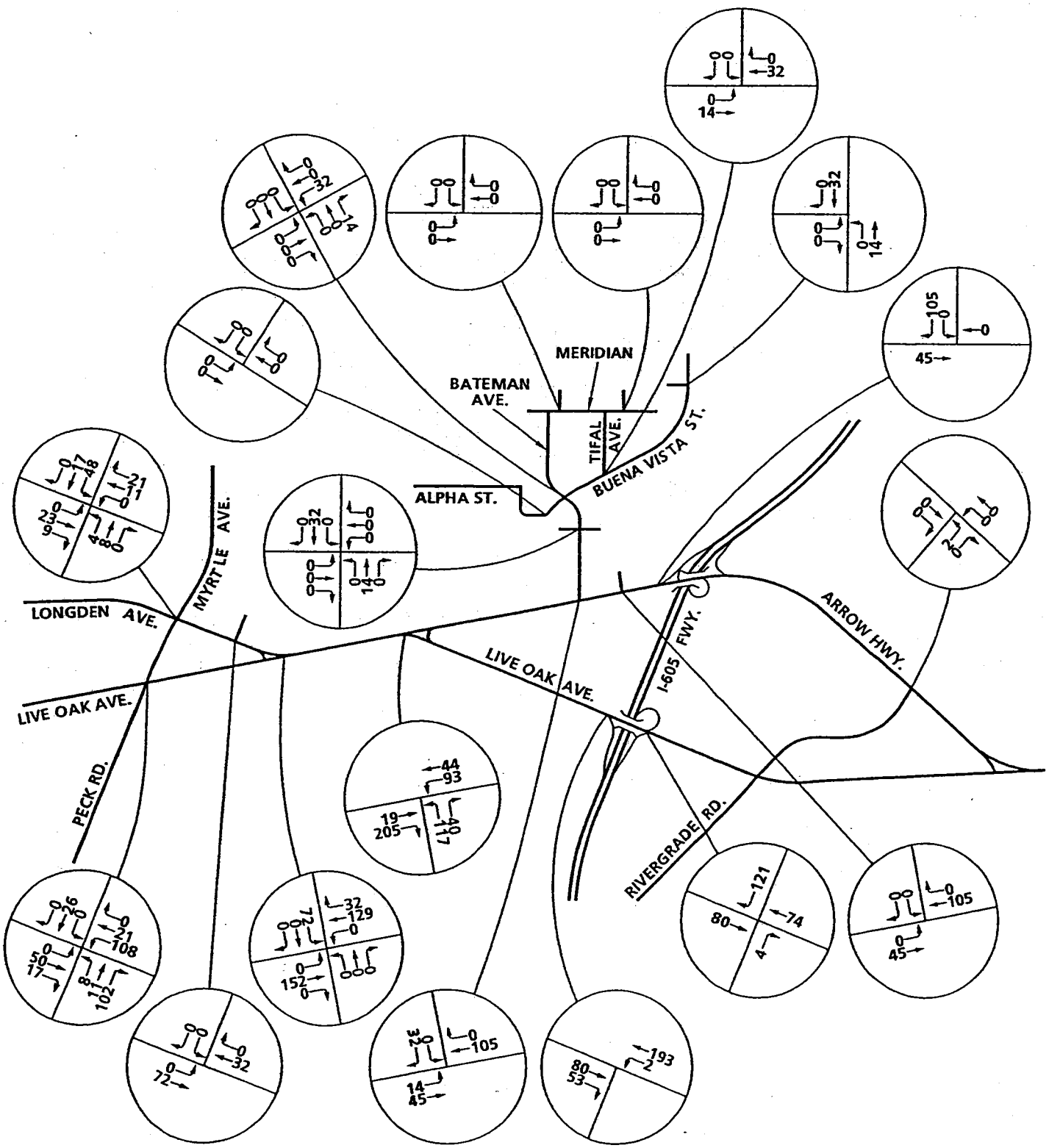


EXHIBIT 4-L

# OTHER DEVELOPMENT PM PEAK HOUR INTERSECTION VOLUMES

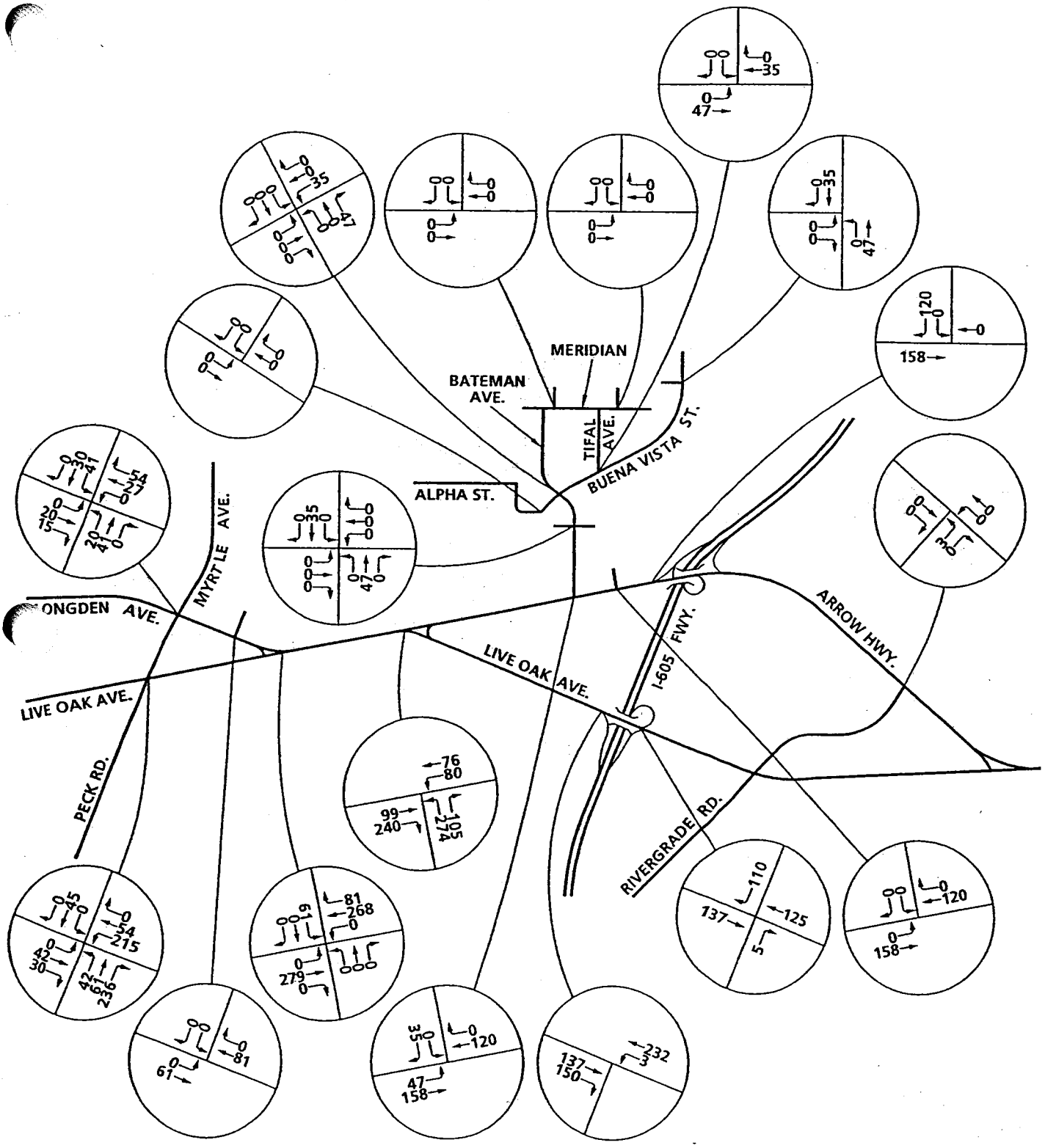
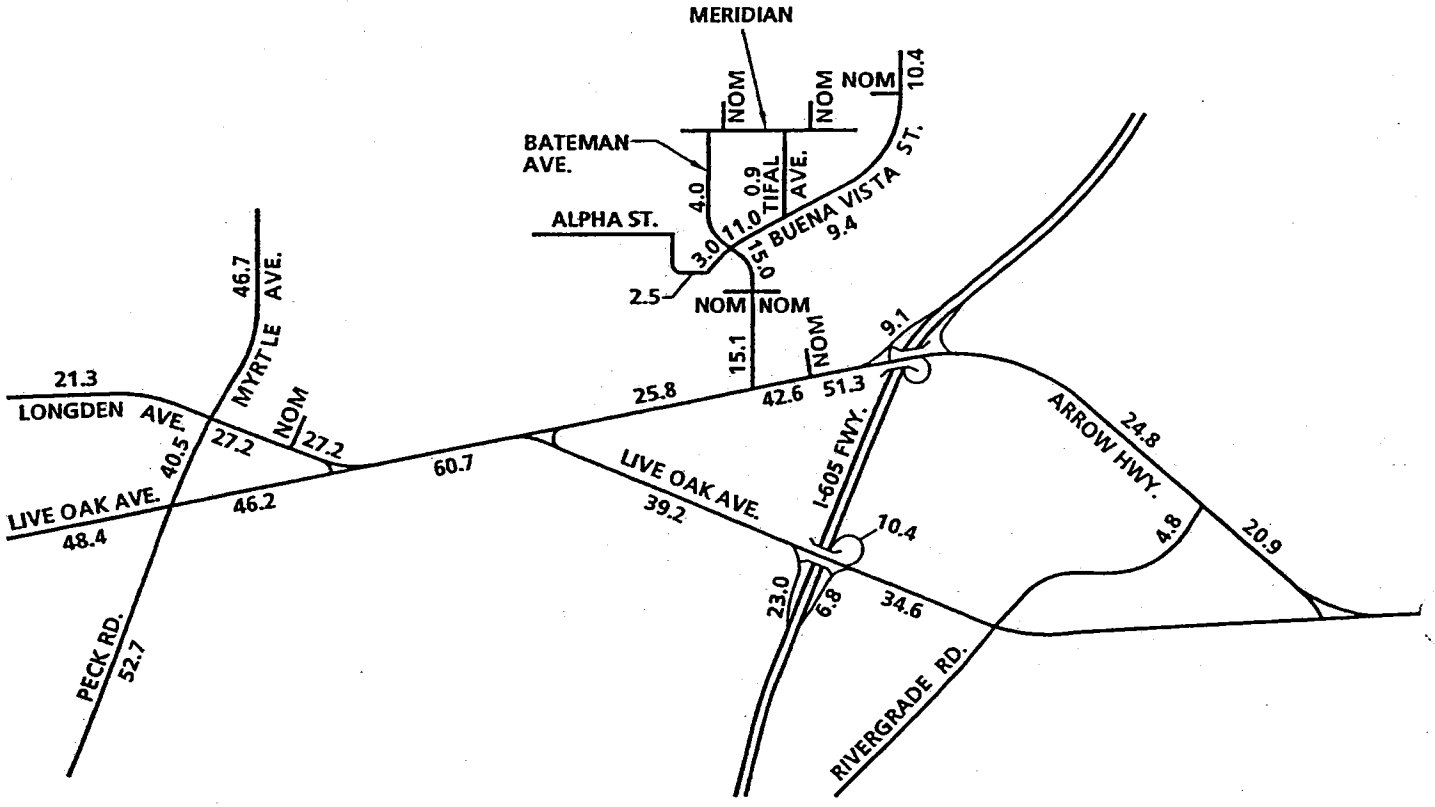


EXHIBIT 4-M

# YEAR 2025 WITHOUT PROJECT AVERAGE DAILY TRAFFIC (ADT)




**LEGEND:**

10.0 = VEHICLES PER DAY (1000'S)

N

## TABLE 4-2

## INTERSECTION ANALYSIS FOR 2025 WITHOUT PROJECT CONDITIONS

| INTERSECTION | TRAFFIC CONTROL[3] | INTERSECTION APPROACH LANES[1] | | | | | | | | | | | | ICU/DELAY[2] (SECS.) | | LEVEL OF SERVICE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NORTH-BOUND | | | SOUTH-BOUND | | | EAST-BOUND | | | WEST-BOUND | | | | | | |
| | | L | T | R | L | T | R | L | T | R | L | T | R | AM | PM | AM | PM |
| Myrtle Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| - Longden Ave. (EW) | TS | 1 | 2 | 1 | 1 | 2 | 1 | 0.5 | 1.5 | 1 | 0.5 | 1.5 | 0 | 1.250 | 1.432 | F | F |
| - Live Oak Ave. (EW) | TS | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1.228 | 1.760 | F | F |
| Longden Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| - Live Oak Ave. (EW) | TS | 1 | 0 | 0 | 2 | 0 | 1 | 1 | 2 | 0 | 1 | 2 | 2>> | 0.884 | 1.195 | D | F |
| Live Oak Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| - Arrow Hwy. (EW) | TS | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 2>> | 1 | 2 | 0 | 1.462 | 1.083 | F | F |
| New Buena Vista St. (NS) at: | | | | | | | | | | | | | | | | | |
| - Alpha St. (EW) | CSS | 0 | 0 | 0 | 1 | 0 | 1 | 0.5 | 0.5 | 0 | 0 | 1 | 0 | 9.6 | 9.5 | A | A |
| - Arrow Hwy. (EW) | TS | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 2 | 0 | 0 | 2 | 1 | 1.084 | 0.872 | F | D |
| Bateman Ave.. (NS) at: | | | | | | | | | | | | | | | | | |
| - Buena Vista St. (EW) | TS | 1 | 1 | 1 | 0.5 | 0.5 | 1 | 0.5 | 1.5 | 1 | 0.5 | 1.5 | 1 | 0.630 | 0.691 | B | B |
| Tifal Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| - Buena Vista St. (EW) | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 2 | 1 | 14.5 | 14.9 | B | B |
| I-605 SB ON-RAMP. (NS) at | | | | | | | | | | | | | | | | | |
| - Live Oak Ave. (EW) | TS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1>> | 1 | 2 | 0 | 0.916 | 1.186 | E | F |
| I-605 NB OFF-RAMP. (NS) at: | | | | | | | | | | | | | | | | | |
| - Live Oak Ave. (EW) | CSS | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 2 | 0 | —[4] | —[4] | F | F |
| I-605 SB OFF-RAMP. (NS) at | | | | | | | | | | | | | | | | | |
| - Arrow Hwy. (EW) | TS | 0 | 0 | 0 | 1 | 0 | 1>> | 0 | 2 | 0 | 0 | 2 | 0 | 0.963 | 0.818 | E | D |
| ıde Rd. (NS) at | | | | | | | | | | | | | | | | | |
| - ...w Hwy. (EW) | TS | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 2 | 0 | 0.894 | 0.603 | D | B |

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[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1>> = Free-Right Turn Lane ; TS= Improvement

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal
CSS = Cross Street Stop
AWS = All Way Stop

[4] – Delay high, intersection unstable. LOS= "F".

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I-605 SB On-Ramp (NS) at:

- Live Oak Avenue

I-605-NB Off-Ramp (NS) at:

- Live Oak Avenue (EW)

I-605 SB Off-Ramp (NS) at:

- Arrow Highway (EW)

Rivergrade Road (NS) at:

- Arrow Highway (EW)

Plant Site Main Project Access (NS) at:

- Arrow Highway (EW)

Year 2025 Without Project Level of Service calculation worksheets are included in Appendix "C". Year 2025 Without Project AM and PM peak hour turning movement volumes are shown on Exhibits 4-N and 4-O, respectively.

## 4.2 Year 2025 With Project Traffic Conditions

### Method of Projection

To assess Year 2025 Plus Project conditions, project-related traffic volumes are combined with Year 2025 Without Project traffic volumes. Exhibit 4-P shows ADT volumes for Year 2025 With Project traffic conditions.

Appendix "D" contains the traffic signal warrants for the unsignalized intersections.

### Year 2025 With Project Intersection Analysis

Intersection levels of service for Year 2025 With Project traffic conditions have been calculated and are shown in Table 4-3. Table 4-3 shows calculations based

EXHIBIT 4-N

# YEAR 2025 WITHOUT PROJECT AM PEAK HOUR INTERSECTION VOLUMES

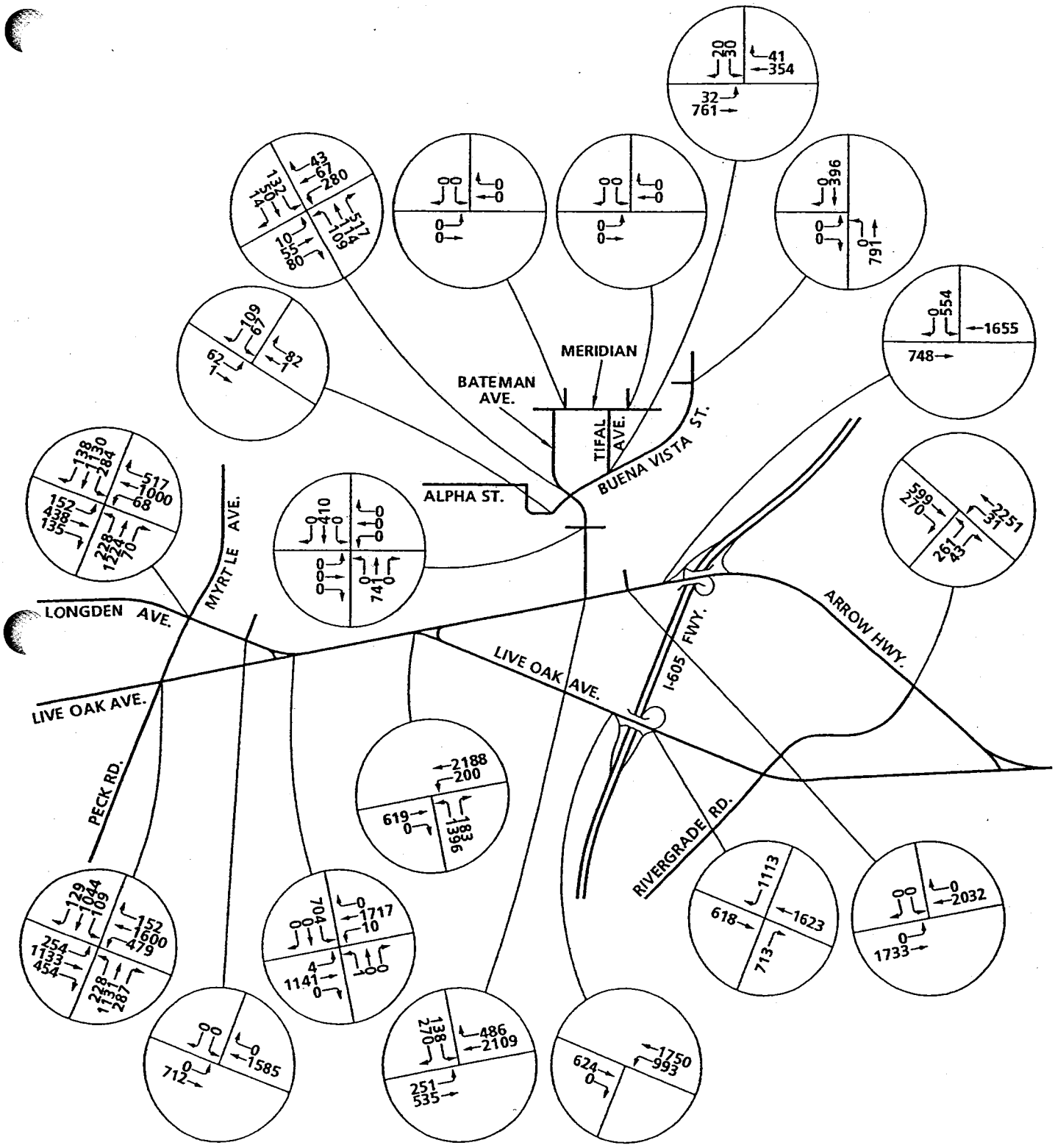
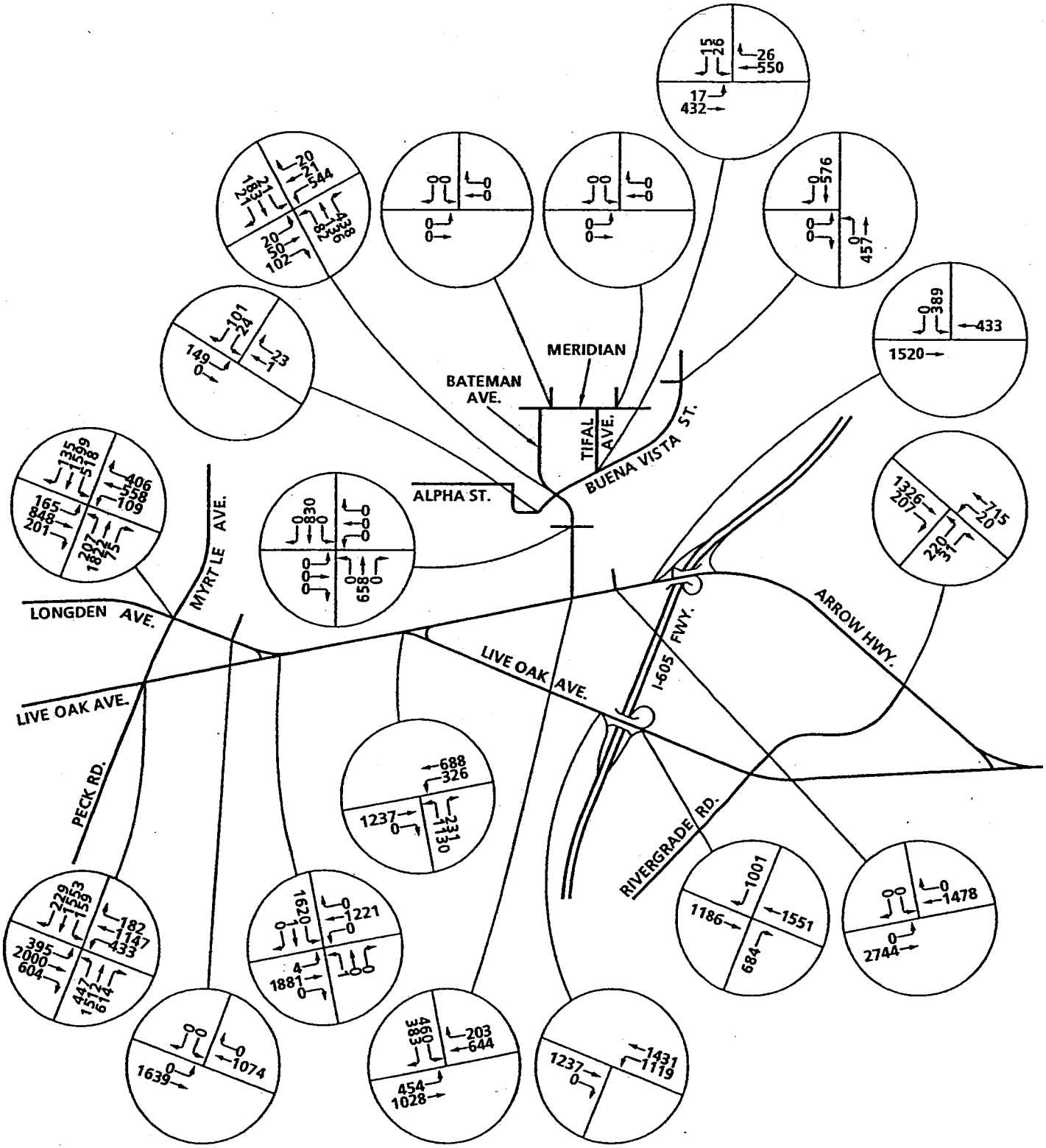


EXHIBIT 4-O

# YEAR 2025 WITHOUT PROJECT PM PEAK HOUR INTERSECTION VOLUMES




UNITED ROCK PRODUCT CORPORATION, Irwindale, California - 01268:37

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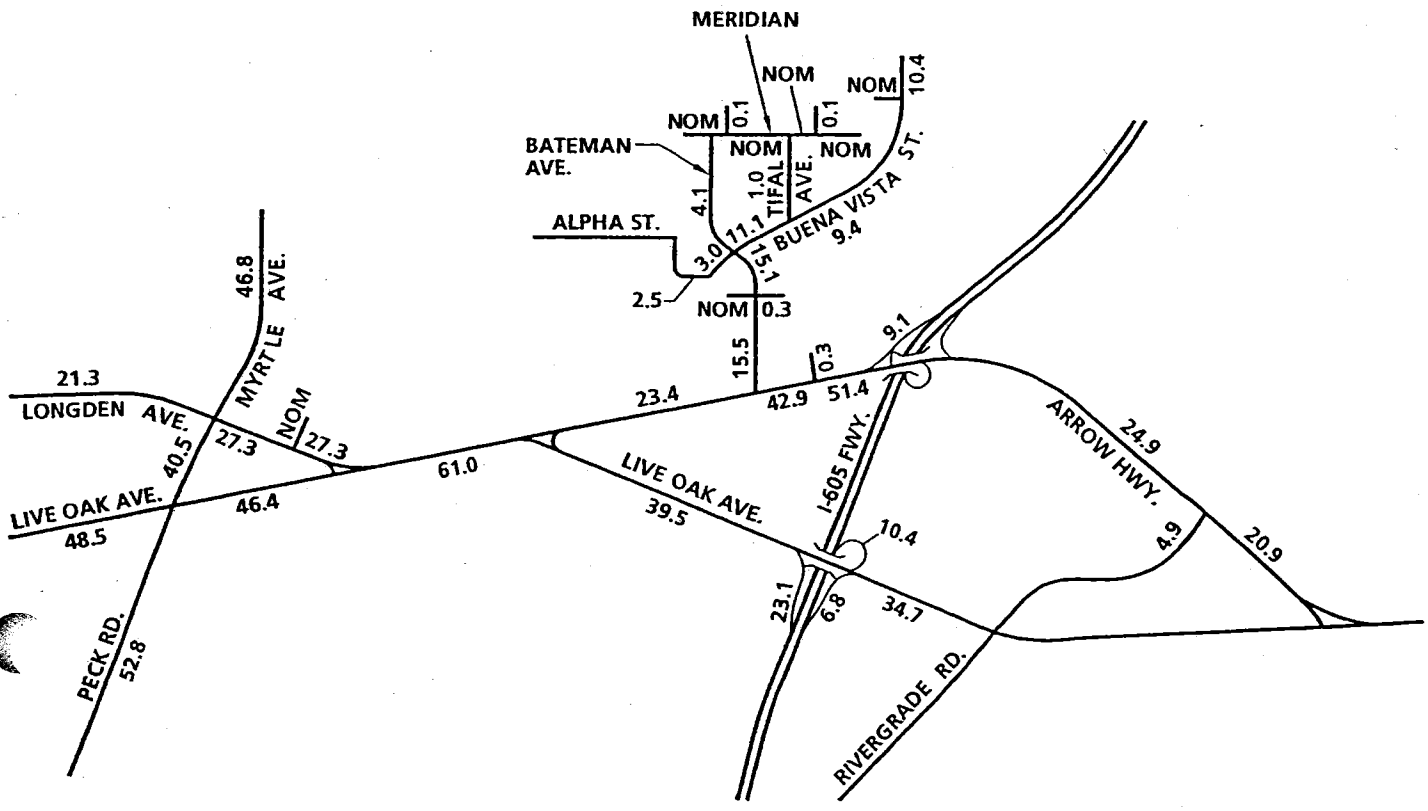
EXHIBIT 4-P

# YEAR 2025 WITH PROJECT AVERAGE DAILY TRAFFIC (ADT)




**LEGEND:**

10.0 = VEHICLES PER DAY (1000'S)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

## TABLE 4-3

## INTERSECTION ANALYSIS FOR 2025 WITH PROJECT CONDITIONS

| INTERSECTION | TRAFFIC CONTROL[3] | INTERSECTION APPROACH LANES[1] | | | | | | | | | | | | ICU/DELAY[2] (SECS.) | | LEVEL OF SERVICE | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NORTH-BOUND | | | SOUTH-BOUND | | | EAST-BOUND | | | WEST-BOUND | | | | | | |
| | | L | T | R | L | T | R | L | T | R | L | T | R | AM | PM | AM | PM |
| Myrtle Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Longden Ave. (EW) | TS | 1 | 2 | 1 | 1 | 2 | 1 | 0.5 | 1.5 | 1 | 0.5 | 1.5 | 0 | 1.259 | 1.435 | F | F |
| • Live Oak Ave. (EW) | TS | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1.232 | 1.766 | F | F |
| Pit 2 West Project Access. (NS) at: | | | | | | | | | | | | | | | | | |
| • Longden Ave. (EW) | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0.5 | 1.5 | 0 | 0 | 2 | 0 | 13.7 | 0.0 | B | A |
| Longden Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Live Oak Ave. (EW) | TS | 1 | 0 | 0 | 2 | 0 | 1 | 1 | 2 | 0 | 1 | 2 | 2>> | 0.895 | 1.198 | D | F |
| Live Oak Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Arrow Hwy. (EW) | TS | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 2>> | 1 | 2 | 0 | 1.483 | 1.103 | F | F |
| -With improvements | TS | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 2>> | 2 | 3 | 0 | 1.252 | 1.005 | F | F |
| New Buena Vista St. (NS) at: | | | | | | | | | | | | | | | | | |
| • Alpha St. (EW) | CSS | 0 | 0 | 0 | 1 | 0 | 1 | 0.5 | 0.5 | 0 | 0 | 1 | 0 | 9.6 | 9.5 | A | A |
| • Pit 2 East/Plant Site North Access. (EW) | CSS | 1 | 2 | 0 | 1 | 2 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 20.4 | 22.4 | C | C |
| • Pit 3 North Access. (EW) | CSS | 1 | 2 | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | A | A |
| • Arrow Hwy. (EW) | TS | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 2 | 0 | 0 | 2 | 1 | 1.142 | 0.887 | F | D |
| -With Improvements | TS | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 0 | 0 | 2 | 1 | 1.092 | 0.887 | F | D |
| Bateman Ave.. (NS) at: | | | | | | | | | | | | | | | | | |
| • Buena Vista St. (EW) | CSS | 1 | 1 | 1 | 0.5 | 0.5 | 1 | 0.5 | 1.5 | 1 | 0.5 | 1.5 | 1 | 0.641 | 0.696 | B | B |
| Tifal Ave. (NS) at: | | | | | | | | | | | | | | | | | |
| • Buena Vista St. (EW) | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 2 | 1 | 14.5 | 14.7 | B | B |
| I-605 SB ON-RAMP. (NS) at | | | | | | | | | | | | | | | | | |
| • Live Oak Ave. (EW) | TS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1>> | 1 | 2 | 0 | 0.922 | 1.190 | E | F |
| I-605 NB OFF-RAMP. (NS) at: | | | | | | | | | | | | | | | | | |
| • Live Oak Ave. (EW) | CSS | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 2 | 0 | —[4] | —[4] | F | F |
| I-605 SB OFF-RAMP. (NS) at | | | | | | | | | | | | | | | | | |
| • Arrow Hwy. (EW) | TS | 0 | 0 | 0 | 1 | 0 | 1>> | 0 | 2 | 0 | 0 | 2 | 0 | 0.969 | 0.819 | E | D |
| Rivergrade Rd. (NS) at | | | | | | | | | | | | | | | | | |
| • Arrow Hwy. (EW) | TS | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 2 | 0 | 0.903 | 0.606 | E | B |
| Pit 3 West Project Access. (NS) at | | | | | | | | | | | | | | | | | |
| • Meridian St. (EW) | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0.5 | 0.5 | 0 | 0 | 1 | 0 | 0.0 | 0.0 | A | A |
| Pit 3 East Project Access. (NS) at | | | | | | | | | | | | | | | | | |
| • Meridian St. (EW) | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0.5 | 0.5 | 0 | 0 | 1 | 0 | 0.0 | 0.0 | A | A |
| Plant Site Main Project Access. (NS) at | | | | | | | | | | | | | | | | | |
| • Arrow Hwy. (EW) | CSS | 0 | 0 | 0 | 0 | 1 | 0 | 0.5 | 1.5 | 0 | 0 | 2 | 0 | 26.7 | 15.2 | D | C |

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[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1>> = Free-Right Turn Lane ; TS= Improvement

[2] Delay and level of service calculated using the following analysis software: Traffix, Version 7.6.0.38 (2003). Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with traffic traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal
CSS = Cross Street Stop
AWS = All Way Stop

[4] -- Delay high, intersection unstable. LOS= "F".

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on the future geometrics at the intersections. As shown in Table 4-3, the following intersections are projected to operate at an unacceptable Level of Service "E" or "F" during the AM and PM peak hours:

Myrtle Avenue (NS) at:

- Longden Avenue (EW)
- Live Oak Avenue (EW)

Longden Avenue (NS) at:

- Live Oak Avenue (EW)

Live Oak Avenue (NS) at:

- Arrow Highway (EW)

New Buena Vista Street (NS) at:

- Arrow Highway (EW)

I-605 SB On-Ramp (NS) at:

- Live Oak Avenue

I-605-NB Off-Ramp (NS) at:

- Live Oak Avenue (EW)

I-605 SB Off-Ramp (NS) at:

- Arrow Highway (EW)

Rivergrade Road (NS) at:

- Arrow Highway (EW)

Plant Site Main Project Access (NS) at:

- Arrow Highway (EW)

Year 2025 Plus Project Level of Service calculation worksheets are included in Appendix "E". Year 2025 Plus Project AM and PM peak hour turning movement volumes are shown on Exhibits 4-Q and 4-R, respectively.

## 4.3 Project Traffic Significant Impacts

**SIGNIFICANT IMPACT**

| LEVEL OF SERVICE | FINAL V/C RATIO | PROJECT-RELATED INCREASE IN V/C |
|---|---|---|
| C | > 0.70 - 0.80 | equal to or greater than 0.0400 |
| D | > 0.80 - 0.90 | equal to or greater than 0.0200 |
| E, F | 0.90 or greater | equal to or greater than 0.0100 |

For the purposes of the traffic analysis conducted for the proposed United Rock Product Corporation site, a significant impact has been defined as an increase in the V/C ratio equal to or greater than 0.04 if the intersection is operating at LOS C, an increase in the V/C ratio equal to or greater than 0.02 if the intersection is operating at LOS D, an increase in the V/C ratio equal to or greater than 0.01 if the intersection is operating at LOS E or F. Table 4-4 summarizes the change in the ICU values for the signalized study area intersections for the Project. As indicated in Table 4-4, a significant impact is <u>not</u> anticipated at the study area intersections due to the project traffic, except for Live Oak Avenue/Arrow Highway and New Buena Vista Street/Arrow Highway.

With the off-site improvements described below, the project-related impacts at the study intersections can be mitigated to a level of insignificance:

Live Oak Avenue (NS) at:

- Arrow Highway (EW)
  - Construct a 2nd westbound left turn lane
  - Construct a third through lane

EXHIBIT 4-Q

# YEAR 2025 WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES

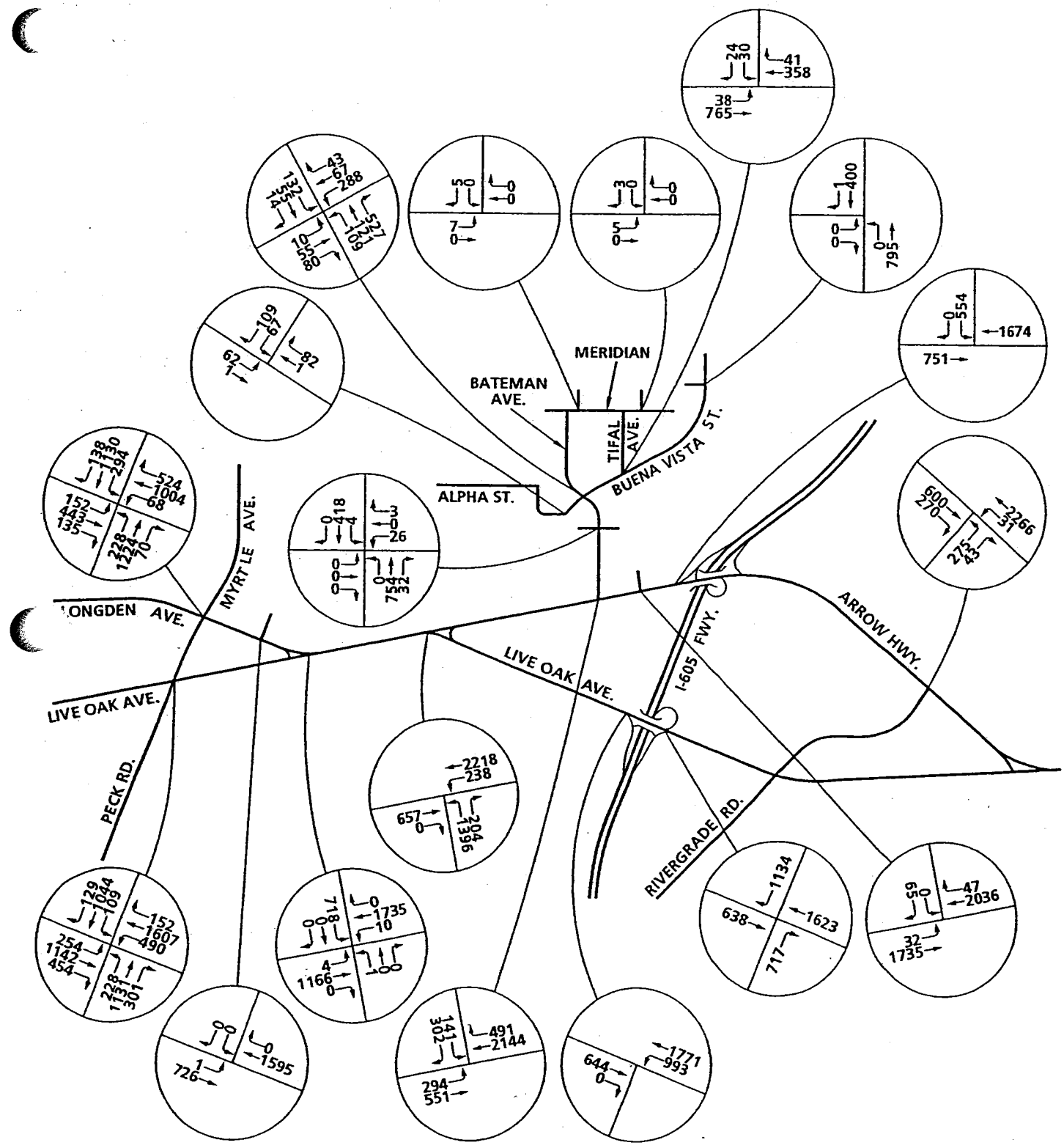
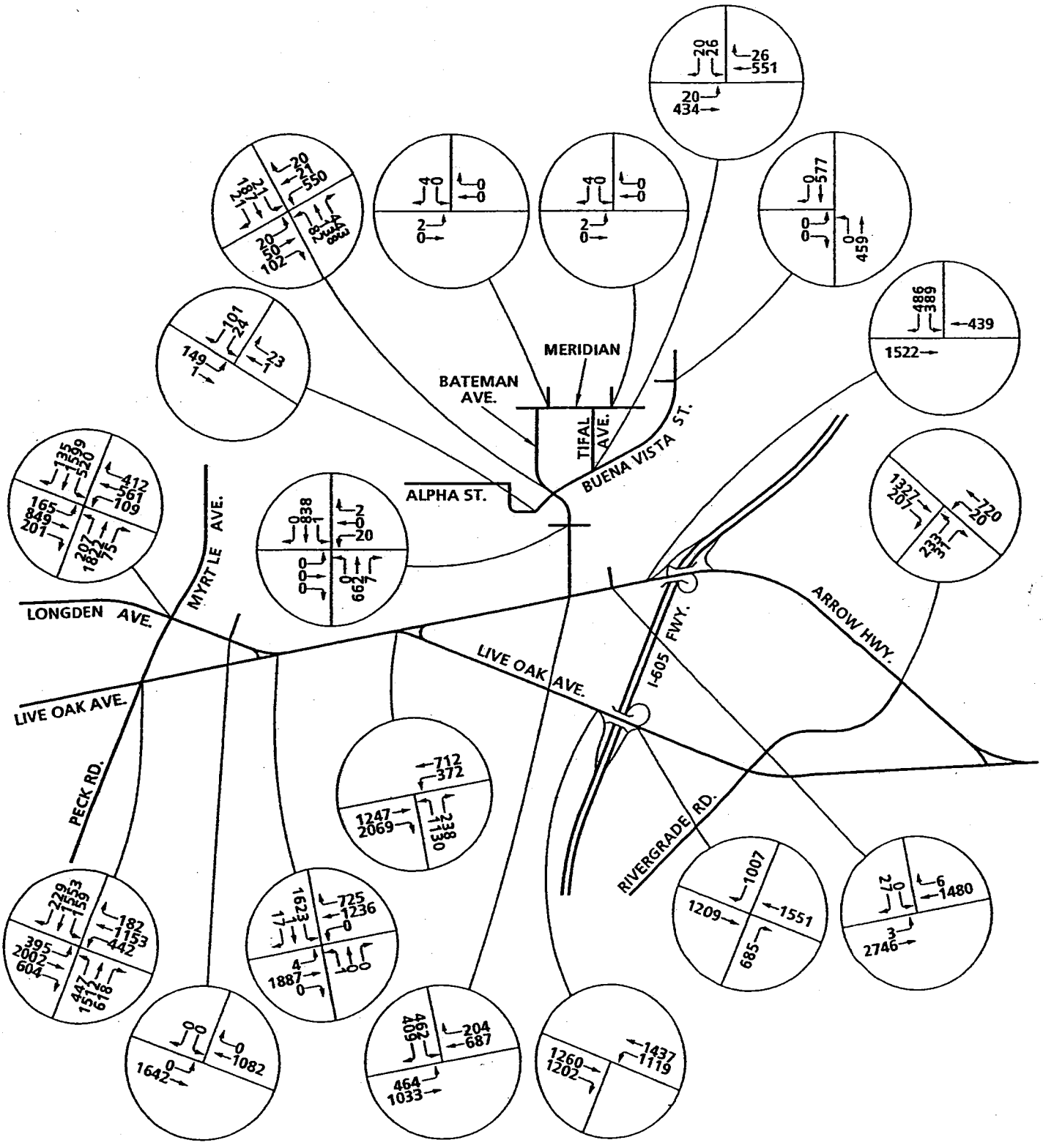


EXHIBIT 4-R

# YEAR 2025 WITH PROJECT PM PEAK HOUR INTERSECTION VOLUMES




UNITED ROCK PRODUCT CORPORATION, Irwindale, California - 01268:39

URBAN CROSSROADS

## TABLE 4-4

## PROJECT TRAFFIC SIGNIFICANT IMPACTS

| INTERSECTION | TRAFFIC CONTROL[3] | 2025 WITHOUT PROJECT ICU/DELAY[1] (SECS.) AM | 2025 WITHOUT PROJECT ICU/DELAY[1] (SECS.) PM | 2025 WITHOUT PROJECT LEVEL OF SERVICE AM | 2025 WITHOUT PROJECT LEVEL OF SERVICE PM | 2025 WITH PROJECT ICU/DELAY (SECS.) AM | 2025 WITH PROJECT ICU/DELAY (SECS.) PM | 2025 WITH PROJECT LEVEL OF SERVICE AM | 2025 WITH PROJECT LEVEL OF SERVICE PM | CHANGE IN ICU AM | CHANGE IN ICU PM | SIGNIFICANT IMPACT[2] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Myrtle Ave. (NS) at: | | | | | | | | | | | | |
| - Longden Ave. (EW) | TS | 1.250 | 1.432 | F | F | 1.259 | 1.435 | F | F | 0.009 | 0.003 | NO |
| - Live Oak Ave. (EW) | TS | 1.228 | 1.760 | F | F | 1.232 | 1.766 | F | F | 0.004 | 0.006 | NO |
| Longden Ave. (NS) at: | | | | | | | | | | | | |
| - Live Oak Ave. (EW) | TS | 0.884 | 1.195 | D | F | 0.895 | 1.198 | D | F | 0.011 | 0.003 | NO |
| Live Oak Ave. (NS) at: | | | | | | | | | | | | |
| - Arrow Hwy. (EW) | TS | 1.462 | 1.083 | F | F | 1.483 | 1.103 | F | F | 0.021 | 0.020 | YES |
| -With Improvements | | | | | | 1.252 | 1.005 | F | F | -0.210 | -0.078 | NO |
| New Buena Vista St. (NS) at: | | | | | | | | | | | | |
| - Alpha St. (EW) | CSS | 9.6 | 9.5 | A | A | 9.6 | 9.5 | A | A | | | NO |
| - Arrow Hwy. (EW) | TS | 1.084 | 0.872 | F | D | 1.142 | 0.887 | F | D | 0.058 | 0.015 | YES |
| -With Improvements | | | | | | 1.092 | 0.887 | F | D | 0.008 | 0.015 | NO |
| Bateman Ave.. (NS) at: | | | | | | | | | | | | |
| - Buena Vista St. (EW) | TS | 0.630 | 0.691 | B | B | 0.641 | 0.696 | B | B | 0.011 | 0.005 | NO |
| Tifal Ave. (NS) at: | | | | | | | | | | | | |
| - Buena Vista St. (EW) | CSS | 14.5 | 14.9 | B | B | 14.5 | 14.7 | B | B | | | NO |
| I-605 SB ON-RAMP. (NS) at | | | | | | | | | | | | |
| - Live Oak Ave. (EW) | TS | 0.916 | 1.186 | E | F | 0.922 | 1.190 | E | F | 0.006 | 0.004 | NO |
| 05 NB OFF-RAMP. (NS) at: | | | | | | | | | | | | |
| Live Oak Ave. (EW) | CSS | —[4] | —[4] | F | F | —[4] | —[4] | F | F | | | NO |
| I-605 SB OFF-RAMP. (NS) at | | | | | | | | | | | | |
| - Arrow Hwy. (EW) | TS | 0.963 | 0.818 | E | D | 0.969 | 0.819 | E | D | 0.006 | 0.001 | NO |
| Rivergrade Rd. (NS) at | | | | | | | | | | | | |
| - Arrow Hwy. (EW) | TS | 0.894 | 0.603 | D | B | 0.903 | 0.606 | E | B | 0.009 | 0.003 | NO |

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[1] ICU = Intersection Capacity Utilization

[2] A significant impacts is defined as a change in the Level of Service value from "D" to" E" or" F" with the additional traffic from the project or, an increase in the ICU value of 0.01 or greater if the intersection is operating at LOS "E" or "F".

New Buena Vista Street (NS) at:

- Arrow Highway (EW)
  - Restripe the southbound left turn lane to provide a shared left-right turn lane

## 5.0 CONCLUSIONS/RECOMMENDATIONS

The following findings have been reached for Existing and Future Conditions.

### 5.1 Existing Conditions

1. Existing roadways in close proximity to the proposed project site include Peck Road/Myrtle Avenue, Buena Vista Street, Rivergrade Road, Longden Avenue, Live Oak Avenue, Arrow Highway, Bateman Avenue, Tifal Avenue, and Meridian Street. Exhibit 2-A (presented previously) illustrates the number of through lanes and intersection controls in the vicinity of the study area.

2. The existing mining operations currently take access to Arrow Highway, Buena Vista Street and Meridian Street. Exhibit 1-B (presented previously) shows the existing access points of the project.

3. The following study area intersections are currently operating at an unacceptable Level of Service ("E" or "F") during the peak hours:

   Myrtle Ave./Peck Road (NS) at:
   - Longden Avenue (EW)
   - Live Oak Avenue (EW)

   I-605 Northbound Off-Ramp (NS) at:
   - Live Oak Avenue (EW)

   Plant Site Main Project Access (NS) at:
   - Arrow Highway (EW)

### 5.2 Project Development

1. The current traffic generation for the site is based on the level of activity occurring at each of the pits. Therefore, traffic counts were conducted at the

existing driveways to determine the number of vehicles entering and exiting the site during the peak hours.

2. The proposed project is expected to generate a total of 172 PCE trips occurring during the AM peak hour and 78 PCE during the PM peak hour.

## 5.3 Future Traffic Conditions

1. The current alignment of Buena Vista Street is anticipated to be closed by June 2004 and replaced with a new alignment. This new alignment is located to the east and is nearly complete. This new roadway will provide access for Pits 2 and the Plant site.

2. To account for ambient growth on roadways, future traffic volumes have been calculated based on a 2.0 percent annual growth rate of existing traffic volumes over a twenty-one year period (2025). Ambient growth has been derived from discussions with City of Irwindale staff.

3. For Year 2025 With or Without the project, the following study area intersections in the vicinity of the site are anticipated to operate at an unacceptable level of service:

Myrtle Avenue (NS) at:

- Longden Avenue (EW)
- Live Oak Avenue (EW)

Longden Avenue (NS) at:

- Live Oak Avenue (EW)

Live Oak Avenue (NS) at:

- Arrow Highway (EW)

New Buena Vista Street (NS) at:

- Arrow Highway (EW)

I-605 SB On-Ramp (NS) at:

- Live Oak Avenue

I-605-NB Off-Ramp (NS) at:

- Live Oak Avenue (EW)

I-605 SB Off-Ramp (NS) at:

- Arrow Highway (EW)

Rivergrade Road (NS) at:

- Arrow Highway (EW)

Plant Site Main Project Access (NS) at:

- Arrow Highway (EW)

4. Without improvements, significant impacts are anticipated at the study area intersections of Live Oak Avenue/Arrow Highway and New Buena Vista Street/Arrow Highway due to the additional project traffic based on the City of Irwindale/Los Angeles County criteria.

5. With the off-site improvements indicated in Section 4, the project related impacts can be mitigated to a level of insignificance.

## 5.4 Recommendations

The current alignment of Buena Vista Street is anticipated to be closed by June 2004 and replaced with a new alignment. This new alignment is located to the east and is nearly complete. This new roadway will provide access for Pits 2 and the Plant site.

The firm of Urban Crossroads, Inc. recommends the following to improve the circulation to/from the site (see Exhibit 5-A):

- Provide adequate sight distance at the project access roadways where they intersect with the public roadways. The minimum sight distance should be provided to meet the City of Irwindale and Caltrans requirements.

- Provide a 150 foot (minimum), northbound and southbound left turn pocket at the plant access along Buena Vista Street.

- Provide a 150 foot (minimum) eastbound left turn pocket at the plant access along Arrow Highway.

- Provide a 100 foot (minimum) westbound right turn lane at the plant access along Arrow Highway.

- Restrict the plant access along Arrow Highway to right turns in/out and left turns in only.

The following off-site intersection improvements are recommended based on the analysis conducted in this study:

Live Oak Avenue (NS) at:

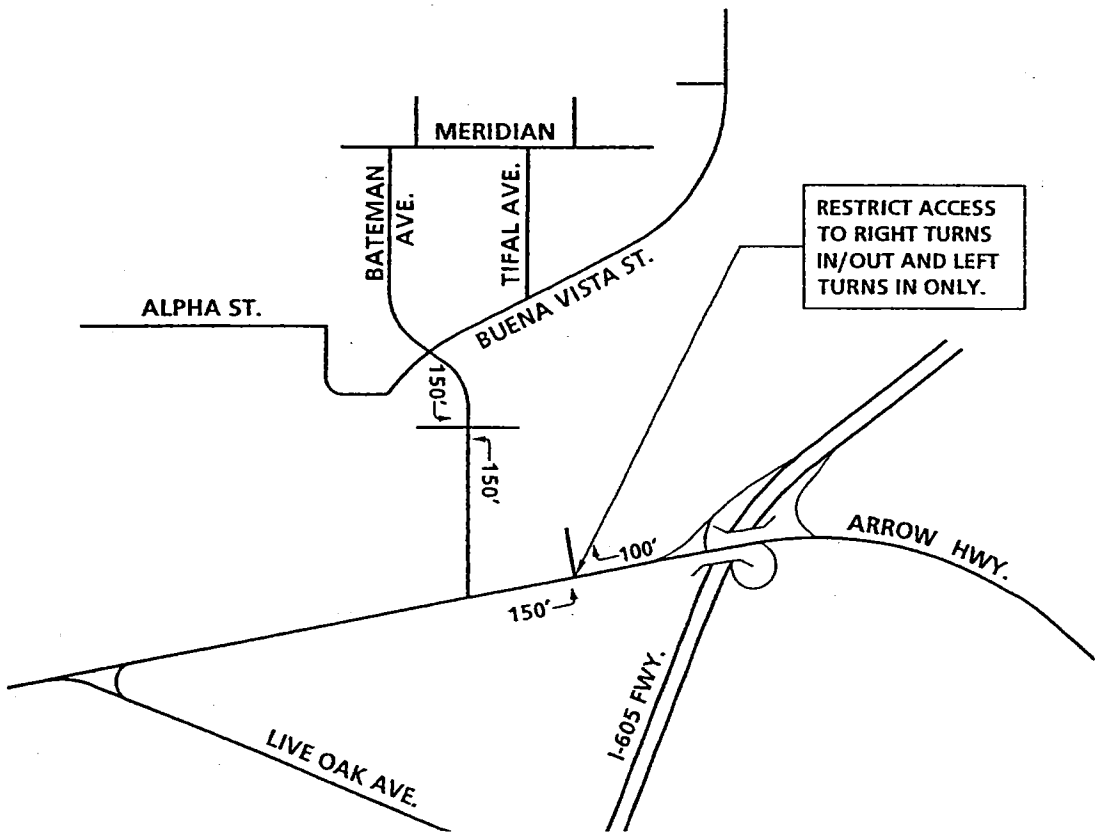
- Arrow Highway (EW)
  - Construct a 2nd westbound left turn lane
  - Construct a third through lane

New Buena Vista Street (NS) at:

- Arrow Highway (EW)
  - Restripe the southbound left turn lane to provide a shared left-right turn lane

EXHIBIT 5-A

# CIRCULATION RECOMMENDATIONS




**LEGEND:**

└ = RIGHT TURN POCKET

┌ = LEFT TURN POCKET

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# APPENDIX A

INTERSECTION TRAFFIC COUNTS

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: Peck Rd. - Myrtle Ave. DATE: 4/1/03 CITY: City of Irwindale

E-W STREET: Longden Ave. DAY: TUESDAY PROJECT# 03-0514-001

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | 1 | 2 | 0 | 1 | 2 | 0 | 0 | 2 | 1 | 0 | 2 | 0 | |
| 6:00 AM | | | | | | | | | | | | | |
| 6:15 AM | | | | | | | | | | | | | |
| 6:30 AM | | | | | | | | | | | | | |
| 6:45 AM | | | | | | | | | | | | | |
| 7:00 AM | 36 | 181 | 9 | 37 | 156 | 16 | 18 | 58 | 21 | 7 | 142 | 65 | 746 |
| 7:15 AM | 41 | 207 | 11 | 42 | 193 | 23 | 21 | 65 | 19 | 9 | 174 | 82 | 887 |
| 7:30 AM | 44 | 238 | 15 | 49 | 227 | 25 | 25 | 77 | 28 | 16 | 205 | 97 | 1046 |
| 7:45 AM | 38 | 216 | 13 | 36 | 186 | 29 | 29 | 81 | 25 | 13 | 170 | 79 | 915 |
| 8:00 AM | 35 | 195 | 10 | 39 | 178 | 20 | 32 | 69 | 17 | 10 | 148 | 91 | 844 |
| 8:15 AM | 27 | 179 | 8 | 33 | 149 | 17 | 27 | 63 | 13 | 8 | 121 | 76 | 721 |
| 8:30 AM | 19 | 153 | 10 | 31 | 134 | 13 | 23 | 54 | 11 | 15 | 107 | 60 | 630 |
| 8:45 AM | 22 | 124 | 7 | 28 | 140 | 18 | 16 | 49 | 16 | 12 | 96 | 48 | 576 |
| 9:00 AM | | | | | | | | | | | | | |
| 9:15 AM | | | | | | | | | | | | | |
| 9:30 AM | | | | | | | | | | | | | |
| 9:45 AM | | | | | | | | | | | | | |
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | | | | | | | | | | | | | |
| 11:15 AM | | | | | | | | | | | | | |
| 11:30 AM | | | | | | | | | | | | | |
| 11:45 AM | | | | | | | | | | | | | |
| TOTAL VOLUMES = | NL 262 | NT 1493 | NR 83 | SL 295 | ST 1363 | SR 161 | EL 191 | ET 516 | ER 150 | WL 90 | WT 1163 | WR 598 | TOTAL 6365 |
| AM Peak Hr Begins at | | | | 715 | AM | | | | | | | | |
| PEAK VOLUMES = | 158 | 856 | 49 | 166 | 784 | 97 | 107 | 292 | 89 | 48 | 697 | 349 | 3692 |

CONDITIONS: Signalized

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: Peck Rd. DATE: 4/1/03 CITY: City of Irwindale

E-W STREET: Live Oak Ave. DAY: TUESDAY PROJECT# 03-0514-002

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 0 | |
| 6:00 AM | | | | | | | | | | | | | |
| 6:15 AM | | | | | | | | | | | | | |
| 6:30 AM | | | | | | | | | | | | | |
| 6:45 AM | | | | | | | | | | | | | |
| 7:00 AM | 34 | 175 | 31 | 15 | 159 | 18 | 32 | 185 | 65 | 47 | 245 | 22 | 1028 |
| 7:15 AM | 39 | 191 | 35 | 19 | 176 | 20 | 41 | 198 | 71 | 54 | 278 | 26 | 1148 |
| 7:30 AM | 45 | 223 | 38 | 22 | 207 | 25 | 46 | 219 | 84 | 69 | 316 | 29 | 1323 |
| 7:45 AM | 38 | 206 | 26 | 20 | 180 | 22 | 49 | 177 | 79 | 73 | 281 | 25 | 1176 |
| 8:00 AM | 33 | 169 | 32 | 16 | 154 | 24 | 43 | 169 | 74 | 65 | 237 | 27 | 1043 |
| 8:15 AM | 36 | 156 | 40 | 18 | 143 | 17 | 35 | 171 | 68 | 58 | 203 | 21 | 966 |
| 8:30 AM | 42 | 148 | 29 | 21 | 114 | 15 | 31 | 146 | 52 | 45 | 194 | 19 | 856 |
| 8:45 AM | 30 | 128 | 33 | 13 | 132 | 19 | 28 | 121 | 39 | 42 | 187 | 14 | 786 |
| 9:00 AM | | | | | | | | | | | | | |
| 9:15 AM | | | | | | | | | | | | | |
| 9:30 AM | | | | | | | | | | | | | |
| 9:45 AM | | | | | | | | | | | | | |
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | | | | | | | | | | | | | |
| 11:15 AM | | | | | | | | | | | | | |
| 11:30 AM | | | | | | | | | | | | | |
| 11:45 AM | | | | | | | | | | | | | |
| TOTAL VOLUMES = | NL 297 | NT 1396 | NR 264 | SL 144 | ST 1265 | SR 160 | EL 305 | ET 1386 | ER 532 | WL 453 | WT 1941 | WR 183 | TOTAL 8326 |
| AM Peak Hr Begins at | | | | 715 | AM | | | | | | | | |
| PEAK VOLUMES = | 155 | 789 | 131 | 77 | 717 | 91 | 179 | 763 | 308 | 261 | 1112 | 107 | 4690 |

ADDITIONS: Signalized; Yield on the ER Movement

# Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Longden Ave. DATE: 4/3/2003 LOCATION: City of Irwindale

E-W STREET: Live Oak Ave. DAY: THURSDAY PROJECT# 03-0514-006 A

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| 6:00 AM | | | | | | | | | | | | | |
| 6:15 AM | | | | | | | | | | | | | |
| 6:30 AM | | | | | | | | | | | | | |
| 6:45 AM | | | | | | | | | | | | | |
| 7:00 AM | 0 | 0 | | 134 | | 3 | 5 | 111 | | 1 | 275 | 214 | 743 |
| 7:15 AM | 0 | 1 | | 96 | | 3 | 1 | 125 | | 5 | 269 | 230 | 730 |
| 7:30 AM | 0 | 0 | | 89 | | 0 | 0 | 153 | | 0 | 351 | 274 | 867 |
| 7:45 AM | 1 | 0 | | 112 | | 3 | 0 | 179 | | 1 | 248 | 244 | 788 |
| 8:00 AM | 0 | 0 | | 123 | | 2 | 2 | 177 | | 5 | 273 | 209 | 791 |
| 8:15 AM | 0 | 0 | | 121 | | 1 | 1 | 189 | | 1 | 246 | 225 | 784 |
| 8:30 AM | 0 | 0 | | 109 | | 2 | 0 | 174 | | 2 | 223 | 206 | 716 |
| 8:45 AM | 0 | 0 | | 102 | | 2 | 0 | 164 | | 1 | 211 | 193 | 673 |
| 9:00 AM | | | | | | | | | | | | | |
| 9:15 AM | | | | | | | | | | | | | |
| 9:30 AM | | | | | | | | | | | | | |
| 9:45 AM | | | | | | | | | | | | | |
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | | | | | | | | | | | | | |
| 11:15 AM | | | | | | | | | | | | | |
| 11:30 AM | | | | | | | | | | | | | |
| 11:45 AM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VOLUMES = | 1 | 1 | 0 | 886 | 0 | 16 | 9 | 1272 | 0 | 16 | 2096 | 1795 | 6092 |

AM Peak Hr Begins at: 730 AM

| PEAK | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VOLUMES = | 1 | 0 | 0 | 445 | 0 | 6 | 3 | 698 | 0 | 7 | 1118 | 952 | 3230 |

CONTROL: Signalized

# Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Live Oak Ave. DATE: 4/3/2003 LOCATION: City of Irwindale

E-W STREET: Arrow Hwy. DAY: THURSDAY PROJECT# 03-0514-007 A

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | 2 | | 1 | | | | | 2 | 1 | 1 | 2 | | |
| 6:00 AM | | | | | | | | | | | | | |
| 6:15 AM | | | | | | | | | | | | | |
| 6:30 AM | | | | | | | | | | | | | |
| 6:45 AM | | | | | | | | | | | | | |
| 7:00 AM | 228 | | 23 | | | | | 88 | 163 | 21 | 358 | | 881 |
| 7:15 AM | 240 | | 21 | | | | | 85 | 139 | 23 | 369 | | 877 |
| 7:30 AM | 205 | | 31 | | | | | 118 | 175 | 21 | 436 | | 986 |
| 7:45 AM | 228 | | 32 | | | | | 133 | 197 | 23 | 348 | | 961 |
| 8:00 AM | 185 | | 50 | | | | | 111 | 164 | 31 | 264 | | 805 |
| 8:15 AM | 200 | | 44 | | | | | 101 | 176 | 31 | 243 | | 795 |
| 8:30 AM | 224 | | 31 | | | | | 118 | 163 | 31 | 200 | | 767 |
| 8:45 AM | 155 | | 33 | | | | | 82 | 170 | 53 | 177 | | 670 |
| 9:00 AM | | | | | | | | | | | | | |
| 9:15 AM | | | | | | | | | | | | | |
| 9:30 AM | | | | | | | | | | | | | |
| 9:45 AM | | | | | | | | | | | | | |
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | | | | | | | | | | | | | |
| 11:15 AM | | | | | | | | | | | | | |
| 11:30 AM | | | | | | | | | | | | | |
| 11:45 AM | | | | | | | | | | | | | |
| TOTAL VOLUMES = | 1665 | 0 | 265 | 0 | 0 | 0 | 0 | 836 | 1347 | 234 | 2395 | 0 | 6742 |
| AM Peak Hr Begins at: | 700 AM | | | | | | | | | | | | |
| PEAK VOLUMES = | 901 | 0 | 107 | 0 | 0 | 0 | 0 | 424 | 674 | 88 | 1511 | 0 | 3705 |

CONTROL: Signalized;

# Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Buena Vista St. DATE: 4/3/2003 LOCATION: City of Irwindale

E-W STREET: Arrow Hwy. DAY: THURSDAY PROJECT# 03-0514-008 A

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | | | | 1 | | 1 | 1 | 2 | | | 2 | 1 | |
| 6:00 AM | | | | | | | | | | | | | |
| 6:15 AM | | | | | | | | | | | | | |
| 6:30 AM | | | | | | | | | | | | | |
| 6:45 AM | | | | | | | | | | | | | |
| 7:00 AM | | | | 33 | | 49 | 38 | 88 | | | 338 | 76 | 622 |
| 7:15 AM | | | | 23 | | 48 | 31 | 66 | | | 368 | 72 | 608 |
| 7:30 AM | | | | 19 | | 36 | 49 | 97 | | | 419 | 102 | 722 |
| 7:45 AM | | | | 22 | | 35 | 51 | 100 | | | 299 | 93 | 600 |
| 8:00 AM | | | | 32 | | 45 | 72 | 82 | | | 252 | 65 | 548 |
| 8:15 AM | | | | 14 | | 38 | 71 | 96 | | | 273 | 75 | 567 |
| 8:30 AM | | | | 14 | | 35 | 46 | 89 | | | 194 | 46 | 424 |
| 8:45 AM | | | | 21 | | 42 | 40 | 84 | | | 190 | 47 | 424 |
| 9:00 AM | | | | | | | | | | | | | |
| 9:15 AM | | | | | | | | | | | | | |
| 9:30 AM | | | | | | | | | | | | | |
| 9:45 AM | | | | | | | | | | | | | |
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | | | | | | | | | | | | | |
| 11:15 AM | | | | | | | | | | | | | |
| 11:30 AM | | | | | | | | | | | | | |
| 11:45 AM | | | | | | | | | | | | | |
| TOTAL VOLUMES = | NL 0 | NT 0 | NR 0 | SL 178 | ST 0 | SR 328 | EL 398 | ET 702 | ER 0 | WL 0 | WT 2333 | WR 576 | TOTAL 4515 |

AM Peak Hr Begins at: 700 AM

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PEAK VOLUMES = | 0 | 0 | 0 | 97 | 0 | 168 | 169 | 351 | 0 | 0 | 1424 | 343 | 2552 |

CONTROL: Signalized

# Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Buena Vista St. DATE: 11/19/2003 LOCATION: City of Irwindale

E-W STREET: Bateman Ave DAY: WEDNESDAY PROJECT# 03-1720-002

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | 0 | 3 | | | 2 | 0 | 0 | 1 | 0 | | | | |
| 6:00 AM | | | | | | | | | | | | | |
| 6:15 AM | | | | | | | | | | | | | |
| 6:30 AM | | | | | | | | | | | | | |
| 6:45 AM | | | | | | | | | | | | | |
| 7:00 AM | 13 | 89 | | | 36 | 3 | 11 | | 8 | | | | 160 |
| 7:15 AM | 18 | 110 | | | 45 | 4 | 16 | | 10 | | | | 203 |
| 7:30 AM | 22 | 124 | | | 54 | 6 | 19 | | 12 | | | | 237 |
| 7:45 AM | 27 | 143 | | | 67 | 9 | 27 | | 9 | | | | 282 |
| 8:00 AM | 20 | 78 | | | 33 | 11 | 31 | | 14 | | | | 187 |
| 8:15 AM | 36 | 67 | | | 39 | 7 | 33 | | 15 | | | | 197 |
| 8:30 AM | 34 | 56 | | | 31 | 5 | 24 | | 13 | | | | 163 |
| 8:45 AM | 25 | 41 | | | 25 | 8 | 20 | | 16 | | | | 135 |
| 9:00 AM | | | | | | | | | | | | | |
| 9:15 AM | | | | | | | | | | | | | |
| 9:30 AM | | | | | | | | | | | | | |
| 9:45 AM | | | | | | | | | | | | | |
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | | | | | | | | | | | | | |
| 11:15 AM | | | | | | | | | | | | | |
| 11:30 AM | | | | | | | | | | | | | |
| 11:45 AM | | | | | | | | | | | | | |
| TOTAL VOLUMES = | NL 195 | NT 708 | NR 0 | SL 0 | ST 330 | SR 53 | EL 181 | ET 0 | ER 97 | WL 0 | WT 0 | WR 0 | TOTAL 1564 |

AM Peak Hr Begins at: 715 AM

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PEAK VOLUMES = | 87 | 455 | 0 | 0 | 199 | 30 | 93 | 0 | 45 | 0 | 0 | 0 | 909 |
| PEAK HR. FACTOR: | | 0.797 | | | 0.753 | | | 0.767 | | | 0.000 | | 0.806 |

CONTROL: Signalized

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: I-605 SB On-Ramp DATE: 4/3/03 CITY: City of Irwindale

E-W STREET: Live Oak Ave. DAY: THURSDAY PROJECT# 03-0514-012

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | | | | | | | | 2 | 1 | 1 | 2 | | |
| 6:00 AM | | | | | | | | | | | | | |
| 6:15 AM | | | | | | | | | | | | | |
| 6:30 AM | | | | | | | | | | | | | |
| 6:45 AM | | | | | | | | | | | | | |
| 7:00 AM | | | | | | | | 56 | 136 | 162 | 226 | | 580 |
| 7:15 AM | | | | | | | | 47 | 129 | 157 | 245 | | 578 |
| 7:30 AM | | | | | | | | 83 | 152 | 186 | 297 | | 718 |
| 7:45 AM | | | | | | | | 104 | 173 | 215 | 314 | | 806 |
| 8:00 AM | | | | | | | | 112 | 161 | 169 | 273 | | 715 |
| 8:15 AM | | | | | | | | 91 | 158 | 128 | 219 | | 596 |
| 8:30 AM | | | | | | | | 80 | 139 | 141 | 238 | | 598 |
| 8:45 AM | | | | | | | | 72 | 123 | 116 | 211 | | 522 |
| 9:00 AM | | | | | | | | | | | | | |
| 9:15 AM | | | | | | | | | | | | | |
| 9:30 AM | | | | | | | | | | | | | |
| 9:45 AM | | | | | | | | | | | | | |
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | | | | | | | | | | | | | |
| 11:15 AM | | | | | | | | | | | | | |
| 11:30 AM | | | | | | | | | | | | | |
| 11:45 AM | | | | | | | | | | | | | |
| TOTAL VOLUMES = | NL 0 | NT 0 | NR 0 | SL 0 | ST 0 | SR 0 | EL 0 | ET 645 | ER 1171 | WL 1274 | WT 2023 | WR 0 | TOTAL 5113 |
| AM Peak Hr Begins at | | | | 730 | AM | | | | | | | | |
| PEAK VOLUMES = | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 390 | 644 | 698 | 1103 | 0 | 2835 |

ADDITIONS: Signalized

# Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Buena Vista St. DATE: 11/19/2003 LOCATION: City of Irwindale

E-W STREET: Tifal DAY: WEDNESDAY PROJECT# 03-1720-001

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | 0 | 3 | | | 2 | 0 | 0 | 1 | 0 | | | | |
| 6:00 AM | | | | | | | | | | | | | |
| 6:15 AM | | | | | | | | | | | | | |
| 6:30 AM | | | | | | | | | | | | | |
| 6:45 AM | | | | | | | | | | | | | |
| 7:00 AM | 4 | 91 | | | 36 | 6 | 2 | | 1 | | | | 140 |
| 7:15 AM | 6 | 123 | | | 49 | 5 | 5 | | 3 | | | | 191 |
| 7:30 AM | 5 | 135 | | | 61 | 8 | 4 | | 2 | | | | 215 |
| 7:45 AM | 8 | 162 | | | 74 | 11 | 7 | | 4 | | | | 266 |
| 8:00 AM | 4 | 106 | | | 43 | 5 | 5 | | 6 | | | | 169 |
| 8:15 AM | 3 | 97 | | | 38 | 7 | 6 | | 2 | | | | 153 |
| 8:30 AM | 2 | 79 | | | 34 | 4 | 3 | | 3 | | | | 125 |
| 8:45 AM | 3 | 60 | | | 27 | 3 | 4 | | 5 | | | | 102 |
| 9:00 AM | | | | | | | | | | | | | |
| 9:15 AM | | | | | | | | | | | | | |
| 9:30 AM | | | | | | | | | | | | | |
| 9:45 AM | | | | | | | | | | | | | |
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | | | | | | | | | | | | | |
| 11:15 AM | | | | | | | | | | | | | |
| 11:30 AM | | | | | | | | | | | | | |
| 11:45 AM | | | | | | | | | | | | | |
| TOTAL VOLUMES = | NL 35 | NT 853 | NR 0 | SL 0 | ST 362 | SR 49 | EL 36 | ET 0 | ER 26 | WL 0 | WT 0 | WR 0 | TOTAL 1361 |

AM Peak Hr Begins at: 715 AM

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PEAK VOLUMES = | 23 | 526 | 0 | 0 | 227 | 29 | 21 | 0 | 15 | 0 | 0 | 0 | 841 |
| PEAK HR. FACTOR: | | 0.807 | | | 0.753 | | | 0.818 | | | 0.000 | | 0.790 |

CONTROL: Signalized;

# Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: I-605 SB Ramps DATE: 4/3/2003 LOCATION: City of Irwindale

E-W STREET: Arrow Hwy. DAY: THURSDAY PROJECT# 03-0514-009 A

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | | | | 1 | | 1 | | 2 | | | 2 | | |
| 6:00 AM | | | | | | | | | | | | | |
| 6:15 AM | | | | | | | | | | | | | |
| 6:30 AM | | | | | | | | | | | | | |
| 6:45 AM | | | | | | | | | | | | | |
| 7:00 AM | | | | 65 | | 105 | | 82 | | | 281 | | 533 |
| 7:15 AM | | | | 85 | | 139 | | 104 | | | 362 | | 690 |
| 7:30 AM | | | | 83 | | 210 | | 126 | | | 366 | | 785 |
| 7:45 AM | | | | 131 | | 148 | | 142 | | | 233 | | 654 |
| 8:00 AM | | | | 91 | | 116 | | 124 | | | 211 | | 542 |
| 8:15 AM | | | | 66 | | 105 | | 104 | | | 184 | | 459 |
| 8:30 AM | | | | 57 | | 82 | | 99 | | | 146 | | 384 |
| 8:45 AM | | | | 83 | | 81 | | 101 | | | 102 | | 367 |
| 9:00 AM | | | | | | | | | | | | | |
| 9:15 AM | | | | | | | | | | | | | |
| 9:30 AM | | | | | | | | | | | | | |
| 9:45 AM | | | | | | | | | | | | | |
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | | | | | | | | | | | | | |
| 11:15 AM | | | | | | | | | | | | | |
| 11:30 AM | | | | | | | | | | | | | |
| 11:45 AM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VOLUMES = | 0 | 0 | 0 | 661 | 0 | 986 | 0 | 882 | 0 | 0 | 1885 | 0 | 4414 |

AM Peak Hr Begins at: 715 AM

| PEAK | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VOLUMES = | 0 | 0 | 0 | 390 | 0 | 613 | 0 | 496 | 0 | 0 | 1172 | 0 | 2671 |

CONTROL: Signalized

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: I-605 NB Ramps DATE: 4/3/03 CITY: City of Irwindale

E-W STREET: Live Oak Ave. DAY: THURSDAY PROJECT# 03-0514-013

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | | | 1 | | | 1 | | 2 | | | 2 | | |
| 6:00 AM | | | | | | | | | | | | | |
| 6:15 AM | | | | | | | | | | | | | |
| 6:30 AM | | | | | | | | | | | | | |
| 6:45 AM | | | | | | | | | | | | | |
| 7:00 AM | | | 86 | | | 108 | | 60 | | | 287 | | 541 |
| 7:15 AM | | | 110 | | | 142 | | 47 | | | 256 | | 555 |
| 7:30 AM | | | 124 | | | 187 | | 81 | | | 294 | | 686 |
| 7:45 AM | | | 137 | | | 204 | | 104 | | | 323 | | 768 |
| 8:00 AM | | | 119 | | | 165 | | 108 | | | 279 | | 671 |
| 8:15 AM | | | 121 | | | 149 | | 93 | | | 195 | | 558 |
| 8:30 AM | | | 112 | | | 169 | | 79 | | | 218 | | 578 |
| 8:45 AM | | | 93 | | | 156 | | 72 | | | 171 | | 492 |
| 9:00 AM | | | | | | | | | | | | | |
| 9:15 AM | | | | | | | | | | | | | |
| 9:30 AM | | | | | | | | | | | | | |
| 9:45 AM | | | | | | | | | | | | | |
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | | | | | | | | | | | | | |
| 11:15 AM | | | | | | | | | | | | | |
| 11:30 AM | | | | | | | | | | | | | |
| 11:45 AM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VOLUMES = | 0 | 0 | 902 | 0 | 0 | 1280 | 0 | 644 | 0 | 0 | 2023 | 0 | 4849 |
| AM Peak Hr Begins at | | | | 730 | AM | | | | | | | | |
| PEAK VOLUMES = | 0 | 0 | 501 | 0 | 0 | 705 | 0 | 386 | 0 | 0 | 1091 | 0 | 2683 |

ADDITIONS: 2-Way Stop (NB & SB)

# Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Rivergrade Rd. DATE: 4/3/2003 LOCATION: City of Irwindale

E-W STREET: Arrow Hwy. DAY: THURSDAY PROJECT# 03-0514-011 A

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | 2 | | 1 | | | | | 2 | 1 | 1 | 2 | | |
| 6:00 AM | | | | | | | | | | | | | |
| 6:15 AM | | | | | | | | | | | | | |
| 6:30 AM | | | | | | | | | | | | | |
| 6:45 AM | | | | | | | | | | | | | |
| 7:00 AM | 28 | | 3 | | | | | 75 | 29 | 2 | 300 | | 437 |
| 7:15 AM | 39 | | 5 | | | | | 81 | 37 | 4 | 406 | | 572 |
| 7:30 AM | 50 | | 8 | | | | | 101 | 43 | 5 | 431 | | 638 |
| 7:45 AM | 56 | | 10 | | | | | 133 | 57 | 7 | 411 | | 674 |
| 8:00 AM | 42 | | 7 | | | | | 107 | 53 | 6 | 342 | | 557 |
| 8:15 AM | 34 | | 4 | | | | | 87 | 41 | 3 | 279 | | 448 |
| 8:30 AM | 22 | | 5 | | | | | 72 | 37 | 2 | 221 | | 359 |
| 8:45 AM | 25 | | 2 | | | | | 79 | 33 | 4 | 182 | | 325 |
| 9:00 AM | | | | | | | | | | | | | |
| 9:15 AM | | | | | | | | | | | | | |
| 9:30 AM | | | | | | | | | | | | | |
| 9:45 AM | | | | | | | | | | | | | |
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | | | | | | | | | | | | | |
| 11:15 AM | | | | | | | | | | | | | |
| 11:30 AM | | | | | | | | | | | | | |
| 11:45 AM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VOLUMES = | 296 | 0 | 44 | 0 | 0 | 0 | 0 | 735 | 330 | 33 | 2572 | 0 | 4010 |

AM Peak Hr Begins at: 715 AM

| PEAK | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VOLUMES = | 187 | 0 | 30 | 0 | 0 | 0 | 0 | 422 | 190 | 22 | 1590 | 0 | 2441 |

CONTROL: Signalized

# Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Buena Vista St. DATE: 11/19/2003 LOCATION: City of Irwindale

E-W STREET: Alpha DAY: WEDNESDAY PROJECT# 03-1720-003

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | 0 | 2 | 1 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | |
| 6:00 AM | | | | | | | | | | | | | |
| 6:15 AM | | | | | | | | | | | | | |
| 6:30 AM | | | | | | | | | | | | | |
| 6:45 AM | | | | | | | | | | | | | |
| 7:00 AM | 5 | 97 | 8 | 4 | 37 | 4 | 6 | 0 | 3 | 4 | 0 | 3 | 171 |
| 7:15 AM | 8 | 116 | 11 | 6 | 45 | 6 | 4 | 0 | 5 | 6 | 1 | 6 | 214 |
| 7:30 AM | 6 | 135 | 9 | 5 | 53 | 3 | 7 | 0 | 4 | 5 | 0 | 5 | 232 |
| 7:45 AM | 14 | 154 | 7 | 3 | 67 | 10 | 5 | 1 | 7 | 14 | 0 | 8 | 290 |
| 8:00 AM | 17 | 87 | 5 | 1 | 39 | 13 | 8 | 0 | 4 | 11 | 0 | 3 | 188 |
| 8:15 AM | 11 | 93 | 6 | 4 | 42 | 8 | 6 | 0 | 5 | 8 | 1 | 2 | 186 |
| 8:30 AM | 15 | 68 | 8 | 2 | 34 | 7 | 13 | 0 | 12 | 17 | 0 | 4 | 180 |
| 8:45 AM | 13 | 54 | 5 | 3 | 27 | 9 | 9 | 0 | 6 | 10 | 0 | 2 | 138 |
| 9:00 AM | | | | | | | | | | | | | |
| 9:15 AM | | | | | | | | | | | | | |
| 9:30 AM | | | | | | | | | | | | | |
| 9:45 AM | | | | | | | | | | | | | |
| 10:00 AM | | | | | | | | | | | | | |
| 10:15 AM | | | | | | | | | | | | | |
| 10:30 AM | | | | | | | | | | | | | |
| 10:45 AM | | | | | | | | | | | | | |
| 11:00 AM | | | | | | | | | | | | | |
| 11:15 AM | | | | | | | | | | | | | |
| 11:30 AM | | | | | | | | | | | | | |
| 11:45 AM | | | | | | | | | | | | | |
| TOTAL VOLUMES = | 89 | 804 | 59 | 28 | 344 | 60 | 58 | 1 | 46 | 75 | 2 | 33 | 1599 |
| PEAK VOLUMES = | 45 | 492 | 32 | 15 | 204 | 32 | 24 | 1 | 20 | 36 | 1 | 22 | 924 |
| PEAK HR. FACTOR: | | 0.813 | | | 0.784 | | | 0.865 | | | 0.670 | | 0.797 |

AM Peak Hr Begins at: 715 AM

CONTROL: Signalized

***SOUTHLAND CAR COUNTERS***

*Axle Count*

Project # 03-1720-004

Location: North project Access/Buena Vista  City: Irwindale  Date: 11/20/2003  Day: THURSDAY

| | Lanes: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7:00 | Cars | | 110 | | | 42 | | | | | 1 | | 1 |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | 1 | | |
| | 4-axle | | | | | | | | | | 1 | | |
| | 5-axle + | | | | | | | | | | 2 | | |
| 7:15 | Cars | | 136 | | | 56 | 1 | | | | 1 | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | 1 | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | 1 | | | | | 3 | | |
| 7:30 | Cars | | 151 | 3 | 3 | 62 | 2 | | | 1 | | | 1 |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | 1 | | |
| | 4-axle | | | | | | | | | | 4 | | |
| | 5-axle + | | 1 | | | | | | | | 3 | | |
| 7:45 | Cars | | 175 | 4 | 1 | 86 | 1 | | | | 1 | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | 1 | | | | | | | 2 | | |
| | 4-axle | | | | | | | | | | 1 | | |
| | 5-axle + | | | 4 | | | | | | | 5 | | |
| 8:00 | Cars | | 112 | 1 | | 53 | | | | | 1 | | 1 |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | 1 | | | | | | | | | |
| | 3-axle | | | 3 | | | | | | | 1 | | |
| | 4-axle | | | | | | | | | | 2 | | |
| | 5-axle + | | 1 | 5 | | | | | | | 5 | | |
| 8:15 | Cars | | 109 | 3 | 1 | 59 | | | | | | | 4 |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | 1 | | | | | | | 1 | | |
| | 3-axle | | | 5 | | | | | | | 2 | | |
| | 4-axle | | | | | | | | | | 2 | | |
| | 5-axle + | | | 7 | | | | | | | 4 | | |
| 8:30 | Cars | | 92 | 2 | | 56 | | | | 1 | | | 3 |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | 1 | | 1 |
| | 3-axle | | | 3 | | | | | | | | | |
| | 4-axle | | | | | | | | | | 1 | | |
| | 5-axle + | | | | | 1 | | | | | 5 | | |
| 8:45 | Cars | | 70 | | | 43 | | | | | | | 1 |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | 1 | | | | | | | | | |
| | 3-axle | | | 1 | | | | | | | | | |
| | 4-axle | | | | | | | | | | 2 | | |
| | 5-axle + | | | 6 | | | | | | | 7 | | |

MOVEMENT TOTALS

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cars | 0 | 955 | 13 | 5 | 457 | 4 | 0 | 0 | 2 | 4 | 0 | 11 |
| Buses | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2-axle | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 |
| 3-axle | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 |
| 4-axle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 |
| 5-axle + | 0 | 2 | 22 | 0 | 2 | 0 | 0 | 0 | 0 | 34 | 0 | 0 |
| TOTALS | 0 | 957 | 51 | 5 | 459 | 4 | 0 | 0 | 2 | 61 | 0 | 12 |
| | *NL* | *NT* | *NR* | *SL* | *ST* | *SR* | *EL* | *ET* | *ER* | *WL* | *WT* | *WR* |

PM Peak Hr Begins at: 715 AM

| PEAK VOLUMES = | 0 | 576 | 22 | 4 | 258 | 4 | 0 | 0 | 1 | 31 | 0 | 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PEAK HR. FACTOR: | | 0.813 | | | 0.756 | | | 0.250 | | | 0.825 | |

CONTROL: 2-Way Stop,EB & WB

A15

***SOUTHLAND CAR COUNTERS***

*Axle Count*

Project # 03-1720-005

Location: Main project Access/Arrow  City: Irwindale  Date: 11/20/2003  Day: THURSDAY

| | Lanes: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7:00 | Cars | | | | | | | 1 | 220 | | | 311 | |
| | Buses | | | | | | | | | | | 2 | |
| | 2-axle | | | | | | | | 1 | | | 3 | 1 |
| | 3-axle | | | | | | | 1 | 2 | | | 4 | 1 |
| | 4-axle | | | | | | | | 3 | | | 5 | |
| | 5-axle + | | | | | | | 1 | 2 | | | 3 | 2 |
| 7:15 | Cars | | | | | | | | 248 | | | 309 | 2 |
| | Buses | | | | | | | | 1 | | | 1 | |
| | 2-axle | | | | | | | | 2 | | | 3 | |
| | 3-axle | | | | | | | 1 | 1 | | | 5 | |
| | 4-axle | | | | | | | | 3 | | | 6 | 1 |
| | 5-axle + | | | | | | | 2 | 1 | | | 2 | 2 |
| 7:30 | Cars | | | | | | 2 | | 260 | | | 322 | 2 |
| | Buses | | | | | | | | 2 | | | 2 | |
| | 2-axle | | | | | | | | 3 | | | 1 | |
| | 3-axle | | | | | | 1 | | 1 | | | 6 | 1 |
| | 4-axle | | | | | | 1 | | 4 | | | 2 | 2 |
| | 5-axle + | | | | | | 4 | 2 | 5 | | | 9 | 2 |
| 7:45 | Cars | | | | 1 | | | | 260 | | | 322 | |
| | Buses | | | | | | | | 2 | | | 1 | |
| | 2-axle | | | | | | | | 6 | | | 15 | |
| | 3-axle | | | | 1 | | 4 | | 7 | | | 2 | |
| | 4-axle | | | | | | | 2 | 8 | | | 2 | 3 |
| | 5-axle + | | | | 3 | | 2 | 3 | 6 | | | 9 | 2 |
| 8:00 | Cars | | | | 1 | | 2 | 3 | 350 | | | 300 | 1 |
| | Buses | | | | | | | | 1 | | | 1 | |
| | 2-axle | | | | | | 1 | | 3 | | | 17 | |
| | 3-axle | | | | | | 2 | 1 | 4 | | | 8 | 2 |
| | 4-axle | | | | | | | | 5 | | | 1 | |
| | 5-axle + | | | | 1 | | 7 | 3 | 6 | | | 11 | 3 |
| 8:15 | Cars | | | | | | | 1 | 244 | | | 260 | |
| | Buses | | | | | | | | 1 | | | 1 | |
| | 2-axle | | | | | | | | 3 | | | 13 | |
| | 3-axle | | | | 2 | | 2 | 2 | 5 | | | 9 | |
| | 4-axle | | | | | | 2 | 1 | 4 | | | 2 | 5 |
| | 5-axle + | | | | 2 | | 7 | 2 | 10 | | | 8 | 2 |
| 8:30 | Cars | | | | | | 1 | 1 | 240 | | | 250 | |
| | Buses | | | | | | | | 3 | | | 2 | |
| | 2-axle | | | | | | | | 4 | | | 11 | |
| | 3-axle | | | | 4 | | 1 | 1 | 6 | | | 9 | 1 |
| | 4-axle | | | | | | | | 11 | | | 1 | 1 |
| | 5-axle + | | | | | | 5 | 1 | 8 | | | 9 | 1 |
| 8:45 | Cars | | | | 1 | | | 1 | 211 | | | 260 | 1 |
| | Buses | | | | | | | | 2 | | | 1 | |
| | 2-axle | | | | | | | | 8 | | | 17 | |
| | 3-axle | | | | 1 | | 1 | | 11 | | | 9 | 2 |
| | 4-axle | | | | | | | | 4 | | | 1 | |
| | 5-axle + | | | | 1 | | 3 | 1 | 9 | | | 5 | |

MOVEMENT TOTALS

| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cars | 0 | 0 | 0 | 3 | 0 | 5 | 7 | 2033 | 0 | 0 | 2334 | 6 |
| Buses | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 11 | 0 |
| 2-axle | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 30 | 0 | 0 | 80 | 1 |
| 3-axle | 0 | 0 | 0 | 8 | 0 | 11 | 6 | 37 | 0 | 0 | 52 | 7 |
| 4-axle | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 42 | 0 | 0 | 20 | 12 |
| 5-axle + | 0 | 0 | 0 | 7 | 0 | 28 | 15 | 47 | 0 | 0 | 56 | 14 |
| TOTALS | 0 | 0 | 0 | 18 | 0 | 48 | 31 | 2201 | 0 | 0 | 2553 | 40 |

PM Peak Hr Begins at: 715 AM

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PEAK VOLUMES = | 0 | 0 | 0 | 7 | 0 | 26 | 17 | 1189 | 0 | 0 | 1357 | 23 |
| PEAK HR. FACTOR: | | 0.000 | | | 0.589 | | | 0.802 | | | 0.969 | |

CONTROL: 2 Way Stop ER & WR

***SOUTHLAND CAR COUNTERS***

*Axle Count*

Project # 03-1720-006

Location: East Access/Meridian St  City: Irwindale  Date: 11/20/2003  Day: THURSDAY

| | Lanes: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7:00 | Cars | | | | | | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |
| 7:15 | Cars | | | | | | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |
| 7:30 | Cars | | | | | | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |
| 7:45 | Cars | | | | | | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | 2 | | | | | |
| 8:00 | Cars | | | | | | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |
| 8:15 | Cars | | | | | | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |
| 8:30 | Cars | | | | | | 2 | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |
| 8:45 | Cars | | | | | | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |

MOVEMENT TOTALS

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cars | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Buses | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2-axle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3-axle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4-axle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5-axle + | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| TOTALS | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 |
| | *NL* | *NT* | *NR* | *SL* | *ST* | *SR* | *EL* | *ET* | *ER* | *WL* | *WT* | *WR* |

PM Peak Hr Begins at: 7:45 AM

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PEAK VOLUMES = | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR. FACTOR: | | 0.000 | | | 0.250 | | | 0.250 | | | 0.000 | |

CONTROL: 2 Way Stop EB & WB

***SOUTHLAND CAR COUNTERS***

*Axle Count*

Project # 03-1720-007

Location: South Access/Buena Vista  City: Irwindale  Date: 11/20/2003  Day: THURSDAY

| | Lanes: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7:00 | Cars | | 110 | | | 43 | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |
| 7:15 | Cars | | 135 | | | 57 | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | 1 | | | | | | | |
| 7:30 | Cars | | 150 | | | 63 | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |
| 7:45 | Cars | | 179 | | | 87 | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | 1 | | | | | | | | | | |
| 8:00 | Cars | | 113 | | | 53 | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |
| 8:15 | Cars | | 112 | | | 55 | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | 1 | | | | | | | | | | |
| 8:30 | Cars | | 94 | | | 55 | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | 1 | | | | | | | |
| 8:45 | Cars | | 70 | | | 44 | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |

MOVEMENT TOTALS

| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cars | 0 | 963 | 0 | 0 | 457 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Buses | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2-axle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3-axle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4-axle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5-axle + | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTALS | 0 | 965 | 0 | 0 | 459 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

PM Peak Hr Begins at: 715 AM

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PEAK VOLUMES = | 0 | 578 | 0 | 0 | 261 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR. FACTOR: | | 0.803 | | | 0.750 | | | 0.000 | | | 0.000 | |

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: Peck Rd. - Myrtle Ave. DATE: 4/1/03 CITY: City of Irwindale

E-W STREET: Longden Ave. DAY: TUESDAY PROJECT# 03-0514-001

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | 1 | 2 | 0 | 1 | 2 | 0 | 0 | 2 | 1 | 0 | 2 | 0 | |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 45 PM | | | | | | | | | | | | | |
| 4:00 PM | 28 | 294 | 9 | 75 | 258 | 20 | 32 | 135 | 36 | 17 | 91 | 57 | 1052 |
| 4:15 PM | 24 | 252 | 7 | 71 | 237 | 15 | 34 | 117 | 32 | 14 | 84 | 49 | 936 |
| 4:30 PM | 33 | 317 | 14 | 82 | 275 | 19 | 37 | 129 | 29 | 16 | 79 | 52 | 1082 |
| 4:45 PM | 37 | 348 | 19 | 87 | 304 | 26 | 41 | 152 | 38 | 20 | 87 | 63 | 1222 |
| 5:00 PM | 31 | 306 | 11 | 78 | 286 | 22 | 30 | 131 | 31 | 23 | 98 | 51 | 1098 |
| 5:15 PM | 29 | 271 | 13 | 80 | 269 | 29 | 26 | 158 | 27 | 19 | 105 | 65 | 1091 |
| 5:30 PM | 35 | 329 | 10 | 91 | 246 | 18 | 19 | 142 | 35 | 15 | 84 | 69 | 1093 |
| 5:45 PM | 22 | 228 | 8 | 69 | 221 | 16 | 23 | 134 | 26 | 11 | 78 | 58 | 894 |
| 6:00 PM | | | | | | | | | | | | | |
| 6:15 PM | | | | | | | | | | | | | |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |
| TOTAL VOLUMES = | 239 | 2345 | 91 | 633 | 2096 | 165 | 242 | 1098 | 254 | 135 | 706 | 464 | 8468 |
| PM Peak Hr Begins at | | | | 445 | PM | | | | | | | | |
| PEAK VOLUMES = | 132 | 1254 | 53 | 336 | 1105 | 95 | 116 | 583 | 131 | 77 | 374 | 248 | 4504 |

ADDITIONS: Signalized

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: Peck Rd. DATE: 4/1/03 CITY: City of Irwindale

E-W STREET: Live Oak Ave. DAY: TUESDAY PROJECT# 03-0514-002

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | 1 | 2 | 0 | 1 | 2 | 0 | 1 | 2 | 1 | 1 | 2 | 0 | |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | 65 | 234 | 60 | 25 | 247 | 34 | 67 | 316 | 81 | 39 | 197 | 26 | 1391 |
| 4:15 PM | 57 | 208 | 54 | 20 | 221 | 26 | 58 | 272 | 86 | 37 | 174 | 19 | 1232 |
| 4:30 PM | 69 | 265 | 68 | 28 | 272 | 42 | 72 | 331 | 94 | 35 | 213 | 28 | 1517 |
| 4:45 PM | 81 | 297 | 76 | 38 | 298 | 49 | 81 | 368 | 109 | 46 | 169 | 36 | 1648 |
| 5:00 PM | 73 | 241 | 63 | 24 | 254 | 37 | 69 | 324 | 98 | 41 | 181 | 31 | 1436 |
| 5:15 PM | 62 | 219 | 59 | 22 | 238 | 33 | 56 | 356 | 103 | 32 | 207 | 33 | 1420 |
| 5:30 PM | 76 | 270 | 72 | 31 | 226 | 40 | 75 | 305 | 87 | 38 | 154 | 27 | 1401 |
| 5:45 PM | 59 | 196 | 51 | 26 | 185 | 31 | 63 | 284 | 79 | 32 | 138 | 21 | 1165 |
| 6:00 PM | | | | | | | | | | | | | |
| 6:15 PM | | | | | | | | | | | | | |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |
| TOTAL VOLUMES = | 542 | 1930 | 503 | 214 | 1941 | 292 | 541 | 2556 | 737 | 300 | 1433 | 221 | 11210 |
| PM Peak Hr Begins at | | | | 430 | PM | | | | | | | | |
| PEAK VOLUMES = | 285 | 1022 | 266 | 112 | 1062 | 161 | 278 | 1379 | 404 | 154 | 770 | 128 | 6021 |

ADDITIONS: Signalized; Yield on the ER Movement

# Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Longden Ave. DATE: 4/3/2003 LOCATION: City of Irwindale

E-W STREET: Live Oak Ave. DAY: THURSDAY PROJECT# 03-0514-006 P

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LANES: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | 0 | | | 230 | 0 | 7 | 0 | 264 | | | 131 | 102 | 734 |
| 4:15 PM | 0 | | | 243 | 0 | 7 | 0 | 276 | | | 143 | 106 | 775 |
| 4:30 PM | 0 | | | 270 | 1 | 6 | 0 | 292 | | | 151 | 120 | 840 |
| 4:45 PM | 1 | | | 238 | 0 | 5 | 0 | 256 | | | 156 | 99 | 755 |
| 5:00 PM | 0 | | | 241 | 0 | 1 | 1 | 270 | | | 176 | 96 | 785 |
| 5:15 PM | 0 | | | 349 | 0 | 0 | 2 | 311 | | | 188 | 133 | 983 |
| 5:30 PM | 0 | | | 233 | 0 | 1 | 0 | 248 | | | 180 | 74 | 736 |
| 5:45 PM | 0 | | | 221 | 0 | 0 | 0 | 222 | | | 163 | 68 | 674 |
| 6:00 PM | | | | | | | | | | | | | |
| 6:15 PM | | | | | | | | | | | | | |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VOLUMES = | 1 | 0 | 0 | 2025 | 1 | 27 | 3 | 2139 | 0 | 0 | 1288 | 798 | 6282 |
| PM Peak Hr Begins at: | 430 PM | | | | | | | | | | | | |
| PEAK VOLUMES = | 1 | 0 | 0 | 1098 | 1 | 12 | 3 | 1129 | 0 | 0 | 671 | 448 | 3363 |

CONTROL: Signalized

# Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Live Oak Ave. DATE: 4/3/2003 LOCATION: City of Irwindale

E-W STREET: Arrow Hwy. DAY: THURSDAY PROJECT# 03-0514-007 P

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | 2 | | 1 | | | | | 2 | 1 | 1 | 2 | | |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | 116 | | 35 | | | | | 178 | 264 | 38 | 125 | | 756 |
| 4:15 PM | 151 | | 26 | | | | | 168 | 218 | 29 | 96 | | 688 |
| 4:30 PM | 138 | | 29 | | | | | 180 | 289 | 38 | 113 | | 787 |
| 4:45 PM | 149 | | 32 | | | | | 172 | 284 | 36 | 88 | | 761 |
| 5:00 PM | 173 | | 26 | | | | | 176 | 327 | 64 | 114 | | 880 |
| 5:15 PM | 117 | | 15 | | | | | 236 | 362 | 39 | 126 | | 895 |
| 5:30 PM | 164 | | 17 | | | | | 218 | 315 | 46 | 104 | | 864 |
| 5:45 PM | 132 | | 23 | | | | | 164 | 246 | 26 | 137 | | 728 |
| 6:00 PM | | | | | | | | | | | | | |
| 6:15 PM | | | | | | | | | | | | | |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VOLUMES = | 1140 | 0 | 203 | 0 | 0 | 0 | 0 | 1492 | 2305 | 316 | 903 | 0 | 6359 |
| PM Peak Hr Begins at: | | 445 PM | | | | | | | | | | | |
| PEAK VOLUMES = | 603 | 0 | 90 | 0 | 0 | 0 | 0 | 802 | 1288 | 185 | 432 | 0 | 3400 |

CONTROL: Signalized;

# Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Buena Vista St. DATE: 4/3/2003 LOCATION: City of Irwindale

E-W STREET: Arrow Hwy. DAY: THURSDAY PROJECT# 03-0514-008 P

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | | | | 1 | | 1 | 1 | 2 | | | 2 | 1 | |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | | | | 59 | | 52 | 47 | 172 | | | 107 | 40 | 477 |
| 4:15 PM | | | | 70 | | 53 | 61 | 162 | | | 116 | 53 | 515 |
| 4:30 PM | | | | 71 | | 48 | 75 | 151 | | | 104 | 36 | 485 |
| 4:45 PM | | | | 61 | | 54 | 78 | 127 | | | 75 | 35 | 430 |
| 5:00 PM | | | | 111 | | 86 | 54 | 149 | | | 102 | 54 | 556 |
| 5:15 PM | | | | 81 | | 58 | 80 | 187 | | | 99 | 18 | 523 |
| 5:30 PM | | | | 77 | | 42 | 55 | 142 | | | 80 | 29 | 425 |
| 5:45 PM | | | | 88 | | 40 | 45 | 138 | | | 116 | 18 | 445 |
| 6:00 PM | | | | | | | | | | | | | |
| 6:15 PM | | | | | | | | | | | | | |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VOLUMES = | 0 | 0 | 0 | 618 | 0 | 433 | 495 | 1228 | 0 | 0 | 799 | 283 | 3856 |
| PM Peak Hr Begins at: | | 430 PM | | | | | | | | | | | |
| PEAK VOLUMES = | 0 | 0 | 0 | 324 | 0 | 246 | 287 | 614 | 0 | 0 | 380 | 143 | 1994 |

CONTROL: Signalized

# Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Buena Vista St. DATE: 11/19/2003 LOCATION: City of Irwindale

E-W STREET: Alpha DAY: WEDNESDAY PROJECT# 03-1720-003

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | 0 | 2 | 1 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | 14 | 87 | 3 | 0 | 123 | 8 | 7 | 0 | 17 | 0 | 0 | 1 | 260 |
| 4:15 PM | 11 | 95 | 2 | 1 | 108 | 7 | 10 | 0 | 14 | 2 | 1 | 4 | 255 |
| 4:30 PM | 13 | 74 | 5 | 2 | 117 | 9 | 8 | 0 | 16 | 3 | 0 | 3 | 250 |
| 4:45 PM | 6 | 79 | 4 | 0 | 104 | 3 | 14 | 0 | 19 | 1 | 0 | 2 | 232 |
| 5:00 PM | 8 | 83 | 6 | 1 | 112 | 5 | 11 | 0 | 22 | 2 | 0 | 4 | 254 |
| 5:15 PM | 5 | 62 | 5 | 0 | 85 | 4 | 9 | 0 | 19 | 0 | 0 | 2 | 191 |
| 5:30 PM | 3 | 58 | 2 | 0 | 71 | 2 | 6 | 0 | 11 | 1 | 0 | 1 | 155 |
| 5:45 PM | 4 | 70 | 4 | 1 | 60 | 5 | 8 | 0 | 13 | 0 | 0 | 3 | 168 |
| 6:00 PM | | | | | | | | | | | | | |
| 6:15 PM | | | | | | | | | | | | | |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |
| TOTAL VOLUMES = | NL 64 | NT 608 | NR 31 | SL 5 | ST 780 | SR 43 | EL 73 | ET 0 | ER 131 | WL 9 | WT 1 | WR 20 | TOTAL 1765 |

PM Peak Hr Begins at: 400 PM

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PEAK VOLUMES = | 44 | 335 | 14 | 3 | 452 | 27 | 39 | 0 | 66 | 6 | 1 | 10 | 997 |
| PEAK HR. FACTOR: | | 0.910 | | | 0.920 | | | 0.795 | | | 0.607 | | 0.959 |

CONTROL: Signalized

# Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Buena Vista St. DATE: 11/19/2003 LOCATION: City of Irwindale

E-W STREET: Bateman Ave DAY: WEDNESDAY PROJECT# 03-1720-002

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | 0 | 3 | | | 2 | 0 | 0 | 1 | 0 | | | | |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | 29 | 64 | | | 92 | 4 | 4 | | 36 | | | | 229 |
| 4:15 PM | 34 | 76 | | | 85 | 2 | 3 | | 33 | | | | 233 |
| 4:30 PM | 22 | 57 | | | 104 | 3 | 1 | | 30 | | | | 217 |
| 4:45 PM | 25 | 72 | | | 63 | 5 | 7 | | 45 | | | | 217 |
| 5:00 PM | 31 | 68 | | | 76 | 7 | 5 | | 39 | | | | 226 |
| 5:15 PM | 20 | 60 | | | 69 | 4 | 2 | | 24 | | | | 179 |
| 5:30 PM | 24 | 43 | | | 48 | 6 | 4 | | 22 | | | | 147 |
| 5:45 PM | 27 | 51 | | | 41 | 4 | 3 | | 27 | | | | 153 |
| 6:00 PM | | | | | | | | | | | | | |
| 6:15 PM | | | | | | | | | | | | | |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |
| TOTAL VOLUMES = | NL 212 | NT 491 | NR 0 | SL 0 | ST 578 | SR 35 | EL 29 | ET 0 | ER 256 | WL 0 | WT 0 | WR 0 | TOTAL 1601 |

PM Peak Hr Begins at: 400 PM

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PEAK VOLUMES = | 110 | 269 | 0 | 0 | 344 | 14 | 15 | 0 | 144 | 0 | 0 | 0 | 896 |
| PEAK HR. FACTOR: | | 0.861 | | | 0.836 | | | 0.764 | | | 0.000 | | 0.961 |

CONTROL: Signalized

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: I-605 SB On-Ramp DATE: 4/3/03 CITY: City of Irwindale

E-W STREET: Live Oak Ave. DAY: THURSDAY PROJECT# 03-0514-012

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | | | | | | | | 2 | 1 | 1 | 2 | | |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | | | | | | | | 173 | 156 | 196 | 191 | | 716 |
| 4:15 PM | | | | | | | | 158 | 143 | 189 | 183 | | 673 |
| 4:30 PM | | | | | | | | 194 | 174 | 208 | 242 | | 818 |
| 4:45 PM | | | | | | | | 226 | 219 | 215 | 224 | | 884 |
| 5:00 PM | | | | | | | | 203 | 195 | 174 | 197 | | 769 |
| 5:15 PM | | | | | | | | 162 | 181 | 161 | 168 | | 672 |
| 5:30 PM | | | | | | | | 178 | 167 | 157 | 189 | | 691 |
| 5:45 PM | | | | | | | | 141 | 138 | 123 | 156 | | 558 |
| 6:00 PM | | | | | | | | | | | | | |
| 6:15 PM | | | | | | | | | | | | | |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VOLUMES = | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1435 | 1373 | 1423 | 1550 | 0 | 5781 |
| PM Peak Hr Begins at | | | | 415 | PM | | | | | | | | |
| PEAK VOLUMES = | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 781 | 731 | 786 | 846 | 0 | 3144 |

ADDITIONS: Signalized

# Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Buena Vista St. DATE: 11/19/2003 LOCATION: City of Irwindale

E-W STREET: Tifal DAY: WEDNESDAY PROJECT# 03-1720-001

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | 0 | 3 | | | 2 | 0 | 0 | 1 | 0 | | | | |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | 4 | 65 | | | 95 | 5 | 6 | | 1 | | | | 176 |
| 4:15 PM | 5 | 72 | | | 81 | 7 | 4 | | 3 | | | | 172 |
| 4:30 PM | 3 | 58 | | | 103 | 2 | 3 | | 5 | | | | 174 |
| 4:45 PM | 1 | 76 | | | 84 | 4 | 5 | | 2 | | | | 172 |
| 5:00 PM | 3 | 69 | | | 86 | 3 | 4 | | 1 | | | | 166 |
| 5:15 PM | 2 | 61 | | | 72 | 1 | 3 | | 4 | | | | 143 |
| 5:30 PM | 4 | 46 | | | 48 | 3 | 8 | | 7 | | | | 116 |
| 5:45 PM | 3 | 54 | | | 37 | 2 | 5 | | 8 | | | | 109 |
| 6:00 PM | | | | | | | | | | | | | |
| 6:15 PM | | | | | | | | | | | | | |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |
| TOTAL VOLUMES = | 25 | 501 | 0 | 0 | 606 | 27 | 38 | 0 | 31 | 0 | 0 | 0 | 1228 |

PM Peak Hr Begins at: 400 PM

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PEAK VOLUMES = | 13 | 271 | 0 | 0 | 363 | 18 | 18 | 0 | 11 | 0 | 0 | 0 | 694 |
| PEAK HR. FACTOR: | | 0.922 | | | 0.907 | | | 0.906 | | | 0.000 | | 0.986 |

CONTROL: Signalized;

# Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: I-605 SB Ramps DATE: 4/3/2003 LOCATION: City of Irwindale

E-W STREET: Arrow Hwy. DAY: THURSDAY PROJECT# 03-0514-009 P

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | | | | 1 | | 1 | | 2 | | | 2 | | |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | | | | 89 | | 53 | | 212 | | | 86 | | 440 |
| 4:15 PM | | | | 63 | | 56 | | 205 | | | 83 | | 407 |
| 4:30 PM | | | | 93 | | 69 | | 249 | | | 84 | | 495 |
| 4:45 PM | | | | 49 | | 54 | | 212 | | | 57 | | 372 |
| 5:00 PM | | | | 66 | | 47 | | 242 | | | 89 | | 444 |
| 5:15 PM | | | | 58 | | 74 | | 250 | | | 97 | | 479 |
| 5:30 PM | | | | 89 | | 76 | | 238 | | | 68 | | 471 |
| 5:45 PM | | | | 61 | | 58 | | 229 | | | 52 | | 400 |
| 6:00 PM | | | | | | | | | | | | | |
| 6:15 PM | | | | | | | | | | | | | |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VOLUMES = | 0 | 0 | 0 | 568 | 0 | 487 | 0 | 1837 | 0 | 0 | 616 | 0 | 3508 |
| PM Peak Hr Begins at: | 500 PM | | | | | | | | | | | | |
| PEAK VOLUMES = | 0 | 0 | 0 | 274 | 0 | 255 | 0 | 959 | 0 | 0 | 306 | 0 | 1794 |

CONTROL: Signalized

SOUTHLAND CAR COUNTERS
VEHICLE AND MANUAL COUNTS

N-S STREET: I-605 NB Ramps DATE: 4/3/03 CITY: City of Irwindale

E-W STREET: Live Oak Ave. DAY: THURSDAY PROJECT# 03-0514-013

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | | | 1 | | | 1 | | 2 | | | 2 | | |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | | | 126 | | | 142 | | 173 | | | 245 | | 686 |
| 4:15 PM | | | 117 | | | 132 | | 152 | | | 227 | | 628 |
| 4:30 PM | | | 104 | | | 181 | | 194 | | | 274 | | 753 |
| 4:45 PM | | | 131 | | | 174 | | 226 | | | 258 | | 789 |
| 5:00 PM | | | 98 | | | 167 | | 203 | | | 213 | | 681 |
| 5:15 PM | | | 119 | | | 148 | | 165 | | | 182 | | 614 |
| 5:30 PM | | | 93 | | | 156 | | 182 | | | 196 | | 627 |
| 5:45 PM | | | 84 | | | 123 | | 141 | | | 153 | | 501 |
| 6:00 PM | | | | | | | | | | | | | |
| 6:15 PM | | | | | | | | | | | | | |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |

| TOTAL | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VOLUMES = | 0 | 0 | 872 | 0 | 0 | 1223 | 0 | 1436 | 0 | 0 | 1748 | 0 | 5279 |

PM Peak Hr Begins at 400 PM

| PEAK | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VOLUMES = | 0 | 0 | 478 | 0 | 0 | 629 | 0 | 745 | 0 | 0 | 1004 | 0 | 2856 |

ADDITIONS: 2-Way Stop (NB & SB)

# Intersection Turning Movement

Prepared by: Southland Car Counters

N-S STREET: Rivergrade Rd. DATE: 4/3/2003 LOCATION: City of Irwindale

E-W STREET: Arrow Hwy. DAY: THURSDAY PROJECT# 03-0514-011 P

| | NORTHBOUND | | | SOUTHBOUND | | | EASTBOUND | | | WESTBOUND | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR | TOTAL |
| LANES: | 2 | | 1 | | | | | 2 | 1 | 1 | 2 | | |
| 1:00 PM | | | | | | | | | | | | | |
| 1:15 PM | | | | | | | | | | | | | |
| 1:30 PM | | | | | | | | | | | | | |
| 1:45 PM | | | | | | | | | | | | | |
| 2:00 PM | | | | | | | | | | | | | |
| 2:15 PM | | | | | | | | | | | | | |
| 2:30 PM | | | | | | | | | | | | | |
| 2:45 PM | | | | | | | | | | | | | |
| 3:00 PM | | | | | | | | | | | | | |
| 3:15 PM | | | | | | | | | | | | | |
| 3:30 PM | | | | | | | | | | | | | |
| 3:45 PM | | | | | | | | | | | | | |
| 4:00 PM | 14 | | 2 | | | | | 130 | 20 | 1 | 89 | | 256 |
| 4:15 PM | 22 | | 4 | | | | | 123 | 33 | 1 | 84 | | 267 |
| 4:30 PM | 30 | | 3 | | | | | 209 | 41 | 3 | 125 | | 411 |
| 4:45 PM | 40 | | 6 | | | | | 250 | 45 | 2 | 148 | | 491 |
| 5:00 PM | 46 | | 8 | | | | | 228 | 39 | 5 | 107 | | 433 |
| 5:15 PM | 38 | | 5 | | | | | 222 | 28 | 4 | 130 | | 427 |
| 5:30 PM | 32 | | 3 | | | | | 234 | 34 | 3 | 120 | | 426 |
| 5:45 PM | 22 | | 2 | | | | | 195 | 26 | 1 | 101 | | 347 |
| 6:00 PM | | | | | | | | | | | | | |
| 6:15 PM | | | | | | | | | | | | | |
| 6:30 PM | | | | | | | | | | | | | |
| 6:45 PM | | | | | | | | | | | | | |
| TOTAL VOLUMES = | NL 244 | NT 0 | NR 33 | SL 0 | ST 0 | SR 0 | EL 0 | ET 1591 | ER 266 | WL 20 | WT 904 | WR 0 | TOTAL 3058 |

PM Peak Hr Begins at: 445 PM

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PEAK VOLUMES = | 156 | 0 | 22 | 0 | 0 | 0 | 0 | 934 | 146 | 14 | 505 | 0 | 1777 |

CONTROL: Signalized

***SOUTHLAND CAR COUNTERS***

*Axle Count*

Project # 03-1720-004

Location: North project Access/Buena Vista  City: Irwindale  Date: 11/20/2003  Day: THURSDAY

| | Lanes: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:00 | Cars | | 103 | 1 | 1 | 140 | | | | | 1 | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |
| 16:15 | Cars | | 107 | 2 | | 123 | | | | | 1 | | 1 |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |
| 16:30 | Cars | | 96 | 1 | | 132 | | | | | 2 | | 1 |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | 1 | | | | | | | | | |
| | 3-axle | | | | | | | | | | 1 | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | 2 | | | | | | | | | |
| 16:45 | Cars | | 88 | | | 123 | | | | | 4 | | 3 |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | 1 | | | | | | | | | |
| | 3-axle | | | | | | | | | | 1 | | |
| | 4-axle | | | | | | | | | | 1 | | |
| | 5-axle + | | 1 | | | | | | | | | | |
| 17:00 | Cars | | 96 | 3 | | 136 | | | | | 2 | | 4 |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | 1 | | | | | | | | | |
| 17:15 | Cars | | 74 | 1 | | 105 | | | | | 1 | | 1 |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | 1 |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | 1 | | | | | 1 | | |
| 17:30 | Cars | | 62 | 1 | | 83 | | | | | 2 | | 3 |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | 1 |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | 1 | | | | | | | 2 | | |
| 17:45 | Cars | | 78 | 1 | | 75 | | | | | 2 | | 2 |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | 1 | | | | | | | 1 | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |

MOVEMENT TOTALS

| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CARS | 0 | 704 | 10 | 1 | 917 | 0 | 0 | 0 | 0 | 15 | 0 | 15 |
| BUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2-axle | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 3-axle | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 |
| 4-axle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 5-axle + | 0 | 1 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 0 | 0 |
| TOTALS | 0 | 705 | 17 | 1 | 918 | 0 | 0 | 0 | 0 | 22 | 0 | 17 |

PM Peak Hr Begins at: 1600 PM

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PEAK VOLUMES = | 0 | 395 | 8 | 1 | 518 | 0 | 0 | 0 | 0 | 11 | 0 | 5 |
| PEAK HR. FACTOR: | | 0.924 | | | 0.920 | | | 0.000 | | | 0.444 | |

CONTROL: 2-Way Stop,EB & WB

***SOUTHLAND CAR COUNTERS***

*Axle Count*

Project # 03-1720-005

Location: Main project Access/Arrow  City: Irwindale  Date: 11/20/2003  Day: THURSDAY

| | Lanes: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:00 | Cars | | | | 2 | | 2 | | 405 | | | 220 | |
| | Buses | | | | | | | | 1 | | | 1 | |
| | 2-axle | | | | | | | | 6 | | | 6 | |
| | 3-axle | | | | | | | | 7 | | | 6 | |
| | 4-axle | | | | | | | | 8 | | | 1 | |
| | 5-axle + | | | | 1 | | | | 10 | | | 8 | |
| 16:15 | Cars | | | | 1 | | 2 | | 400 | | | 200 | |
| | Buses | | | | | | | | 2 | | | 1 | |
| | 2-axle | | | | | | | | 11 | | | 7 | |
| | 3-axle | | | | | | | | 8 | | | 6 | |
| | 4-axle | | | | | | | | 2 | | | 1 | |
| | 5-axle + | | | | | | 1 | | 9 | | | 7 | |
| 16:30 | Cars | | | | 1 | | 1 | | 400 | | | 207 | 1 |
| | Buses | | | | | | | | 1 | | | 1 | |
| | 2-axle | | | | | | | | 16 | | | 8 | |
| | 3-axle | | | | | | | | 9 | | | 15 | |
| | 4-axle | | | | | | | | 2 | | | 2 | 1 |
| | 5-axle + | | | | 1 | | | | 11 | | | 9 | |
| 16:45 | Cars | | | | 2 | | 2 | | 450 | | | 187 | 1 |
| | Buses | | | | | | | | 1 | | | 2 | |
| | 2-axle | | | | | | | | 6 | | | 6 | |
| | 3-axle | | | | 3 | | 1 | | 9 | | | 9 | |
| | 4-axle | | | | | | | | 2 | | | 1 | 2 |
| | 5-axle + | | | | | | 1 | | 5 | | | 7 | 2 |
| 17:00 | Cars | | | | 2 | | | | 461 | | | 211 | |
| | Buses | | | | | | | | 2 | | | 2 | |
| | 2-axle | | | | | | | | 8 | | | 6 | |
| | 3-axle | | | | 1 | | 1 | | 9 | | | 7 | 1 |
| | 4-axle | | | | | | | | 1 | | | 1 | 1 |
| | 5-axle + | | | | 1 | | 1 | | 6 | | | 6 | |
| 17:15 | Cars | | | | 1 | | 4 | | 411 | | | 220 | 3 |
| | Buses | | | | | | | | 1 | | | 1 | |
| | 2-axle | | | | | | | | 8 | | | 11 | |
| | 3-axle | | | | | | 3 | | 7 | | | 13 | |
| | 4-axle | | | | | | | | 2 | | | 2 | |
| | 5-axle + | | | | | | | | 6 | | | 9 | |
| 17:30 | Cars | | | | 1 | | 2 | | 400 | | | 215 | |
| | Buses | | | | | | | | 2 | | | 3 | |
| | 2-axle | | | | | | | | 8 | | | 15 | |
| | 3-axle | | | | 2 | | 1 | | 9 | | | 10 | |
| | 4-axle | | | | | | | | 1 | | | 3 | |
| | 5-axle + | | | | | | 1 | | 6 | | | 9 | |
| 17:45 | Cars | | | | 1 | | 1 | | 366 | | | 220 | |
| | Buses | | | | | | | | 1 | | | 1 | |
| | 2-axle | | | | | | | | 9 | | | 9 | |
| | 3-axle | | | | 1 | | 1 | | 5 | | | 8 | |
| | 4-axle | | | | | | | | 2 | | | 2 | |
| | 5-axle + | | | | 1 | | | | 9 | | | 7 | |

MOVEMENT TOTALS

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CARS | 0 | 0 | 0 | 11 | 0 | 14 | 0 | 3293 | 0 | 0 | 1680 | 5 |
| BUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 12 | 0 |
| 2-axle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 72 | 0 | 0 | 68 | 0 |
| 3-axle | 0 | 0 | 0 | 7 | 0 | 7 | 0 | 63 | 0 | 0 | 74 | 1 |
| 4-axle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 13 | 4 |
| 5-axle + | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 62 | 0 | 0 | 62 | 2 |
| TOTALS | 0 | 0 | 0 | 22 | 0 | 25 | 0 | 3521 | 0 | 0 | 1909 | 12 |
| | *NL* | *NT* | *NR* | *SL* | *ST* | *SR* | *EL* | *ET* | *ER* | *WL* | *WT* | *WR* |

PM Peak Hr Begins at: 1645 PM

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PEAK VOLUMES = | 0 | 0 | 0 | 13 | 0 | 17 | 0 | 1821 | 0 | 0 | 956 | 10 |
| PEAK HR. FACTOR: | | 0.000 | | | 0.833 | | | 0.935 | | | 0.932 | |

CONTROL: 2-Way Stop,EB & WB

A21

***SOUTHLAND CAR COUNTERS***

*Axle Count*

Project # 03-1720-006

Location: East Access/Meridian St  City: Irwindale  Date: 11/20/2003  Day: THURSDAY

| | Lanes: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:00 | Cars | | | | | | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |
| 16:15 | Cars | | | | | | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | 1 | | | | | |
| 16:30 | Cars | | | | | | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |
| 16:45 | Cars | | | | | | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |
| 17:00 | Cars | | | | | | 1 | 2 | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |
| 17:15 | Cars | | | | | | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |
| 17:30 | Cars | | | | | | 2 | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |
| 17:45 | Cars | | | | | | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |

MOVEMENT TOTALS

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CARS | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 |
| BUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2-axle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3-axle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4-axle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5-axle + | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| TOTALS | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 |
| | *NL* | *NT* | *NR* | *SL* | *ST* | *SR* | *EL* | *ET* | *ER* | *WL* | *WT* | *WR* |

PM Peak Hr Begins at: 17:00 PM

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PEAK VOLUMES = | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR. FACTOR: | | 0.000 | | | 0.375 | | | 0.250 | | | 0.000 | |

CONTROL: 2-Way Stop,EB & WB

A33

***SOUTHLAND CAR COUNTERS***

*Axle Count*

Project # 03-1720-007

Location: South Access/Buena Vista  City: Irwindale  Date: 11/20/2003  Day: THURSDAY

| | Lanes: | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16:00 | Cars | | 104 | | | 141 | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |
| 16:15 | Cars | | 108 | | | 122 | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |
| 16:30 | Cars | | 97 | | | 134 | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |
| 16:45 | Cars | | 87 | | | 126 | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | 1 | | | | | | | | | | |
| 17:00 | Cars | | 98 | | | 137 | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |
| 17:15 | Cars | | 75 | | | 106 | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | 1 | | | | | | | |
| 17:30 | Cars | | 63 | | | 85 | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |
| 17:45 | Cars | | 79 | | | 77 | | | | | | | |
| | Buses | | | | | | | | | | | | |
| | 2-axle | | | | | | | | | | | | |
| | 3-axle | | | | | | | | | | | | |
| | 4-axle | | | | | | | | | | | | |
| | 5-axle + | | | | | | | | | | | | |

MOVEMENT TOTALS

| | NL | NT | NR | SL | ST | SR | EL | ET | ER | WL | WT | WR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CARS | 0 | 711 | 0 | 0 | 928 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BUS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2-axle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3-axle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4-axle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5-axle + | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTALS | 0 | 712 | 0 | 0 | 929 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

PM Peak Hr Begins at: 1600 PM

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PEAK VOLUMES = | 0 | 397 | 0 | 0 | 523 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PEAK HR. FACTOR: | | 0.919 | | | 0.927 | | | 0.000 | | | 0.000 | |

CONTROL: 2-Way Stop EB & WB

A-2 U

# Average Daily Traffic Volumes

Prepared by: Southland Car Counters

Volumes for: Thursday, November 20, 2003 City: Irwindale Project #: 03-1721-001

Location: Arrow Hwy & E/o Londgden Ave Client Ref #:

| Period | NB | SB | EB | | WB | | | PM Period | NB | SB | EB | | WB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00-12:15 | | | 19 | | 44 | | | 12:00-12:15 | | | 199 | | 239 | | |
| 12:15-12:30 | | | 19 | | 20 | | | 12:15-12:30 | | | 184 | | 271 | | |
| 12:30-12:45 | | | 25 | | 23 | | | 12:30-12:45 | | | 219 | | 250 | | |
| 12:45-1:00 | | | 15 | 78 | 20 | 107 | 185 | 12:45-1:00 | | | 190 | 792 | 228 | 988 | 1780 |
| 1:00-1:15 | | | 11 | | 24 | | | 1:00-1:15 | | | 231 | | 176 | | |
| 1:15-1:30 | | | 15 | | 22 | | | 1:15-1:30 | | | 226 | | 213 | | |
| 1:30-1:45 | | | 10 | | 12 | | | 1:30-1:45 | | | 225 | | 275 | | |
| 1:45-2:00 | | | 12 | 48 | 10 | 68 | 116 | 1:45-2:00 | | | 284 | 966 | 229 | 893 | 1859 |
| 2:00-2:15 | | | 25 | | 15 | | | 2:00-2:15 | | | 284 | | 250 | | |
| 2:15-2:30 | | | 14 | | 21 | | | 2:15-2:30 | | | 271 | | 307 | | |
| 2:30-2:45 | | | 15 | | 19 | | | 2:30-2:45 | | | 288 | | 307 | | |
| 2:45-3:00 | | | 18 | 72 | 27 | 82 | 154 | 2:45-3:00 | | | 325 | 1168 | 238 | 1102 | 2270 |
| 3:00-3:15 | | | 15 | | 23 | | | 3:00-3:15 | | | 355 | | 276 | | |
| 3:15-3:30 | | | 32 | | 39 | | | 3:15-3:30 | | | 434 | | 291 | | |
| 3:30-3:45 | | | 34 | | 38 | | | 3:30-3:45 | | | 432 | | 361 | | |
| 3:45-4:00 | | | 18 | 99 | 30 | 130 | 229 | 3:45-4:00 | | | 426 | 1647 | 306 | 1234 | 2881 |
| 4:00-4:15 | | | 58 | | 42 | | | 4:00-4:15 | | | 444 | | 358 | | |
| 4:15-4:30 | | | 75 | | 48 | | | 4:15-4:30 | | | 492 | | 327 | | |
| 4:30-4:45 | | | 71 | | 89 | | | 4:30-4:45 | | | 540 | | 277 | | |
| 4:45-5:00 | | | 88 | 292 | 105 | 284 | 576 | 4:45-5:00 | | | 588 | 2064 | 342 | 1304 | 3368 |
| 5:00-5:15 | | | 132 | | 113 | | | 5:00-5:15 | | | 566 | | 382 | | |
| 5:15-5:30 | | | 162 | | 160 | | | 5:15-5:30 | | | 612 | | 250 | | |
| 5:30-5:45 | | | 186 | | 255 | | | 5:30-5:45 | | | 611 | | 143 | | |
| 5:45-6:00 | | | 169 | 649 | 218 | 746 | 1395 | 5:45-6:00 | | | 604 | 2393 | 111 | 886 | 3279 |
| -6:15 | | | 170 | | 314 | | | 6:00-6:15 | | | 476 | | 112 | | |
| 6:15-6:30 | | | 218 | | 382 | | | 6:15-6:30 | | | 484 | | 40 | | |
| 6:30-6:45 | | | 208 | | 477 | | | 6:30-6:45 | | | 341 | | 105 | | |
| 6:45-7:00 | | | 224 | 820 | 474 | 1647 | 2467 | 6:45-7:00 | | | 229 | 1530 | 226 | 483 | 2013 |
| 7:00-7:15 | | | 228 | | 613 | | | 7:00-7:15 | | | 210 | | 159 | | |
| 7:15-7:30 | | | 274 | | 627 | | | 7:15-7:30 | | | 162 | | 182 | | |
| 7:30-7:45 | | | 286 | | 546 | | | 7:30-7:45 | | | 154 | | 164 | | |
| 7:45-8:00 | | | 276 | 1064 | 471 | 2257 | 3321 | 7:45-8:00 | | | 101 | 627 | 158 | 663 | 1290 |
| 8:00-8:15 | | | 271 | | 452 | | | 8:00-8:15 | | | 105 | | 128 | | |
| 8:15-8:30 | | | 245 | | 411 | | | 8:15-8:30 | | | 101 | | 129 | | |
| 8:30-8:45 | | | 265 | | 329 | | | 8:30-8:45 | | | 91 | | 134 | | |
| 8:45-9:00 | | | 190 | 971 | 325 | 1517 | 2488 | 8:45-9:00 | | | 89 | 386 | 124 | 515 | 901 |
| 9:00-9:15 | | | 194 | | 254 | | | 9:00-9:15 | | | 78 | | 140 | | |
| 9:15-9:30 | | | 254 | | 245 | | | 9:15-9:30 | | | 91 | | 147 | | |
| 9:30-9:45 | | | 199 | | 242 | | | 9:30-9:45 | | | 88 | | 138 | | |
| 9:45-10:00 | | | 196 | 843 | 245 | 986 | 1829 | 9:45-10:00 | | | 64 | 321 | 101 | 526 | 847 |
| 10:00-10:15 | | | 212 | | 206 | | | 10:00-10:15 | | | 60 | | 110 | | |
| 10:15-10:30 | | | 181 | | 255 | | | 10:15-10:30 | | | 50 | | 111 | | |
| 10:30-10:45 | | | 164 | | 231 | | | 10:30-10:45 | | | 36 | | 78 | | |
| 10:45-11:00 | | | 175 | 732 | 207 | 899 | 1631 | 10:45-11:00 | | | 48 | 194 | 73 | 372 | 566 |
| 11:00-11:15 | | | 214 | | 205 | | | 11:00-11:15 | | | 26 | | 62 | | |
| 11:15-11:30 | | | 214 | | 255 | | | 11:15-11:30 | | | 38 | | 61 | | |
| 11:30-11:45 | | | 185 | | 244 | | | 11:30-11:45 | | | 29 | | 39 | | |
| 11:45-12:00 | | | 222 | 835 | 263 | 967 | 1802 | 11:45-12:00 | | | 25 | 118 | 34 | 196 | 314 |
| **Total Vol.** | 0 | 0 | 6503 | | 9690 | | 16193 | | 0 | 0 | 12206 | | 9162 | | 21368 |
| **Totals** | | | | | | | | | 0 | 0 | 18709 | | 18852 | | 37561 |

# Average Daily Traffic Volumes

Prepared by: Southland Car Counters

Volumes for: Thursday, November 20, 2003 City: Irwindale — Project #: 03-1721-002

Location: Arrow Hwy & W/o I-605 Fwy — Client Ref #:

| AM Period | NB | SB | EB | | WB | | | PM Period | NB | SB | EB | | WB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00-12:15 | | | 13 | | 33 | | | 12:00-12:15 | | | 209 | | 226 | | |
| 12:15-12:30 | | | 22 | | 23 | | | 12:15-12:30 | | | 236 | | 246 | | |
| 12:30-12:45 | | | 15 | | 28 | | | 12:30-12:45 | | | 206 | | 245 | | |
| 12:45-1:00 | | | 15 | 65 | 20 | 104 | 169 | 12:45-1:00 | | | 203 | 854 | 241 | 958 | 1812 |
| 1:00-1:15 | | | 19 | | 25 | | | 1:00-1:15 | | | 235 | | 192 | | |
| 1:15-1:30 | | | 13 | | 21 | | | 1:15-1:30 | | | 233 | | 219 | | |
| 1:30-1:45 | | | 11 | | 12 | | | 1:30-1:45 | | | 242 | | 268 | | |
| 1:45-2:00 | | | 17 | 60 | 12 | 70 | 130 | 1:45-2:00 | | | 224 | 934 | 255 | 934 | 1868 |
| 2:00-2:15 | | | 30 | | 18 | | | 2:00-2:15 | | | 233 | | 252 | | |
| 2:15-2:30 | | | 14 | | 21 | | | 2:15-2:30 | | | 299 | | 273 | | |
| 2:30-2:45 | | | 17 | | 15 | | | 2:30-2:45 | | | 259 | | 252 | | |
| 2:45-3:00 | | | 28 | 89 | 30 | 84 | 173 | 2:45-3:00 | | | 266 | 1057 | 228 | 1005 | 2062 |
| 3:00-3:15 | | | 28 | | 20 | | | 3:00-3:15 | | | 284 | | 268 | | |
| 3:15-3:30 | | | 29 | | 40 | | | 3:15-3:30 | | | 357 | | 232 | | |
| 3:30-3:45 | | | 37 | | 34 | | | 3:30-3:45 | | | 357 | | 243 | | |
| 3:45-4:00 | | | 49 | 143 | 31 | 125 | 268 | 3:45-4:00 | | | 368 | 1366 | 192 | 935 | 2301 |
| 4:00-4:15 | | | 61 | | 21 | | | 4:00-4:15 | | | 410 | | 251 | | |
| 4:15-4:30 | | | 62 | | 45 | | | 4:15-4:30 | | | 409 | | 228 | | |
| 4:30-4:45 | | | 85 | | 85 | | | 4:30-4:45 | | | 409 | | 244 | | |
| 4:45-5:00 | | | 105 | 313 | 85 | 236 | 549 | 4:45-5:00 | | | 458 | 1686 | 212 | 935 | 2621 |
| 5:00-5:15 | | | 144 | | 96 | | | 5:00-5:15 | | | 471 | | 243 | | |
| 5:15-5:30 | | | 172 | | 138 | | | 5:15-5:30 | | | 412 | | 244 | | |
| 5:30-5:45 | | | 175 | | 185 | | | 5:30-5:45 | | | 401 | | 248 | | |
| 5:45-6:00 | | | 161 | 652 | 160 | 579 | 1231 | 5:45-6:00 | | | 395 | 1679 | 243 | 978 | 2657 |
| 6:00-6:15 | | | 173 | | 243 | | | 6:00-6:15 | | | 302 | | 212 | | |
| 6:15-6:30 | | | 209 | | 270 | | | 6:15-6:30 | | | 308 | | 201 | | |
| 6:30-6:45 | | | 188 | | 300 | | | 6:30-6:45 | | | 241 | | 213 | | |
| 6:45-7:00 | | | 217 | 787 | 300 | 1113 | 1900 | 6:45-7:00 | | | 193 | 1044 | 223 | 849 | 1893 |
| 7:00-7:15 | | | 222 | | 339 | | | 7:00-7:15 | | | 191 | | 164 | | |
| 7:15-7:30 | | | 250 | | 351 | | | 7:15-7:30 | | | 135 | | 186 | | |
| 7:30-7:45 | | | 263 | | 340 | | | 7:30-7:45 | | | 139 | | 182 | | |
| 7:45-8:00 | | | 268 | 1003 | 358 | 1388 | 2391 | 7:45-8:00 | | | 117 | 582 | 146 | 678 | 1260 |
| 8:00-8:15 | | | 352 | | 361 | | | 8:00-8:15 | | | 112 | | 121 | | |
| 8:15-8:30 | | | 248 | | 299 | | | 8:15-8:30 | | | 114 | | 112 | | |
| 8:30-8:45 | | | 243 | | 282 | | | 8:30-8:45 | | | 133 | | 134 | | |
| 8:45-9:00 | | | 215 | 1058 | 289 | 1231 | 2289 | 8:45-9:00 | | | 123 | 482 | 98 | 465 | 947 |
| 9:00-9:15 | | | 219 | | 220 | | | 9:00-9:15 | | | 126 | | 97 | | |
| 9:15-9:30 | | | 246 | | 240 | | | 9:15-9:30 | | | 135 | | 123 | | |
| 9:30-9:45 | | | 216 | | 228 | | | 9:30-9:45 | | | 165 | | 99 | | |
| 9:45-10:00 | | | 225 | 906 | 214 | 902 | 1808 | 9:45-10:00 | | | 226 | 652 | 81 | 400 | 1052 |
| 10:00-10:15 | | | 242 | | 219 | | | 10:00-10:15 | | | 99 | | 81 | | |
| 10:15-10:30 | | | 221 | | 217 | | | 10:15-10:30 | | | 97 | | 69 | | |
| 10:30-10:45 | | | 213 | | 234 | | | 10:30-10:45 | | | 38 | | 60 | | |
| 10:45-11:00 | | | 195 | 871 | 233 | 903 | 1774 | 10:45-11:00 | | | 49 | 283 | 50 | 260 | 543 |
| 11:00-11:15 | | | 219 | | 226 | | | 11:00-11:15 | | | 28 | | 56 | | |
| 11:15-11:30 | | | 236 | | 280 | | | 11:15-11:30 | | | 44 | | 50 | | |
| 11:30-11:45 | | | 227 | | 220 | | | 11:30-11:45 | | | 41 | | 52 | | |
| 11:45-12:00 | | | 192 | 874 | 245 | 971 | 1845 | 11:45-12:00 | | | 37 | 150 | 23 | 181 | 331 |
| **Total Vol.** | 0 | 0 | | 6821 | | 7706 | 14527 | | 0 | 0 | | 10769 | | 8578 | 19347 |
| **Daily Totals** | | | | | | | | | 0 | 0 | | 17590 | | 16284 | 33874 |

# Average Daily Traffic Volumes

Prepared by: Southland Car Counters

Volumes for: Thursday, November 20, 2003 City: Irwindale — Project #: 03-1721-003

Location: Buena Vista St. & N/o Tifal Ave — Client Ref #:

| AM Period | NB | | SB | | EB | WB | | PM Period | NB | | SB | | EB | WB | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00-12:15 | 3 | | 0 | | | | | 12:00-12:15 | 43 | | 43 | | | | |
| 12:15-12:30 | 5 | | 2 | | | | | 12:15-12:30 | 44 | | 39 | | | | |
| 12:30-12:45 | 1 | | 2 | | | | | 12:30-12:45 | 42 | | 44 | | | | |
| 12:45-1:00 | 5 | 14 | 1 | 5 | | | 19 | 12:45-1:00 | 33 | 162 | 34 | 160 | | | 322 |
| 1:00-1:15 | 4 | | 4 | | | | | 1:00-1:15 | 35 | | 32 | | | | |
| 1:15-1:30 | 2 | | 1 | | | | | 1:15-1:30 | 28 | | 48 | | | | |
| 1:30-1:45 | 4 | | 0 | | | | | 1:30-1:45 | 47 | | 26 | | | | |
| 1:45-2:00 | 7 | 17 | 3 | 8 | | | 25 | 1:45-2:00 | 50 | 160 | 34 | 140 | | | 300 |
| 2:00-2:15 | 2 | | 0 | | | | | 2:00-2:15 | 48 | | 31 | | | | |
| 2:15-2:30 | 3 | | 2 | | | | | 2:15-2:30 | 50 | | 40 | | | | |
| 2:30-2:45 | 2 | | 1 | | | | | 2:30-2:45 | 44 | | 48 | | | | |
| 2:45-3:00 | 4 | 11 | 7 | 10 | | | 21 | 2:45-3:00 | 49 | 191 | 41 | 160 | | | 351 |
| 3:00-3:15 | 1 | | 5 | | | | | 3:00-3:15 | 51 | | 40 | | | | |
| 3:15-3:30 | 1 | | 3 | | | | | 3:15-3:30 | 46 | | 60 | | | | |
| 3:30-3:45 | 1 | | 2 | | | | | 3:30-3:45 | 82 | | 43 | | | | |
| 3:45-4:00 | 1 | 4 | 3 | 13 | | | 17 | 3:45-4:00 | 58 | 237 | 68 | 211 | | | 448 |
| 4:00-4:15 | 6 | | 5 | | | | | 4:00-4:15 | 59 | | 74 | | | | |
| 4:15-4:30 | 1 | | 5 | | | | | 4:15-4:30 | 58 | | 96 | | | | |
| 4:30-4:45 | 6 | | 6 | | | | | 4:30-4:45 | 75 | | 90 | | | | |
| 4:45-5:00 | 7 | 20 | 13 | 29 | | | 49 | 4:45-5:00 | 95 | 287 | 91 | 351 | | | 638 |
| 5:00-5:15 | 10 | | 11 | | | | | 5:00-5:15 | 87 | | 90 | | | | |
| 5:15-5:30 | 25 | | 15 | | | | | 5:15-5:30 | 59 | | 81 | | | | |
| 5:30-5:45 | 35 | | 23 | | | | | 5:30-5:45 | 58 | | 63 | | | | |
| 5:45-6:00 | 24 | 94 | 24 | 73 | | | 167 | 5:45-6:00 | 57 | 261 | 72 | 306 | | | 567 |
| 6:00-6:15 | 22 | | 18 | | | | | 6:00-6:15 | 47 | | 42 | | | | |
| 6:15-6:30 | 43 | | 34 | | | | | 6:15-6:30 | 39 | | 55 | | | | |
| 6:30-6:45 | 66 | | 29 | | | | | 6:30-6:45 | 34 | | 55 | | | | |
| 6:45-7:00 | 57 | 188 | 29 | 110 | | | 298 | 6:45-7:00 | 33 | 153 | 33 | 185 | | | 338 |
| 7:00-7:15 | 130 | | 42 | | | | | 7:00-7:15 | 24 | | 18 | | | | |
| 7:15-7:30 | 125 | | 66 | | | | | 7:15-7:30 | 21 | | 28 | | | | |
| 7:30-7:45 | 161 | | 45 | | | | | 7:30-7:45 | 24 | | 29 | | | | |
| 7:45-8:00 | 119 | 535 | 56 | 209 | | | 744 | 7:45-8:00 | 15 | 84 | 20 | 95 | | | 179 |
| 8:00-8:15 | 112 | | 52 | | | | | 8:00-8:15 | 15 | | 13 | | | | |
| 8:15-8:30 | 55 | | 39 | | | | | 8:15-8:30 | 20 | | 18 | | | | |
| 8:30-8:45 | 63 | | 48 | | | | | 8:30-8:45 | 22 | | 7 | | | | |
| 8:45-9:00 | 70 | 300 | 22 | 161 | | | 461 | 8:45-9:00 | 20 | 77 | 10 | 48 | | | 125 |
| 9:00-9:15 | 33 | | 19 | | | | | 9:00-9:15 | 17 | | 14 | | | | |
| 9:15-9:30 | 37 | | 25 | | | | | 9:15-9:30 | 10 | | 8 | | | | |
| 9:30-9:45 | 40 | | 20 | | | | | 9:30-9:45 | 10 | | 10 | | | | |
| 9:45-10:00 | 26 | 136 | 19 | 83 | | | 219 | 9:45-10:00 | 11 | 48 | 8 | 40 | | | 88 |
| 10:00-10:15 | 35 | | 31 | | | | | 10:00-10:15 | 10 | | 5 | | | | |
| 10:15-10:30 | 32 | | 26 | | | | | 10:15-10:30 | 6 | | 11 | | | | |
| 10:30-10:45 | 21 | | 32 | | | | | 10:30-10:45 | 2 | | 6 | | | | |
| 10:45-11:00 | 46 | 134 | 37 | 126 | | | 260 | 10:45-11:00 | 5 | 23 | 5 | 27 | | | 50 |
| 11:00-11:15 | 38 | | 24 | | | | | 11:00-11:15 | 8 | | 6 | | | | |
| 11:15-11:30 | 29 | | 26 | | | | | 11:15-11:30 | 4 | | 6 | | | | |
| 11:30-11:45 | 45 | | 30 | | | | | 11:30-11:45 | 3 | | 3 | | | | |
| 11:45-12:00 | 43 | 155 | 40 | 120 | | | 275 | 11:45-12:00 | 6 | 21 | 5 | 20 | | | 41 |
| **Total Vol.** | | 1608 | | 947 | 0 | 0 | 2555 | | | 1704 | | 1743 | 0 | 0 | 3447 |
| **Totals** | | | | | | | | | | 3312 | | 2690 | 0 | 0 | 6002 |

# Average Daily Traffic Volumes

Prepared by: Southland Car Counters

Volumes for: Thursday, November 20, 2003 City: Irwindale — Project #: 03-1721-004

Location: Buena Vista St. & S/o Alpha St — Client Ref #:

| AM Period | NB | | SB | | EB | WB | | PM Period | NB | | SB | | EB | WB | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00-12:15 | 4 | | 5 | | | | | 12:00-12:15 | 50 | | 40 | | | | |
| 12:15-12:30 | 5 | | 3 | | | | | 12:15-12:30 | 44 | | 30 | | | | |
| 12:30-12:45 | 3 | | 0 | | | | | 12:30-12:45 | 45 | | 42 | | | | |
| 12:45-1:00 | 2 | 14 | 2 | 10 | | | 24 | 12:45-1:00 | 30 | 169 | 40 | 152 | | | 321 |
| 1:00-1:15 | 4 | | 4 | | | | | 1:00-1:15 | 35 | | 35 | | | | |
| 1:15-1:30 | 4 | | 0 | | | | | 1:15-1:30 | 40 | | 33 | | | | |
| 1:30-1:45 | 2 | | 3 | | | | | 1:30-1:45 | 44 | | 40 | | | | |
| 1:45-2:00 | 6 | 16 | 0 | 7 | | | 23 | 1:45-2:00 | 30 | 149 | 35 | 143 | | | 292 |
| 2:00-2:15 | 2 | | 2 | | | | | 2:00-2:15 | 45 | | 30 | | | | |
| 2:15-2:30 | 4 | | 6 | | | | | 2:15-2:30 | 50 | | 45 | | | | |
| 2:30-2:45 | 3 | | 3 | | | | | 2:30-2:45 | 55 | | 40 | | | | |
| 2:45-3:00 | 5 | 14 | 5 | 16 | | | 30 | 2:45-3:00 | 56 | 206 | 54 | 169 | | | 375 |
| 3:00-3:15 | 2 | | 7 | | | | | 3:00-3:15 | 60 | | 50 | | | | |
| 3:15-3:30 | 1 | | 6 | | | | | 3:15-3:30 | 68 | | 65 | | | | |
| 3:30-3:45 | 1 | | 3 | | | | | 3:30-3:45 | 78 | | 60 | | | | |
| 3:45-4:00 | 1 | 5 | 5 | 21 | | | 26 | 3:45-4:00 | 80 | 286 | 60 | 235 | | | 521 |
| 4:00-4:15 | 5 | | 4 | | | | | 4:00-4:15 | 78 | | 101 | | | | |
| 4:15-4:30 | 6 | | 5 | | | | | 4:15-4:30 | 100 | | 117 | | | | |
| 4:30-4:45 | 7 | | 6 | | | | | 4:30-4:45 | 101 | | 116 | | | | |
| 4:45-5:00 | 8 | 26 | 8 | 23 | | | 49 | 4:45-5:00 | 104 | 383 | 136 | 470 | | | 853 |
| 5:00-5:15 | 10 | | 10 | | | | | 5:00-5:15 | 117 | | 130 | | | | |
| 5:15-5:30 | 25 | | 16 | | | | | 5:15-5:30 | 86 | | 116 | | | | |
| 5:30-5:45 | 30 | | 15 | | | | | 5:30-5:45 | 84 | | 104 | | | | |
| 5:45-6:00 | 33 | 98 | 25 | 66 | | | 164 | 5:45-6:00 | 65 | 352 | 98 | 448 | | | 800 |
| 6:00-6:15 | 25 | | 20 | | | | | 6:00-6:15 | 54 | | 60 | | | | |
| 6:15-6:30 | 40 | | 30 | | | | | 6:15-6:30 | 40 | | 55 | | | | |
| 6:30-6:45 | 56 | | 25 | | | | | 6:30-6:45 | 44 | | 50 | | | | |
| 6:45-7:00 | 60 | 181 | 20 | 95 | | | 276 | 6:45-7:00 | 30 | 168 | 45 | 210 | | | 378 |
| 7:00-7:15 | 109 | | 40 | | | | | 7:00-7:15 | 35 | | 40 | | | | |
| 7:15-7:30 | 125 | | 40 | | | | | 7:15-7:30 | 40 | | 35 | | | | |
| 7:30-7:45 | 126 | | 59 | | | | | 7:30-7:45 | 20 | | 30 | | | | |
| 7:45-8:00 | 147 | 507 | 58 | 197 | | | 704 | 7:45-8:00 | 22 | 117 | 25 | 130 | | | 247 |
| 8:00-8:15 | 123 | | 54 | | | | | 8:00-8:15 | 25 | | 17 | | | | |
| 8:15-8:30 | 56 | | 40 | | | | | 8:15-8:30 | 15 | | 18 | | | | |
| 8:30-8:45 | 63 | | 34 | | | | | 8:30-8:45 | 18 | | 15 | | | | |
| 8:45-9:00 | 70 | 312 | 27 | 155 | | | 467 | 8:45-9:00 | 20 | 78 | 13 | 63 | | | 141 |
| 9:00-9:15 | 35 | | 15 | | | | | 9:00-9:15 | 21 | | 15 | | | | |
| 9:15-9:30 | 40 | | 18 | | | | | 9:15-9:30 | 15 | | 11 | | | | |
| 9:30-9:45 | 42 | | 21 | | | | | 9:30-9:45 | 16 | | 9 | | | | |
| 9:45-10:00 | 33 | 150 | 25 | 79 | | | 229 | 9:45-10:00 | 12 | 64 | 8 | 43 | | | 107 |
| 10:00-10:15 | 35 | | 20 | | | | | 10:00-10:15 | 10 | | 10 | | | | |
| 10:15-10:30 | 30 | | 35 | | | | | 10:15-10:30 | 5 | | 8 | | | | |
| 10:30-10:45 | 22 | | 33 | | | | | 10:30-10:45 | 6 | | 6 | | | | |
| 10:45-11:00 | 24 | 111 | 30 | 118 | | | 229 | 10:45-11:00 | 7 | 28 | 8 | 32 | | | 60 |
| 11:00-11:15 | 30 | | 35 | | | | | 11:00-11:15 | 5 | | 7 | | | | |
| 11:15-11:30 | 35 | | 33 | | | | | 11:15-11:30 | 8 | | 6 | | | | |
| 11:30-11:45 | 40 | | 40 | | | | | 11:30-11:45 | 6 | | 4 | | | | |
| 11:45-12:00 | 45 | 150 | 35 | 143 | | | 293 | 11:45-12:00 | 7 | 26 | 5 | 22 | | | 48 |
| **Total Vol.** | | 1584 | | 930 | 0 | 0 | 2514 | | | 2026 | | 2117 | 0 | 0 | 4143 |
| **Daily Totals** | | | | | | | | | | 3610 | | 3047 | 0 | 0 | 6657 |

A38

# APPENDIX B

EXISTING OPERATIONS ANALYSIS WORKSHEETS

United Rock Product Corporation
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Myrtle Ave (NS) / Longden Ave. (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 0.880 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 91 | Level Of Service: | D |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 1 0 2 | 0 | 1 | 1 0 2 | 0 | 1 | 0 1 1 | 0 | 1 | 0 1 | 0 | 1 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 158 | 856 | 49 | 166 | 784 | 97 | 107 | 292 | 89 | 48 | 697 | 349 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 158 | 856 | 49 | 166 | 784 | 97 | 107 | 292 | 89 | 48 | 697 | 349 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 158 | 856 | 49 | 166 | 784 | 97 | 107 | 292 | 89 | 48 | 697 | 349 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 158 | 856 | 49 | 166 | 784 | 97 | 107 | 292 | 89 | 48 | 697 | 349 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 158 | 856 | 49 | 166 | 784 | 97 | 107 | 292 | 89 | 48 | 697 | 349 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 0.54 | 1.46 | 1.00 | 0.09 | 1.27 | 0.64 |
| Final Sat.: | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 | 858 | 2342 | 1600 | 140 | 2039 | 1021 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.10 | 0.27 | 0.03 | 0.10 | 0.25 | 0.06 | 0.07 | 0.12 | 0.06 | 0.03 | 0.34 | 0.34 |
| Crit Moves: | | **** | | | **** | | | **** | | | **** | |

United Rock Product Corporation
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Myrtle Ave. (NS) / Live Oak Ave. (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 0.880 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 91 | Level Of Service: | D |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Protected | | | Protected | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 1 0 | 2 | 0 1 | 1 0 | 2 | 0 1 | 1 0 | 2 | 0 1 | 1 0 | 2 | 0 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 155 | 789 | 131 | 77 | 717 | 91 | 179 | 763 | 308 | 261 | 1112 | 107 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 155 | 789 | 131 | 77 | 717 | 91 | 179 | 763 | 308 | 261 | 1112 | 107 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 155 | 789 | 131 | 77 | 717 | 91 | 179 | 763 | 308 | 261 | 1112 | 107 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 155 | 789 | 131 | 77 | 717 | 91 | 179 | 763 | 308 | 261 | 1112 | 107 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 155 | 789 | 131 | 77 | 717 | 91 | 179 | 763 | 308 | 261 | 1112 | 107 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.10 | 0.25 | 0.08 | 0.05 | 0.22 | 0.06 | 0.11 | 0.24 | 0.19 | 0.16 | 0.35 | 0.07 |
| Crit Moves: | **** | | | | **** | | **** | | | | **** | |

United Rock Product Corporation
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Live Oak Ave. (NS) / Arrow Hwy (EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.885
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 93 Level Of Service: D

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Ignore | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 2 0 | 0 | 1 | 0 0 | 0 | 0 | 0 0 | 2 | 0 2 | 1 0 | 2 | 0 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 901 | 0 | 107 | 0 | 0 | 0 | 0 | 424 | 674 | 88 | 1511 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 901 | 0 | 107 | 0 | 0 | 0 | 0 | 424 | 674 | 88 | 1511 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 901 | 0 | 107 | 0 | 0 | 0 | 0 | 424 | 674 | 88 | 1511 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 901 | 0 | 107 | 0 | 0 | 0 | 0 | 424 | 0 | 88 | 1511 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 901 | 0 | 107 | 0 | 0 | 0 | 0 | 424 | 0 | 88 | 1511 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 901 | 0 | 107 | 0 | 0 | 0 | 0 | 424 | 0 | 88 | 1511 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 0.90 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 2.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 2.00 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 2880 | 0 | 1600 | 0 | 0 | 0 | 0 | 3200 | 3200 | 1600 | 3200 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.31 | 0.00 | 0.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.13 | 0.00 | 0.06 | 0.47 | 0.00 |
| Crit Moves: | **** | | | | | | **** | | | | **** | |

United Rock Product Corporation
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Buena Vista Ave. (NS) / Arrow Hwy (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 0.756 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 58 | Level Of Service: | C |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Protected | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Ignore | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 0 | 0 0 | 1 0 | 0 | 0 1 | 1 0 | 2 | 0 0 | 0 0 | 2 | 0 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 97 | 0 | 168 | 169 | 351 | 0 | 0 | 1424 | 343 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 97 | 0 | 168 | 169 | 351 | 0 | 0 | 1424 | 343 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| PHF Volume: | 0 | 0 | 0 | 97 | 0 | 168 | 169 | 351 | 0 | 0 | 1424 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 97 | 0 | 168 | 169 | 351 | 0 | 0 | 1424 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| Final Vol.: | 0 | 0 | 0 | 97 | 0 | 168 | 169 | 351 | 0 | 0 | 1424 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 2.00 | 0.00 | 0.00 | 2.00 | 1.00 |
| Final Sat.: | 0 | 0 | 0 | 1600 | 0 | 1600 | 1600 | 3200 | 0 | 0 | 3200 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.06 | 0.00 | 0.11 | 0.11 | 0.11 | 0.00 | 0.00 | 0.45 | 0.00 |
| Crit Moves: | | | | | | **** | **** | | | | **** | |

United Rock Product Corporation
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

**********

Intersection #7 Bateman Ave. (NS) / Buena Vista St. (EW)

**********

Average Delay (sec/veh): 2.9 Worst Case Level Of Service: B[ 13.8]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 0 0 0 | | | 0 1 0 0 1 | | | 0 1 1 0 1 | | | 0 1 1 0 1 | | |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 93 | 0 | 45 | 87 | 455 | 0 | 0 | 199 | 30 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 93 | 0 | 45 | 87 | 455 | 0 | 0 | 199 | 30 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 93 | 0 | 45 | 87 | 455 | 0 | 0 | 199 | 30 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 93 | 0 | 45 | 87 | 455 | 0 | 0 | 199 | 30 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.8 | xxxx | 6.9 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 601 | xxxx | 99 | 229 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 437 | xxxx | 943 | 1351 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 414 | xxxx | 943 | 1351 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | 0.22 | xxxx | 0.05 | 0.06 | xxxx | xxxx | xxxx | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 0.2 | 0.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 9.0 | 7.8 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | A | A | * | * | * | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | 414 | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | 0.9 | xxxx | xxxxx | 0.2 | xxxx | xxxxx | 0.5 | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | 16.2 | xxxx | xxxxx | 7.8 | xxxx | xxxxx | 0.0 | xxxx | xxxxx |
| Shared LOS: | * | * | * | C | * | * | A | * | * | A | * | * |
| ApproachDel: | xxxxxx | | | 13.8 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | B | | | * | | | * | | |

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United Rock Product Corporation
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Tifal Ave. (NS) / Buena Vista St. (EW)

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: B[ 11.5]

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 0 0 0 | | | 0 0 1! 0 0 | | | 1 0 2 0 0 | | | 0 0 2 0 1 | | |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 21 | 0 | 15 | 23 | 526 | 0 | 0 | 227 | 29 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 21 | 0 | 15 | 23 | 526 | 0 | 0 | 227 | 29 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 21 | 0 | 15 | 23 | 526 | 0 | 0 | 227 | 29 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 21 | 0 | 15 | 23 | 526 | 0 | 0 | 227 | 29 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.8 | xxxx | 6.9 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 536 | xxxx | 114 | 256 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 480 | xxxx | 924 | 1321 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 473 | xxxx | 924 | 1321 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | 0.04 | xxxx | 0.02 | 0.02 | xxxx | xxxx | xxxx | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 0.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 7.8 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | * | A | * | * | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | 594 | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | 0.2 | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | 11.5 | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | B | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 11.5 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | B | | | * | | | * | | |

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United Rock Product Corporation
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 I-605 SB On Ramp (NS) / Live Oak Ave. (EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.658
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 45 Level Of Service: B

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Protected | | | Protected | | | Permitted | | | Protected | | |
| Rights: | Include | | | Include | | | Ignore | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 0 | 0 0 | 0 0 | 0 | 0 0 | 0 0 | 2 | 0 1 | 1 0 | 2 | 0 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 390 | 644 | 698 | 1103 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 390 | 644 | 698 | 1103 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 390 | 0 | 698 | 1103 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 390 | 0 | 698 | 1103 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 390 | 0 | 698 | 1103 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3200 | 1600 | 1600 | 3200 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.12 | 0.00 | 0.44 | 0.34 | 0.00 |
| Crit Moves: | | | | | | | | **** | | **** | | |

United Rock Product Corporation
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

**********

Intersection #10 I-605 NB Off Ramp (NS) / Live Oak Ave. (EW)

**********

Average Delay (sec/veh): 64.7 Worst Case Level Of Service: F[235.0]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 0 0 1 | | | 0 0 0 0 1 | | | 0 0 2 0 0 | | | 0 0 2 0 0 | | |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 501 | 0 | 0 | 705 | 0 | 386 | 0 | 0 | 1091 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 501 | 0 | 0 | 705 | 0 | 386 | 0 | 0 | 1091 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 501 | 0 | 0 | 705 | 0 | 386 | 0 | 0 | 1091 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 501 | 0 | 0 | 705 | 0 | 386 | 0 | 0 | 1091 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | 6.9 | xxxxx | xxxx | 6.9 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | 3.3 | xxxxx | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | 193 | xxxx | xxxx | 546 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | 822 | xxxx | xxxx | 487 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | 822 | xxxx | xxxx | 487 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | 0.61 | xxxx | xxxx | 1.45 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | 4.2 | xxxxx | xxxx | 34.8 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | 16.0 | xxxxx | xxxx | 235.0 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | C | * | * | F | * | * | * | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | | 16.0 | | | 235.0 | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | C | | | F | | | * | | | * | |

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United Rock Product Corporation
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 I-605 SB Off Ramp (NS) / Arrow Hwy (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 0.710 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 51 | Level Of Service: | C |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Ignore | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 0 | 0 0 | 1 0 | 0 | 0 1 | 0 0 | 2 | 0 0 | 0 0 | 2 | 0 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 390 | 0 | 613 | 0 | 496 | 0 | 0 | 1172 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 390 | 0 | 613 | 0 | 496 | 0 | 0 | 1172 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 390 | 0 | 0 | 0 | 496 | 0 | 0 | 1172 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 390 | 0 | 0 | 0 | 496 | 0 | 0 | 1172 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 390 | 0 | 0 | 0 | 496 | 0 | 0 | 1172 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.00 | 2.00 | 0.00 | 0.00 | 2.00 | 0.00 |
| Final Sat.: | 0 | 0 | 0 | 1600 | 0 | 1600 | 0 | 3200 | 0 | 0 | 3200 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.24 | 0.00 | 0.00 | 0.00 | 0.16 | 0.00 | 0.00 | 0.37 | 0.00 |
| Crit Moves: | | | | **** | | | **** | | | | **** | |

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United Rock Product Corporation
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Rivergrade Rd. (NS) / Arrow Hwy (EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.662
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 46 Level Of Service: B

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 2 0 0 | 0 1 | | 0 0 0 | 0 0 | | 0 0 2 | 0 1 | | 1 0 2 | 0 0 | |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 187 | 0 | 30 | 0 | 0 | 0 | 0 | 422 | 190 | 22 | 1590 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 187 | 0 | 30 | 0 | 0 | 0 | 0 | 422 | 190 | 22 | 1590 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 187 | 0 | 30 | 0 | 0 | 0 | 0 | 422 | 190 | 22 | 1590 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 187 | 0 | 30 | 0 | 0 | 0 | 0 | 422 | 190 | 22 | 1590 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 187 | 0 | 30 | 0 | 0 | 0 | 0 | 422 | 190 | 22 | 1590 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 0.90 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 2.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 2880 | 0 | 1600 | 0 | 0 | 0 | 0 | 3200 | 1600 | 1600 | 3200 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.06 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.13 | 0.12 | 0.01 | 0.50 | 0.00 |
| Crit Moves: | **** | | | | | | **** | | | | **** | |

United Rock Product Corporation
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

**********

Intersection #21 Pit 3 Easterly Access (NS) / Meridian St. (EW)

**********

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[ 0.0]

**********

| Approach: | North Bound | | | | | South Bound | | | | | East Bound | | | | | West Bound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - | T | - | R | L | - | T | - | R | L | - | T | - | R | L | - | T | - | R |
| Control: | Stop Sign | | | | | Stop Sign | | | | | Uncontrolled | | | | | Uncontrolled | | | | |
| Rights: | Include | | | | | Include | | | | | Include | | | | | Include | | | | |
| Lanes: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Volume Module: | | | | | | | | | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Critical Gap Module: | | | | | | | | | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 6.2 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | | | | | | | | |
| FollowUpTim: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | | | | | | | | |
| Capacity Module: | | | | | | | | | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | xxxx | xxxx | 0 | 0 | xxxx | xxxxx | xxxx | xxxx | xxxxx | | | | | | | | |
| Potent Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | 0 | 0 | xxxx | xxxxx | xxxx | xxxx | xxxxx | | | | | | | | |
| Move Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | 0 | 0 | xxxx | xxxxx | xxxx | xxxx | xxxxx | | | | | | | | |
| Volume/Cap: | xxxx | xxxx | xxxx | xxxx | xxxx | 0.00 | 0.00 | xxxx | xxxx | xxxx | xxxx | xxxx | | | | | | | | |
| Level Of Service Module: | | | | | | | | | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 0.0 | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | | | | | | | | |
| Stopped Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 0.0 | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | | | | | | | | |
| LOS by Move: | * | * | * | * | * | A | A | * | * | * | * | * | | | | | | | | |
| Movement: | LT | - | LTR | - | RT | LT | - | LTR | - | RT | LT | - | LTR | - | RT | LT | - | LTR | - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | | xxxx | xxxx | xxxxx | | | | | | | |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | | xxxxx | xxxx | xxxxx | | | | | | | |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | | xxxxx | xxxx | xxxxx | | | | | | | |
| Shared LOS: | * | * | * | * | * | * | * | * | * | | * | * | * | | | | | | | |
| ApproachDel: | xxxxxx | | | 0.0 | | | xxxxxx | | | | xxxxxx | | | | | | | | | |
| ApproachLOS: | * | | | A | | | * | | | | * | | | | | | | | | |

United Rock Product Corporation
Existing Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

**********

Intersection #22 Plant Site Main Project Access (NS) / Arrow Hwy (EW)

**********

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: D[ 32.2]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 0 0 0 | | | 0 0 1! 0 0 | | | 0 1 1 0 0 | | | 0 0 1 1 0 | | |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 7 | 0 | 26 | 17 | 1189 | 0 | 0 | 1357 | 23 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 7 | 0 | 26 | 17 | 1189 | 0 | 0 | 1357 | 23 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 7 | 0 | 26 | 17 | 1189 | 0 | 0 | 1357 | 23 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 7 | 0 | 26 | 17 | 1189 | 0 | 0 | 1357 | 23 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.8 | xxxx | 6.9 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 1997 | xxxx | 690 | 1380 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 54 | xxxx | 392 | 503 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 52 | xxxx | 392 | 503 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | 0.13 | xxxx | 0.07 | 0.03 | xxxx | xxxx | xxxx | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 0.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 12.4 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | * | B | * | * | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | 165 | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | 0.7 | xxxxx | 0.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | 32.2 | xxxxx | 12.4 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | D | * | B | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 32.2 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | D | | | * | | | * | | |

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United Rock Product Corporation
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

**********

Intersection #1 Myrtle Ave (NS) / Longden Ave. (EW)

**********

Cycle (sec): 100 Critical Vol./Cap. (X): 0.993
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: E

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 1 0 | 2 0 | 1 | 1 0 | 2 0 | 1 | 0 1 | 1 0 | 1 | 0 1 | 0 1 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 132 | 1254 | 53 | 336 | 1105 | 95 | 116 | 583 | 131 | 77 | 374 | 248 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 132 | 1254 | 53 | 336 | 1105 | 95 | 116 | 583 | 131 | 77 | 374 | 248 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 132 | 1254 | 53 | 336 | 1105 | 95 | 116 | 583 | 131 | 77 | 374 | 248 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 132 | 1254 | 53 | 336 | 1105 | 95 | 116 | 583 | 131 | 77 | 374 | 248 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 132 | 1254 | 53 | 336 | 1105 | 95 | 116 | 583 | 131 | 77 | 374 | 248 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 0.33 | 1.67 | 1.00 | 0.22 | 1.07 | 0.71 |
| Final Sat.: | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 | 531 | 2669 | 1600 | 353 | 1712 | 1135 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.08 | 0.39 | 0.03 | 0.21 | 0.35 | 0.06 | 0.07 | 0.22 | 0.08 | 0.05 | 0.22 | 0.22 |
| Crit Moves: | | **** | | | **** | | | **** | | | **** | |

**********

United Rock Product Corporation
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #2 Myrtle Ave. (NS) / Live Oak Ave. (EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 1.137
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: F

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Protected | | | Protected | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 1 0 2 | 0 | 1 | 1 0 2 | 0 | 1 | 1 0 2 | 0 | 1 | 1 0 2 | 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 285 | 1022 | 266 | 112 | 1062 | 161 | 278 | 1379 | 404 | 154 | 770 | 128 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 285 | 1022 | 266 | 112 | 1062 | 161 | 278 | 1379 | 404 | 154 | 770 | 128 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 285 | 1022 | 266 | 112 | 1062 | 161 | 278 | 1379 | 404 | 154 | 770 | 128 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 285 | 1022 | 266 | 112 | 1062 | 161 | 278 | 1379 | 404 | 154 | 770 | 128 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 285 | 1022 | 266 | 112 | 1062 | 161 | 278 | 1379 | 404 | 154 | 770 | 128 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.18 | 0.32 | 0.17 | 0.07 | 0.33 | 0.10 | 0.17 | 0.43 | 0.25 | 0.10 | 0.24 | 0.08 |
| Crit Moves: | **** | | | | **** | | | **** | | **** | | |

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United Rock Product Corporation
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #4 Longden Ave. (NS) / Live Oak Ave. (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 0.797 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 66 | Level Of Service: | C |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Ignore | | | Include | | | Ignore | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 1 0 | 0 | 0 | 1 | 1 0 | 1 0 | 1 | 0 | 1 1 0 | 1 | 0 | 2 0 2 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 1 | 0 | 0 | 1098 | 1 | 12 | 3 | 1129 | 0 | 0 | 671 | 448 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 1 | 0 | 0 | 1098 | 1 | 12 | 3 | 1129 | 0 | 0 | 671 | 448 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| PHF Volume: | 1 | 0 | 0 | 1098 | 1 | 0 | 3 | 1129 | 0 | 0 | 671 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 1 | 0 | 0 | 1098 | 1 | 0 | 3 | 1129 | 0 | 0 | 671 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| Final Vol.: | 1 | 0 | 0 | 1098 | 1 | 0 | 3 | 1129 | 0 | 0 | 671 | 0 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 0.00 | 0.00 | 2.00 | 1.00 | 0.00 | 1.00 | 2.00 | 0.00 | 1.00 | 2.00 | 2.00 |
| Final Sat.: | 1600 | 0 | 0 | 3200 | 1600 | 0 | 1600 | 3200 | 0 | 1600 | 3200 | 3200 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.34 | 0.00 | 0.00 | 0.00 | 0.35 | 0.00 | 0.00 | 0.21 | 0.00 |
| Crit Moves: | **** | | | **** | | | | **** | | **** | | |



B21

United Rock Product Corporation
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

**********

Intersection #5 Live Oak Ave. (NS) / Arrow Hwy (EW)

**********

Cycle (sec): 100 Critical Vol./Cap. (X): 0.676
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 47 Level Of Service: B

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Protected | | |
| Rights: | Include | | | Include | | | Ignore | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 2 0 | 0 | 0 1 | 0 0 | 0 | 0 0 | 0 0 | 2 | 0 2 | 1 0 | 2 | 0 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 603 | 0 | 90 | 0 | 0 | 0 | 0 | 802 | 1288 | 185 | 432 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 603 | 0 | 90 | 0 | 0 | 0 | 0 | 802 | 1288 | 185 | 432 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 603 | 0 | 90 | 0 | 0 | 0 | 0 | 802 | 0 | 185 | 432 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 603 | 0 | 90 | 0 | 0 | 0 | 0 | 802 | 0 | 185 | 432 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 603 | 0 | 90 | 0 | 0 | 0 | 0 | 802 | 0 | 185 | 432 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 0.90 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 2.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 2.00 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 2880 | 0 | 1600 | 0 | 0 | 0 | 0 | 3200 | 3200 | 1600 | 3200 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.21 | 0.00 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.25 | 0.00 | 0.12 | 0.14 | 0.00 |
| Crit Moves: | **** | | | | | | | **** | | **** | | |

**********

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United Rock Product Corporation
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

**********

Intersection #6 Buena Vista St. (NS) / Alpha St. (EW)

**********

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: B[ 14.2]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Uncontrolled | | | Uncontrolled | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 1 | 1 | 0 1 | 0 1 | 1 | 0 1 | 0 | 0 1! | 0 0 | 0 1 | 0 | 0 1 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 44 | 335 | 14 | 3 | 452 | 27 | 39 | 0 | 66 | 6 | 1 | 10 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 44 | 335 | 14 | 3 | 452 | 27 | 39 | 0 | 66 | 6 | 1 | 10 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 44 | 335 | 14 | 3 | 452 | 27 | 39 | 0 | 66 | 6 | 1 | 10 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 44 | 335 | 14 | 3 | 452 | 27 | 39 | 0 | 66 | 6 | 1 | 10 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | 4.1 | xxxx | xxxxx | 4.1 | xxxx | xxxxx | 7.5 | xxxx | 6.9 | 7.5 | 6.5 | 6.9 |
| FollowUpTim: | 2.2 | xxxx | xxxxx | 2.2 | xxxx | xxxxx | 3.5 | xxxx | 3.3 | 3.5 | 4.0 | 3.3 |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | 479 | xxxx | xxxxx | 349 | xxxx | xxxxx | 714 | xxxx | 226 | 655 | 908 | 168 |
| Potent Cap.: | 1094 | xxxx | xxxxx | 1221 | xxxx | xxxxx | 322 | xxxx | 783 | 355 | 277 | 854 |
| Move Cap.: | 1094 | xxxx | xxxxx | 1221 | xxxx | xxxxx | 307 | xxxx | 783 | 315 | 265 | 854 |
| Volume/Cap: | 0.04 | xxxx | xxxx | 0.00 | xxxx | xxxx | 0.13 | xxxx | 0.08 | 0.02 | 0.00 | 0.01 |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Queue: | 0.1 | xxxx | xxxxx | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 0.0 |
| Stopped Del: | 8.4 | xxxx | xxxxx | 8.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 9.3 |
| LOS by Move: | A | * | * | A | * | * | * | * | * | * | * | A |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | 497 | xxxxx | 306 | xxxx | xxxxx |
| SharedQueue: | 0.1 | xxxx | xxxxx | 0.0 | xxxx | xxxxx | xxxxx | 0.8 | xxxxx | 0.1 | xxxx | xxxxx |
| Shrd StpDel: | 8.4 | xxxx | xxxxx | 8.0 | xxxx | xxxxx | xxxxx | 14.2 | xxxxx | 17.0 | xxxx | xxxxx |
| Shared LOS: | A | * | * | A | * | * | * | B | * | C | * | * |
| ApproachDel: | xxxxxx | | | xxxxxx | | | 14.2 | | | 12.5 | | |
| ApproachLOS: | * | | | * | | | B | | | B | | |

United Rock Product Corporation
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

**********

Intersection #64 Existing Buena Vista (NS)/ North Project Access (EW)

**********

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[ 0.0]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Uncontrolled | | | Uncontrolled | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 1 | 1 | 0 0 | 0 0 | 2 | 0 1 | 0 0 | 1! | 0 0 | 0 0 | 0 | 0 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 395 | 0 | 0 | 518 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 395 | 0 | 0 | 518 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 395 | 0 | 0 | 518 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 395 | 0 | 0 | 518 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | * | * | * | * | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | 0 | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd StpDel: | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | A | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | * | | | * | | | * | | |

United Rock Product Corporation
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

**********

Intersection #65 Existing Buena Vista (NS) / South Project Access (EW)

**********

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[ 0.0]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Uncontrolled | | | Uncontrolled | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 1 1 | 0 | 0 | 0 0 2 | 0 | 0 | 0 0 1! | 0 | 0 | 0 0 0 | 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 397 | | 0 | 0 523 | | 0 | 0 0 | | 0 | 0 0 | | 0 |
| Growth Adj: | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 |
| Initial Bse: | 0 397 | | 0 | 0 523 | | 0 | 0 0 | | 0 | 0 0 | | 0 |
| User Adj: | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 |
| PHF Adj: | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 |
| PHF Volume: | 0 397 | | 0 | 0 523 | | 0 | 0 0 | | 0 | 0 0 | | 0 |
| Reduct Vol: | 0 0 | | 0 | 0 0 | | 0 | 0 0 | | 0 | 0 0 | | 0 |
| Final Vol.: | 0 397 | | 0 | 0 523 | | 0 | 0 0 | | 0 | 0 0 | | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxx xxxx | | xxxxx | xxxxx xxxx | | xxxxx | xxxxx xxxx | | xxxxx | xxxxx xxxx | | xxxxx |
| FollowUpTim: | xxxx xxxx | | xxxxx | xxxxx xxxx | | xxxxx | xxxxx xxxx | | xxxxx | xxxxx xxxx | | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx xxxx | | xxxxx | xxxx xxxx | | xxxxx | xxxx xxxx | | xxxxx | xxxx xxxx | | xxxxx |
| Potent Cap.: | xxxx xxxx | | xxxxx | xxxx xxxx | | xxxxx | xxxx xxxx | | xxxxx | xxxx xxxx | | xxxxx |
| Move Cap.: | xxxx xxxx | | xxxxx | xxxx xxxx | | xxxxx | xxxx xxxx | | xxxxx | xxxx xxxx | | xxxxx |
| Volume/Cap: | xxxx xxxx | | xxxx | xxxx xxxx | | xxxx | xxxx xxxx | | xxxx | xxxx xxxx | | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx xxxx | | xxxxx | xxxxx xxxx | | xxxxx | xxxxx xxxx | | xxxxx | xxxxx xxxx | | xxxxx |
| Stopped Del: | xxxxx xxxx | | xxxxx | xxxxx xxxx | | xxxxx | xxxxx xxxx | | xxxxx | xxxxx xxxx | | xxxxx |
| LOS by Move: | * * | | * | * * | | * | * * | | * | * * | | * |
| Movement: | LT - LTR | | - RT | LT - LTR | | - RT | LT - LTR | | - RT | LT - LTR | | - RT |
| Shared Cap.: | xxxx xxxx | | xxxxx | xxxx xxxx | | xxxxx | xxxx | 0 | xxxxx | xxxx xxxx | | xxxxx |
| SharedQueue: | 0.0 xxxx | | xxxxx | xxxxx xxxx | | xxxxx | xxxxx xxxx | | xxxxx | xxxxx xxxx | | xxxxx |
| Shrd StpDel: | 0.0 xxxx | | xxxxx | xxxxx xxxx | | xxxxx | xxxxx xxxx | | xxxxx | xxxxx xxxx | | xxxxx |
| Shared LOS: | A * | | * | * * | | * | * * | | * | * * | | * |
| ApproachDel: | xxxxxx | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | * | | | * | | | * | | |

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PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #15 Buena Vista Ave. (NS) / Arrow Hwy (EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.601
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 40 Level Of Service: B

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Protected | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Ignore | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 0 | 0 0 | 1 0 | 0 | 0 1 | 1 0 | 2 | 0 0 | 0 0 | 2 | 0 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 324 | 0 | 246 | 287 | 614 | 0 | 0 | 380 | 143 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 324 | 0 | 246 | 287 | 614 | 0 | 0 | 380 | 143 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| PHF Volume: | 0 | 0 | 0 | 324 | 0 | 246 | 287 | 614 | 0 | 0 | 380 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 324 | 0 | 246 | 287 | 614 | 0 | 0 | 380 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| Final Vol.: | 0 | 0 | 0 | 324 | 0 | 246 | 287 | 614 | 0 | 0 | 380 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 2.00 | 0.00 | 0.00 | 2.00 | 1.00 |
| Final Sat.: | 0 | 0 | 0 | 1600 | 0 | 1600 | 1600 | 3200 | 0 | 0 | 3200 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.20 | 0.00 | 0.15 | 0.18 | 0.19 | 0.00 | 0.00 | 0.12 | 0.00 |
| Crit Moves: | | | | **** | | | **** | | | | **** | |

United Rock Product Corporation
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

**********

Intersection #7 Bateman Ave. (NS) / Buena Vista St. (EW)

**********

Average Delay (sec/veh): 2.9 Worst Case Level Of Service: B[ 10.6]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 0 | 0 0 | | 0 1 | 0 0 | 1 | 0 1 | 1 0 | 1 | 0 1 | 1 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 15 | 0 | 144 | 110 | 269 | 0 | 0 | 344 | 14 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 15 | 0 | 144 | 110 | 269 | 0 | 0 | 344 | 14 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 15 | 0 | 144 | 110 | 269 | 0 | 0 | 344 | 14 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 15 | 0 | 144 | 110 | 269 | 0 | 0 | 344 | 14 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.8 | xxxx | 6.9 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 699 | xxxx | 172 | 358 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 379 | xxxx | 848 | 1212 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 351 | xxxx | 848 | 1212 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | 0.04 | xxxx | 0.17 | 0.09 | xxxx | xxxx | xxxx | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 0.6 | 0.3 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 10.1 | 8.3 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | B | A | * | * | * | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | 351 | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | 0.1 | xxxx | xxxxx | 0.3 | xxxx | xxxxx | 0.0 | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | 15.7 | xxxx | xxxxx | 8.3 | xxxx | xxxxx | 0.0 | xxxx | xxxxx |
| Shared LOS: | * | * | * | C | * | * | A | * | * | A | * | * |
| ApproachDel: | xxxxxx | | | 10.6 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | B | | | * | | | * | | |

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PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #8 Tifal Ave. (NS) / Buena Vista St. (EW)

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: B[ 11.6]

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 0 | 0 0 | | 0 0 1! | 0 0 | | 1 0 2 | 0 0 | | 0 0 2 | 0 1 | |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 18 | 0 | 11 | 13 | 271 | 0 | 0 | 363 | 18 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 18 | 0 | 11 | 13 | 271 | 0 | 0 | 363 | 18 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 18 | 0 | 11 | 13 | 271 | 0 | 0 | 363 | 18 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 18 | 0 | 11 | 13 | 271 | 0 | 0 | 363 | 18 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.8 | xxxx | 6.9 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 525 | xxxx | 182 | 381 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 488 | xxxx | 836 | 1189 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 483 | xxxx | 836 | 1189 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | 0.04 | xxxx | 0.01 | 0.01 | xxxx | xxxx | xxxx | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | * | A | * | * | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | 576 | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | 0.2 | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | 11.6 | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | B | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 11.6 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | B | | | * | | | * | | |

United Rock Product Corporation
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #9 I-605 SB On Ramp (NS) / Live Oak Ave. (EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.835
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 76 Level Of Service: D

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Protected | | | Protected | | | Permitted | | | Protected | | |
| Rights: | Include | | | Include | | | Ignore | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 2 | 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 781 | 731 | | 786 | 846 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 0 | 0 | 0 | 781 | 731 | | 786 | 846 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 0 | 0 | 0 | 781 | 0 | | 786 | 846 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 781 | 0 | | 786 | 846 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 0 | 0 | 0 | 781 | 0 | | 786 | 846 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3200 | 1600 | 1600 | 3200 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.24 | 0.00 | 0.49 | 0.26 | 0.00 |
| Crit Moves: | | | | | | | | **** | | **** | | |

United Rock Product Corporation
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

**********

Intersection #10 I-605 NB Off Ramp (NS) / Live Oak Ave. (EW)

**********

Average Delay (sec/veh): 34.5 Worst Case Level Of Service: F[136.5]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 0 0 1 | | | 0 0 0 0 1 | | | 0 0 2 0 0 | | | 0 0 2 0 0 | | |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 478 | 0 | 0 | 629 | 0 | 745 | 0 | 0 | 1004 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 478 | 0 | 0 | 629 | 0 | 745 | 0 | 0 | 1004 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 478 | 0 | 0 | 629 | 0 | 745 | 0 | 0 | 1004 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 478 | 0 | 0 | 629 | 0 | 745 | 0 | 0 | 1004 | 0 |
| **Critical Gap Module:** | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | 6.9 | xxxxx | xxxx | 6.9 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | 3.3 | xxxxx | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| **Capacity Module:** | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | 373 | xxxx | xxxx | 502 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | 631 | xxxx | xxxx | 520 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | 631 | xxxx | xxxx | 520 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | 0.76 | xxxx | xxxx | 1.21 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx |
| **Level Of Service Module:** | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | 6.9 | xxxxx | xxxx | 23.6 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | 26.3 | xxxxx | xxxx | 136.5 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | D | * | * | F | * | * | * | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | | 26.3 | | | 136.5 | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | D | | | F | | | * | | | * | |

United Rock Product Corporation
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #11 I-605 SB Off Ramp (NS) / Arrow Hwy (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 0.571 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 38 | Level Of Service: | A |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Ignore | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 0 | 0 0 | 1 | 0 0 | 0 1 | 0 | 0 2 | 0 0 | 0 | 0 2 | 0 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 274 | 0 | 255 | 0 | 959 | 0 | 0 | 306 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 274 | 0 | 255 | 0 | 959 | 0 | 0 | 306 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 274 | 0 | 0 | 0 | 959 | 0 | 0 | 306 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 274 | 0 | 0 | 0 | 959 | 0 | 0 | 306 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 274 | 0 | 0 | 0 | 959 | 0 | 0 | 306 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.00 | 2.00 | 0.00 | 0.00 | 2.00 | 0.00 |
| Final Sat.: | 0 | 0 | 0 | 1600 | 0 | 1600 | 0 | 3200 | 0 | 0 | 3200 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.17 | 0.00 | 0.00 | 0.00 | 0.30 | 0.00 | 0.00 | 0.10 | 0.00 |
| Crit Moves: | | | | **** | | | | **** | | **** | | |

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United Rock Product Corporation
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #13 Rivergrade Rd. (NS) / Arrow Hwy (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 0.455 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 31 | Level Of Service: | A |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 2 0 0 | 0 1 | | 0 0 0 | 0 0 | | 0 0 2 | 0 1 | | 1 0 2 | 0 0 | |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 156 | 0 | 22 | 0 | 0 | 0 | 0 | 934 | 146 | 14 | 505 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 156 | 0 | 22 | 0 | 0 | 0 | 0 | 934 | 146 | 14 | 505 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 156 | 0 | 22 | 0 | 0 | 0 | 0 | 934 | 146 | 14 | 505 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 156 | 0 | 22 | 0 | 0 | 0 | 0 | 934 | 146 | 14 | 505 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 156 | 0 | 22 | 0 | 0 | 0 | 0 | 934 | 146 | 14 | 505 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 0.90 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 2.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 2880 | 0 | 1600 | 0 | 0 | 0 | 0 | 3200 | 1600 | 1600 | 3200 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.05 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.29 | 0.09 | 0.01 | 0.16 | 0.00 |
| Crit Moves: | **** | | | | | | | **** | | **** | | |

United Rock Product Corporation
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

**********

Intersection #21 Pit 3 Easterly Access (NS) / Meridian St. (EW)

**********

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[ 0.0]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 0 | 0 0 | | 0 0 0 | 0 1 | | 1 0 0 | 0 0 | | 0 0 0 | 1 0 | |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 |
| Growth Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 6.2 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | xxxx | xxxx | 0 | 0 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | 0 | 0 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | 0 | 0 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | xxxx | xxxx | 0.00 | 0.00 | xxxx | xxxx | xxxx | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 0.0 | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 0.0 | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | A | A | * | * | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 0.0 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | A | | | * | | | * | | |

United Rock Product Corporation
Existing Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

**********

Intersection #22 Plant Site Main Project Access (NS) / Arrow Hwy (EW)

**********

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: E[ 40.9]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 | 0 | 0 0 | 0 0 | 1! | 0 0 | 0 1 | 1 | 0 0 | 0 0 | 1 | 1 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 13 | 0 | 17 | 0 | 1821 | 0 | 0 | 956 | 10 |
| Growth Adj: | 1.00 1.00 | 1.00 | | 1.00 1.00 | 1.00 | | 1.00 1.00 | 1.00 | | 1.00 1.00 | 1.00 | |
| Initial Bse: | 0 | 0 | 0 | 13 | 0 | 17 | 0 | 1821 | 0 | 0 | 956 | 10 |
| User Adj: | 1.00 1.00 | 1.00 | | 1.00 1.00 | 1.00 | | 1.00 1.00 | 1.00 | | 1.00 1.00 | 1.00 | |
| PHF Adj: | 1.00 1.00 | 1.00 | | 1.00 1.00 | 1.00 | | 1.00 1.00 | 1.00 | | 1.00 1.00 | 1.00 | |
| PHF Volume: | 0 | 0 | 0 | 13 | 0 | 17 | 0 | 1821 | 0 | 0 | 956 | 10 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 13 | 0 | 17 | 0 | 1821 | 0 | 0 | 956 | 10 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx xxxx | xxxxx | | 6.8 | xxxx | 6.9 | xxxxx xxxx | xxxxx | | xxxxx xxxx | xxxxx | |
| FollowUpTim: | xxxxx xxxx | xxxxx | | 3.5 | xxxx | 3.3 | xxxxx xxxx | xxxxx | | xxxxx xxxx | xxxxx | |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx xxxx | xxxxx | | 1872 | xxxx | 483 | xxxx xxxx | xxxxx | | xxxx xxxx | xxxxx | |
| Potent Cap.: | xxxx xxxx | xxxxx | | 65 | xxxx | 535 | xxxx xxxx | xxxxx | | xxxx xxxx | xxxxx | |
| Move Cap.: | xxxx xxxx | xxxxx | | 65 | xxxx | 535 | xxxx xxxx | xxxxx | | xxxx xxxx | xxxxx | |
| Volume/Cap: | xxxx xxxx | xxxx | | 0.20 | xxxx | 0.03 | xxxx xxxx | xxxx | | xxxx xxxx | xxxx | |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx xxxx | xxxxx | | xxxxx | xxxx | xxxxx | xxxxx xxxx | xxxxx | | xxxxx xxxx | xxxxx | |
| Stopped Del: | xxxxx xxxx | xxxxx | | xxxxx | xxxx | xxxxx | xxxxx xxxx | xxxxx | | xxxxx xxxx | xxxxx | |
| LOS by Move: | * | * | * | * | * | * | * | * | * | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx xxxx | xxxxx | | xxxx | 130 | xxxxx | xxxx xxxx | xxxxx | | xxxx xxxx | xxxxx | |
| SharedQueue: | xxxxx xxxx | xxxxx | | xxxxx | 0.8 | xxxxx | 0.0 xxxx | xxxxx | | xxxxx xxxx | xxxxx | |
| Shrd StpDel: | xxxxx xxxx | xxxxx | | xxxxx | 40.9 | xxxxx | 0.0 xxxx | xxxxx | | xxxxx xxxx | xxxxx | |
| Shared LOS: | * | * | * | * | E | * | A | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | | 40.9 | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | | E | | * | | | * | | |

# APPENDIX C

YEAR 2025 WITHOUT PROJECT
OPERATION ANALYSIS WORKSHEETS

United Rock Product Corporation
Year 2025 Without Project
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Myrtle Ave (NS) / Longden Ave. (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 1.250 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 100 | Level Of Service: | F |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 1 0 | 2 0 | 1 | 1 0 | 2 0 | 1 | 0 1 | 1 0 | 1 | 0 1 | 0 1 | 0 |
| **Volume Module:** | | | | | | | | | | | | |
| Base Vol: | 158 | 856 | 49 | 166 | 784 | 97 | 107 | 292 | 89 | 48 | 697 | 349 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 224 | 1216 | 70 | 236 | 1113 | 138 | 152 | 415 | 126 | 68 | 990 | 496 |
| Added Vol: | 4 | 8 | 0 | 48 | 17 | 0 | 0 | 23 | 9 | 0 | 10 | 21 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 228 | 1224 | 70 | 284 | 1130 | 138 | 152 | 438 | 135 | 68 | 1000 | 517 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 228 | 1224 | 70 | 284 | 1130 | 138 | 152 | 438 | 135 | 68 | 1000 | 517 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 228 | 1224 | 70 | 284 | 1130 | 138 | 152 | 438 | 135 | 68 | 1000 | 517 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 228 | 1224 | 70 | 284 | 1130 | 138 | 152 | 438 | 135 | 68 | 1000 | 517 |
| **Saturation Flow Module:** | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 0.52 | 1.48 | 1.00 | 0.09 | 1.26 | 0.65 |
| Final Sat.: | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 | 825 | 2375 | 1600 | 138 | 2019 | 1043 |
| **Capacity Analysis Module:** | | | | | | | | | | | | |
| Vol/Sat: | 0.14 | 0.38 | 0.04 | 0.18 | 0.35 | 0.09 | 0.09 | 0.18 | 0.08 | 0.04 | 0.50 | 0.50 |
| Crit Moves: | | **** | | | **** | | | **** | | | **** | |



C3

United Rock Product Corporation
Year 2025 Without Project
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Myrtle Ave. (NS) / Live Oak Ave. (EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 1.228
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: F

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Protected | | | Protected | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 1 0 2 | 0 | 1 | 1 0 2 | 0 | 1 | 1 0 2 | 0 | 1 | 1 0 2 | 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 155 | 789 | 131 | 77 | 717 | 91 | 179 | 763 | 308 | 261 | 1112 | 107 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 220 | 1120 | 186 | 109 | 1018 | 129 | 254 | 1083 | 437 | 371 | 1579 | 152 |
| Added Vol: | 8 | 11 | 101 | 0 | 26 | 0 | 0 | 50 | 17 | 108 | 21 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 228 | 1131 | 287 | 109 | 1044 | 129 | 254 | 1133 | 454 | 479 | 1600 | 152 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 228 | 1131 | 287 | 109 | 1044 | 129 | 254 | 1133 | 454 | 479 | 1600 | 152 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 228 | 1131 | 287 | 109 | 1044 | 129 | 254 | 1133 | 454 | 479 | 1600 | 152 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 228 | 1131 | 287 | 109 | 1044 | 129 | 254 | 1133 | 454 | 479 | 1600 | 152 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.14 | 0.35 | 0.18 | 0.07 | 0.33 | 0.08 | 0.16 | 0.35 | 0.28 | 0.30 | 0.50 | 0.09 |
| Crit Moves: | **** | | | | **** | | **** | | | | **** | |

United Rock Product Corporation
Year 2025 Without Project
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Longden Ave. (NS) / Live Oak Ave. (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 0.884 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 93 | Level Of Service: | D |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Ignore | | | Include | | | Ignore | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 1 0 | 0 | 0 0 | 2 0 | 0 | 0 1 | 1 0 | 1 | 1 0 | 1 0 | 2 | 0 2 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 1 | 0 | 0 | 445 | 0 | 6 | 3 | 698 | 0 | 7 | 1118 | 952 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 1 | 0 | 0 | 632 | 0 | 9 | 4 | 991 | 0 | 10 | 1588 | 1352 |
| Added Vol: | 0 | 0 | 0 | 72 | 0 | 0 | 0 | 150 | 0 | 0 | 129 | 31 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 1 | 0 | 0 | 704 | 0 | 9 | 4 | 1141 | 0 | 10 | 1717 | 1383 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| PHF Volume: | 1 | 0 | 0 | 704 | 0 | 0 | 4 | 1141 | 0 | 10 | 1717 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 1 | 0 | 0 | 704 | 0 | 0 | 4 | 1141 | 0 | 10 | 1717 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| Final Vol.: | 1 | 0 | 0 | 704 | 0 | 0 | 4 | 1141 | 0 | 10 | 1717 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 0.90 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 0.00 | 0.00 | 2.00 | 0.00 | 1.00 | 1.00 | 2.00 | 0.00 | 1.00 | 2.00 | 2.00 |
| Final Sat.: | 1600 | 0 | 0 | 2880 | 0 | 1600 | 1600 | 3200 | 0 | 1600 | 3200 | 3200 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.24 | 0.00 | 0.00 | 0.00 | 0.36 | 0.00 | 0.01 | 0.54 | 0.00 |
| Crit Moves: | **** | | | **** | | | **** | | | | **** | |

United Rock Product Corporation
Year 2025 Without Project
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Live Oak Ave. (NS) / Arrow Hwy (EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 1.462
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: F

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Protected | | |
| Rights: | Include | | | Include | | | Ignore | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 2 0 | 0 0 | 1 | 0 0 | 0 0 | 0 | 0 0 | 2 0 | 2 | 1 0 | 2 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 901 | 0 | 107 | 0 | 0 | 0 | 0 | 424 | 674 | 88 | 1511 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 1279 | 0 | 152 | 0 | 0 | 0 | 0 | 602 | 957 | 125 | 2146 | 0 |
| Added Vol: | 117 | 0 | 31 | 0 | 0 | 0 | 0 | 17 | 205 | 75 | 42 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 1396 | 0 | 183 | 0 | 0 | 0 | 0 | 619 | 1162 | 200 | 2188 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 1396 | 0 | 183 | 0 | 0 | 0 | 0 | 619 | 0 | 200 | 2188 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 1396 | 0 | 183 | 0 | 0 | 0 | 0 | 619 | 0 | 200 | 2188 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 1396 | 0 | 183 | 0 | 0 | 0 | 0 | 619 | 0 | 200 | 2188 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 0.90 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 2.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 2.00 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 2880 | 0 | 1600 | 0 | 0 | 0 | 0 | 3200 | 3200 | 1600 | 3200 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.48 | 0.00 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.19 | 0.00 | 0.12 | 0.68 | 0.00 |
| Crit Moves: | **** | | | | | | | **** | | | **** | |

United Rock Product Corporation
Year 2025 with Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

**********

Intersection #22 Plant Site Main Project Access (NS) / Arrow Hwy (EW)

**********

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C[ 15.2]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 0 | 0 0 | | 0 0 0 | 0 1 | | 0 1 1 | 0 0 | | 0 0 1 | 1 0 | |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1821 | 0 | 0 | 956 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2586 | 0 | 0 | 1358 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 10 | 1 | 160 | 0 | 0 | 122 | 2 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 0 | 0 | 10 | 1 | 2746 | 0 | 0 | 1480 | 2 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 0 | 0 | 10 | 1 | 2746 | 0 | 0 | 1480 | 2 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 0 | 0 | 10 | 1 | 2746 | 0 | 0 | 1480 | 2 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 6.9 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | xxxx | xxxx | 741 | 1482 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | 363 | 460 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | 363 | 460 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | xxxx | xxxx | 0.03 | 0.00 | xxxx | xxxx | xxxx | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 0.1 | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 15.2 | 12.8 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | C | B | * | * | * | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 12.8 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | B | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 15.2 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | C | | | * | | | * | | |

United Rock Product Corporation
Year 2025 with Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

**********

Intersection #21 Pit 3 Easterly Access (NS) / Meridian St. (EW)

**********

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[ 0.0]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 0 | 0 0 | | 0 0 0 | 0 1 | | 1 0 0 | 0 0 | | 0 0 0 | 1 0 | |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 6.2 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | xxxx | xxxx | 0 | 0 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | 0 | 0 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | 0 | 0 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | xxxx | xxxx | 0.00 | 0.00 | xxxx | xxxx | xxxx | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 0.0 | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 0.0 | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | A | A | * | * | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 0.0 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | A | | | * | | | * | | |

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United Rock Product Corporation
Year 2025 with Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

**********

Intersection #20 Pit 3 Westerly Access (NS) / Meridian Ave. (EW)

**********

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[ 0.0]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 0 | 0 0 | | 0 0 0 | 0 1 | | 1 0 0 | 0 0 | | 0 0 0 | 1 0 | |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 0 | 0 | 4 | 2 | 0 | 0 | 0 | 0 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 6.2 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | xxxx | xxxx | 0 | 0 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | 0 | 0 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | 0 | 0 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | xxxx | xxxx | 0.00 | 0.00 | xxxx | xxxx | xxxx | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 0.0 | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 0.0 | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | A | A | * | * | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 0.0 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | A | | | * | | | * | | |



E40

United Rock Product Corporation
Year 2025 with Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Rivergrade Rd. (NS) / Arrow Hwy (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 0.606 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 41 | Level Of Service: | B |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 2 0 0 | 0 | 1 | 0 0 | 0 | 0 0 | 0 | 2 0 | 1 | 1 0 | 2 | 0 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 156 | 0 | 22 | 0 | 0 | 0 | 0 | 934 | 146 | 14 | 505 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 222 | 0 | 31 | 0 | 0 | 0 | 0 | 1326 | 207 | 20 | 717 | 0 |
| Added Vol: | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 228 | 0 | 31 | 0 | 0 | 0 | 0 | 1327 | 207 | 20 | 719 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 228 | 0 | 31 | 0 | 0 | 0 | 0 | 1327 | 207 | 20 | 719 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 228 | 0 | 31 | 0 | 0 | 0 | 0 | 1327 | 207 | 20 | 719 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 228 | 0 | 31 | 0 | 0 | 0 | 0 | 1327 | 207 | 20 | 719 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 0.90 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 2.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 2880 | 0 | 1600 | 0 | 0 | 0 | 0 | 3200 | 1600 | 1600 | 3200 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.08 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.41 | 0.13 | 0.01 | 0.22 | 0.00 |
| Crit Moves: | **** | | | | | | | **** | | **** | | |

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United Rock Product Corporation
Year 2025 with Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

**********

Intersection #11 I-605 SB Off Ramp (NS) / Arrow Hwy (EW)

**********

Cycle (sec): 100 Critical Vol./Cap. (X): 0.819
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 71 Level Of Service: D

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Ignore | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 0 | 0 0 | 1 0 | 0 | 0 1 | 0 0 | 2 | 0 0 | 0 0 | 2 | 0 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 274 | 0 | 255 | 0 | 959 | 0 | 0 | 306 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 389 | 0 | 362 | 0 | 1362 | 0 | 0 | 435 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 122 | 0 | 160 | 0 | 0 | 2 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 389 | 0 | 484 | 0 | 1522 | 0 | 0 | 437 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 389 | 0 | 0 | 0 | 1522 | 0 | 0 | 437 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 389 | 0 | 0 | 0 | 1522 | 0 | 0 | 437 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 389 | 0 | 0 | 0 | 1522 | 0 | 0 | 437 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.00 | 2.00 | 0.00 | 0.00 | 2.00 | 0.00 |
| Final Sat.: | 0 | 0 | 0 | 1600 | 0 | 1600 | 0 | 3200 | 0 | 0 | 3200 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.24 | 0.00 | 0.00 | 0.00 | 0.48 | 0.00 | 0.00 | 0.14 | 0.00 |
| Crit Moves: | | | | **** | | | | **** | | **** | | |

**********

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United Rock Product Corporation
Year 2025 with Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

**********

Intersection #10 I-605 NB Off Ramp (NS) / Live Oak Ave. (EW)

**********

Average Delay (sec/veh): 243.6 Worst Case Level Of Service: F[892.7]

**********

| Approach: | North Bound | | | | | South Bound | | | | | East Bound | | | | | West Bound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - | T | - | R | L | - | T | - | R | L | - | T | - | R | L | - | T | - | R |
| Control: | Stop Sign | | | | | Stop Sign | | | | | Uncontrolled | | | | | Uncontrolled | | | | |
| Rights: | Include | | | | | Include | | | | | Include | | | | | Include | | | | |
| Lanes: | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| Volume Module: | | | | | | | | | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 478 | | | 0 | 0 | 629 | | | 0 | 745 | 0 | | | 0 | 1004 | 0 | | |
| Growth Adj: | 1.42 | 1.42 | 1.42 | | | 1.42 | 1.42 | 1.42 | | | 1.42 | 1.42 | 1.42 | | | 1.42 | 1.42 | 1.42 | | |
| Initial Bse: | 0 | 0 | 679 | | | 0 | 0 | 893 | | | 0 | 1058 | 0 | | | 0 | 1426 | 0 | | |
| Added Vol: | 0 | 0 | 5 | | | 0 | 0 | 112 | | | 0 | 142 | 0 | | | 0 | 125 | 0 | | |
| PasserByVol: | 0 | 0 | 0 | | | 0 | 0 | 0 | | | 0 | 0 | 0 | | | 0 | 0 | 0 | | |
| Initial Fut: | 0 | 0 | 684 | | | 0 | 0 | 1005 | | | 0 | 1200 | 0 | | | 0 | 1551 | 0 | | |
| User Adj: | 1.00 | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | | | 1.00 | 1.00 | 1.00 | | |
| PHF Volume: | 0 | 0 | 684 | | | 0 | 0 | 1005 | | | 0 | 1200 | 0 | | | 0 | 1551 | 0 | | |
| Reduct Vol: | 0 | 0 | 0 | | | 0 | 0 | 0 | | | 0 | 0 | 0 | | | 0 | 0 | 0 | | |
| Final Vol.: | 0 | 0 | 684 | | | 0 | 0 | 1005 | | | 0 | 1200 | 0 | | | 0 | 1551 | 0 | | |
| Critical Gap Module: | | | | | | | | | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | 6.9 | | | xxxxx | xxxx | 6.9 | | | xxxxx | xxxx | xxxxx | | | xxxxx | xxxx | xxxxx | | |
| FollowUpTim: | xxxxx | xxxx | 3.3 | | | xxxxx | xxxx | 3.3 | | | xxxxx | xxxx | xxxxx | | | xxxxx | xxxx | xxxxx | | |
| Capacity Module: | | | | | | | | | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | 600 | | | xxxx | xxxx | 775 | | | xxxx | xxxx | xxxxx | | | xxxx | xxxx | xxxxx | | |
| Potent Cap.: | xxxx | xxxx | 449 | | | xxxx | xxxx | 345 | | | xxxx | xxxx | xxxxx | | | xxxx | xxxx | xxxxx | | |
| Move Cap.: | xxxx | xxxx | 449 | | | xxxx | xxxx | 345 | | | xxxx | xxxx | xxxxx | | | xxxx | xxxx | xxxxx | | |
| Volume/Cap: | xxxx | xxxx | 1.52 | | | xxxx | xxxx | 2.91 | | | xxxx | xxxx | xxxx | | | xxxx | xxxx | xxxx | | |
| Level Of Service Module: | | | | | | | | | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | 36.4 | | | xxxxx | xxxx | 86.9 | | | xxxxx | xxxx | xxxxx | | | xxxxx | xxxx | xxxxx | | |
| Stopped Del: | xxxxx | xxxx | 269.5 | | | xxxxx | xxxx | 892.7 | | | xxxxx | xxxx | xxxxx | | | xxxxx | xxxx | xxxxx | | |
| LOS by Move: | * | * | F | | | * | * | F | | | * | * | * | | | * | * | * | | |
| Movement: | LT | - | LTR | - | RT | LT | - | LTR | - | RT | LT | - | LTR | - | RT | LT | - | LTR | - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | | | xxxx | xxxx | xxxxx | | | xxxx | xxxx | xxxxx | | | xxxx | xxxx | xxxxx | | |
| SharedQueue: | xxxxx | xxxx | xxxxx | | | xxxxx | xxxx | xxxxx | | | xxxxx | xxxx | xxxxx | | | xxxxx | xxxx | xxxxx | | |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | | | xxxxx | xxxx | xxxxx | | | xxxxx | xxxx | xxxxx | | | xxxxx | xxxx | xxxxx | | |
| Shared LOS: | * | * | * | | | * | * | * | | | * | * | * | | | * | * | * | | |
| ApproachDel: | 269.5 | | | | | 892.7 | | | | | xxxxxx | | | | | xxxxxx | | | | |
| ApproachLOS: | F | | | | | F | | | | | * | | | | | * | | | | |

United Rock Product Corporation
Year 2025 with Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 I-605 SB On Ramp (NS) / Live Oak Ave. (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 1.190 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 100 | Level Of Service: | F |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Protected | | | Protected | | | Permitted | | | Protected | | |
| Rights: | Include | | | Include | | | Ignore | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 0 | 0 0 | 0 0 | 0 | 0 0 | 0 0 | 2 | 0 1 | 1 0 | 2 | 0 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 781 | 731 | 786 | 846 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1109 | 1038 | 1116 | 1201 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 142 | 157 | 3 | 234 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1251 | 1195 | 1119 | 1435 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1251 | 0 | 1119 | 1435 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1251 | 0 | 1119 | 1435 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1251 | 0 | 1119 | 1435 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3200 | 1600 | 1600 | 3200 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.39 | 0.00 | 0.70 | 0.45 | 0.00 |
| Crit Moves: | | | | | | | | **** | | **** | | |

United Rock Product Corporation
Year 2025 with Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

**********

Intersection #8 Tifal Ave. (NS) / Buena Vista St. (EW)

**********

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: B[ 14.7]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 0 | 0 0 | 0 | 0 0 | 1! 0 | 0 | 1 0 | 2 0 | 0 | 0 0 | 2 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 18 | 0 | 11 | 13 | 271 | 0 | 0 | 363 | 18 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 26 | 0 | 16 | 18 | 385 | 0 | 0 | 515 | 26 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 49 | 0 | 0 | 36 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 26 | 0 | 18 | 19 | 434 | 0 | 0 | 551 | 26 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 26 | 0 | 18 | 19 | 434 | 0 | 0 | 551 | 26 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 26 | 0 | 18 | 19 | 434 | 0 | 0 | 551 | 26 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.8 | xxxx | 6.9 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 807 | xxxx | 276 | 577 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 323 | xxxx | 728 | 1006 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 318 | xxxx | 728 | 1006 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | 0.08 | xxxx | 0.02 | 0.02 | xxxx | xxxx | xxxx | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 0.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.6 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | * | A | * | * | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | 413 | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | 0.3 | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | 14.7 | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | B | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 14.7 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | B | | | * | | | * | | |

United Rock Product Corporation
Year 2025 with Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Bateman Ave. (NS) / Buena Vista St. (EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.696
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 47 Level Of Service: B

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 1 0 | 1 | 0 1 | 0 | 1 0 | 0 1 | 0 | 1 1 | 0 1 | 0 | 1 1 | 0 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 58 | 96 | 276 | 15 | 129 | 15 | 14 | 35 | 72 | 359 | 15 | 14 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 82 | 136 | 392 | 21 | 183 | 21 | 20 | 50 | 102 | 510 | 21 | 20 |
| Added Vol: | 0 | 2 | 50 | 0 | 4 | 0 | 0 | 0 | 0 | 38 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 82 | 138 | 442 | 21 | 187 | 21 | 20 | 50 | 102 | 548 | 21 | 20 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 82 | 138 | 442 | 21 | 187 | 21 | 20 | 50 | 102 | 548 | 21 | 20 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 82 | 138 | 442 | 21 | 187 | 21 | 20 | 50 | 102 | 548 | 21 | 20 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 82 | 138 | 442 | 21 | 187 | 21 | 20 | 50 | 102 | 548 | 21 | 20 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 1.00 | 1.00 | 0.10 | 0.90 | 1.00 | 0.57 | 1.43 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1600 | 1600 | 1600 | 163 | 1437 | 1600 | 914 | 2286 | 1600 | 1600 | 1600 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.05 | 0.09 | 0.28 | 0.01 | 0.13 | 0.01 | 0.01 | 0.02 | 0.06 | 0.34 | 0.01 | 0.01 |
| Crit Moves: | | | **** | **** | | | | | **** | **** | | |

United Rock Product Corporation
Year 2025 with Project Conditions W/Improvements
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 New Buena Vista-Bateman Ave. (NS) / Arrow Hwy (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 0.887 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 94 | Level Of Service: | D |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Protected | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 0 | 0 0 | 0 | 0 1! | 0 1 | 1 0 | 2 | 0 0 | 0 0 | 2 | 0 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 324 | 0 | 246 | 287 | 614 | 0 | 0 | 380 | 143 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 460 | 0 | 349 | 408 | 872 | 0 | 0 | 540 | 203 |
| Added Vol: | 0 | 0 | 0 | 2 | 0 | 59 | 55 | 159 | 0 | 0 | 131 | 1 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 462 | 0 | 408 | 463 | 1031 | 0 | 0 | 671 | 204 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 462 | 0 | 408 | 463 | 1031 | 0 | 0 | 671 | 204 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 462 | 0 | 408 | 463 | 1031 | 0 | 0 | 671 | 204 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 462 | 0 | 408 | 463 | 1031 | 0 | 0 | 671 | 204 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 2.00 | 0.00 | 0.00 | 2.00 | 1.00 |
| Final Sat.: | 0 | 0 | 0 | 1600 | 0 | 1600 | 1600 | 3200 | 0 | 0 | 3200 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.29 | 0.00 | 0.26 | 0.29 | 0.32 | 0.00 | 0.00 | 0.21 | 0.13 |
| Crit Moves: | | | | **** | | | **** | | | | **** | |

United Rock Product Corporation
Year 2025 with Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 New Buena Vista-Bateman Ave. (NS) / Arrow Hwy (EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.887
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 94 Level Of Service: D

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Protected | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 0 | 0 0 | 1 | 0 0 | 0 1 | 1 | 0 2 | 0 0 | 0 | 0 2 | 0 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 324 | 0 | 246 | 287 | 614 | 0 | 0 | 380 | 143 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 460 | 0 | 349 | 408 | 872 | 0 | 0 | 540 | 203 |
| Added Vol: | 0 | 0 | 0 | 2 | 0 | 59 | 55 | 159 | 0 | 0 | 131 | 1 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 462 | 0 | 408 | 463 | 1031 | 0 | 0 | 671 | 204 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 462 | 0 | 408 | 463 | 1031 | 0 | 0 | 671 | 204 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 462 | 0 | 408 | 463 | 1031 | 0 | 0 | 671 | 204 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 462 | 0 | 408 | 463 | 1031 | 0 | 0 | 671 | 204 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 2.00 | 0.00 | 0.00 | 2.00 | 1.00 |
| Final Sat.: | 0 | 0 | 0 | 1600 | 0 | 1600 | 1600 | 3200 | 0 | 0 | 3200 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.29 | 0.00 | 0.26 | 0.29 | 0.32 | 0.00 | 0.00 | 0.21 | 0.13 |
| Crit Moves: | | | | **** | | | **** | | | | **** | |

United Rock Product Corporation
Year 2025 with Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

**********

Intersection #47 Buena Vista St. (NS) /Pit 3 Northerly Access (EW)

**********

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[ 0.0]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Uncontrolled | | | Uncontrolled | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 1 0 2 | 0 0 | | 0 0 2 | 0 1 | | 0 0 1! | 0 0 | | 0 0 0 | 0 0 | |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 289 | 0 | 0 | 381 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 410 | 0 | 0 | 541 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Added Vol: | 0 | 49 | 0 | 0 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 459 | 0 | 0 | 577 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 459 | 0 | 0 | 577 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 459 | 0 | 0 | 577 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | * | * | * | * | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | 0 | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | * | | | * | | | * | | |

United Rock Product Corporation
Year 2025 with Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

**********

Intersection #44 Buena Vista St. (NS) / Pit 2 Easterly Acces and Plant Site Nort

**********

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[ 22.4]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Uncontrolled | | | Uncontrolled | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 1 0 | 1 | 1 0 | 1 0 | 1 | 1 0 | 0 0 | 1! | 0 0 | 0 0 | 1! | 0 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 430 | 0 | 0 | 560 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 611 | 0 | 0 | 795 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Added Vol: | 0 | 50 | 7 | 1 | 41 | 0 | 0 | 0 | 0 | 20 | 0 | 2 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 661 | 7 | 1 | 836 | 0 | 0 | 0 | 0 | 20 | 0 | 2 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 661 | 7 | 1 | 836 | 0 | 0 | 0 | 0 | 20 | 0 | 2 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 661 | 7 | 1 | 836 | 0 | 0 | 0 | 0 | 20 | 0 | 2 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 6.8 | xxxx | 6.9 |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 668 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1084 | xxxx | 334 |
| Potent Cap.: | xxxx | xxxx | xxxxx | 932 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 215 | xxxx | 668 |
| Move Cap.: | xxxx | xxxx | xxxxx | 932 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 215 | xxxx | 668 |
| Volume/Cap: | xxxx | xxxx | xxxx | 0.00 | xxxx | xxxx | xxxx | xxxx | xxxx | 0.09 | xxxx | 0.00 |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | 8.9 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | A | * | * | * | * | * | * | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | 0 | xxxxx | xxxx | 229 | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | 0.3 | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | 22.4 | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | C | * |
| ApproachDel: | xxxxxx | | | xxxxxx | | | xxxxxx | | | 22.4 | | |
| ApproachLOS: | * | | | * | | | * | | | C | | |



E30

United Rock Product Corporation
Year 2025 with Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

**********

Intersection #6 Buena Vista St. (NS) / Alpha St. (EW)

**********

Average Delay (sec/veh): 5.2 Worst Case Level Of Service: A[ 9.5]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Uncontrolled | | | Uncontrolled | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 0 | 0 0 | | 1 0 0 | 0 1 | | 1 0 0 | 0 0 | | 0 0 0 | 1 0 | |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 17 | 0 | 71 | 105 | 0 | 0 | 0 | 1 | 16 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 24 | 0 | 101 | 149 | 0 | 0 | 0 | 1 | 23 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 24 | 0 | 101 | 149 | 0 | 0 | 0 | 1 | 23 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 24 | 0 | 101 | 149 | 0 | 0 | 0 | 1 | 23 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 24 | 0 | 101 | 149 | 0 | 0 | 0 | 1 | 23 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx | 7.1 | xxxx | xxxxx | xxxxx | 6.5 | 6.2 |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx | 3.5 | xxxx | xxxxx | xxxxx | 4.0 | 3.3 |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 0 | xxxx | xxxxx | 49 | xxxx | xxxxx | xxxx | 149 | 0 |
| Potent Cap.: | xxxx | xxxx | xxxxx | 0 | xxxx | xxxxx | 956 | xxxx | xxxxx | xxxx | 746 | 0 |
| Move Cap.: | xxxx | xxxx | xxxxx | 0 | xxxx | xxxxx | 955 | xxxx | xxxxx | xxxx | 746 | 0 |
| Volume/Cap: | xxxx | xxxx | xxxx | 0.00 | xxxx | xxxx | 0.16 | xxxx | xxxx | xxxx | 0.00 | 0.00 |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | 0.0 | xxxx | xxxxx | 0.6 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | 0.0 | xxxx | xxxxx | 9.5 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | A | * | * | A | * | * | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | 12684 |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 0.0 |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 5.3 |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | A |
| ApproachDel: | xxxxxx | | | xxxxxx | | | 9.5 | | | 5.3 | | |
| ApproachLOS: | * | | | * | | | A | | | A | | |

United Rock Product Corporation
Year 2025 with Project Conditions W/Improvements
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Live Oak Ave. (NS) / Arrow Hwy (EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 1.005
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: F

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Protected | | |
| Rights: | Include | | | Include | | | Ignore | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 2 0 0 | 0 1 | | 0 0 0 | 0 0 | | 0 0 2 | 0 2 | | 2 0 3 | 0 0 | |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 603 | 0 | 90 | 0 | 0 | 0 | 0 | 802 | 1288 | 185 | 432 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 856 | 0 | 128 | 0 | 0 | 0 | 0 | 1139 | 1829 | 263 | 613 | 0 |
| Added Vol: | 274 | 0 | 107 | 0 | 0 | 0 | 0 | 107 | 240 | 92 | 97 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 1130 | 0 | 235 | 0 | 0 | 0 | 0 | 1246 | 2069 | 355 | 710 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 1130 | 0 | 235 | 0 | 0 | 0 | 0 | 1246 | 0 | 355 | 710 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 1130 | 0 | 235 | 0 | 0 | 0 | 0 | 1246 | 0 | 355 | 710 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 1130 | 0 | 235 | 0 | 0 | 0 | 0 | 1246 | 0 | 355 | 710 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 0.90 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.90 | 1.00 | 1.00 |
| Lanes: | 2.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 2.00 | 2.00 | 3.00 | 0.00 |
| Final Sat.: | 2880 | 0 | 1600 | 0 | 0 | 0 | 0 | 3200 | 3200 | 2880 | 4800 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.39 | 0.00 | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.39 | 0.00 | 0.12 | 0.15 | 0.00 |
| Crit Moves: | **** | | | | | | | **** | | **** | | |

United Rock Product Corporation
Year 2025 with Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

**********

Intersection #5 Live Oak Ave. (NS) / Arrow Hwy (EW)

**********

Cycle (sec): 100 Critical Vol./Cap. (X): 1.103
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: F

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Protected | | |
| Rights: | Include | | | Include | | | Ignore | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 2 0 | 0 | 0 1 | 0 | 0 0 | 0 0 | 0 | 0 2 | 0 2 | 1 0 | 2 | 0 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 603 | 0 | 90 | 0 | 0 | 0 | 0 | 802 | 1288 | 185 | 432 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 856 | 0 | 128 | 0 | 0 | 0 | 0 | 1139 | 1829 | 263 | 613 | 0 |
| Added Vol: | 274 | 0 | 107 | 0 | 0 | 0 | 0 | 107 | 240 | 92 | 97 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 1130 | 0 | 235 | 0 | 0 | 0 | 0 | 1246 | 2069 | 355 | 710 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 1130 | 0 | 235 | 0 | 0 | 0 | 0 | 1246 | 0 | 355 | 710 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 1130 | 0 | 235 | 0 | 0 | 0 | 0 | 1246 | 0 | 355 | 710 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 1130 | 0 | 235 | 0 | 0 | 0 | 0 | 1246 | 0 | 355 | 710 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 0.90 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 2.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 2.00 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 2880 | 0 | 1600 | 0 | 0 | 0 | 0 | 3200 | 3200 | 1600 | 3200 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.39 | 0.00 | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.39 | 0.00 | 0.22 | 0.22 | 0.00 |
| Crit Moves: | **** | | | | | | | **** | | **** | | |

**********

United Rock Product Corporation
Year 2025 with Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Longden Ave. (NS) / Live Oak Ave. (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 1.198 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 100 | Level Of Service: | F |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Ignore | | | Include | | | Ignore | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 1 0 | 0 | 0 | 1 1 | 0 | 1 0 | 1 0 | 1 | 1 0 | 1 0 | 2 | 0 2 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 1 | 0 | 0 | 1098 | 1 | 12 | 3 | 1129 | 0 | 0 | 671 | 448 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 1 | 0 | 0 | 1559 | 1 | 17 | 4 | 1603 | 0 | 0 | 953 | 636 |
| Added Vol: | 0 | 0 | 0 | 64 | 0 | 0 | 0 | 283 | 0 | 0 | 282 | 89 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 1 | 0 | 0 | 1623 | 1 | 17 | 4 | 1886 | 0 | 0 | 1235 | 725 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| PHF Volume: | 1 | 0 | 0 | 1623 | 1 | 0 | 4 | 1886 | 0 | 0 | 1235 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 1 | 0 | 0 | 1623 | 1 | 0 | 4 | 1886 | 0 | 0 | 1235 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| Final Vol.: | 1 | 0 | 0 | 1623 | 1 | 0 | 4 | 1886 | 0 | 0 | 1235 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 0.00 | 0.00 | 2.00 | 1.00 | 0.00 | 1.00 | 2.00 | 0.00 | 1.00 | 2.00 | 2.00 |
| Final Sat.: | 1600 | 0 | 0 | 3200 | 1600 | 0 | 1600 | 3200 | 0 | 1600 | 3200 | 3200 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.51 | 0.00 | 0.00 | 0.00 | 0.59 | 0.00 | 0.00 | 0.39 | 0.00 |
| Crit Moves: | **** | | | **** | | | | **** | | **** | | |

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United Rock Product Corporation
Year 2025 with Project Conditions
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

**********

Intersection #43 Pit 2 Westerly Access (NS) / Longden Ave. (EW)

**********

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[ 0.0]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 0 | 0 0 | | 0 0 1! | 0 0 | | 0 1 1 | 0 0 | | 0 0 1 | 1 0 | |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1111 | 0 | 0 | 699 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1578 | 0 | 0 | 993 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 | 0 | 0 | 89 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1642 | 0 | 0 | 1082 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1642 | 0 | 0 | 1082 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1642 | 0 | 0 | 1082 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | * | * | * | * | * | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | 0 | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | A | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | * | | | * | | | * | | |

United Rock Product Corporation
Year 2025 with Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Myrtle Ave. (NS) / Live Oak Ave. (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 1.766 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 100 | Level Of Service: | F |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Protected | | | Protected | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 1 0 2 | 0 | 1 | 1 0 2 | 0 | 1 | 1 0 2 | 0 | 1 | 1 0 2 | 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 285 1022 | | 266 | 112 1062 | | 161 | 278 1379 | | 404 | 154 770 | | 128 |
| Growth Adj: | 1.42 1.42 | | 1.42 | 1.42 1.42 | | 1.42 | 1.42 1.42 | | 1.42 | 1.42 1.42 | | 1.42 |
| Initial Bse: | 405 1451 | | 378 | 159 1508 | | 229 | 395 1958 | | 574 | 219 1093 | | 182 |
| Added Vol: | 42 61 | | 239 | 0 45 | | 0 | 0 44 | | 30 | 223 59 | | 0 |
| PasserByVol: | 0 0 | | 0 | 0 0 | | 0 | 0 0 | | 0 | 0 0 | | 0 |
| Initial Fut: | 447 1512 | | 617 | 159 1553 | | 229 | 395 2002 | | 604 | 442 1152 | | 182 |
| User Adj: | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 |
| PHF Adj: | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 |
| PHF Volume: | 447 1512 | | 617 | 159 1553 | | 229 | 395 2002 | | 604 | 442 1152 | | 182 |
| Reduct Vol: | 0 0 | | 0 | 0 0 | | 0 | 0 0 | | 0 | 0 0 | | 0 |
| Reduced Vol: | 447 1512 | | 617 | 159 1553 | | 229 | 395 2002 | | 604 | 442 1152 | | 182 |
| PCE Adj: | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 |
| MLF Adj: | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 |
| Final Vol.: | 447 1512 | | 617 | 159 1553 | | 229 | 395 2002 | | 604 | 442 1152 | | 182 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 1600 | | 1600 | 1600 1600 | | 1600 | 1600 1600 | | 1600 | 1600 1600 | | 1600 |
| Adjustment: | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 |
| Lanes: | 1.00 2.00 | | 1.00 | 1.00 2.00 | | 1.00 | 1.00 2.00 | | 1.00 | 1.00 2.00 | | 1.00 |
| Final Sat.: | 1600 3200 | | 1600 | 1600 3200 | | 1600 | 1600 3200 | | 1600 | 1600 3200 | | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.28 0.47 | | 0.39 | 0.10 0.49 | | 0.14 | 0.25 0.63 | | 0.38 | 0.28 0.36 | | 0.11 |
| Crit Moves: | **** | | | **** | | | **** | | | **** | | |

United Rock Product Corporation
Year 2025 with Project Conditions
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Myrtle Ave (NS) / Longden Ave. (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 1.435 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 100 | Level Of Service: | F |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 1 0 2 | 0 | 1 | 1 0 2 | 0 | 1 | 0 1 1 | 0 | 1 | 0 1 | 0 | 1 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 132 1254 | | 53 | 336 1105 | | 95 | 116 583 | | 131 | 77 374 | | 248 |
| Growth Adj: | 1.42 1.42 | | 1.42 | 1.42 1.42 | | 1.42 | 1.42 1.42 | | 1.42 | 1.42 1.42 | | 1.42 |
| Initial Bse: | 187 1781 | | 75 | 477 1569 | | 135 | 165 828 | | 186 | 109 531 | | 352 |
| Added Vol: | 20 41 | | 0 | 43 30 | | 0 | 0 21 | | 15 | 0 30 | | 59 |
| PasserByVol: | 0 0 | | 0 | 0 0 | | 0 | 0 0 | | 0 | 0 0 | | 0 |
| Initial Fut: | 207 1822 | | 75 | 520 1599 | | 135 | 165 849 | | 201 | 109 561 | | 411 |
| User Adj: | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 |
| PHF Adj: | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 |
| PHF Volume: | 207 1822 | | 75 | 520 1599 | | 135 | 165 849 | | 201 | 109 561 | | 411 |
| Reduct Vol: | 0 0 | | 0 | 0 0 | | 0 | 0 0 | | 0 | 0 0 | | 0 |
| Reduced Vol: | 207 1822 | | 75 | 520 1599 | | 135 | 165 849 | | 201 | 109 561 | | 411 |
| PCE Adj: | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 |
| MLF Adj: | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 |
| Final Vol.: | 207 1822 | | 75 | 520 1599 | | 135 | 165 849 | | 201 | 109 561 | | 411 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 1600 | | 1600 | 1600 1600 | | 1600 | 1600 1600 | | 1600 | 1600 1600 | | 1600 |
| Adjustment: | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 | 1.00 1.00 | | 1.00 |
| Lanes: | 1.00 2.00 | | 1.00 | 1.00 2.00 | | 1.00 | 0.33 1.67 | | 1.00 | 0.20 1.04 | | 0.76 |
| Final Sat.: | 1600 3200 | | 1600 | 1600 3200 | | 1600 | 520 2680 | | 1600 | 323 1660 | | 1216 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.13 0.57 | | 0.05 | 0.33 0.50 | | 0.08 | 0.10 0.32 | | 0.13 | 0.07 0.34 | | 0.34 |
| Crit Moves: | **** | | | **** | | | **** | | | | **** | |

United Rock Product Corporation
Year 2025 with Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

**********

Intersection #22 Plant Site Main Project Access (NS) / Arrow Hwy (EW)

**********

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: D[ 26.7]

**********

| Approach: | North Bound | | | | | South Bound | | | | | East Bound | | | | | West Bound | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | - | T | - | R | L | - | T | - | R | L | - | T | - | R | L | - | T | - | R |
| Control: | Stop Sign | | | | | Stop Sign | | | | | Uncontrolled | | | | | Uncontrolled | | | | |
| Rights: | Include | | | | | Include | | | | | Include | | | | | Include | | | | |
| Lanes: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| Volume Module: | | | | | | | | | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 17 | 1189 | 0 | 0 | 1357 | 23 | | | | | | |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | | | | | | |
| Initial Bse: | 0 | 0 | 0 | 0 | 0 | 47 | 24 | 1688 | 0 | 0 | 1927 | 33 | | | | | | | | |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 18 | 8 | 47 | 0 | 0 | 109 | 14 | | | | | | | | |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | |
| Initial Fut: | 0 | 0 | 0 | 0 | 0 | 65 | 32 | 1735 | 0 | 0 | 2036 | 47 | | | | | | | | |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | | | | | | |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | | | | | | |
| PHF Volume: | 0 | 0 | 0 | 0 | 0 | 65 | 32 | 1735 | 0 | 0 | 2036 | 47 | | | | | | | | |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | |
| Final Vol.: | 0 | 0 | 0 | 0 | 0 | 65 | 32 | 1735 | 0 | 0 | 2036 | 47 | | | | | | | | |
| Critical Gap Module: | | | | | | | | | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 6.9 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | | | | | | | | |
| FollowUpTim: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | | | | | | | | |
| Capacity Module: | | | | | | | | | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | xxxx | xxxx | 1041 | 2083 | xxxx | xxxxx | xxxx | xxxx | xxxxx | | | | | | | | |
| Potent Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | 230 | 270 | xxxx | xxxxx | xxxx | xxxx | xxxxx | | | | | | | | |
| Move Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | 230 | 270 | xxxx | xxxxx | xxxx | xxxx | xxxxx | | | | | | | | |
| Volume/Cap: | xxxx | xxxx | xxxx | xxxx | xxxx | 0.28 | 0.12 | xxxx | xxxx | xxxx | xxxx | xxxx | | | | | | | | |
| Level Of Service Module: | | | | | | | | | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 1.1 | 0.4 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | | | | | | | | |
| Stopped Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 26.7 | 20.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | | | | | | | | |
| LOS by Move: | * | * | * | * | * | D | C | * | * | * | * | * | | | | | | | | |
| Movement: | LT | - | LTR | - | RT | LT | - | LTR | - | RT | LT | - | LTR | - | RT | LT | - | LTR | - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | | | | | | | | |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 0.4 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | | | | | | | | |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 20.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | | | | | | | | |
| Shared LOS: | * | * | * | * | * | * | C | * | * | * | * | * | | | | | | | | |
| ApproachDel: | xxxxxx | | | 26.7 | | | xxxxxx | | | xxxxxx | | | | | | | | | | |
| ApproachLOS: | * | | | D | | | * | | | * | | | | | | | | | | |

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United Rock Product Corporation
Year 2025 with Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

**********

Intersection #21 Pit 3 Easterly Access (NS) / Meridian St. (EW)

**********

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[ 0.0]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L - | T - | R | L - | T - | R | L - | T - | R | L - | T - | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 | 0 0 | 0 | 0 0 | 0 0 | 1 | 1 0 | 0 0 | 0 | 0 0 | 0 1 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 0 | 0 | 0 | 0 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 0 | 0 | 0 | 0 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 0 | 0 | 0 | 0 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 6.2 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | xxxx | xxxx | 0 | 0 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | 0 | 0 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | 0 | 0 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | xxxx | xxxx | 0.00 | 0.00 | xxxx | xxxx | xxxx | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 0.0 | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 0.0 | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | A | A | * | * | * | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 0.0 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | A | | | * | | | * | | |



E21

United Rock Product Corporation
Year 2025 with Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

**********

Intersection #20 Pit 3 Westerly Access (NS) / Meridian Ave. (EW)

**********

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[ 0.0]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 0 0 0 | | | 0 0 0 0 1 | | | 1 0 0 0 0 | | | 0 0 0 1 0 | | |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 5 | 7 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 0 | 0 | 5 | 7 | 0 | 0 | 0 | 0 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 0 | 0 | 5 | 7 | 0 | 0 | 0 | 0 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 0 | 0 | 5 | 7 | 0 | 0 | 0 | 0 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 6.2 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | xxxx | xxxx | 0 | 0 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | 0 | 0 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | 0 | 0 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | xxxx | xxxx | 0.00 | 0.00 | xxxx | xxxx | xxxx | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 0.0 | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 0.0 | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | A | A | * | * | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 0.0 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | A | | | * | | | * | | |

United Rock Product Corporation
Year 2025 with Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Rivergrade Rd. (NS) / Arrow Hwy (EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.903
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: E

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 2 0 0 | 0 1 | | 0 0 0 | 0 0 | | 0 0 2 | 0 1 | | 1 0 2 | 0 0 | |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 187 | 0 | 30 | 0 | 0 | 0 | 0 | 422 | 190 | 22 | 1590 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 266 | 0 | 43 | 0 | 0 | 0 | 0 | 599 | 270 | 31 | 2258 | 0 |
| Added Vol: | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 8 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 275 | 0 | 43 | 0 | 0 | 0 | 0 | 600 | 270 | 31 | 2266 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 275 | 0 | 43 | 0 | 0 | 0 | 0 | 600 | 270 | 31 | 2266 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 275 | 0 | 43 | 0 | 0 | 0 | 0 | 600 | 270 | 31 | 2266 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 275 | 0 | 43 | 0 | 0 | 0 | 0 | 600 | 270 | 31 | 2266 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 0.90 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 2.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 2880 | 0 | 1600 | 0 | 0 | 0 | 0 | 3200 | 1600 | 1600 | 3200 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.10 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.19 | 0.17 | 0.02 | 0.71 | 0.00 |
| Crit Moves: | **** | | | | | | **** | | | | **** | |

United Rock Product Corporation
Year 2025 with Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 I-605 SB Off Ramp (NS) / Arrow Hwy (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 0.969 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 100 | Level Of Service: | E |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Ignore | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 0 | 0 0 | 1 0 | 0 | 0 1 | 0 0 | 2 | 0 0 | 0 0 | 2 | 0 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 390 | 0 | 613 | 0 | 496 | 0 | 0 | 1172 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 554 | 0 | 870 | 0 | 704 | 0 | 0 | 1664 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 113 | 0 | 47 | 0 | 0 | 10 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 554 | 0 | 983 | 0 | 751 | 0 | 0 | 1674 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 554 | 0 | 0 | 0 | 751 | 0 | 0 | 1674 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 554 | 0 | 0 | 0 | 751 | 0 | 0 | 1674 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 554 | 0 | 0 | 0 | 751 | 0 | 0 | 1674 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.00 | 2.00 | 0.00 | 0.00 | 2.00 | 0.00 |
| Final Sat.: | 0 | 0 | 0 | 1600 | 0 | 1600 | 0 | 3200 | 0 | 0 | 3200 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.35 | 0.00 | 0.00 | 0.00 | 0.23 | 0.00 | 0.00 | 0.52 | 0.00 |
| Crit Moves: | | | | **** | | | **** | | | | **** | |

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United Rock Product Corporation
Year 2025 with Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

**********

Intersection #10 I-605 NB Off Ramp (NS) / Live Oak Ave. (EW)

**********

Average Delay (sec/veh): 328.4 Worst Case Level Of Service: F[1144.7]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 0 0 1 | | | 0 0 0 0 1 | | | 0 0 2 0 0 | | | 0 0 2 0 0 | | |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 501 | 0 | 0 | 705 | 0 | 386 | 0 | 0 | 1091 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 711 | 0 | 0 | 1001 | 0 | 548 | 0 | 0 | 1549 | 0 |
| Added Vol: | 0 | 0 | 6 | 0 | 0 | 133 | 0 | 90 | 0 | 0 | 74 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 717 | 0 | 0 | 1134 | 0 | 638 | 0 | 0 | 1623 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 717 | 0 | 0 | 1134 | 0 | 638 | 0 | 0 | 1623 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 717 | 0 | 0 | 1134 | 0 | 638 | 0 | 0 | 1623 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | 6.9 | xxxxx | xxxx | 6.9 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | 3.3 | xxxxx | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | 319 | xxxx | xxxx | 812 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | 683 | xxxx | xxxx | 326 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | 683 | xxxx | xxxx | 326 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | 1.05 | xxxx | xxxx | 3.47 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | 18.7 | xxxxx | xxxx | 105.0 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | 73.0 | xxxxx | xxxx | 1145 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | F | * | * | F | * | * | * | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | 73.0 | | | 1144.7 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | F | | | F | | | * | | | * | | |

United Rock Product Corporation
Year 2025 with Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 I-605 SB On Ramp (NS) / Live Oak Ave. (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 0.922 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 100 | Level Of Service: | E |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Protected | | | Protected | | | Permitted | | | Protected | | |
| Rights: | Include | | | Include | | | Ignore | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 0 | 0 0 | 0 0 | 0 | 0 0 | 0 0 | 2 | 0 1 | 1 0 | 2 | 0 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 390 | 644 | 698 | 1103 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 554 | 914 | 991 | 1566 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 64 | 2 | 205 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 644 | 978 | 993 | 1771 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 644 | 0 | 993 | 1771 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 644 | 0 | 993 | 1771 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 644 | 0 | 993 | 1771 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3200 | 1600 | 1600 | 3200 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.20 | 0.00 | 0.62 | 0.55 | 0.00 |
| Crit Moves: | | | | | | | | **** | | **** | | |

United Rock Product Corporation
Year 2025 with Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Tifal Ave. (NS) / Buena Vista St. (EW)

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[ 14.5]

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 0 | 0 0 | | 0 0 1! | 0 0 | | 1 0 | 2 0 0 | | 0 0 | 2 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 21 | 0 | 15 | 23 | 526 | 0 | 0 | 227 | 29 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 30 | 0 | 21 | 33 | 747 | 0 | 0 | 322 | 41 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 18 | 0 | 0 | 36 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 30 | 0 | 24 | 38 | 765 | 0 | 0 | 358 | 41 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 30 | 0 | 24 | 38 | 765 | 0 | 0 | 358 | 41 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 30 | 0 | 24 | 38 | 765 | 0 | 0 | 358 | 41 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.8 | xxxx | 6.9 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 816 | xxxx | 179 | 400 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 319 | xxxx | 839 | 1170 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 311 | xxxx | 839 | 1170 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | 0.10 | xxxx | 0.03 | 0.03 | xxxx | xxxx | xxxx | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 0.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | * | A | * | * | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | 434 | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | 0.4 | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | 14.5 | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | B | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 14.5 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | B | | | * | | | * | | |



E15

United Rock Product Corporation
Year 2025 with Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Bateman Ave. (NS) / Buena Vista St. (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 0.641 |
| Loss Time (sec): | 0 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 40 | Level Of Service: | B |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 1 0 | 1 | 0 1 | 0 | 1 0 | 0 1 | 0 | 1 1 | 0 1 | 0 | 1 1 | 0 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 77 | 80 | 355 | 93 | 35 | 10 | 7 | 39 | 56 | 175 | 47 | 30 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 109 | 114 | 504 | 132 | 50 | 14 | 10 | 55 | 80 | 249 | 67 | 43 |
| Added Vol: | 0 | 7 | 23 | 0 | 5 | 0 | 0 | 0 | 0 | 39 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 109 | 121 | 527 | 132 | 55 | 14 | 10 | 55 | 80 | 288 | 67 | 43 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 109 | 121 | 527 | 132 | 55 | 14 | 10 | 55 | 80 | 288 | 67 | 43 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 109 | 121 | 527 | 132 | 55 | 14 | 10 | 55 | 80 | 288 | 67 | 43 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 109 | 121 | 527 | 132 | 55 | 14 | 10 | 55 | 80 | 288 | 67 | 43 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 1.00 | 1.00 | 0.71 | 0.29 | 1.00 | 0.30 | 1.70 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1600 | 1600 | 1600 | 1131 | 469 | 1600 | 487 | 2713 | 1600 | 1600 | 1600 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.07 | 0.08 | 0.33 | 0.08 | 0.12 | 0.01 | 0.01 | 0.02 | 0.05 | 0.18 | 0.04 | 0.03 |
| Crit Moves: | | | **** | **** | | | | | **** | **** | | |

United Rock Product Corporation
Year 2025 with Project Conditions W/Improvements
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

**********

Intersection #23 New Buena Vista-Bateman Ave. (NS) / Arrow Hwy (EW)

**********

Cycle (sec): 100 Critical Vol./Cap. (X): 1.092
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: F

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Protected | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 0 | 0 0 | 0 | 0 1! | 0 1 | 1 0 | 2 | 0 0 | 0 0 | 2 | 0 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 97 | 0 | 168 | 169 | 351 | 0 | 0 | 1424 | 343 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 138 | 0 | 239 | 240 | 498 | 0 | 0 | 2022 | 487 |
| Added Vol: | 0 | 0 | 0 | 3 | 0 | 63 | 54 | 53 | 0 | 0 | 122 | 4 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 141 | 0 | 302 | 294 | 551 | 0 | 0 | 2144 | 491 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 141 | 0 | 302 | 294 | 551 | 0 | 0 | 2144 | 491 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 141 | 0 | 302 | 294 | 551 | 0 | 0 | 2144 | 491 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 141 | 0 | 302 | 294 | 551 | 0 | 0 | 2144 | 491 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 0.64 | 0.00 | 1.36 | 1.00 | 2.00 | 0.00 | 0.00 | 2.00 | 1.00 |
| Final Sat.: | 0 | 0 | 0 | 1018 | 0 | 2182 | 1600 | 3200 | 0 | 0 | 3200 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.14 | 0.00 | 0.14 | 0.18 | 0.17 | 0.00 | 0.00 | 0.67 | 0.31 |
| Crit Moves: | | | | **** | | | **** | | | | **** | |

**********

Traffix 7.6.0715 (c) 2003 Dowling Assoc. Licensed to URBAN CROSSROADS, IRVINE

United Rock Product Corporation
Year 2025 with Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 New Buena Vista-Bateman Ave. (NS) / Arrow Hwy (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 1.142 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 100 | Level Of Service: | F |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Protected | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 0 | 0 0 | 1 0 | 0 | 0 1 | 1 0 | 2 | 0 0 | 0 0 | 2 | 0 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 97 | 0 | 168 | 169 | 351 | 0 | 0 | 1424 | 343 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 138 | 0 | 239 | 240 | 498 | 0 | 0 | 2022 | 487 |
| Added Vol: | 0 | 0 | 0 | 3 | 0 | 63 | 54 | 53 | 0 | 0 | 122 | 4 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 141 | 0 | 302 | 294 | 551 | 0 | 0 | 2144 | 491 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 141 | 0 | 302 | 294 | 551 | 0 | 0 | 2144 | 491 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 141 | 0 | 302 | 294 | 551 | 0 | 0 | 2144 | 491 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 141 | 0 | 302 | 294 | 551 | 0 | 0 | 2144 | 491 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 2.00 | 0.00 | 0.00 | 2.00 | 1.00 |
| Final Sat.: | 0 | 0 | 0 | 1600 | 0 | 1600 | 1600 | 3200 | 0 | 0 | 3200 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.09 | 0.00 | 0.19 | 0.18 | 0.17 | 0.00 | 0.00 | 0.67 | 0.31 |
| Crit Moves: | | | | | | **** | **** | | | | **** | |

United Rock Product Corporation
Year 2025 with Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

**********

Intersection #47 Buena Vista St. (NS) /Pit 3 Northerly Access (EW)

**********

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[ 0.0]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Uncontrolled | | | Uncontrolled | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 1 0 2 | 0 | 0 | 0 0 2 | 0 | 1 | 0 0 1! | 0 | 0 | 0 0 0 | 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 547 | 0 | 0 | 256 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 777 | 0 | 0 | 364 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Added Vol: | 0 | 18 | 0 | 0 | 36 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 795 | 0 | 0 | 400 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 795 | 0 | 0 | 400 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 795 | 0 | 0 | 400 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | * | * | * | * | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | 0 | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | * | | | * | | | * | | |



E11

United Rock Product Corporation
Year 2025 with Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

**********

Intersection #44 Buena Vista St. (NS) / Pit 2 Easterly Acces and Plant Site Nort

**********

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[ 20.4]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L - | T - | R | L - | T - | R | L - | T - | R | L - | T - | R |
| Control: | Uncontrolled | | | Uncontrolled | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 1 0 | 1 1 | 0 | 1 0 | 1 1 | 0 | 0 0 | 1! 0 | 0 | 0 0 | 1! 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 512 | 0 | 0 | 266 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 727 | 0 | 0 | 378 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Added Vol: | 0 | 27 | 32 | 4 | 40 | 0 | 0 | 0 | 0 | 26 | 0 | 3 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 754 | 32 | 4 | 418 | 0 | 0 | 0 | 0 | 26 | 0 | 3 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 754 | 32 | 4 | 418 | 0 | 0 | 0 | 0 | 26 | 0 | 3 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 754 | 32 | 4 | 418 | 0 | 0 | 0 | 0 | 26 | 0 | 3 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 6.8 | xxxx | 6.9 |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 786 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 987 | xxxx | 393 |
| Potent Cap.: | xxxx | xxxx | xxxxx | 842 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 248 | xxxx | 612 |
| Move Cap.: | xxxx | xxxx | xxxxx | 842 | xxxx | xxxxx | xxxx | xxxx | xxxxx | 247 | xxxx | 612 |
| Volume/Cap: | xxxx | xxxx | xxxx | 0.00 | xxxx | xxxx | xxxx | xxxx | xxxx | 0.11 | xxxx | 0.00 |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | 9.3 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | A | * | * | * | * | * | * | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | 0 | xxxxx | xxxx | 263 | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | 0.4 | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | 20.4 | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | C | * |
| ApproachDel: | xxxxxx | | | xxxxxx | | | xxxxxx | | | 20.4 | | |
| ApproachLOS: | * | | | * | | | * | | | C | | |

United Rock Product Corporation
Year 2025 with Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

**********

Intersection #6 Buena Vista St. (NS) / Alpha St. (EW)

**********

Average Delay (sec/veh): 3.2 Worst Case Level Of Service: A[ 9.6]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Uncontrolled | | | Uncontrolled | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 0 0 0 | | | 1 0 0 0 1 | | | 0 1 0 0 0 | | | 0 0 0 1 0 | | |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 47 | 0 | 77 | 44 | 1 | 0 | 0 | 1 | 58 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 67 | 0 | 109 | 62 | 1 | 0 | 0 | 1 | 82 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 67 | 0 | 109 | 62 | 1 | 0 | 0 | 1 | 82 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 67 | 0 | 109 | 62 | 1 | 0 | 0 | 1 | 82 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 67 | 0 | 109 | 62 | 1 | 0 | 0 | 1 | 82 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx | 7.1 | 6.5 | xxxxx | xxxxx | 6.5 | 6.2 |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx | 3.5 | 4.0 | xxxxx | xxxxx | 4.0 | 3.3 |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 0 | xxxx | xxxxx | 134 | 133 | xxxxx | xxxx | 243 | 0 |
| Potent Cap.: | xxxx | xxxx | xxxxx | 0 | xxxx | xxxxx | 842 | 761 | xxxxx | xxxx | 662 | 0 |
| Move Cap.: | xxxx | xxxx | xxxxx | 0 | xxxx | xxxxx | 841 | 761 | xxxxx | xxxx | 662 | 0 |
| Volume/Cap: | xxxx | xxxx | xxxx | 0.00 | xxxx | xxxx | 0.07 | 0.00 | xxxx | xxxx | 0.00 | 0.00 |

| Level Of Service Module: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Queue: | xxxxx | xxxx | xxxxx | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | A | * | * | * | * | * | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 839 | xxxx | xxxxx | xxxx | xxxx | 39080 |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 0.2 | xxxx | xxxxx | xxxxx | xxxx | 0.0 |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 9.6 | xxxx | xxxxx | xxxxx | xxxx | 5.1 |
| Shared LOS: | * | * | * | * | * | * | A | * | * | * | * | A |
| ApproachDel: | xxxxxx | | | xxxxxx | | | 9.6 | | | 5.1 | | |
| ApproachLOS: | * | | | * | | | A | | | A | | |

United Rock Product Corporation
Year 2025 with Project Conditions W/Improvements
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Live Oak Ave. (NS) / Arrow Hwy (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 1.252 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 100 | Level Of Service: | F |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Protected | | |
| Rights: | Include | | | Include | | | Ignore | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 2 0 | 0 | 0 1 | 0 | 0 0 | 0 0 | 0 | 0 2 | 0 2 | 2 0 | 3 | 0 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 901 | 0 | 107 | 0 | 0 | 0 | 0 | 424 | 674 | 88 | 1511 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 1279 | 0 | 152 | 0 | 0 | 0 | 0 | 602 | 957 | 125 | 2146 | 0 |
| Added Vol: | 117 | 0 | 52 | 0 | 0 | 0 | 0 | 55 | 205 | 113 | 72 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 1396 | 0 | 204 | 0 | 0 | 0 | 0 | 657 | 1162 | 238 | 2218 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 1396 | 0 | 204 | 0 | 0 | 0 | 0 | 657 | 0 | 238 | 2218 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 1396 | 0 | 204 | 0 | 0 | 0 | 0 | 657 | 0 | 238 | 2218 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 1396 | 0 | 204 | 0 | 0 | 0 | 0 | 657 | 0 | 238 | 2218 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 0.90 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.90 | 1.00 | 1.00 |
| Lanes: | 2.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 2.00 | 2.00 | 3.00 | 0.00 |
| Final Sat.: | 2880 | 0 | 1600 | 0 | 0 | 0 | 0 | 3200 | 3200 | 2880 | 4800 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.48 | 0.00 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.21 | 0.00 | 0.08 | 0.46 | 0.00 |
| Crit Moves: | **** | | | | | | | **** | | | **** | |

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United Rock Product Corporation
Year 2025 with Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Live Oak Ave. (NS) / Arrow Hwy (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 1.483 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 100 | Level Of Service: | F |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Protected | | |
| Rights: | Include | | | Include | | | Ignore | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 2 0 | 0 | 0 1 | 0 0 | 0 | 0 0 | 0 0 | 2 | 0 2 | 1 0 | 2 | 0 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 901 | 0 | 107 | 0 | 0 | 0 | 0 | 424 | 674 | 88 | 1511 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 1279 | 0 | 152 | 0 | 0 | 0 | 0 | 602 | 957 | 125 | 2146 | 0 |
| Added Vol: | 117 | 0 | 52 | 0 | 0 | 0 | 0 | 55 | 205 | 113 | 72 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 1396 | 0 | 204 | 0 | 0 | 0 | 0 | 657 | 1162 | 238 | 2218 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 1396 | 0 | 204 | 0 | 0 | 0 | 0 | 657 | 0 | 238 | 2218 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 1396 | 0 | 204 | 0 | 0 | 0 | 0 | 657 | 0 | 238 | 2218 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 1396 | 0 | 204 | 0 | 0 | 0 | 0 | 657 | 0 | 238 | 2218 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 0.90 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 2.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 2.00 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 2880 | 0 | 1600 | 0 | 0 | 0 | 0 | 3200 | 3200 | 1600 | 3200 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.48 | 0.00 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.21 | 0.00 | 0.15 | 0.69 | 0.00 |
| Crit Moves: | **** | | | | | | | **** | | | **** | |

United Rock Product Corporation
Year 2025 with Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Longden Ave. (NS) / Live Oak Ave. (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 0.895 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 97 | Level Of Service: | D |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Ignore | | | Include | | | Ignore | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 1 0 | 0 | 0 | 2 0 | 0 | 0 1 | 1 0 | 1 | 1 0 | 1 0 | 2 | 0 2 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 1 | 0 | 0 | 445 | 0 | 6 | 3 | 698 | 0 | 7 | 1118 | 952 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 1 | 0 | 0 | 632 | 0 | 9 | 4 | 991 | 0 | 10 | 1588 | 1352 |
| Added Vol: | 0 | 0 | 0 | 86 | 0 | 0 | 0 | 175 | 0 | 0 | 147 | 42 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 1 | 0 | 0 | 718 | 0 | 9 | 4 | 1166 | 0 | 10 | 1735 | 1394 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| PHF Volume: | 1 | 0 | 0 | 718 | 0 | 0 | 4 | 1166 | 0 | 10 | 1735 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 1 | 0 | 0 | 718 | 0 | 0 | 4 | 1166 | 0 | 10 | 1735 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| Final Vol.: | 1 | 0 | 0 | 718 | 0 | 0 | 4 | 1166 | 0 | 10 | 1735 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 0.90 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 0.00 | 0.00 | 2.00 | 0.00 | 1.00 | 1.00 | 2.00 | 0.00 | 1.00 | 2.00 | 2.00 |
| Final Sat.: | 1600 | 0 | 0 | 2880 | 0 | 1600 | 1600 | 3200 | 0 | 1600 | 3200 | 3200 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.25 | 0.00 | 0.00 | 0.00 | 0.36 | 0.00 | 0.01 | 0.54 | 0.00 |
| Crit Moves: | **** | | | **** | | | **** | | | | **** | |

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United Rock Product Corporation
Year 2025 with Project Conditions
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

**********

Intersection #43 Pit 2 Westerly Access (NS) / Longden Ave. (EW)

**********

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: B[ 13.7]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 0 0 0 | | | 0 0 1! 0 0 | | | 0 1 1 0 0 | | | 0 0 1 1 0 | | |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 451 | 0 | 0 | 1094 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 640 | 0 | 0 | 1553 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 86 | 0 | 0 | 42 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 726 | 0 | 0 | 1595 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 726 | 0 | 0 | 1595 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 726 | 0 | 0 | 1595 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1595 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 416 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 416 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | 0.00 | xxxx | xxxx | xxxx | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 13.7 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | * | B | * | * | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | 0 | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 13.7 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | B | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | xxxxxx | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | * | | | * | | | * | | |



E5

United Rock Product Corporation
Year 2025 with Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Myrtle Ave. (NS) / Live Oak Ave. (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 1.232 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 100 | Level Of Service: | F |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Protected | | | Protected | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 1 0 | 2 0 | 1 | 1 0 | 2 0 | 1 | 1 0 | 2 0 | 1 | 1 0 | 2 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 155 | 789 | 131 | 77 | 717 | 91 | 179 | 763 | 308 | 261 | 1112 | 107 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 220 | 1120 | 186 | 109 | 1018 | 129 | 254 | 1083 | 437 | 371 | 1579 | 152 |
| Added Vol: | 8 | 11 | 115 | 0 | 26 | 0 | 0 | 59 | 17 | 119 | 28 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 228 | 1131 | 301 | 109 | 1044 | 129 | 254 | 1142 | 454 | 490 | 1607 | 152 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 228 | 1131 | 301 | 109 | 1044 | 129 | 254 | 1142 | 454 | 490 | 1607 | 152 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 228 | 1131 | 301 | 109 | 1044 | 129 | 254 | 1142 | 454 | 490 | 1607 | 152 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 228 | 1131 | 301 | 109 | 1044 | 129 | 254 | 1142 | 454 | 490 | 1607 | 152 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.14 | 0.35 | 0.19 | 0.07 | 0.33 | 0.08 | 0.16 | 0.36 | 0.28 | 0.31 | 0.50 | 0.09 |
| Crit Moves: | **** | | | | **** | | | **** | | | **** | |

United Rock Product Corporation
Year 2025 with Project Conditions
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Myrtle Ave (NS) / Longden Ave. (EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 1.259
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: F

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 1 0 2 | 0 | 1 | 1 0 2 | 0 | 1 | 0 1 1 | 0 | 1 | 0 1 | 0 | 1 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 158 | 856 | 49 | 166 | 784 | 97 | 107 | 292 | 89 | 48 | 697 | 349 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 224 | 1216 | 70 | 236 | 1113 | 138 | 152 | 415 | 126 | 68 | 990 | 496 |
| Added Vol: | 4 | 8 | 0 | 58 | 17 | 0 | 0 | 28 | 9 | 0 | 14 | 28 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 228 | 1224 | 70 | 294 | 1130 | 138 | 152 | 443 | 135 | 68 | 1004 | 524 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 228 | 1224 | 70 | 294 | 1130 | 138 | 152 | 443 | 135 | 68 | 1004 | 524 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 228 | 1224 | 70 | 294 | 1130 | 138 | 152 | 443 | 135 | 68 | 1004 | 524 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 228 | 1224 | 70 | 294 | 1130 | 138 | 152 | 443 | 135 | 68 | 1004 | 524 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 0.51 | 1.49 | 1.00 | 0.08 | 1.26 | 0.66 |
| Final Sat.: | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 | 818 | 2382 | 1600 | 137 | 2013 | 1050 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.14 | 0.38 | 0.04 | 0.18 | 0.35 | 0.09 | 0.09 | 0.19 | 0.08 | 0.04 | 0.50 | 0.50 |
| Crit Moves: | | **** | | | **** | | | **** | | | **** | |

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# APPENDIX E

YEAR 2025 WITH PROJECT
OPERATION ANALYSIS WORKSHEETS

# TRAFFIC SIGNAL WARRANTS

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Meridian St. Minor St: Pit3 W Access Year = 2025+Proj

Volume = 100 Lanes= 1 Volume = 50 Lanes= 1 (one-way)

| URBAN XX RURAL | Minimum Requirements EADT | |
|---|---|---|
| 1. Minimum Vehicular<br>Satisfied Not Satisfied XX | Vehicles per day on major street (both approaches) | Vehicles per day on higher volume minor-street approach (one direction only) |
| Number of lanes for moving traffic on each approach.<br>Major Street 100 Minor Street 50<br>1 1<br>2 + 1<br>2 + 2 +<br>1 2 + | Urban Rural<br>8,000 5,600<br>9,600 6,720<br>9,600 6,720<br>8,000 5,600 | Urban Rural<br>2,400 1,680<br>2,400 1,680<br>3,200 2,240<br>3,200 2,240 |
| 2. Interruption of Continuous traffic<br>Satisfied Not Satisfied XX | Vehicles per day on major street (both approaches) | Vehicles per day on higher volume minor-street approach (one direction only) |
| Number of lanes for moving traffic on each approach.<br>Major Street 100 Minor Street 50<br>1 1<br>2 + 1<br>2 + 2 +<br>1 2 + | Urban Rural<br>12,000 8,400<br>14,400 10,080<br>14,000 10,080<br>12,000 8,400 | Urban Rural<br>1,200 850<br>1,200 850<br>1,600 1,120<br>1,600 1,120 |
| 3. Combination<br>Satisfied Not Satisfied XX<br>No one warrant satisfied but following warrants fulfilled 80% or more..<br>1% 1%<br>1 2 | 2 Warrants | 2 Warrants |

NOTES: 1. Heavier left turn movement from the major street may be included with minor street volume if a separate signal phase is to be provided for the left-tum movement.

2. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

# TRAFFIC SIGNAL WARRANTS

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Meridian St. Minor St: Pit3 E Access Year = 2025+Proj

Volume = 100 Lanes= 1 Volume = 50 Lanes= 1 (one-way)

| URBAN XX RURAL | Minimum Requirements EADT | |
|---|---|---|
| 1. Minimum Vehicular<br>Satisfied Not Satisfied XX | Vehicles per day on major street (both approaches) | Vehicles per day on higher volume minor-street approach (one direction only) |
| Number of lanes for moving traffic on each approach. | | |
| Major Street 100 / Minor Street 50 | Urban / Rural | Urban / Rural |
| 1 / 1 | 8,000 / 5,600 | 2,400 / 1,680 |
| 2 + / 1 | 9,600 / 6,720 | 2,400 / 1,680 |
| 2 + / 2 + | 9,600 / 6,720 | 3,200 / 2,240 |
| 1 / 2 + | 8,000 / 5,600 | 3,200 / 2,240 |
| 2. Interruption of Continuous traffic<br>Satisfied Not Satisfied XX | Vehicles per day on major street (both approaches) | Vehicles per day on higher volume minor-street approach (one direction only) |
| Number of lanes for moving traffic on each approach. | | |
| Major Street 100 / Minor Street 50 | Urban / Rural | Urban / Rural |
| 1 / 1 | 12,000 / 8,400 | 1,200 / 850 |
| 2 + / 1 | 14,400 / 10,080 | 1,200 / 850 |
| 2 + / 2 + | 14,000 / 10,080 | 1,600 / 1,120 |
| 1 / 2 + | 12,000 / 8,400 | 1,600 / 1,120 |
| 3. Combination<br>Satisfied Not Satisfied XX<br>No one warrant satisfied but following warrants fulfilled 80% or more..<br>1% 1%<br>1 2 | 2 Warrants | 2 Warrants |

NOTES: 1. Heavier left turn movement from the major street may be included with minor street volume if a separate signal phase is to be provided for the left-turn movement.

2. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

# TRAFFIC SIGNAL WARRANTS

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Buena Vista St. Minor St: Pit3 N Access Year = 2025+Proj

Volume = 9,900 Lanes= 2 Volume = 50 Lanes= 1 (one-way)

| URBAN | RURAL XX | Minimum Requirements EADT | |
|---|---|---|---|
| 1. Minimum Vehicular<br>Satisfied / Not Satisfied XX | | Vehicles per day on major street (both approaches) | Vehicles per day on higher volume minor-street approach (one direction only) |
| Number of lanes for moving traffic on each approach.<br>Major Street / Minor Street | | Urban / Rural | Urban / Rural |
| 1 / 1 | | 8,000 / 5,600 | 2,400 / 1,680 |
| 2 + / 1 | 9,900 / 50 | 9,600 / 6,720 * | 2,400 / 1,680 |
| 2 + / 2 + | | 9,600 / 6,720 | 3,200 / 2,240 |
| 1 / 2 + | | 8,000 / 5,600 | 3,200 / 2,240 |
| 2. Interruption of Continuous traffic<br>Satisfied / Not Satisfied XX | | Vehicles per day on major street (both approaches) | Vehicles per day on higher volume minor-street approach (one direction only) |
| Number of lanes for moving traffic on each approach.<br>Major Street / Minor Street | | Urban / Rural | Urban / Rural |
| 1 / 1 | | 12,000 / 8,400 | 1,200 / 850 |
| 2 + / 1 | 9,900 / 50 | 14,400 / 10,080 | 1,200 / 850 |
| 2 + / 2 + | | 14,000 / 10,080 | 1,600 / 1,120 |
| 1 / 2 + | | 12,000 / 8,400 | 1,600 / 1,120 |
| 3. Combination<br>Satisfied / Not Satisfied XX<br>No one warrant satisfied but following warrants fulfilled 80% or more..<br>3% / 6%<br>1 / 2 | | 2 Warrants | 2 Warrants |

NOTES: 1. Heavier left turn movement from the major street may be included with minor street volume if a separate signal phase is to be provided for the left-turn movement.

2. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

# TRAFFIC SIGNAL WARRANTS

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Buena Vista — Minor St: Pit2 E Access — Year = 2025+Pro,

Volume = 15,300 Lanes= 2 — Volume = 150 Lanes= 1 (one-way)

| URBAN RURAL XX | Minimum Requirements EADT | |
|---|---|---|
| 1. Minimum Vehicular<br>Satisfied Not Satisfied XX | Vehicles per day on major street (both approaches) | Vehicles per day on higher volume minor-street approach (one direction only) |
| Number of lanes for moving traffic on each approach. | | |
| Major Street / Minor Street | Urban / Rural | Urban / Rural |
| 1 / 1 | 8,000 / 5,600 | 2,400 / 1,680 |
| 2 + 15,300 / 1 150 | 9,600 / 6,720 * | 2,400 / 1,680 |
| 2 + / 2 + | 9,600 / 6,720 | 3,200 / 2,240 |
| 1 / 2 + | 8,000 / 5,600 | 3,200 / 2,240 |
| 2. Interruption of Continuous traffic<br>Satisfied Not Satisfied XX | Vehicles per day on major street (both approaches) | Vehicles per day on higher volume minor-street approach (one direction only) |
| Number of lanes for moving traffic on each approach. | | |
| Major Street / Minor Street | Urban / Rural | Urban / Rural |
| 1 / 1 | 12,000 / 8,400 | 1,200 / 850 |
| 2 + 15,300 / 1 150 | 14,400 / 10,080 * | 1,200 / 850 |
| 2 + / 2 + | 14,000 / 10,080 | 1,600 / 1,120 |
| 1 / 2 + | 12,000 / 8,400 | 1,600 / 1,120 |
| 3. Combination<br>Satisfied Not Satisfied XX<br>No one warrant satisfied but following warrants fulfilled 80% or more..<br>9% 18%<br>1 2 | 2 Warrants | 2 Warrants |

NOTES: 1. Heavier left turn movement from the major street may be included with minor street volume if a separate signal phase is to be provided for the left-turn movement.

2. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

# TRAFFIC SIGNAL WARRANTS

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Longden Ave — Minor St: Pit2 W Access — Year = 2025+Proj

Volume = 27,300 Lanes= 2 — Volume = 50 Lanes= 1 (one-way)

| URBAN RURAL XX | Minimum Requirements EADT | |
|---|---|---|
| 1. Minimum Vehicular<br>Satisfied Not Satisfied XX | Vehicles per day on major street (both approaches) | Vehicles per day on higher volume minor-street approach (one direction only) |
| Number of lanes for moving traffic on each approach.<br>Major Street / Minor Street<br>1 / 1<br>2 + 27,300 / 1 50<br>2 + / 2 +<br>1 / 2 + | Urban / Rural<br>8,000 / 5,600<br>9,600 / 6,720 *<br>9,600 / 6,720<br>8,000 / 5,600 | Urban / Rural<br>2,400 / 1,680<br>2,400 / 1,680<br>3,200 / 2,240<br>3,200 / 2,240 |
| 2. Interruption of Continuous traffic<br>Satisfied Not Satisfied XX | Vehicles per day on major street (both approaches) | Vehicles per day on higher volume minor-street approach (one direction only) |
| Number of lanes for moving traffic on each approach.<br>Major Street / Minor Street<br>1 / 1<br>2 + 27,300 / 1 50<br>2 + / 2 +<br>1 / 2 + | Urban / Rural<br>12,000 / 8,400<br>14,400 / 10,080 *<br>14,000 / 10,080<br>12,000 / 8,400 | Urban / Rural<br>1,200 / 850<br>1,200 / 850<br>1,600 / 1,120<br>1,600 / 1,120 |
| 3. Combination<br>Satisfied Not Satisfied XX<br>No one warrant satisfied but following warrants fulfilled 80% or more..<br>3% 6%<br>1 2 | 2 Warrants | 2 Warrants |

NOTES: 1. Heavier left turn movement from the major street may be included with minor street volume if a separate signal phase is to be provided for the left-turn movement.

2. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

# TRAFFIC SIGNAL WARRANTS

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Arrow HWY Minor St: Plant Site Main Year = 2025+Proj

Volume = 47,150 Lanes= 2 Volume = 150 Lanes= 1 (one-way)

| URBAN RURAL XX | Minimum Requirements EADT | |
|---|---|---|
| 1. Minimum Vehicular<br>Satisfied Not Satisfied XX | Vehicles per day on major street (both approaches) | Vehicles per day on higher volume minor-street approach (one direction only) |
| Number of lanes for moving traffic on each approach.<br>Major Street 47,150 Minor Street 150<br>1 1<br>2 + 1<br>2 + 2 +<br>1 2 + | Urban Rural<br>8,000 5,600<br>9,600 6,720 *<br>9,600 6,720<br>8,000 5,600 | Urban Rural<br>2,400 1,680<br>2,400 1,680<br>3,200 2,240<br>3,200 2,240 |
| 2. Interruption of Continuous traffic<br>Satisfied Not Satisfied XX | Vehicles per day on major street (both approaches) | Vehicles per day on higher volume minor-street approach (one direction only) |
| Number of lanes for moving traffic on each approach.<br>Major Street 47,150 Minor Street 150<br>1 1<br>2 + 1<br>2 + 2 +<br>1 2 + | Urban Rural<br>12,000 8,400<br>14,400 10,080 *<br>14,000 10,080<br>12,000 8,400 | Urban Rural<br>1,200 850<br>1,200 850<br>1,600 1,120<br>1,600 1,120 |
| 3. Combination<br>Satisfied Not Satisfied XX<br>No one warrant satisfied but following warrants fulfilled 80% or more..<br>9% 18%<br>1 2 | 2 Warrants | 2 Warrants |

NOTES: 1. Heavier left turn movement from the major street may be included with minor street volume if a separate signal phase is to be provided for the left-turn movement.

2. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

# TRAFFIC SIGNAL WARRANTS

(Based on Estimated Average Daily Traffic-See Note 2)

Major St: Buena Vista St. Minor St: Tifal Ave. Year = 2025+Proj

Volume = 10,250 Lanes= 2 Volume = 500 Lanes= 1 (one-way)

| URBAN RURAL XX | Minimum Requirements EADT | |
|---|---|---|
| 1. Minimum Vehicular<br>Satisfied Not Satisfied XX | Vehicles per day on major street (both approaches) | Vehicles per day on higher volume minor-street approach (one direction only) |
| Number of lanes for moving traffic on each approach.<br>Major Street / Minor Street | Urban / Rural | Urban / Rural |
| 1 / 1 | 8,000 / 5,600 | 2,400 / 1,680 |
| 2 + 10,250 / 1 500 | 9,600 / 6,720 * | 2,400 / 1,680 |
| 2 + / 2 + | 9,600 / 6,720 | 3,200 / 2,240 |
| 1 / 2 + | 8,000 / 5,600 | 3,200 / 2,240 |
| 2. Interruption of Continuous traffic<br>Satisfied Not Satisfied XX | Vehicles per day on major street (both approaches) | Vehicles per day on higher volume minor-street approach (one direction only) |
| Number of lanes for moving traffic on each approach.<br>Major Street / Minor Street | Urban / Rural | Urban / Rural |
| 1 / 1 | 12,000 / 8,400 | 1,200 / 850 |
| 2 + 10,250 / 1 500 | 14,400 / 10,080 * | 1,200 / 850 |
| 2 + / 2 + | 14,000 / 10,080 | 1,600 / 1,120 |
| 1 / 2 + | 12,000 / 8,400 | 1,600 / 1,120 |
| 3. Combination<br>Satisfied Not Satisfied XX<br>No one warrant satisfied but following warrants fulfilled 80% or more..<br>30% 59%<br>1 2 | 2 Warrants | 2 Warrants |

NOTES: 1. Heavier left turn movement from the major street may be included with minor street volume if a separate signal phase is to be provided for the left-turn movement.

2. To be used only for NEW INTERSECTIONS or other locations where actual traffic volumes cannot be counted.

# APPENDIX D

TRAFFIC SIGNAL WARRANTS

United Rock Product Corporation
Year 2025 Without Project
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 New Buena Vista-Bateman Ave. (NS) / Arrow Hwy (EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.872
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 88 Level Of Service: D

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Protected | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 0 | 0 0 | 1 0 | 0 | 0 1 | 1 0 | 2 | 0 0 | 0 0 | 2 | 0 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 324 | 0 | 246 | 287 | 614 | 0 | 0 | 380 | 143 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 460 | 0 | 349 | 408 | 872 | 0 | 0 | 540 | 203 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 34 | 46 | 156 | 0 | 0 | 104 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 460 | 0 | 383 | 454 | 1028 | 0 | 0 | 644 | 203 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 460 | 0 | 383 | 454 | 1028 | 0 | 0 | 644 | 203 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 460 | 0 | 383 | 454 | 1028 | 0 | 0 | 644 | 203 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 460 | 0 | 383 | 454 | 1028 | 0 | 0 | 644 | 203 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 2.00 | 0.00 | 0.00 | 2.00 | 1.00 |
| Final Sat.: | 0 | 0 | 0 | 1600 | 0 | 1600 | 1600 | 3200 | 0 | 0 | 3200 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.29 | 0.00 | 0.24 | 0.28 | 0.32 | 0.00 | 0.00 | 0.20 | 0.13 |
| Crit Moves: | | | | **** | | | **** | | | | **** | |

United Rock Product Corporation
Year 2025 Without Project
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

**********

Intersection #13 Rivergrade Rd. (NS) / Arrow Hwy (EW)

**********

Cycle (sec): 100 Critical Vol./Cap. (X): 0.603
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 40 Level Of Service: B

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 2 0 | 0 | 0 1 | 0 | 0 0 | 0 0 | 0 | 0 2 | 0 1 | 1 0 | 2 | 0 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 156 | 0 | 22 | 0 | 0 | 0 | 0 | 934 | 146 | 14 | 505 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 222 | 0 | 31 | 0 | 0 | 0 | 0 | 1326 | 207 | 20 | 717 | 0 |
| Added Vol: | -2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -2 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 220 | 0 | 31 | 0 | 0 | 0 | 0 | 1326 | 207 | 20 | 715 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 220 | 0 | 31 | 0 | 0 | 0 | 0 | 1326 | 207 | 20 | 715 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 220 | 0 | 31 | 0 | 0 | 0 | 0 | 1326 | 207 | 20 | 715 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 220 | 0 | 31 | 0 | 0 | 0 | 0 | 1326 | 207 | 20 | 715 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 0.90 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 2.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 2880 | 0 | 1600 | 0 | 0 | 0 | 0 | 3200 | 1600 | 1600 | 3200 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.08 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.41 | 0.13 | 0.01 | 0.22 | 0.00 |
| Crit Moves: | **** | | | | | | | **** | | **** | | |

**********

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United Rock Product Corporation
Year 2025 Without Project
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 I-605 SB Off Ramp (NS) / Arrow Hwy (EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.818
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 71 Level Of Service: D

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Ignore | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 0 | 0 0 | 1 | 0 0 | 0 1 | 0 | 0 2 | 0 0 | 0 | 0 2 | 0 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 274 | 0 | 255 | 0 | 959 | 0 | 0 | 306 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 389 | 0 | 362 | 0 | 1362 | 0 | 0 | 435 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 119 | 0 | 158 | 0 | 0 | -2 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 389 | 0 | 481 | 0 | 1520 | 0 | 0 | 433 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 389 | 0 | 0 | 0 | 1520 | 0 | 0 | 433 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 389 | 0 | 0 | 0 | 1520 | 0 | 0 | 433 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 389 | 0 | 0 | 0 | 1520 | 0 | 0 | 433 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.00 | 2.00 | 0.00 | 0.00 | 2.00 | 0.00 |
| Final Sat.: | 0 | 0 | 0 | 1600 | 0 | 1600 | 0 | 3200 | 0 | 0 | 3200 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.24 | 0.00 | 0.00 | 0.00 | 0.47 | 0.00 | 0.00 | 0.14 | 0.00 |
| Crit Moves: | | | | **** | | | | **** | | **** | | |

United Rock Product Corporation
Year 2025 Without Project
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

**********

Intersection #10 I-605 NB Off Ramp (NS) / Live Oak Ave. (EW)

**********

Average Delay (sec/veh): 241.6 Worst Case Level Of Service: F[887.5]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 0 0 1 | | | 0 0 0 0 1 | | | 0 0 2 0 0 | | | 0 0 2 0 0 | | |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 478 | 0 | 0 | 629 | 0 | 745 | 0 | 0 | 1004 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 679 | 0 | 0 | 893 | 0 | 1058 | 0 | 0 | 1426 | 0 |
| Added Vol: | 0 | 0 | 5 | 0 | 0 | 108 | 0 | 128 | 0 | 0 | 125 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 684 | 0 | 0 | 1001 | 0 | 1186 | 0 | 0 | 1551 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 684 | 0 | 0 | 1001 | 0 | 1186 | 0 | 0 | 1551 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 684 | 0 | 0 | 1001 | 0 | 1186 | 0 | 0 | 1551 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | 6.9 | xxxxx | xxxx | 6.9 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | 3.3 | xxxxx | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | 593 | xxxx | xxxx | 775 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | 454 | xxxx | xxxx | 345 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | 454 | xxxx | xxxx | 345 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | 1.51 | xxxx | xxxx | 2.90 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | 35.9 | xxxxx | xxxx | 86.4 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | 262.4 | xxxxx | xxxx | 887.5 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | F | * | * | F | * | * | * | * | * | * |
| Movement: | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT | LT - | LTR - | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | | 262.4 | | | 887.5 | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | F | | | F | | | * | | | * | |

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United Rock Product Corporation
Year 2025 Without Project
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 I-605 SB On Ramp (NS) / Live Oak Ave. (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 1.186 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 100 | Level Of Service: | F |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Protected | | | Protected | | | Permitted | | | Protected | | |
| Rights: | Include | | | Include | | | Ignore | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 0 0 | 0 | 0 0 | 0 0 | 0 | 0 0 | 2 0 | 1 | 1 0 | 2 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 781 | 731 | 786 | 846 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1109 | 1038 | 1116 | 1201 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 128 | 142 | 3 | 230 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1237 | 1180 | 1119 | 1431 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1237 | 0 | 1119 | 1431 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1237 | 0 | 1119 | 1431 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1237 | 0 | 1119 | 1431 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3200 | 1600 | 1600 | 3200 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.39 | 0.00 | 0.70 | 0.45 | 0.00 |
| Crit Moves: | | | | | | | | **** | | **** | | |

United Rock Product Corporation
Year 2025 Without Project
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Tifal Ave. (NS) / Buena Vista St. (EW)

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: B[ 14.9]

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 0 | 0 0 | | 0 0 | 1! 0 | 0 | 1 0 | 2 0 | 0 | 0 0 | 2 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 18 | 0 | 11 | 13 | 271 | 0 | 0 | 363 | 18 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 26 | 0 | 16 | 18 | 385 | 0 | 0 | 515 | 26 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | -1 | -1 | 47 | 0 | 0 | 35 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 26 | 0 | 15 | 17 | 432 | 0 | 0 | 550 | 26 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 26 | 0 | 15 | 17 | 432 | 0 | 0 | 550 | 26 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 26 | 0 | 15 | 17 | 432 | 0 | 0 | 550 | 26 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.8 | xxxx | 6.9 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 801 | xxxx | 275 | 576 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 326 | xxxx | 728 | 1007 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 322 | xxxx | 728 | 1007 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | 0.08 | xxxx | 0.02 | 0.02 | xxxx | xxxx | xxxx | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 0.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.6 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | * | A | * | * | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | 404 | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | 0.3 | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | 14.9 | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | B | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 14.9 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | B | | | * | | | * | | |



C21

United Rock Product Corporation
Year 2025 Without Project
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #7 Bateman Ave. (NS) / Buena Vista St. (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 0.691 |
| Loss Time (sec): | 0 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 47 | Level Of Service: | B |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 1 0 | 1 | 0 1 | 0 | 1 0 | 0 1 | 0 | 1 1 | 0 1 | 0 | 1 1 | 0 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 58 | 96 | 276 | 15 | 129 | 15 | 14 | 35 | 72 | 359 | 15 | 14 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 82 | 136 | 392 | 21 | 183 | 21 | 20 | 50 | 102 | 510 | 21 | 20 |
| Added Vol: | 0 | 0 | 46 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 82 | 136 | 438 | 21 | 183 | 21 | 20 | 50 | 102 | 544 | 21 | 20 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 82 | 136 | 438 | 21 | 183 | 21 | 20 | 50 | 102 | 544 | 21 | 20 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 82 | 136 | 438 | 21 | 183 | 21 | 20 | 50 | 102 | 544 | 21 | 20 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 82 | 136 | 438 | 21 | 183 | 21 | 20 | 50 | 102 | 544 | 21 | 20 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 1.00 | 1.00 | 0.10 | 0.90 | 1.00 | 0.57 | 1.43 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1600 | 1600 | 1600 | 167 | 1433 | 1600 | 914 | 2286 | 1600 | 1600 | 1600 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.05 | 0.09 | 0.27 | 0.01 | 0.13 | 0.01 | 0.01 | 0.02 | 0.06 | 0.34 | 0.01 | 0.01 |
| Crit Moves: | | | **** | **** | | | | | **** | **** | | |

United Rock Product Corporation
Year 2025 Without Project
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

**********

Intersection #6 Buena Vista St. (NS) / Alpha St. (EW)

**********

Average Delay (sec/veh): 5.2 Worst Case Level Of Service: A[ 9.5]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Uncontrolled | | | Uncontrolled | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 0 | 0 0 | | 1 0 | 0 0 | 1 | 1 0 | 0 0 | 0 | 0 0 | 0 1 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 17 | 0 | 71 | 105 | 0 | 0 | 0 | 1 | 16 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 24 | 0 | 101 | 149 | 0 | 0 | 0 | 1 | 23 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 24 | 0 | 101 | 149 | 0 | 0 | 0 | 1 | 23 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 24 | 0 | 101 | 149 | 0 | 0 | 0 | 1 | 23 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 24 | 0 | 101 | 149 | 0 | 0 | 0 | 1 | 23 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx | 7.1 | xxxx | xxxxx | xxxxx | 6.5 | 6.2 |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx | 3.5 | xxxx | xxxxx | xxxxx | 4.0 | 3.3 |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 0 | xxxx | xxxxx | 49 | xxxx | xxxxx | xxxx | 149 | 0 |
| Potent Cap.: | xxxx | xxxx | xxxxx | 0 | xxxx | xxxxx | 956 | xxxx | xxxxx | xxxx | 746 | 0 |
| Move Cap.: | xxxx | xxxx | xxxxx | 0 | xxxx | xxxxx | 955 | xxxx | xxxxx | xxxx | 746 | 0 |
| Volume/Cap: | xxxx | xxxx | xxxx | 0.00 | xxxx | xxxx | 0.16 | xxxx | xxxx | xxxx | 0.00 | 0.00 |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | 0.0 | xxxx | xxxxx | 0.6 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | 0.0 | xxxx | xxxxx | 9.5 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | A | * | * | A | * | * | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | 12684 |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 0.0 |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | 5.3 |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | A |
| ApproachDel: | xxxxxx | | | xxxxxx | | | 9.5 | | | 5.3 | | |
| ApproachLOS: | * | | | * | | | A | | | A | | |

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United Rock Product Corporation
Year 2025 Without Project
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #5 Live Oak Ave. (NS) / Arrow Hwy (EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 1.083
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: F

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Protected | | |
| Rights: | Include | | | Include | | | Ignore | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 2 0 | 0 0 | 1 | 0 0 | 0 0 | 0 | 0 0 | 2 0 | 2 | 1 0 | 2 0 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 603 | 0 | 90 | 0 | 0 | 0 | 0 | 802 | 1288 | 185 | 432 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 856 | 0 | 128 | 0 | 0 | 0 | 0 | 1139 | 1829 | 263 | 613 | 0 |
| Added Vol: | 274 | 0 | 103 | 0 | 0 | 0 | 0 | 98 | 240 | 63 | 75 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 1130 | 0 | 231 | 0 | 0 | 0 | 0 | 1237 | 2069 | 326 | 688 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 1130 | 0 | 231 | 0 | 0 | 0 | 0 | 1237 | 0 | 326 | 688 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 1130 | 0 | 231 | 0 | 0 | 0 | 0 | 1237 | 0 | 326 | 688 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 1130 | 0 | 231 | 0 | 0 | 0 | 0 | 1237 | 0 | 326 | 688 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 0.90 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 2.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 2.00 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 2880 | 0 | 1600 | 0 | 0 | 0 | 0 | 3200 | 3200 | 1600 | 3200 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.39 | 0.00 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.39 | 0.00 | 0.20 | 0.22 | 0.00 |
| Crit Moves: | **** | | | | | | | **** | | **** | | |

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United Rock Product Corporation
Year 2025 Without Project
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #4 Longden Ave. (NS) / Live Oak Ave. (EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 1.195
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: F

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Ignore | | | Include | | | Ignore | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 1 0 | 0 | 0 | 1 1 | 0 | 1 0 | 1 0 | 1 | 1 0 | 1 0 | 2 | 0 2 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 1 | 0 | 0 | 1098 | 1 | 12 | 3 | 1129 | 0 | 0 | 671 | 448 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 1 | 0 | 0 | 1559 | 1 | 17 | 4 | 1603 | 0 | 0 | 953 | 636 |
| Added Vol: | 0 | 0 | 0 | 61 | 0 | 0 | 0 | 278 | 0 | 0 | 268 | 80 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 1 | 0 | 0 | 1620 | 1 | 17 | 4 | 1881 | 0 | 0 | 1221 | 716 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| PHF Volume: | 1 | 0 | 0 | 1620 | 1 | 0 | 4 | 1881 | 0 | 0 | 1221 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 1 | 0 | 0 | 1620 | 1 | 0 | 4 | 1881 | 0 | 0 | 1221 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| Final Vol.: | 1 | 0 | 0 | 1620 | 1 | 0 | 4 | 1881 | 0 | 0 | 1221 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 0.00 | 0.00 | 2.00 | 1.00 | 0.00 | 1.00 | 2.00 | 0.00 | 1.00 | 2.00 | 2.00 |
| Final Sat.: | 1600 | 0 | 0 | 3200 | 1600 | 0 | 1600 | 3200 | 0 | 1600 | 3200 | 3200 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.51 | 0.00 | 0.00 | 0.00 | 0.59 | 0.00 | 0.00 | 0.38 | 0.00 |
| Crit Moves: | **** | | | **** | | | | **** | | **** | | |

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United Rock Product Corporation
Year 2025 Without Project
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #2 Myrtle Ave. (NS) / Live Oak Ave. (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 1.760 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxx |
| Optimal Cycle: | 100 | Level Of Service: | F |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Protected | | | Protected | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 1 0 | 2 0 | 1 | 1 0 | 2 0 | 1 | 1 0 | 2 0 | 1 | 1 0 | 2 0 | 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 285 | 1022 | 266 | 112 | 1062 | 161 | 278 | 1379 | 404 | 154 | 770 | 128 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 405 | 1451 | 378 | 159 | 1508 | 229 | 395 | 1958 | 574 | 219 | 1093 | 182 |
| Added Vol: | 42 | 61 | 236 | 0 | 45 | 0 | 0 | 42 | 30 | 214 | 54 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 447 | 1512 | 614 | 159 | 1553 | 229 | 395 | 2000 | 604 | 433 | 1147 | 182 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 447 | 1512 | 614 | 159 | 1553 | 229 | 395 | 2000 | 604 | 433 | 1147 | 182 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 447 | 1512 | 614 | 159 | 1553 | 229 | 395 | 2000 | 604 | 433 | 1147 | 182 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 447 | 1512 | 614 | 159 | 1553 | 229 | 395 | 2000 | 604 | 433 | 1147 | 182 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.28 | 0.47 | 0.38 | 0.10 | 0.49 | 0.14 | 0.25 | 0.63 | 0.38 | 0.27 | 0.36 | 0.11 |
| Crit Moves: | **** | | | | **** | | | **** | | | **** | |

United Rock Product Corporation
Year 2025 Without Project
PM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Myrtle Ave (NS) / Longden Ave. (EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 1.432
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: F

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 1 0 | 2 0 | 1 | 1 0 | 2 0 | 1 | 0 1 | 1 0 | 1 | 0 1 | 0 1 | 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 132 | 1254 | 53 | 336 | 1105 | 95 | 116 | 583 | 131 | 77 | 374 | 248 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 187 | 1781 | 75 | 477 | 1569 | 135 | 165 | 828 | 186 | 109 | 531 | 352 |
| Added Vol: | 20 | 41 | 0 | 41 | 30 | 0 | 0 | 20 | 15 | 0 | 27 | 54 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 207 | 1822 | 75 | 518 | 1599 | 135 | 165 | 848 | 201 | 109 | 558 | 406 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 207 | 1822 | 75 | 518 | 1599 | 135 | 165 | 848 | 201 | 109 | 558 | 406 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 207 | 1822 | 75 | 518 | 1599 | 135 | 165 | 848 | 201 | 109 | 558 | 406 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 207 | 1822 | 75 | 518 | 1599 | 135 | 165 | 848 | 201 | 109 | 558 | 406 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 0.33 | 1.67 | 1.00 | 0.20 | 1.04 | 0.76 |
| Final Sat.: | 1600 | 3200 | 1600 | 1600 | 3200 | 1600 | 521 | 2679 | 1600 | 326 | 1663 | 1211 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.13 | 0.57 | 0.05 | 0.32 | 0.50 | 0.08 | 0.10 | 0.32 | 0.13 | 0.07 | 0.34 | 0.34 |
| Crit Moves: | | **** | | **** | | | **** | | | | **** | |

United Rock Product Corporation
Year 2025 Without Project
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #23 New Buena Vista-Bateman Ave. (NS) / Arrow Hwy (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 1.084 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 100 | Level Of Service: | F |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Protected | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 0 | 0 0 | 1 0 | 0 | 0 1 | 1 0 | 2 | 0 0 | 0 0 | 2 | 0 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 97 | 0 | 168 | 169 | 351 | 0 | 0 | 1424 | 343 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 138 | 0 | 239 | 240 | 498 | 0 | 0 | 2022 | 487 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 31 | 11 | 37 | 0 | 0 | 87 | -1 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 138 | 0 | 270 | 251 | 535 | 0 | 0 | 2109 | 486 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 138 | 0 | 270 | 251 | 535 | 0 | 0 | 2109 | 486 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 138 | 0 | 270 | 251 | 535 | 0 | 0 | 2109 | 486 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 138 | 0 | 270 | 251 | 535 | 0 | 0 | 2109 | 486 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 2.00 | 0.00 | 0.00 | 2.00 | 1.00 |
| Final Sat.: | 0 | 0 | 0 | 1600 | 0 | 1600 | 1600 | 3200 | 0 | 0 | 3200 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.09 | 0.00 | 0.17 | 0.16 | 0.17 | 0.00 | 0.00 | 0.66 | 0.30 |
| Crit Moves: | | | | | | **** | **** | | | | **** | |

United Rock Product Corporation
Year 2025 Without Project
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #13 Rivergrade Rd. (NS) / Arrow Hwy (EW)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.894
Loss Time (sec): 10 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 97 Level Of Service: D

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 2 0 0 | 0 | 1 | 0 0 | 0 | 0 0 | 0 | 0 2 | 0 1 | 1 0 | 2 | 0 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 187 | 0 | 30 | 0 | 0 | 0 | 0 | 422 | 190 | 22 | 1590 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 266 | 0 | 43 | 0 | 0 | 0 | 0 | 599 | 270 | 31 | 2258 | 0 |
| Added Vol: | -5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -7 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 261 | 0 | 43 | 0 | 0 | 0 | 0 | 599 | 270 | 31 | 2251 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 261 | 0 | 43 | 0 | 0 | 0 | 0 | 599 | 270 | 31 | 2251 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 261 | 0 | 43 | 0 | 0 | 0 | 0 | 599 | 270 | 31 | 2251 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 261 | 0 | 43 | 0 | 0 | 0 | 0 | 599 | 270 | 31 | 2251 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 0.90 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 2.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 2880 | 0 | 1600 | 0 | 0 | 0 | 0 | 3200 | 1600 | 1600 | 3200 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.09 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.19 | 0.17 | 0.02 | 0.70 | 0.00 |
| Crit Moves: | **** | | | | | | **** | | | | **** | |

United Rock Product Corporation
Year 2025 Without Project
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #11 I-605 SB Off Ramp (NS) / Arrow Hwy (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 0.963 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 100 | Level Of Service: | E |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Split Phase | | | Split Phase | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Ignore | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 0 | 0 0 | 1 0 | 0 | 0 1 | 0 0 | 2 | 0 0 | 0 0 | 2 | 0 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 390 | 0 | 613 | 0 | 496 | 0 | 0 | 1172 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 554 | 0 | 870 | 0 | 704 | 0 | 0 | 1664 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 98 | 0 | 44 | 0 | 0 | -9 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 554 | 0 | 968 | 0 | 748 | 0 | 0 | 1655 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 554 | 0 | 0 | 0 | 748 | 0 | 0 | 1655 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 554 | 0 | 0 | 0 | 748 | 0 | 0 | 1655 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 554 | 0 | 0 | 0 | 748 | 0 | 0 | 1655 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 0.00 | 2.00 | 0.00 | 0.00 | 2.00 | 0.00 |
| Final Sat.: | 0 | 0 | 0 | 1600 | 0 | 1600 | 0 | 3200 | 0 | 0 | 3200 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.35 | 0.00 | 0.00 | 0.00 | 0.23 | 0.00 | 0.00 | 0.52 | 0.00 |
| Crit Moves: | | | | **** | | | **** | | | | **** | |

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Year 2025 Without Project
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

**********

Intersection #10 I-605 NB Off Ramp (NS) / Live Oak Ave. (EW)

**********

Average Delay (sec/veh): 317.0 Worst Case Level Of Service: F[1115.9]

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L - T - R | | | L - T - R | | | L - T - R | | | L - T - R | | |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 0 0 1 | | | 0 0 0 0 1 | | | 0 0 2 0 0 | | | 0 0 2 0 0 | | |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 501 | 0 | 0 | 705 | 0 | 386 | 0 | 0 | 1091 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 711 | 0 | 0 | 1001 | 0 | 548 | 0 | 0 | 1549 | 0 |
| Added Vol: | 0 | 0 | 2 | 0 | 0 | 112 | 0 | 70 | 0 | 0 | 74 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 713 | 0 | 0 | 1113 | 0 | 618 | 0 | 0 | 1623 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 713 | 0 | 0 | 1113 | 0 | 618 | 0 | 0 | 1623 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 713 | 0 | 0 | 1113 | 0 | 618 | 0 | 0 | 1623 | 0 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | 6.9 | xxxxx | xxxx | 6.9 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | 3.3 | xxxxx | xxxx | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | 309 | xxxx | xxxx | 812 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | 693 | xxxx | xxxx | 326 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | 693 | xxxx | xxxx | 326 | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | 1.03 | xxxx | xxxx | 3.41 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | 17.7 | xxxxx | xxxx | 102.4 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | 66.4 | xxxxx | xxxx | 1116 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | F | * | * | F | * | * | * | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | * | * | * | * | * | * | * | * |
| ApproachDel: | | 66.4 | | | 1115.9 | | | xxxxxx | | | xxxxxx | |
| ApproachLOS: | | F | | | F | | | * | | | * | |



C11

United Rock Product Corporation
Year 2025 Without Project
AM Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #9 I-605 SB On Ramp (NS) / Live Oak Ave. (EW)

| | | | |
|---|---|---|---|
| Cycle (sec): | 100 | Critical Vol./Cap. (X): | 0.916 |
| Loss Time (sec): | 10 (Y+R = 4 sec) | Average Delay (sec/veh): | xxxxxx |
| Optimal Cycle: | 100 | Level Of Service: | E |

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Protected | | | Protected | | | Permitted | | | Protected | | |
| Rights: | Include | | | Include | | | Ignore | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 0 0 | 0 | 0 0 | 0 0 | 0 | 0 0 | 0 0 | 2 | 0 1 | 1 0 | 2 | 0 0 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 390 | 644 | 698 | 1103 | 0 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 554 | 914 | 991 | 1566 | 0 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 45 | 2 | 184 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 624 | 959 | 993 | 1750 | 0 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 624 | 0 | 993 | 1750 | 0 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 624 | 0 | 993 | 1750 | 0 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 624 | 0 | 993 | 1750 | 0 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3200 | 1600 | 1600 | 3200 | 0 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.19 | 0.00 | 0.62 | 0.55 | 0.00 |
| Crit Moves: | | | | | | | | **** | | **** | | |

United Rock Product Corporation
Year 2025 Without Project
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Tifal Ave. (NS) / Buena Vista St. (EW)

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: B[ 14.5]

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Stop Sign | | | Stop Sign | | | Uncontrolled | | | Uncontrolled | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 | 0 | 0 0 | 0 0 | 1! | 0 0 | 1 0 | 2 | 0 0 | 0 0 | 2 | 0 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 21 | 0 | 15 | 23 | 526 | 0 | 0 | 227 | 29 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 30 | 0 | 21 | 33 | 747 | 0 | 0 | 322 | 41 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | -1 | -1 | 14 | 0 | 0 | 32 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 30 | 0 | 20 | 32 | 761 | 0 | 0 | 354 | 41 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 30 | 0 | 20 | 32 | 761 | 0 | 0 | 354 | 41 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 30 | 0 | 20 | 32 | 761 | 0 | 0 | 354 | 41 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 6.8 | xxxx | 6.9 | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 3.5 | xxxx | 3.3 | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 798 | xxxx | 177 | 396 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 327 | xxxx | 842 | 1174 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.: | xxxx | xxxx | xxxxx | 321 | xxxx | 842 | 1174 | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap: | xxxx | xxxx | xxxx | 0.09 | xxxx | 0.02 | 0.03 | xxxx | xxxx | xxxx | xxxx | xxxx |

| Level Of Service Module: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Queue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 0.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 8.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | * | * | * | A | * | * | * | * | * |
| Movement: | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT | LT | LTR | RT |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | 428 | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | 0.4 | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | 14.5 | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Shared LOS: | * | * | * | * | B | * | * | * | * | * | * | * |
| ApproachDel: | xxxxxx | | | 14.5 | | | xxxxxx | | | xxxxxx | | |
| ApproachLOS: | * | | | B | | | * | | | * | | |

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Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

**********

Intersection #7 Bateman Ave. (NS) / Buena Vista St. (EW)

**********

Cycle (sec): 100 Critical Vol./Cap. (X): 0.630
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 39 Level Of Service: B

**********

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Permitted | | | Permitted | | | Permitted | | | Permitted | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Min. Green: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lanes: | 1 0 | 1 | 0 1 | 0 | 1 0 | 0 1 | 0 | 1 1 | 0 1 | 0 | 1 1 | 0 1 |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 77 | 80 | 355 | 93 | 35 | 10 | 7 | 39 | 56 | 175 | 47 | 30 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 109 | 114 | 504 | 132 | 50 | 14 | 10 | 55 | 80 | 249 | 67 | 43 |
| Added Vol: | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 109 | 114 | 517 | 132 | 50 | 14 | 10 | 55 | 80 | 280 | 67 | 43 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 109 | 114 | 517 | 132 | 50 | 14 | 10 | 55 | 80 | 280 | 67 | 43 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced Vol: | 109 | 114 | 517 | 132 | 50 | 14 | 10 | 55 | 80 | 280 | 67 | 43 |
| PCE Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Vol.: | 109 | 114 | 517 | 132 | 50 | 14 | 10 | 55 | 80 | 280 | 67 | 43 |
| Saturation Flow Module: | | | | | | | | | | | | |
| Sat/Lane: | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 | 1600 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes: | 1.00 | 1.00 | 1.00 | 0.73 | 0.27 | 1.00 | 0.30 | 1.70 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1600 | 1600 | 1600 | 1163 | 438 | 1600 | 487 | 2713 | 1600 | 1600 | 1600 | 1600 |
| Capacity Analysis Module: | | | | | | | | | | | | |
| Vol/Sat: | 0.07 | 0.07 | 0.32 | 0.08 | 0.11 | 0.01 | 0.01 | 0.02 | 0.05 | 0.17 | 0.04 | 0.03 |
| Crit Moves: | | | **** | **** | | | | | **** | **** | | |

**********

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 Buena Vista St. (NS) / Alpha St. (EW)

Average Delay (sec/veh): 3.2 Worst Case Level Of Service: A[ 9.6]

| Approach: | North Bound | | | South Bound | | | East Bound | | | West Bound | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movement: | L | T | R | L | T | R | L | T | R | L | T | R |
| Control: | Uncontrolled | | | Uncontrolled | | | Stop Sign | | | Stop Sign | | |
| Rights: | Include | | | Include | | | Include | | | Include | | |
| Lanes: | 0 0 0 0 0 | | | 1 0 0 0 1 | | | 0 1 0 0 0 | | | 0 0 0 1 0 | | |
| Volume Module: | | | | | | | | | | | | |
| Base Vol: | 0 | 0 | 0 | 47 | 0 | 77 | 44 | 1 | 0 | 0 | 1 | 58 |
| Growth Adj: | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| Initial Bse: | 0 | 0 | 0 | 67 | 0 | 109 | 62 | 1 | 0 | 0 | 1 | 82 |
| Added Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PasserByVol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Initial Fut: | 0 | 0 | 0 | 67 | 0 | 109 | 62 | 1 | 0 | 0 | 1 | 82 |
| User Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Volume: | 0 | 0 | 0 | 67 | 0 | 109 | 62 | 1 | 0 | 0 | 1 | 82 |
| Reduct Vol: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Final Vol.: | 0 | 0 | 0 | 67 | 0 | 109 | 62 | 1 | 0 | 0 | 1 | 82 |
| Critical Gap Module: | | | | | | | | | | | | |
| Critical Gp: | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx | 7.1 | 6.5 | xxxxx | xxxxx | 6.5 | 6.2 |
| FollowUpTim: | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx | 3.5 | 4.0 | xxxxx | xxxxx | 4.0 | 3.3 |
| Capacity Module: | | | | | | | | | | | | |
| Cnflict Vol: | xxxx | xxxx | xxxxx | 0 | xxxx | xxxxx | 134 | 133 | xxxxx | xxxx | 243 | 0 |
| Potent Cap.: | xxxx | xxxx | xxxxx | 0 | xxxx | xxxxx | 842 | 761 | xxxxx | xxxx | 662 | 0 |
| Move Cap.: | xxxx | xxxx | xxxxx | 0 | xxxx | xxxxx | 841 | 761 | xxxxx | xxxx | 662 | 0 |
| Volume/Cap: | xxxx | xxxx | xxxx | 0.00 | xxxx | xxxx | 0.07 | 0.00 | xxxx | xxxx | 0.00 | 0.00 |
| Level Of Service Module: | | | | | | | | | | | | |
| Queue: | xxxxx | xxxx | xxxxx | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| Stopped Del: | xxxxx | xxxx | xxxxx | 0.0 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| LOS by Move: | * | * | * | A | * | * | * | * | * | * | * | * |
| Movement: | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | | LT - LTR - RT | | |
| Shared Cap.: | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 839 | xxxx | xxxxx | xxxx | xxxx | 39080 |
| SharedQueue: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 0.2 | xxxx | xxxxx | xxxxx | xxxx | 0.0 |
| Shrd StpDel: | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 9.6 | xxxx | xxxxx | xxxxx | xxxx | 5.1 |
| Shared LOS: | * | * | * | * | * | * | A | * | * | * | * | A |
| ApproachDel: | xxxxxx | | | xxxxxx | | | 9.6 | | | 5.1 | | |
| ApproachLOS: | * | | | * | | | A | | | A | | |

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# APPENDIX H
## Air Quality Information

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# RULE 403 PM SAMPLING AROUND VARIOUS GRAVEL MINING OPERATIONS

**Report #MA2003-10**

Barry R. Wallerstein, D. Env.
Executive Officer

Carol Coy
Deputy Executive Officer
Engineering & Compliance

Peter Mieras
District Prosecutor

Edwin Pupka
Senior Enforcement Manager

Rudy Eden
Senior Laboratory & Analysis Manager

February 2004

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## EXECUTIVE SUMMARY

The South Coast Air Quality Management District (AQMD) initiated a comprehensive air monitoring study in May 2003 to characterize air quality impacts of gravel mining activities in the Irwindale area.

Air quality impacts from gravel mining activities are regulated at federal and local levels. Such health-protective regulations help reduce public exposure to the smaller fugitive dust particles ($PM_{10}$) that become suspended in the air as the result of these activities.

At the local level, fugitive dust is regulated under AQMD Rule 403 – Fugitive Dust. As such, $PM_{10}$ ambient monitoring of the gravel mining activities follows the monitoring procedures provided in Rule 403. This procedure is different from the traditional ambient monitoring conducted in various communities since Rule 403 establishes a $PM_{10}$ upwind/downwind differential concentration level that facilities must meet.

$PM_{10}$ sampling was conducted at six of the largest gravel mining operations in Irwindale and Azusa. Sampling was initiated in May 2003 at United Rock/Sully Miller, Hanson Aggregate, Calmat/Vulcan Materials, Robertson's Ready Mix, Nu-Way Live Oak, and All American Asphalt. Results of sampling completed at these facilities through October 2003 is provided in this report.

$PM_{10}$ samples collected in the study were analyzed for total mass. Additionally, wind monitoring was conducted to describe air mass movement during sampling to determine upwind and downwind locations.

At each of the locations three five-hour samples were collected to determine compliance with AQMD Rule 403. This rule requires any facility with the potential to produce fugitive dust to take measures to limit those emissions to no more than 50 $\mu g/m^3$, measured as the difference between upwind and downwind ambient concentrations collected over a five-hour interval at or near the facility fence line.

In addition to the Rule 403 sampling, AQMD staff examined the $PM_{10}$ ambient measurements at several of its monitoring stations located near the gravel mining sites with measurements at sites further away to determine any correlations to particulate emissions from the gravel mining activities.

### Key Findings

#### Rule 403 Monitoring

1. Monitoring completed at four of the six sites indicate upwind/downwind $PM_{10}$ measured differences greater than the 50 $\mu g/m^3$ threshold established by AQMD Rule 403. The exceedances led AQMD to issue Notices of

Violation to the responsible facilities located at the sites (see below for further action).

2. Levels measured at the Live Oak Ave. site were highest during the latter part of the sampling period. This suggests a large source of the measured $PM_{10}$ is re-entrained road dust and is consistent with track out observed at several locations.

3. Results of upwind sampling at Robertson's Ready Mix and All American Asphalt suggest that unpaved access roads and track out to public streets may contribute significantly to ambient PM levels.

$PM_{10}$ Ambient Measurements

Comparison of $PM_{10}$ ambient measurements at the AQMD Azusa monitoring station indicate that PM10 measurements at Azusa are higher generally compared to measurements at other stations located in nearby areas. In addition, during the two days that Rule 403 violations were found during this study, violating facilities may have contributed significantly to the Azusa station's monitoring data. (See Table 2)

Compliance Enforcement Activities

1. Notices of Violation (NOVs) were issued to four of the six facilities operating at the time Rule 403 monitoring was conducted. Specifically, United Rock/Sully Miller, Hanson Aggregate, Calmat/Vulcan Materials, and Nu-Way Live Oak were issued NOVs.

2. The AQMD is in discussions with the four facilities and has requested the facilities to consider measures to mitigate the violations.

Future Actions/Activities

1. AQMD staff is continuing its monitoring of gravel mining activities at other locations in the South Coast Air Basin as part of Rule 403.

2. AQMD Chief Prosecutor's Office is pursuing appropriate remedy for the violations that have occurred to date.

3. AQMD staff is working with the City of Irwindale to implement an Interagency Workplan to enhance communication among the stakeholders and provide a schedule to implement mitigation measures.

4. AQMD staff will continue efforts to inform local jurisdictions where such mining activities or other dust-related activities occur to take steps to reduce potential dust emissions as early as possible.

# 1.0 INTRODUCTION

Rule 403 requires facilities to limit $PM_{10}$ emission to less than 50 $\mu g/m^3$ as measured by an upwind/downwind differential. These measurements are made using the techniques referred to in the rule that follow Federal Reference Methods for the collection of $PM_{10}$ as specified by the U.S. Environmental Protection Agency (EPA).

In order to determine how sand and gravel operations may be affecting local air quality, six aggregate processors were initially selected for monitoring. Monitoring was conducted on at least three separate days at each location. All samples were processed according to established procedures and analyzed in the AQMD laboratory.

## 2.0 RULE 403 GRAVEL MINING OPERATION $PM_{10}$ SAMPLING

Irwindale and Azusa are located in the northeastern part of the South Coast Air Basin commonly referred to as the Foothills. These communities are bounded on the north by the San Gabriel Mountains, on the east by the San Bernardino Mountains, and on the southeast by the Santa Ana Mountains. To the south, the foothills open into the San Gabriel River Valley. Elevations in the Azusa area range from 560 to 700 feet above mean sea level (msl) and in the Irwindale area range from 320 to 560 feet above msl. The San Gabriel Mountains rise to elevations over 10,000 feet above msl on the north while the Santa Ana Mountains reach elevations over 5,000 feet above msl and the San Bernardino Mountains reach elevations over 10,000 feet above msl. Irwindale and Azusa can be characterized as gentle and moderate foothill terrain in relation to their surroundings. The San Gabriel River Basin and its associated flood plains are the major influence on the topography in these areas. The gravel pits mine rock and soil deposits left by the San Gabriel River.

Like most cities in the South Coast Air Basin, Irwindale and Azusa are influenced by the sea breeze. Winds are predominantly from the southwest when the sea breeze is the strongest. In spring cloudiness will prevail over the coastal cities for longer periods, whereas Irwindale and Azusa may have fewer or higher, thin clouds due to daytime radiation heating. June is the time when "June gloom" may predominate the South Coast Air Basin. Clouds are present most of the day over widespread areas and can be trapped by inversions that lift only with sufficient radiation heating. In summer, cloudiness is virtually nonexistent in the inland areas. The predominant weather pattern is a high pressure system centered over the eastern Pacific Ocean which envelopes the entire California coastal region. Surface heating during the day draws marine air into the inland regions and, cooling after sunset, slows the onshore flow eventually reversing it for a few hours. Autumn is one of the most stagnant weather periods in Southern California. Synoptic-scale weather systems are still too weak to produce cloudy and rainy weather when they penetrate the San Gabriel Mountain range. Sea breezes are commonly counteracted by strong high pressure systems that build up over interior deserts causing wide-spread stagnation. Occasionally, the clockwise circulation of wind around these high pressure systems produces an intense, dry, east wind, known locally as a Santa Ana. Santa Ana winds can last a few hours or several days. During Santa Ana winds the South Coast Basin experiences higher concentrations of particulates than when the ocean breeze is the main influence.

Monitoring was conducted upwind and downwind at each quarry/aggregate processor on three separate days for five hours each day from May 2003 through October 2003. Monitoring sites were selected on the basis of wind data, source locations, and requirements of Rule 403. General area site maps are shown in Figures 1 and 2.

The local climatological wind collected at the Buena Vista Channel indicated that the predominant air flow is southwesterly and airflow is moderate through the sampling

periods. Based on this information sites were selected both upwind and downwind and are shown for each aggregate processor. Specific monitoring locations are shown in Figures 3 through 6.

High volume $PM_{10}$ samplers and one wind monitoring system were installed at the following locations:

United Rock Products
1245 Arrow Highway
Site #1 Alpha Street (upwind)
Site #2 Buena Vista Street (downwind)
Site #3 Flood Control Channel (downwind)
**(see Figure 3)**

Calmat/Vulcan Materials
16001 Foothill Blvd
Site #1 Lario San Gabriel River Trail Park (upwind)
Site #2 Construction Workers School (downwind)
**(see Figure 5)**

Hanson Aggregates
13550 Live Oak Avenue
Site #1 Irwindale Speedway (downwind)
Site #2 Clark Street (upwind)
**(see Figure 4)**

Robertson's Ready Mix,
13623 Live Oak, Irwindale
Site #1 13530 Live Oak Ave. (upwind)
Site #2 Flood Control Channel (downwind)
**(see Figure 6)**

Nu-Way Live Oak
13620 Live Oak Ln.
Site #2 Flood Control Channel (upwind)
Site #3 Nu-Way Live Oak (downwind)
**(see Figure 6)**

All American Asphalt
13646 Live Oak
Site #3 Nu-Way Live Oak (upwind)
Site #4 All American Asphalt (downwind)
**(see Figure 6)**

## $PM_{10}$ Sampling Procedures

The $PM_{10}$ samplers used to collect the samples consist of a size-selective inlet (SSI) head, filter holder, blower motor, timer, flow controller with electronic probe, and Dickson airflow recorder. To collect suspended particles, the blower motor draws air through the SSI head onto an eight by ten inch quartz fiber filter. Air flows through the sampler and is maintained at a constant rate by an electronic probe which automatically adjusts motor speed to correct variations in line voltage, temperature, pressure and filter loading. The flow of air is calibrated and subsequently recorded on a paper chart recorder.

Once a sample has been collected it is returned to the laboratory, following chain-of-custody protocols, where $PM_{10}$ mass is determined. Ambient $PM_{10}$ mass is determined by subtracting the weight of the clean unsampled filter (measured in the laboratory prior to sampling) from the weight of the sampled filter containing the collected $PM_{10}$, to yield the mass of the $PM_{10}$ collected on the filter. This mass is then divided by the amount of air drawn through the filter to give the ambient concentration, expressed as mass per cubic meter ($\mu g/m^3$).

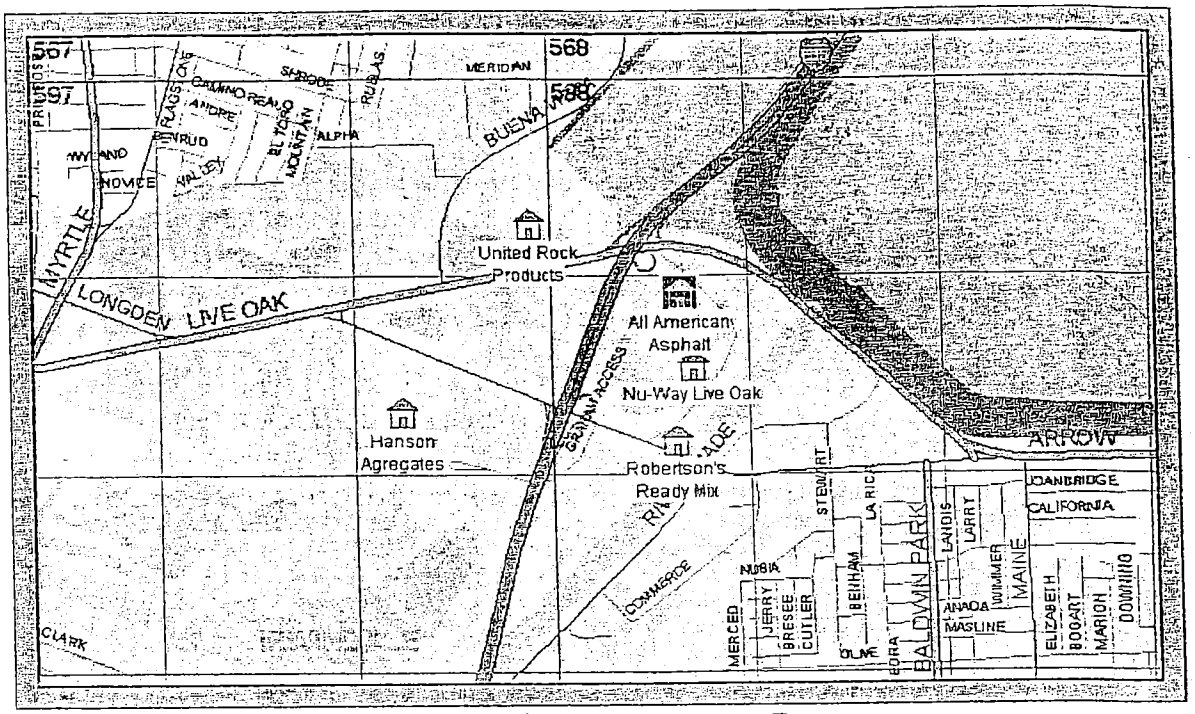



Figure 1. Irwindale Aggregate Processors

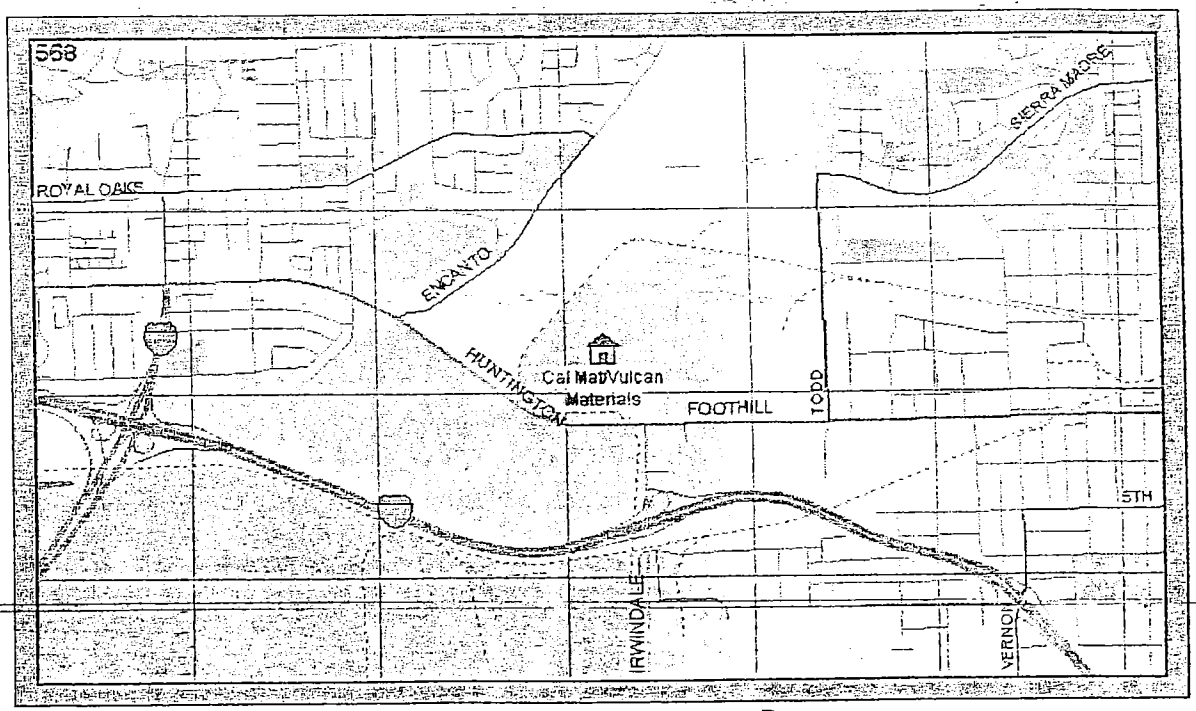



Figure 2. Azusa Aggregate Processor

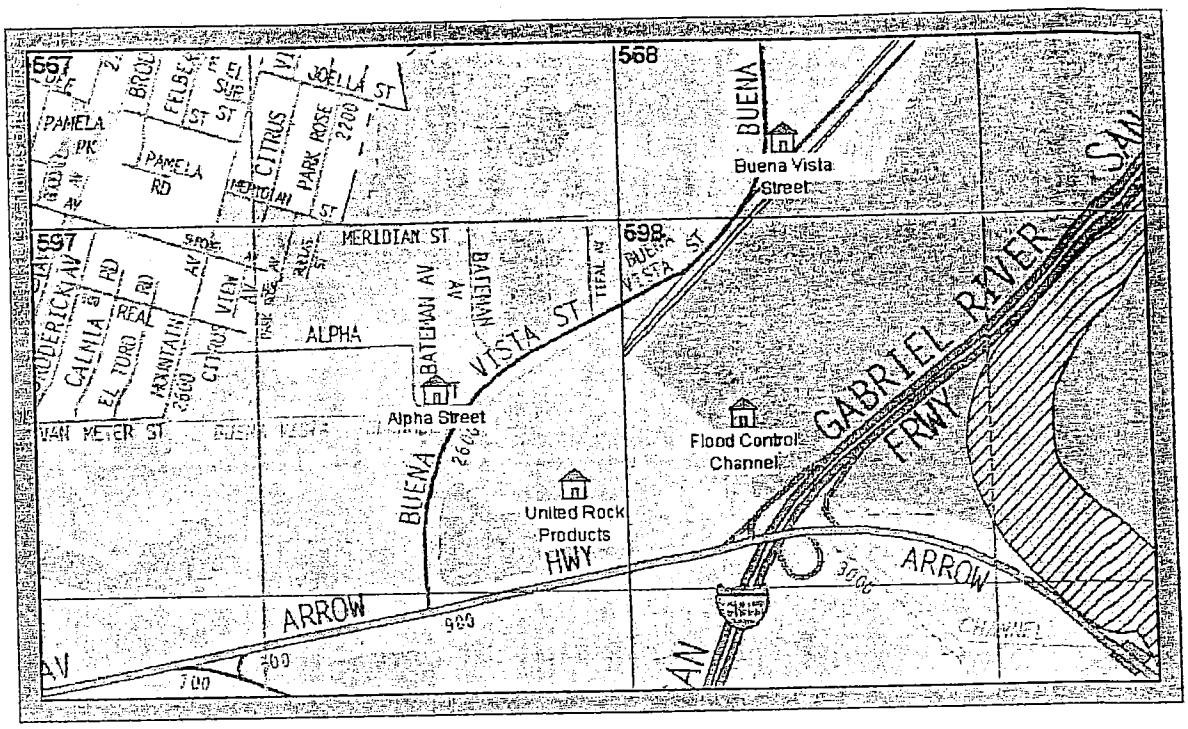



Figure 3. Sampling Locations for the United Rock/Sully Miller Operations May 22, 2003 and June 16, 2003

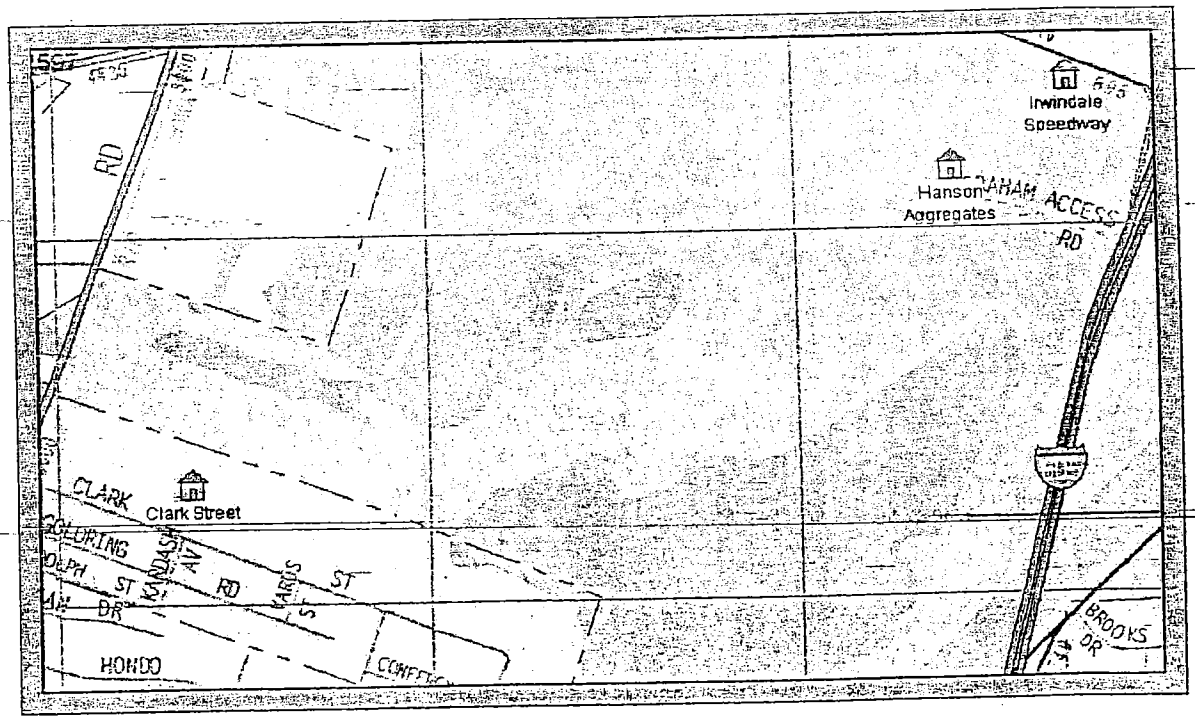



Figure 4. Sampling Locations for Hanson Aggregates - June 25, 30, and July 2, 2003

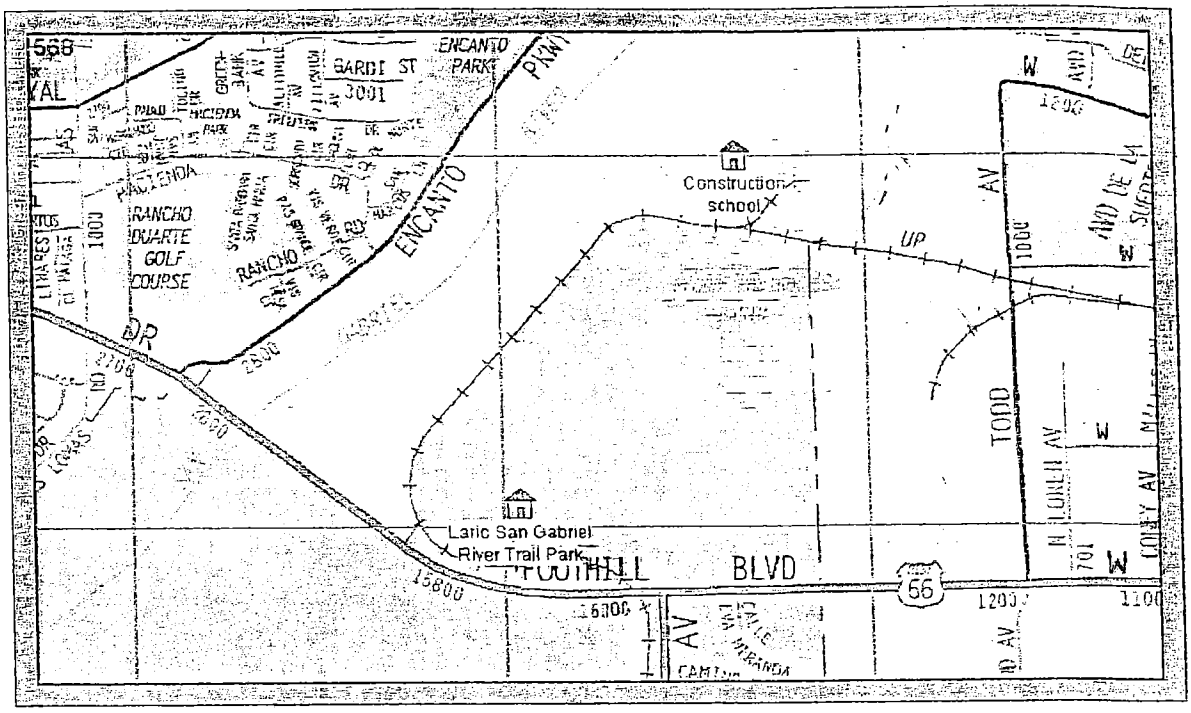



Figure 5. Sampling Locations for Calmat/Vulcan Materials - July 16, August 13 and 19, 2003

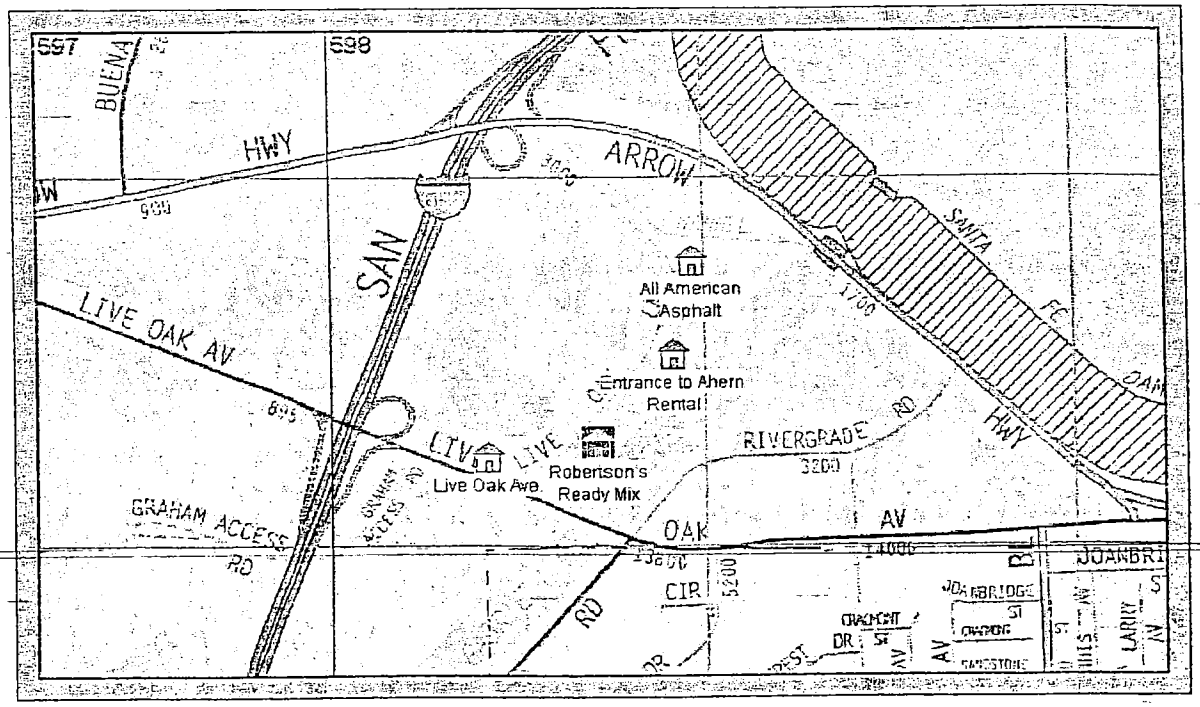



Figure 6. Sampling Locations for Robertson's Ready Mix/Nu-Way Live Oak/All American Asphalt - September 12, 18, 24, October 9 and 15, 2003

Since all of the sampling locations are in close proximity to one another, a wind system was installed on Flood Control property at the Buena Vista Channel in order to determine wind speed and direction for the area. The wind data collected is depicted in Figure 7 and indicates the predominant wind direction. Wind data specific to the sampling periods is located in Appendix A-1.

Wind data taken specific to the sampling period included in Appendix A-1 supports sampler placement at the selected sites. The wind data depicted is a picture of actual wind conditions at the time of sampling. This confirms that the sites selected were upwind and downwind. The chart depicts the direction that the wind is blowing from, as points of the compass.

## Monitoring Results

Table 1 shows the results of the monitoring at the six locations. Rule 403 limits a facility with the potential to release fugitive dust to no more than 50$\mu g/m^3$, measured as the difference between simultaneous up and down wind sampling over a 5 hour monitoring interval. However, since there is a potential 10% error band in the sampling and analysis procedures, only values greater than 55 $\mu g/m^3$ are considered violations of the Rule. Sampling collected on five different periods exceeded Rule 403 upwind – downwind differential allowances. Those exceedances are further discussed in Chapter 3.

Table 1 also shows results from Robertson's Ready Mix and All American Asphalt where the upwind $PM_{10}$ values are greater than the downwind value. These events are noted by a number appearing in parenthesis in the table. Dust from the unpaved access roads and dust tracked out to public streets are the most likely cause of upwind $PM_{10}$ values being greater than downwind monitored $PM_{10}$ values. Potential control measures are discussed in Chapters 3 and 4 to prevent potential future violations. Lastly, many of the ambient measurements, including those upwind of the operations, are relatively high. This general condition for the area is further discussed in the next section of the report.

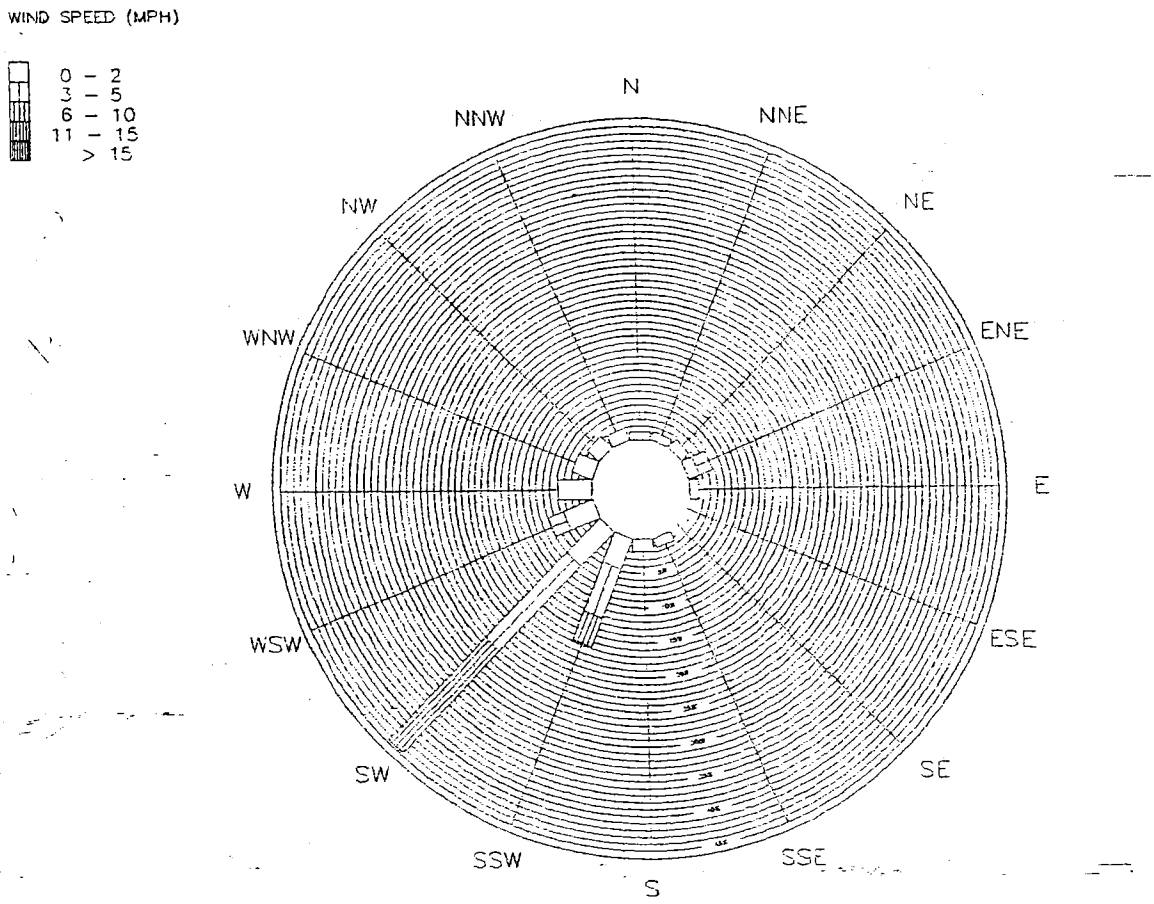



Figure 7 – General Wind Patterns During the Monitoring Period

Table 1. Rule 403 $PM_{10}$ Monitoring Results by Location ($ug/m^3$)

**(a) United Rock Products/Sully Miller/National Ready-Mix (Colas Inc.)**

| Date | Upwind | Downwind (1) | Downwind (2) | Difference upwind – downwind 1* | Difference upwind – downwind 2* |
|---|---|---|---|---|---|
| May 22, 2003 | 102 | 93 | 147 | (9) | 45 |
| May 30, 2003 | 71 | 63 | 131 | (8) | 60** |
| June 16, 2003 | 99 | 91 | 132 | (8) | 33 |

**(b) Hanson Aggregates**

| Date | Upwind | Downwind | Difference upwind – downwind* |
|---|---|---|---|
| June 25, 2003 | 58 | 115 | 57** |
| June 30, 2003 | 79 | 119 | 40 |
| July 2, 2003 | 66 | 166 | 100** |

**(c) Calmat dba Vulcan Materials**

| Date | Upwind | Downwind | Difference upwind – downwind* |
|---|---|---|---|
| July 16, 2003 | 142 | 194 | 52 |
| August 13, 2003 | 83 | 167 | 84** |
| August 19, 2003 | 88 | 114 | 26 |

Table 1. Concluded.

(d) Robertson's Ready Mix

| Date | Upwind | Downwind | Difference upwind – downwind* |
|---|---|---|---|
| Sept 12, 2003 | 188 | 126 | (62) |
| Sept 18, 2003 | 191 | 111 | (80) |
| Sept 24, 2003 | 191 | 114 | (77) |
| Oct. 9, 2003 | 202 | 122 | (80) |
| Oct 15, 2003 | 205 | 90 | (115) |

(e) Nu-Way Live Oak

| Date | Upwind | Downwind | Difference upwind – downwind* |
|---|---|---|---|
| Sept 12, 2003 | 126 | 153 | 27 |
| Sept 18, 2003 | 111 | 175 | 64 |
| Sept 24, 2003 | 114 | 146 | 32 |
| Oct 9, 2003 | 122 | 139 | 17 |
| Oct 15, 2003 | 90 | 170 | 80 |

(f) All American Asphalt

| Date | Upwind | Downwind | Difference upwind – downwind |
|---|---|---|---|
| Sept 12, 2003 | 153 | 143 | (10) |
| Sept 18, 2003 | 175 | 144 | (31) |
| Sept 24, 2003 | 146 | 136 | (10) |
| Oct 9, 2003 | 139 | 178 | 39 |
| Oct 15, 2003 | 170 | 151 | (19) |

* Values in parentheses indicate that the upwind particulate concentrations were higher than the downwind concentrations and did not violate Rule 403.

** Bold values denote violation of Rule 403 provisions.

## Ambient PM10 Monitoring

The AQMD also routinely performs ambient air monitoring for $PM_{10}$ at many of its monitoring stations. Data are collected on a one-in-six day basis. The $PM_{10}$ measurements at the AQMD's routine monitoring stations cannot be directly compared with the Rule 403 monitoring because the routine measurements are collected on a 24-hour basis, whereas the Rule 403 measurements are collected on a five-hour basis. The $PM_{10}$ measurements at the Azusa monitoring station for July 2, 2003, August 13, 2003, and August 19, 2003 (the days when the one-in-six collection coincide with the Rule 403 monitoring) are presented in Table 2 along with measurements at other AQMD monitoring stations. The Azusa $PM_{10}$ data represent the average ambient particulate for the Azusa/Irwindale area. The measurements for these dates are in general agreement with the upwind sites and are much lower than the downwind sites of the facilities monitored. However, on two of the three days when violations were monitored, the $PM_{10}$ reported at Azusa tended to be higher than on the days where no violations occurred.

The Azusa air monitoring station is located approximately ¼ mile from the nearest sand and gravel handling operation. The station is part of the AQMD's $PM_{10}$ monitoring network. Table 2, below, shows the data from the entire $PM_{10}$ sampling network on sampling days that were coincident with monitoring conducted as a part of this Rule 403 air monitoring study. Although the data set is limited, it would appear to indicate that the Azusa air monitoring station is influenced by nearby sand and gravel handling operations and the higher PM10 concentrations, as compared to many other network sites may be indicative of operations at the nearby facility.

Table 2. Air Monitoring Data from AQMD $PM_{10}$ Network Sites ($ug/m^3$)*

| Station | July 2, 2003 | August 13, 2003 | August 19, 2003 |
|---|---|---|---|
| **Los Angeles County** | | | |
| Azusa | 80 | 89 | 56 |
| Burbank | 45 | 47 | 36 |
| Los Angeles | 48 | 49 | 34 |
| Long Beach | 33 | 40 | 24 |
| South Long Beach | No sample | 44 | 23 |
| Santa Clarita | 67 | 40 | 35 |
| Hawthorne | 44 | 39 | 27 |
| **San Bernardino County** | | | |
| Crestline | 32 | 32 | No sample |
| Fontana | 65 | 79 | 65 |
| Ontario | 52 | 58 | 36 |
| Redlands | 46 | 39 | 55 |
| San Bernardino | 53 | 60 | 52 |
| **Riverside County** | | | |
| Banning | No sample | 51 | 79 |
| Indio | 54 | 62 | 124 |
| Norco | 67 | 55 | 28 |
| Palm Springs | 30 | 43 | 108 |
| Perris | 60 | 64 | 51 |
| Rubidoux | 74 | 83 | 53 |
| **Orange County** | | | |
| Anaheim | 32 | 45 | 27 |
| Mission Viejo | 29 | 45 | 28 |

* 24-hour samples as opposed to 5-hour samples for Rule 403 compliance.

## 3.0 COMPLIANCE ACTION

Aggregate and gravel mining operations are governed by the following air quality rules and regulations:

- AQMD Rules 201 – Permit to Construct and Rule 203 - Permit to Operate (for equipment not subject to Rule 219 - Equipment Not Requiring a Written Permit Pursuant to Regulation II).
- AQMD Rule 401 and California Health & Safety Code § 41701 — Visible Emissions
- AQMD Rule 402 and California Health & Safety Code § 41700 — Public Nuisance
- AQMD Rule 403 – Fugitive Dust
- 40 CFR 60, Subpart OOO – Standards of Performance for Non-Metallic Mineral Processing Plants

AQMD Rule 403 applies to "any activity or man-made condition capable of generating fugitive dust, ..." including gravel mining, aggregate, and related activities. Such potential sources of fugitive dust are required "to prevent, reduce or mitigate their emissions... [in order] to reduce the amount of particulate matter entrained in the ambient air." In particular, Rule 403(d)(4) establishes a not-to-exceed health-protective $PM_{10}$ concentration limit, as well as a methodology for determining compliance with this limit, for air-entrained fugitive dust. Specifically, Rule 403 provides that "A person shall not cause or allow $PM_{10}$ levels to exceed 50 micrograms per cubic meter when determined, by simultaneous sampling, as the difference between upwind and downwind samples collected on high-volume particulate matter samplers or other U.S. EPA-approved equivalent method for $PM_{10}$ monitoring."

Sampling results shown in Table 1 show exceedances of the 50$\mu g/m^3$ $PM_{10}$ differential threshold on the following five occasions.

- At United Rock/Sully Miller on May 30, 2003, the $PM_{10}$ upwind/downwind differential threshold was **60$\mu g/m^3$** [71$\mu g/m^3$ (upwind)] – [131 $\mu g/m^3$ (downwind)], an exceedance of the 50$\mu g/m^3$ $PM_{10}$ differential threshold.
- At Hanson Aggregates on June 25, 2003, the $PM_{10}$ upwind/downwind differential threshold was **57$\mu g/m^3$** [58$\mu g/m^3$ (upwind)] – [115$\mu g/m^3$ (downwind)], an exceedance of the 50$\mu g/m^3$ $PM_{10}$ differential threshold.
- At Hanson Aggregates on July 2, 2003, the $PM_{10}$ upwind/downwind differential threshold was **100$\mu g/m^3$** [66$\mu g/m^3$ (upwind)] – [166$\mu g/m^3$ (downwind)], an exceedances of the 50$\mu g/m^3$ $PM_{10}$ differential threshold.

- At Calmat/Vulcan Materials on August 13, 2003, the $PM_{10}$ upwind/downwind differential threshold was **84µg/m³** [83µg/m³ (upwind)] – [167µg/m³ (downwind)], an exceedance of the 50µg/m³ $PM_{10}$ differential threshold.

- At the Nu-Way Live Oak on October 15, 2003 the $PM_{10}$ upwind/downwind differential threshold was **80 µg/m³** [90µg/m³ (upwind)] – [170µg/m³ (downwind)], an exceedance of the 50µg/m³ $PM_{10}$ differential threshold.

Notices of Violation (NOVs) were issued to the responsible parties as shown in Table 3 below.

Table 3. Issuance of Notices of Violation for $PM_{10}$ Sample Concentrations Exceeding 50µg/m3 [Rule 403(d)(4)]

| NOTICE OF VIOLATION | ISSUED TO | $PM_{10}$ SAMPLE CONCENTRATION | DATE OF $PM_{10}$ EXCEEDANCE |
|---|---|---|---|
| #P34396 | United Rock Products | 60 µg/m³ | 5-30-03 |
| #P34395 | Hanson Aggregates[1] | 57 µg/m³ | 6-25-03 |
| | | 100 µg/m³ | 7-02-03 |
| #P34397 | Calmat dba Vulcan Materials | 84 µg/m³ | 8-13-03 |
| #P41757 | Nu-Way Live Oak Landfill Inc | 80 µg/m³ | 10-15-03 |

In addition, at Nu-Way Live Oak Landfill Inc., on September 18, 2003, monitoring indicated a 64 µg/m³ difference between upwind and downwind sites. Although this difference exceeds the 50µg/m3 threshold required to prove a violation of Rule 403(d)(4), generator problems at sample site #3 foreshortening the sampling period from five to four hours invalidated sample results.

Upon settlement of these NOVs with the facilities, AQMD will disclose details of their resolution and disposition.

[1] Also cited for violation of Rule 403(f)(9): Failure to re-submit dust plan or statement of no change at least 60 days before plan expiration date.

## 4.0 MITIGATION OF CURRENT AIR QUALITY IMPACTS

Prior to settlement of their violations, a number of proactive measures are being implemented by the following facilities to reduce fugitive dust emissions from their sites:

United Rock Products

- Purchasing and operating a Tymco vacuum sweeper to reduce and prevent track out onto Arrow Hwy.
- Operating a full time water truck on site to water all unpaved roads inside the property.
- Improving dust controls on transfer points.
- Monitoring and controlling dust from storage piles.
- Operating a wash rack for drivers to wet down material before leaving facility.
- Operating a wheel washer to remove soil from vehicle tires as needed.
- Purchasing and installing a second clean track for the landfill quarry.

Hanson Aggregates

- Operating sweeper on site twice per day.
- Operating three water trucks to dispense water as needed on all unpaved roads and storage sites near the speedway between the hours of 3:30 am through 8:00 pm.
- Applying chemical stabilizers on all unpaved roadways as needed (Haul-EZ 02DL120-dust control with 81200-foaming agent commonly referred to as "fish oil")
- Installing netting at chain-link fence between Hanson and the Irwindale Speedway
- Installing irrigation lines on site running parallel to the Irwindale Speedway.
- Adding misters to form a curtain which prevents fugitive dust from crossing the property line.
- Planting pepper trees along the slope area.
- Constructing a rumble grate and waste water collecting system with wheel washer.
- Placing speed bumps on the roadways.

CalMat dba Vulcan Materials

- Treating all unpaved roads in summer with a chemical stabilizer called Westlake
- Paving entry road into aggregate plant with grinding recycled asphalt
- Daily operation of sweeper on Foothill Blvd 400 ft east and west of CalMat main entrance and south on Irwindale to the 210 Fwy.
- Operating an existing wheel washer at the main exit of the plant which automatically rinses and removes soil from tires as each vehicle leaves the facility.

Nu-Way Live Oak Landfill Inc.

Similar measures to those above will be discussed with Nu-Way to reduce emissions of fugitive dust associated with their operation.

AQMD compliance staff will continue its efforts at these and other gravel mining and aggregate operations in and around the Irwindale area to identify further strategies for mitigating fugitive dust emissions.

**Interagency Workplan**

In addition to additional monitoring, surveillance, and inspections conducted by AQMD staff to assure compliance with our health-protective emission standards, AQMD has proposed an Interagency Workplan that establishes:

- A policy for the exchange of information between AQMD staff and representatives from the City of Irwindale about fugitive dust and visible emission incidents
- A schedule for joint surveillance of aggregate and gravel mining operations by AQMD inspectors and City Code Enforcement staff
- A joint forum with City representatives and aggregate and gravel mining operators for ongoing discussion and feedback about further strategies for dust mitigation.

AQMD staff and representatives from the City of Irwindale participated in a joint planning session on January 20, 2004, to establish an implementation schedule with performance milestones and deliverables. These parties will convene a workshop with aggregate and gravel mining operators which will include training on AQMD fugitive dust rule requirements and mitigation strategies. Progress reports on milestones and deliverables will be provided to AQMD senior management.

## Prosecutor's Office Activities

The enforcement function at the AQMD is shared between Engineering and Compliance and the Prosecutor's Office. Engineering and Compliance inspects and documents all observed violations, and the Prosecutor's Office reviews and resolves the violations. The Notices of Violation issued for violation of Rule 403 to Hanson Aggregates Irwindale Plant, Calmat Company dba Vulcan Materials, and United Rock Products have been reviewed and accepted for prosecution by the Prosecutor's Office. A Pre-suit letter has been sent to each facility requesting a written response. After these responses have been reviewed, each facility will be given an opportunity to meet with the assigned prosecutor to discuss resolution of the matter. In resolving these matters, in lieu of cash penalties paid to the AQMD, high priority will be given to implementing fugitive dust mitigation measures over and above those currently required. The settlement process typically takes several months to complete. Implementation of the mitigation measures will be scheduled for the earliest possible dates.

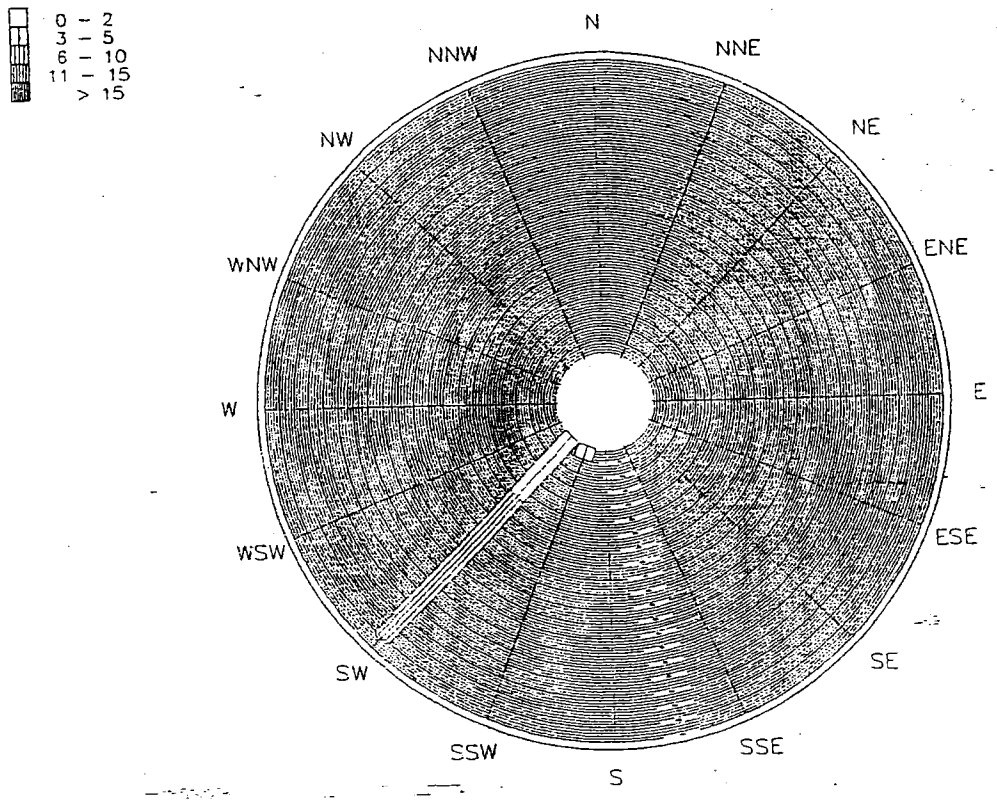
A Notice of Violation was also recently issued to Nu-way Liveoak Landfill. This Notice of Violation is currently being processed by the Engineering and Compliance Division and will thereafter be delivered to the District Prosecutor's Office for review and prosecution.

## 5.0 CONCLUSION

Fourteen sampling events were conducted from May 2003 to October 2003. These concentrated on aggregate processors in the Irwindale/Azusa area and examined six separate quarries. Of the fourteen sets of samples collected, five were found to be out of compliance with Rule 403. Enforcement actions have been taken with five NOVs issued to four of the six facilities monitored. To date, the affected facilities have taken some actions to mitigate the problem. AQMD staff is currently investigating the circumstances leading to the exceedances and will determine appropriate actions to resolve the NOVs.

AQMD staff will continue efforts to conduct Rule 403 monitoring at other mining operations in the region during the course of the year. In addition, the AQMD will conduct additional monitoring of the facilities discussed in this report to determine if the problems have been mitigated.

# APPENDIX 1
## WIND ROSE FOR FIVE HOUR SAMPLING PERIODS




IRWINDALE, CA

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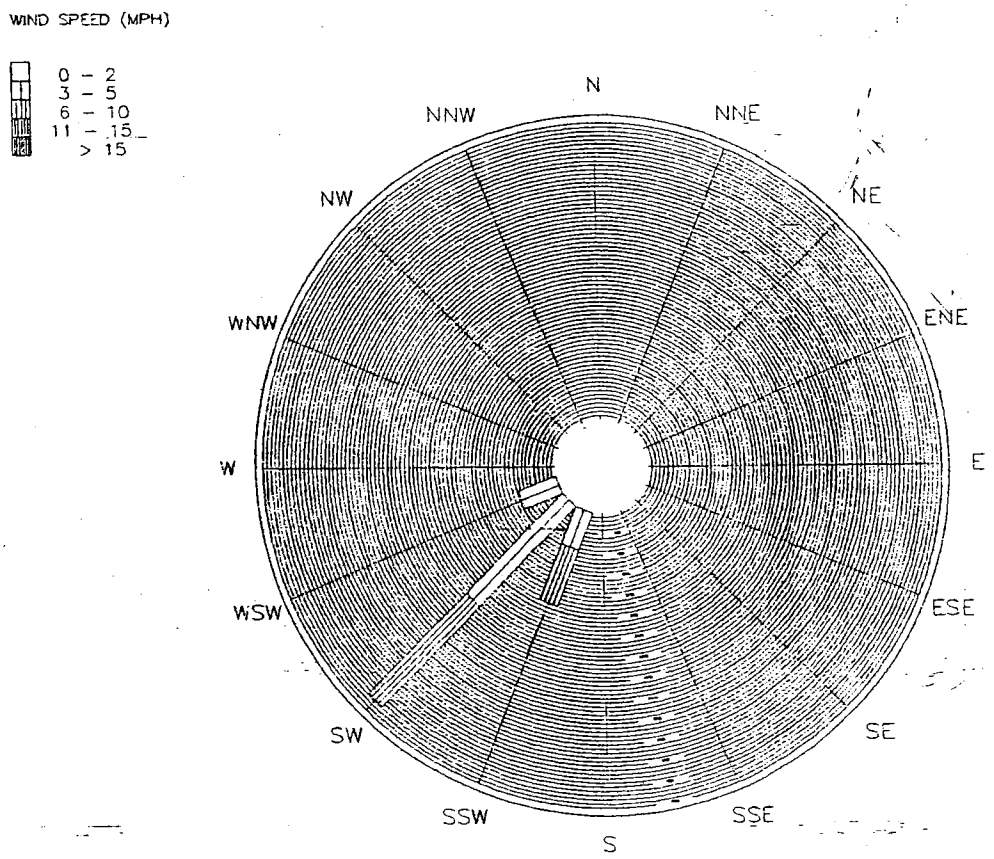
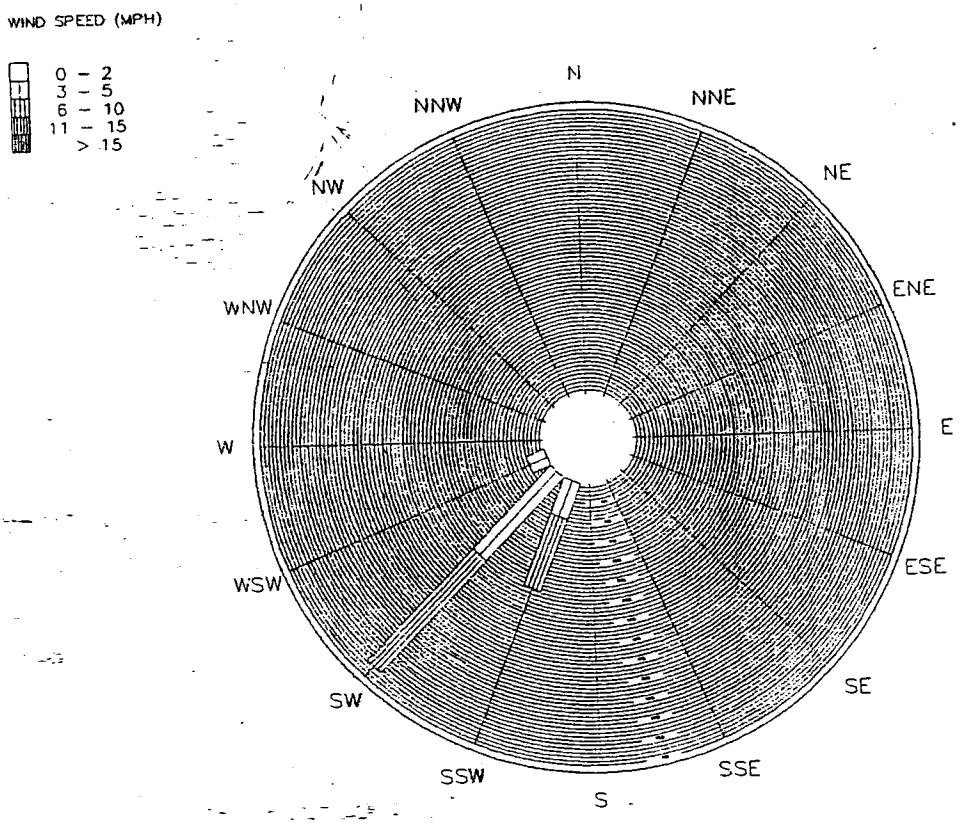



IRWINDALE, CA

MAY 30, 2003 0900 - 1400 PST

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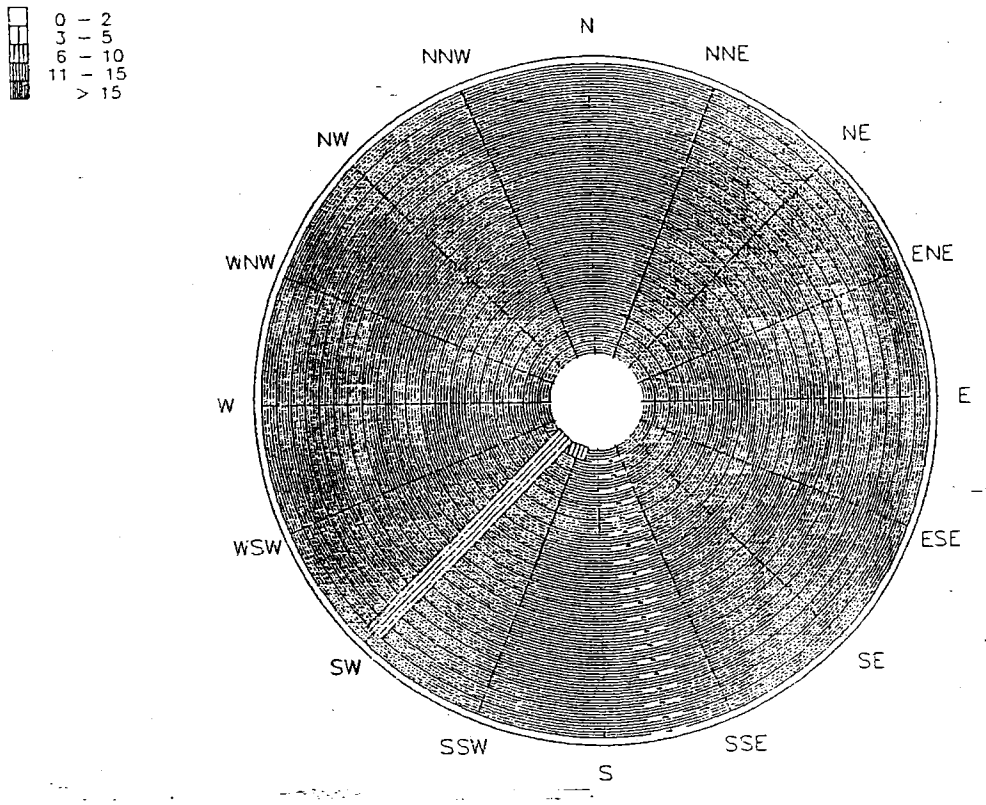
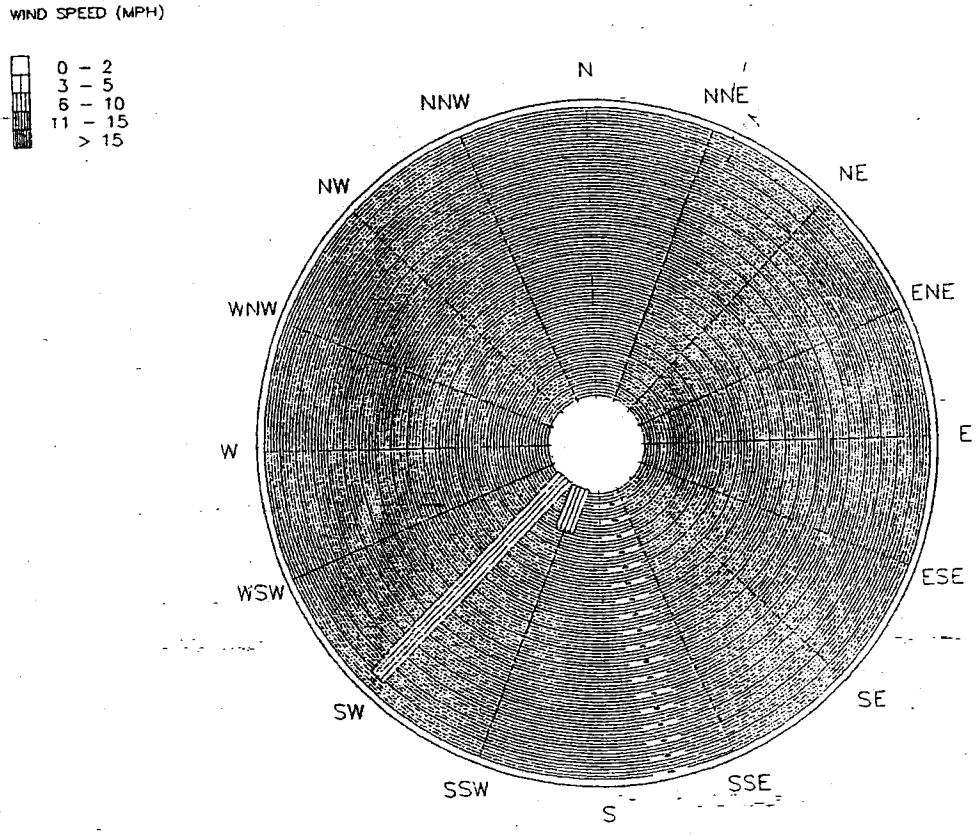


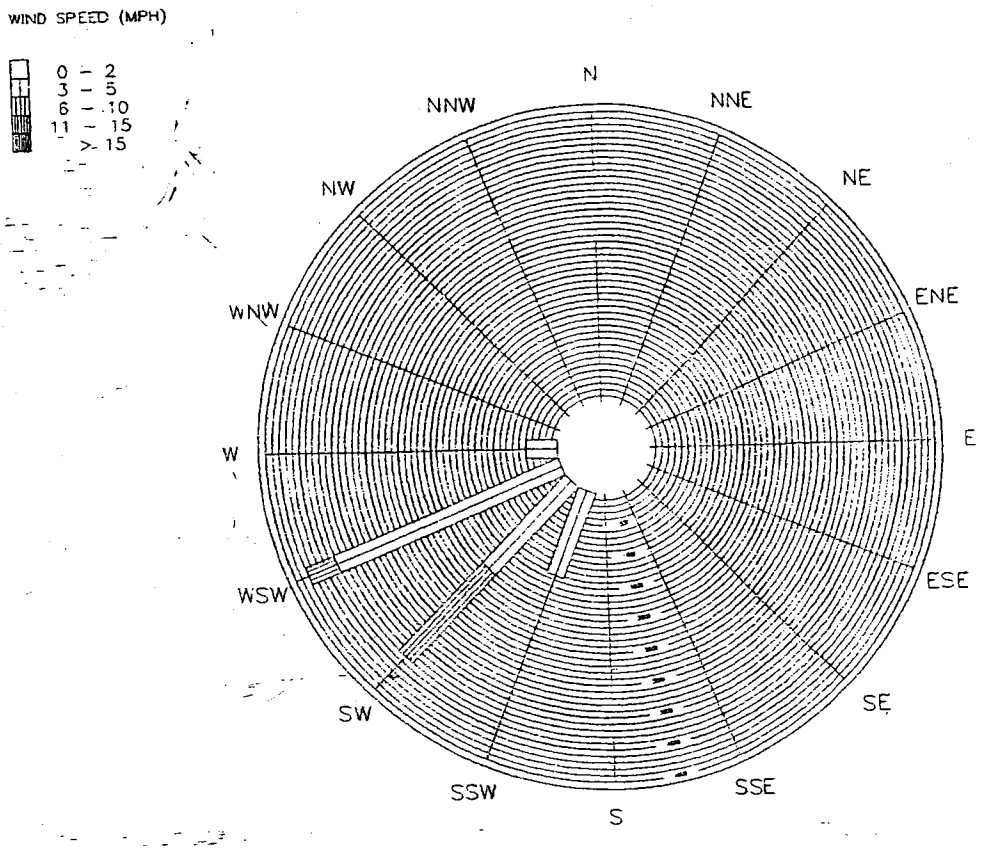

IRWINDALE, CA

JUNE 25, 2003 13:00 – 18:00 PST



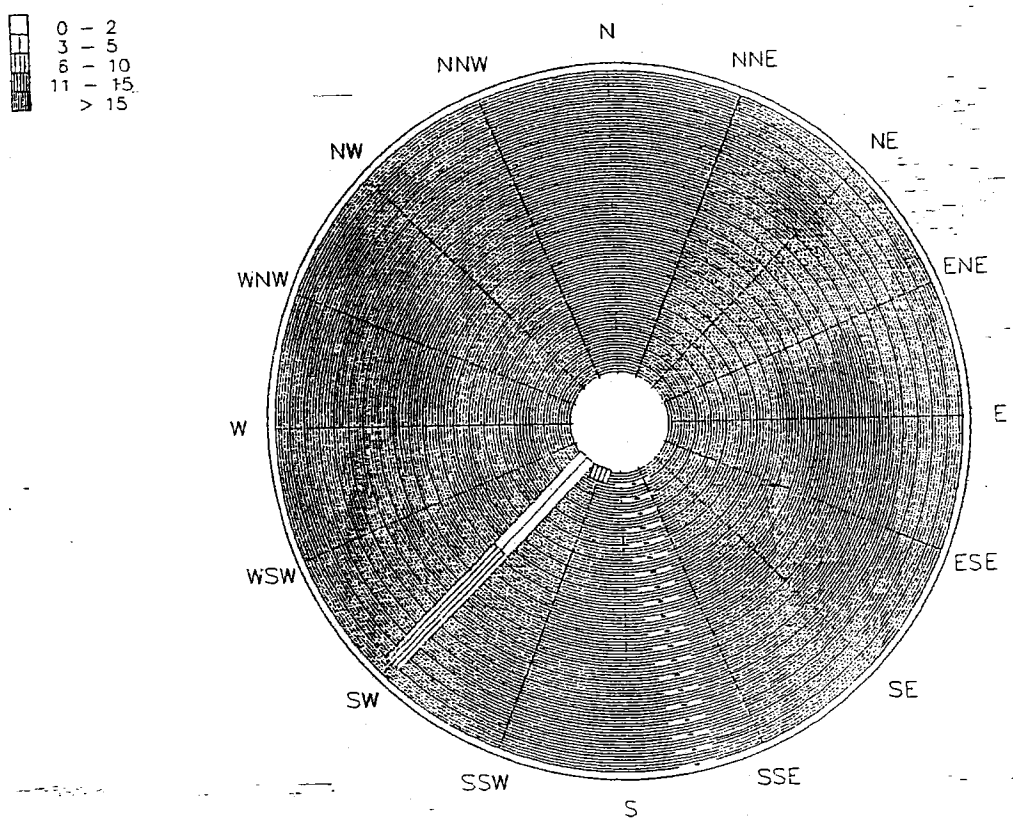

IRWINDALE, CA

JUNE 30, 2003 13:00 – 18:00 PST



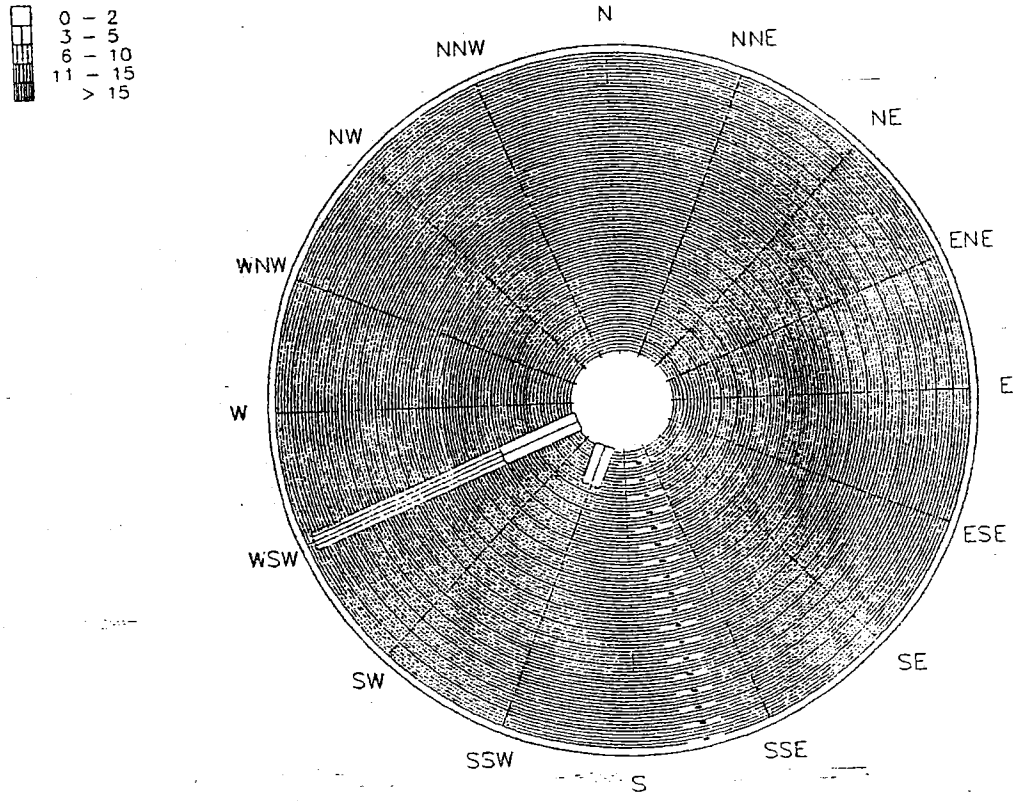

IRWINDALE, CA

10/15/2003 1030 - 1530 PST



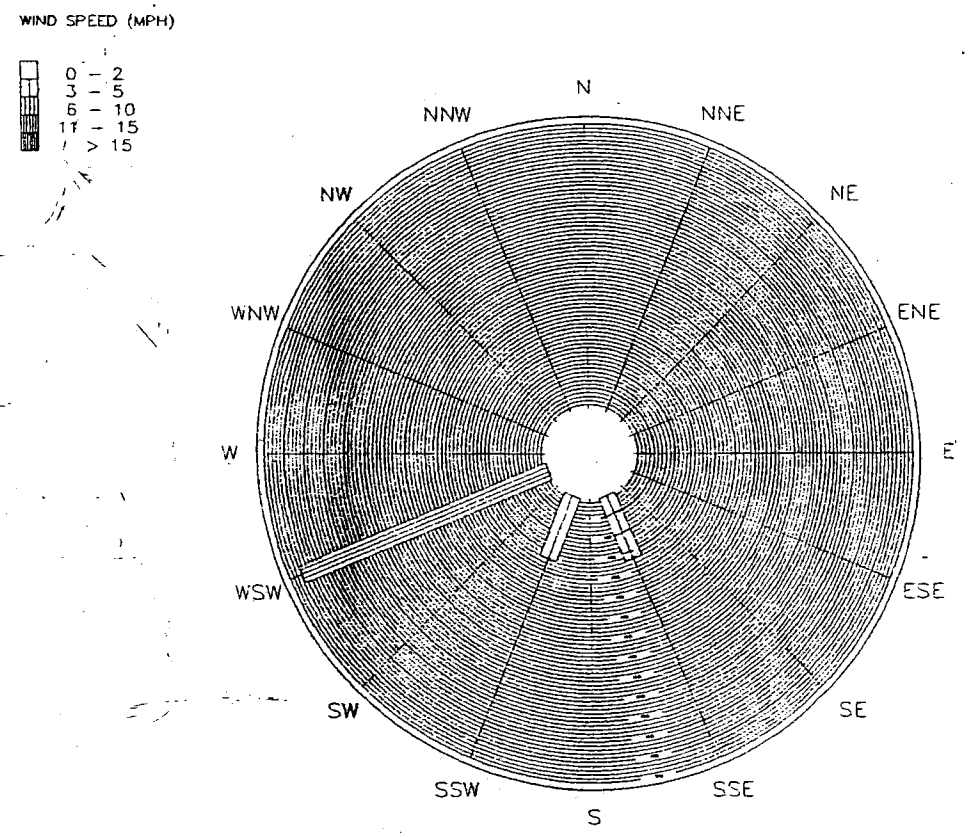

IRWINDALE, CA

10/9/2003 1030 – 1530 PST



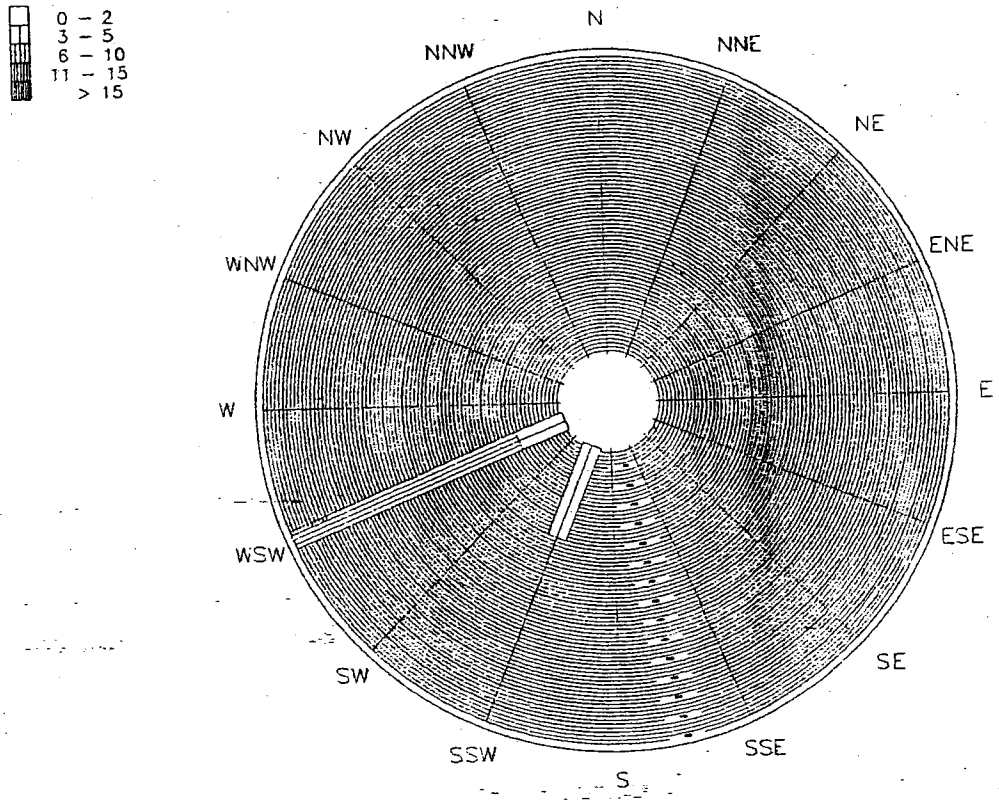

IRWINDALE, CA

9/24/2003 1030 – 1530 PST

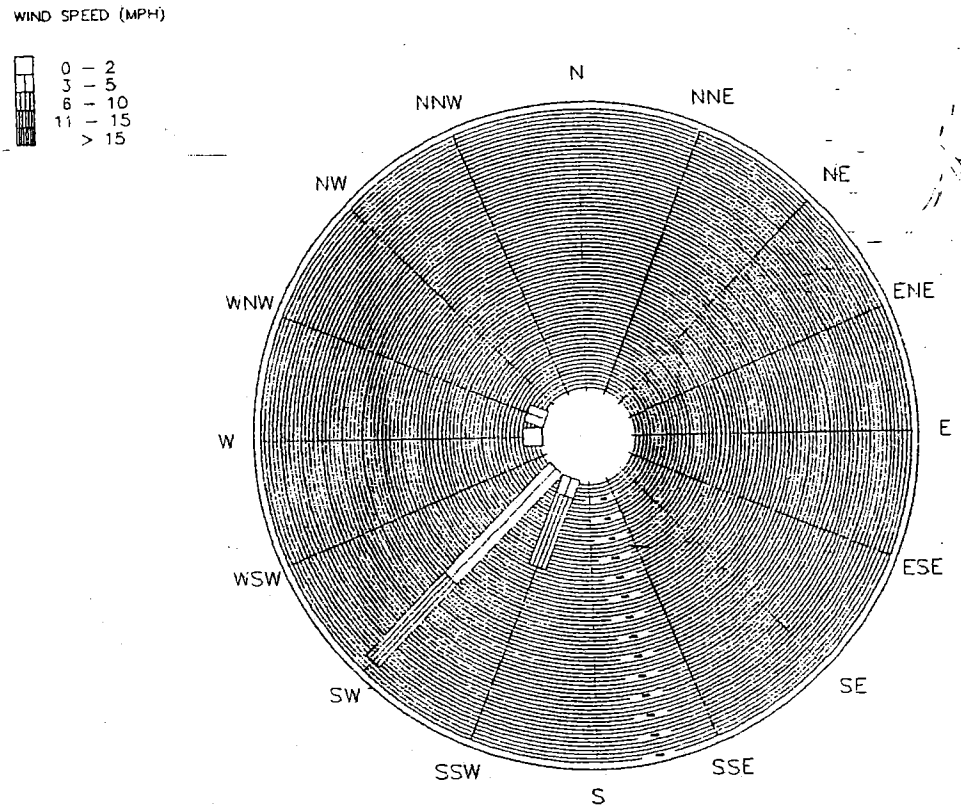



IRWINDALE, CA

9/18/2003 1000 – 1500 PST

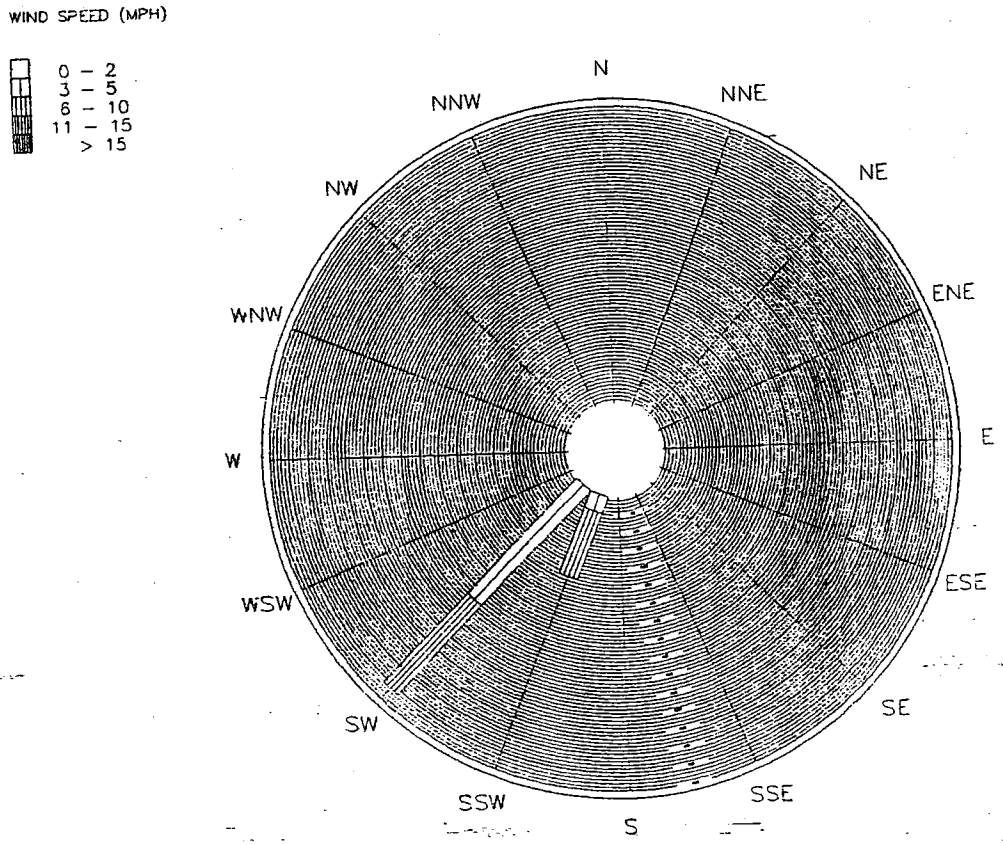



# IRWINDALE, CA
# 9/12/2003 1000 – 1500 PST



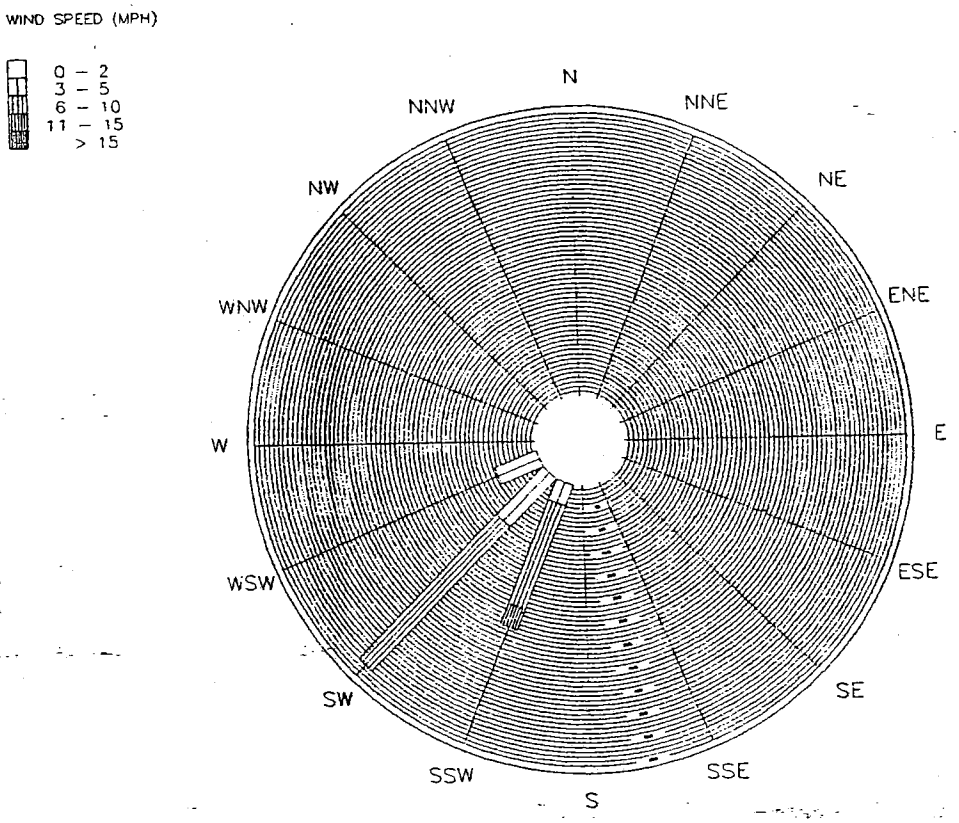

IRWINDALE, CA

AUGUST 19, 2003 1000 – 1500 PST



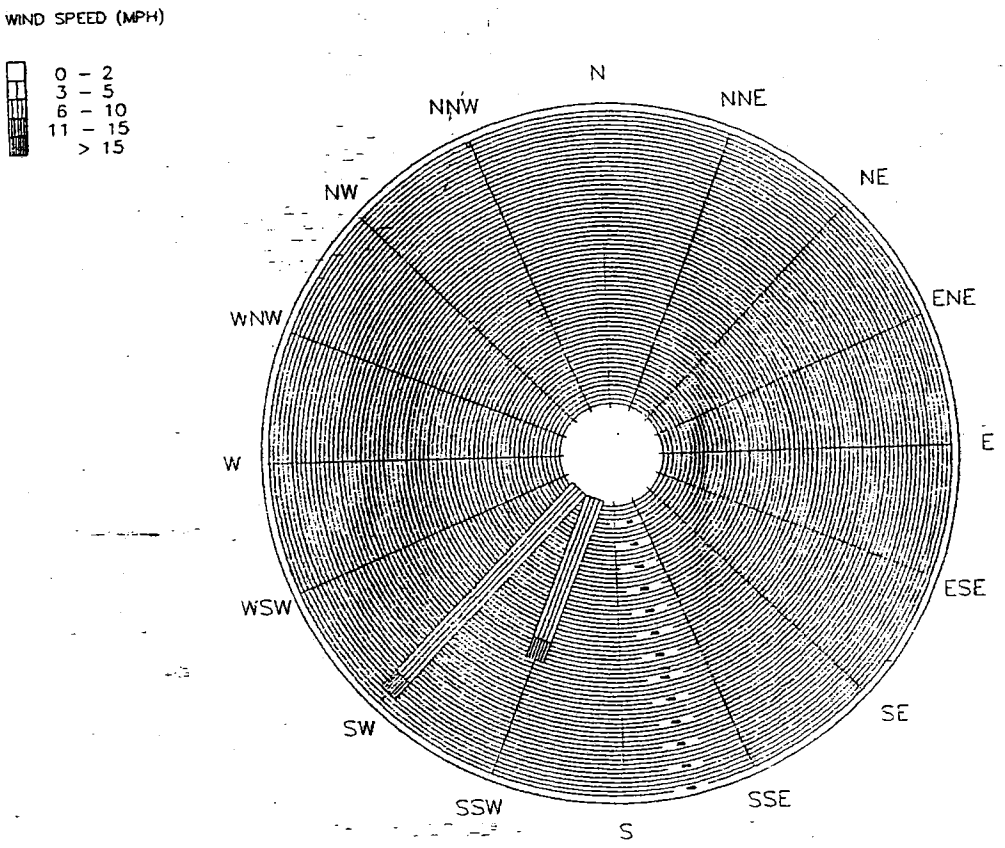

IRWINDALE, CA

AUGUST 13, 2003 1000 – 1500 PST




IRWINDALE, CA

JULY 16, 2003 1000 – 1500 PST




IRWINDALE, CA

JULY 2, 2003 13:00 – 18:00 PST

URBEMIS 2002 For Windows 7.4.2

ile Name: C:\Program Files\URBEMIS 2002 for Windows\Projects2k2\United Rock Traffic - Mining.urb
ro[illegible] Name: United Rock Traffic and Mining Equipment Only
r[illegible] ocation: South Coast Air Basin (Los Angeles area)
n-[illegible] or Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

ONSTRUCTION EMISSION ESTIMATES

| *** 2004 *** | ROG | NOx | CO | SO2 | PM10 TOTAL | PM10 EXHAUST | PM10 DUST |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day,unmitigated) | 6.39 | 42.27 | 54.07 | 0.00 | 1.91 | 1.91 | 0.00 |
| TOTALS (lbs/day, mitigated) | 6.39 | 42.27 | 54.07 | 0.00 | 1.91 | 1.91 | 0.00 |

| *** 2005 *** | ROG | NOx | CO | SO2 | PM10 TOTAL | PM10 EXHAUST | PM10 DUST |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day,unmitigated) | 6.39 | 39.76 | 55.63 | 0.00 | 1.68 | 1.68 | 0.00 |
| TOTALS (lbs/day, mitigated) | 6.39 | 39.76 | 55.63 | 0.00 | 1.68 | 1.68 | 0.00 |

PERATIONAL (VEHICLE) EMISSION ESTIMATES

| | ROG | NOx | CO | SO2 | PM10 |
|---|---|---|---|---|---|
| TOTALS (lbs/day,unmitigated) | 3.62 | 3.68 | 61.24 | 0.03 | 28.88 |

SUM OF 2004 "CONSTRUCTION" + OPERATIONS

| | ROG | $NO_x$ | CO | $SO_2$ | $PM_{10}$ |
|---|---|---|---|---|---|
| | 10 | 46 | 115 | 0 | 31 |

(MINING MOBILE EQUIPMENT AND HAUL TRUCK/EMPLOYEE TRAFFIC)

URBEMIS 2002 For Windows 7.4.2

ile Name: C:\Program Files\URBEMIS 2002 for Windows\Projects2k2\United Rock Traffic - Mining.urb
ro[illegible]t Name: United Rock Traffic and Mining Equipment Only
r[illegible] Location: South Coast Air Basin (Los Angeles area)
n[illegible]otor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

onstruction Start Month and Year: June, 2004
onstruction Duration: 12
otal Land Use Area to be Developed: 50 acres
aximum Acreage Disturbed Per Day: 5 acres
ingle Family Units: 0 Multi-Family Units: 0
etail/Office/Institutional/Industrial Square Footage: 1089000

ONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

| Source | ROG | NOx | CO | SO2 | PM10 TOTAL | PM10 EXHAUST | PM10 DUST |
|---|---|---|---|---|---|---|---|
| *** 2004*** | | | | | | | |
| hase 1 - Demolition Emissions | | | | | | | |
| ugitive Dust | - | - | - | - | 0.00 | - | 0.00 |
| ff-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| n-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| orker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| hase 2 - Site Grading Emissions | | | | | | | |
| ugitive Dust | - | - | - | - | 0.00 | - | 0.00 |
| ff-Road Diesel | 6.30 | 42.16 | 52.00 | - | 1.91 | 1.91 | 0.00 |
| n-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| orker Trips | 0.09 | 0.11 | 2.07 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 6.39 | 42.27 | 54.07 | 0.00 | 1.91 | 1.91 | 0.00 |
| hase 3 - Building Construction | | | | | | | |
| ldg Const Off-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| ldg Const Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| rch Coatings Off-Gas | 0.00 | - | - | - | - | - | - |
| rc[illegible]oatings Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| s[illegible]ff-Gas | 0.00 | - | - | - | - | - | - |
| sp[illegible]ff-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| sphal[illegible]n-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| sphalt Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Max lbs/day all phases | 6.39 | 42.27 | 54.07 | 0.00 | 1.91 | 1.91 | 0.00 |
| *** 2005*** | | | | | | | |
| hase 1 - Demolition Emissions | | | | | | | |
| ugitive Dust | - | - | - | - | 0.00 | - | 0.00 |
| ff-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| n-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| orker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| hase 2 - Site Grading Emissions | | | | | | | |
| ugitive Dust | - | - | - | - | 0.00 | - | 0.00 |
| ff-Road Diesel | 6.30 | 39.65 | 53.59 | - | 1.68 | 1.68 | 0.00 |
| n-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| orker Trips | 0.09 | 0.11 | 2.04 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 6.39 | 39.76 | 55.63 | 0.00 | 1.68 | 1.68 | 0.00 |
| hase 3 - Building Construction | | | | | | | |
| ldg Const Off-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| ldg Const Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| rch Coatings Off-Gas | 0.00 | - | - | - | - | - | - |
| rch Coatings Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| sphalt Off-Gas | 0.00 | - | - | - | - | - | - |
| sphalt Off-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| sphalt On-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| sphalt Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| M[illegible]lbs/day all phases | 6.39 | 39.76 | 55.63 | 0.00 | 1.68 | 1.68 | 0.00 |

ase 3 - Building Construction Assumptions: Phase Turned OFF

ase 2 - Site Grading Assumptions
a[illegible] Month/Year for Phase 2: Jun '04
[illegible] Duration: 12 months
[illegible] k Travel (VMT): 0
f-Roa[illegible] ipment

| No. | Type | Horsepower | Load Factor | Hours/Day |
|---|---|---|---|---|
| 1 | Off Highway Trucks | 417 | 0.490 | 8.0 |
| 2 | Rubber Tired Loaders | 165 | 0.465 | 8.0 |

UNMITIGATED OPERATIONAL EMISSIONS

| | ROG | NOx | CO | SO2 | PM10 |
|---|---|---|---|---|---|
| e: heavy industry | 3.62 | 3.68 | 61.24 | 0.03 | 28.88 |
| OTAL SIONS (lbs/day) | 3.62 | 3.68 | 61.24 | 0.03 | 28.88 |

oes not include correction for passby trips.
oes not include double counting adjustment for internal trips.

PERATIONAL (Vehicle) EMISSION ESTIMATES

nalysis Year: 2005 Temperature (F): 90 Season: Summer

MFAC Version: EMFAC2002 (9/2002)

ummary of Land Uses:

| nit Type | Trip Rate | Size | Total Trips |
|---|---|---|---|
| eneral heavy industry | 10.00 trips / acres | 50.00 | 500.00 |

ehicle Assumptions:

leet Mix:

| ehicle Type | Percent Type | Non-Catalyst | Catalyst | Diesel |
|---|---|---|---|---|
| ight Auto | 0.00 | 2.30 | 97.10 | 0.60 |
| ight Truck < 3,750 lbs | 15.00 | 4.00 | 93.40 | 2.60 |
| ight Truck 3,751- 5,750 | 0.00 | 1.90 | 96.80 | 1.30 |
| ed Truck 5,751- 8,500 | 0.00 | 1.50 | 95.60 | 2.90 |
| ite-Heavy 8,501-10,000 | 0.00 | 0.00 | 80.00 | 20.00 |
| ite-Heavy 10,001-14,000 | 0.00 | 0.00 | 66.70 | 33.30 |
| ed-Heavy 14,001-33,000 | 0.00 | 10.00 | 20.00 | 70.00 |
| eavy-Heavy 33,001-60,000 | 0.00 | 0.00 | 12.50 | 87.50 |
| ine Haul > 60,000 lbs | 85.00 | 0.00 | 0.00 | 100.00 |
| rban Bus | 0.00 | 0.00 | 0.00 | 100.00 |
| otorcycle | 0.00 | 87.50 | 12.50 | 0.00 |
| ch Bus | 0.00 | 0.00 | 0.00 | 100.00 |
| ot | 0.00 | 14.30 | 78.60 | 7.10 |

ravel conditions

| | Residential | | | Commercial | | |
|---|---|---|---|---|---|---|
| | Home-Work | Home-Shop | Home-Other | Commute | Non-Work | Customer |
| rban Trip Length (miles) | 11.5 | 4.9 | 6.0 | 40.0 | 40.0 | 40.0 |
| ural Trip Length (miles) | 11.5 | 4.9 | 6.0 | 10.3 | 5.5 | 5.5 |
| rip Speeds (mph) | 35.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |
| of Trips - Residential | 20.0 | 37.0 | 43.0 | | | |
| of Trips - Commercial (by land use) | | | | | | |
| eneral heavy industry | | | | 90.0 | 5.0 | 5.0 |

anges made to the default values for Land Use Trip Percentages

ar s made to the default values for Construction

ne s overridden the Default Phase Lengths
ite Gr g Fugitive Dust Emission Rate changed from 10 to 0
ase 2 mitigation measure Soil Disturbance: Water exposed surfaces - 2x daily
has been changed from off to on.
hase 2 mitigation measure Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
has been changed from off to on.

hanges made to the default values for Operations

he light auto percentage changed from 56.1 to 0.
he light truck < 3750 lbs percentage changed from 15.1 to 15.
he light truck 3751-5750 percentage changed from 15.5 to 0.
he med truck 5751-8500 percentage changed from 6.8 to 0.
he lite-heavy truck 8501-10000 percentage changed from 1.0 to 0.
he lite-heavy truck 10001-14000 percentage changed from 0.3 to 0.
he med-heavy truck 14001-33000 percentage changed from 1.0 to 0.
he heavy-heavy truck 33001-60000 percentage changed from 0.8 to 0.
he line haul > 60000 percentage changed from 0.0 to 85.
he urban bus percentage changed from 0.1 to 0.
he motorcycle percentage changed from 1.6 to 0.
he school bus percentage changed from 0.3 to 0.
he motorhome percentage changed from 1.4 to 0.
he operational emission year changed from 2004 to 2005.
he home based work selection item changed from 8 to 7.
he home based shopping selection item changed from 9 to 8.
he home based other selection item changed from 9 to 8.
he commercial based commute selection item changed from 9 to 8.
he commercial based commute urban trip length changed from 10.3 to 40.
he commercial based non-work selection item changed from 9 to 8.
he commercial based non-work urban trip length changed from 5.5 to 40.
he commercial based customer selection item changed from 9 to 8.
he commercial based customer urban trip length changed from 5.5 to 40.
he double counting other trip limit changed from to -225.

URBEMIS 2002 For Windows 7.4.2

ile Name: C:\Program Files\URBEMIS 2002 for Windows\Projects2k2\United Rock - Reclamation.urb
r t Name: United Rock Reclamation
r ocation: South Coast Air Basin (Los Angeles area)
n- tor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

ONSTRUCTION EMISSION ESTIMATES

| *** 2018 *** | ROG | NOx | CO | SO2 | PM10 TOTAL | PM10 EXHAUST | PM10 DUST |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day,unmitigated) | 4.41 | 28.11 | 36.75 | 0.00 | 151.07 | 1.07 | 150.00 |
| TOTALS (lbs/day, mitigated) | 4.41 | 28.11 | 36.75 | 0.00 | 42.65 | 1.07 | 41.58 |

| *** 2019 *** | ROG | NOx | CO | SO2 | PM10 TOTAL | PM10 EXHAUST | PM10 DUST |
|---|---|---|---|---|---|---|---|
| TOTALS (lbs/day,unmitigated) | 4.41 | 28.11 | 36.75 | 0.00 | 151.07 | 1.07 | 150.00 |
| TOTALS (lbs/day, mitigated) | 4.41 | 28.11 | 36.75 | 0.00 | 42.65 | 1.07 | 41.58 |

URBEMIS 2002 For Windows 7.4.2

ile Name: C:\Program Files\URBEMIS 2002 for Windows\Projects2k2\United Rock - Reclamation.urb
roject Name: United Rock Reclamation
r Location: South Coast Air Basin (Los Angeles area)
n tor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

onstruction Start Month and Year: June, 2018
onstruction Duration: 12
otal Land Use Area to be Developed: 5 acres
aximum Acreage Disturbed Per Day: 5 acres
ingle Family Units: 0 Multi-Family Units: 0
etail/Office/Institutional/Industrial Square Footage: 2178000

ONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

| Source | ROG | NOx | CO | SO2 | PM10 TOTAL | PM10 EXHAUST | PM10 DUST |
|---|---|---|---|---|---|---|---|
| *** 2018*** | | | | | | | |
| hase 1 - Demolition Emissions | | | | | | | |
| ugitive Dust | - | - | - | - | 0.00 | - | 0.00 |
| ff-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| n-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| orker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| hase 2 - Site Grading Emissions | | | | | | | |
| ugitive Dust | - | - | - | - | 150.00 | - | 150.00 |
| ff-Road Diesel | 4.39 | 28.09 | 36.33 | - | 1.07 | 1.07 | 0.00 |
| n-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| orker Trips | 0.02 | 0.02 | 0.42 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 4.41 | 28.11 | 36.75 | 0.00 | 151.07 | 1.07 | 150.00 |
| hase 3 - Building Construction | | | | | | | |
| ldg Const Off-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| ldg Const Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| rch Coatings Off-Gas | 0.00 | - | - | - | - | - | - |
| rc oatings Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| s f-Gas | 0.00 | - | - | - | - | - | - |
| sp -Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| sphalt -Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| sphalt Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Max lbs/day all phases | 4.41 | 28.11 | 36.75 | 0.00 | 151.07 | 1.07 | 150.00 |
| *** 2019*** | | | | | | | |
| hase 1 - Demolition Emissions | | | | | | | |
| ugitive Dust | - | - | - | - | 0.00 | - | 0.00 |
| ff-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| n-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| orker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| hase 2 - Site Grading Emissions | | | | | | | |
| ugitive Dust | - | - | - | - | 150.00 | - | 150.00 |
| ff-Road Diesel | 4.39 | 28.09 | 36.33 | - | 1.07 | 1.07 | 0.00 |
| n-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| orker Trips | 0.02 | 0.02 | 0.42 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 4.41 | 28.11 | 36.75 | 0.00 | 151.07 | 1.07 | 150.00 |
| hase 3 - Building Construction | | | | | | | |
| ldg Const Off-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| ldg Const Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| rch Coatings Off-Gas | 0.00 | - | - | - | - | - | - |
| rch Coatings Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| sphalt Off-Gas | 0.00 | - | - | - | - | - | - |
| sphalt Off-Road Diesel | 0.00 | 0.00 | 0.00 | - | 0.00 | 0.00 | 0.00 |
| sphalt On-Road Diesel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| sphalt Worker Trips | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum lbs/day | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| M lbs/day all phases | 4.41 | 28.11 | 36.75 | 0.00 | 151.07 | 1.07 | 150.00 |

age: 3

hase 3 - Building Construction Assumptions:  Phase Turned OFF

hase 2 - Site Grading Assumptions
tart Month/Year for Phase 2: Jun '18
b 2 Duration: 12 months
n ck Travel (VMT): 0
ff-Ro uipment

| No. | ype | Horsepower | Load Factor | Hours/Day |
|---|---|---|---|---|
| 1 | Off Highway Trucks | 417 | 0.100 | 8.0 |
| 1 | Rubber Tired Dozers | 352 | 0.590 | 8.0 |

hanges made to the default values for Land Use Trip Percentages

ha ade to the default values for Construction

he er has overridden the Default Phase Lengths
ite Grading Fugitive Dust Emission Rate changed from 10 to 30
ite Grading Miles/Round Trip changed from 20 to 40
hase 2 mitigation measure Soil Disturbance: Apply soil stabilizers to inactive areas
has been changed from off to on.
hase 2 mitigation measure Soil Disturbance: Water exposed surfaces - 2x daily
has been changed from off to on.
hase 2 mitigation measure Unpaved Roads: Reduce speed on unpaved roads to < 15 mph
has been changed from off to on.

# APPENDIX I

## Draft Performance Specifications for Proposed Mine Backfills

# Performance Specification for Proposed Mine Backfills

Irwindale, California

April 28, 2004

This performance specification applies to proposed backfilling operations at open-pit sand-and-gravel mines in the City of Irwindale, California. A separate set of specifications has been prepared for backfilling operations that are already under way.

## Definitions

| | |
|---|---|
| Angular distortion, $\theta$ – | The ratio of the differential settlement between two points to the horizontal distance between these points |
| Differential settlement – | The difference in total settlement between two points |
| Total settlement, $\delta$ – | The change in elevation at a point due to compression or consolidation of the underlying soils |

## Performance Objectives

The reclaimed pit is intended to be used to support conventionally designed and constructed commercial structures, such as tilt-up concrete buildings, as well as the associated streets and infrastructure. Therefore, the pit must be backfilled in a way that will accommodate this intended use.

In addition, the backfilling must be performed in a way that adequately protects groundwater quality, in accordance with applicable regulations.

## Settlement

In order to provide adequate support for the proposed structures and ancillary site improvements, the pit shall be backfilled such that the post-backfilling settlements satisfy the following criteria:

Static Conditions

The post-backfilling settlement at the finished ground surface shall not exceed the following:

Within proposed building footprint areas:

Total settlement: $\delta \leq 2$ in

Angular distortion $\theta \leq 1/480$

All other areas:

Total settlement: $\delta \leq 3$ in

Angular distortion $\theta \leq 1/360$

Seismic Conditions

The sum of the post-backfilling static settlement and the seismically-induced settlement at the finished ground surface shall not exceed the following:

Within proposed building footprint areas:

Total settlement: $\delta \leq 4$ in

Angular distortion $\theta \leq 1/240$

All other areas:

Total settlement: $\delta \leq 6$ in

Angular distortion $\theta \leq 1/180$

## Geotechnical Investigation

A geotechnical investigation shall be performed to address the following issues:

1. Establish backfilling material specifications, procedures, and quality control measures.
2. Demonstrate how these specifications, procedures, and measures are expected to produce a fill that will satisfy the allowable settlement criteria.

The material specifications shall address the acceptable types of backfill materials, as well as maximum size requirements. The procedures section shall include a discussion of placement and compaction requirements, as well as other relevant topics. At least the uppermost ten feet of backfill must consist of conventionally-compacted soil without any waste products.

If some of the backfill is to be placed underwater, then the geotechnical investigation must specifically address how this fill is to be placed, and how it will satisfy both settlement and groundwater quality criteria.

If the backfilling operation will create permanent slopes, then the stability of these slopes must be addressed in accordance with the December 24, 2003 *Guidelines for Stability Analysis of Open-Pit Mine Slopes* prepared by the Irwindale Slope Stability Committee.

The geotechnical investigation report shall include the results of settlement analyses. The static analyses must consider the effects of post-construction wetting due to rising groundwater or other sources. The seismic settlement analyses shall be based on a design earthquake having a probability of exceedance of 10 percent in 50 years.

The quality control measures must be consistent with local standards of practice for structural fills, and must include both observation and testing. These quality control procedures also must include a requirement for production of annual reports by a California licensed geotechnical engineer.

The report of this geotechnical investigation shall be prepared by a California licensed geotechnical engineer, and submitted to the City of Irwindale for review and approval.

## Backfilling Operations

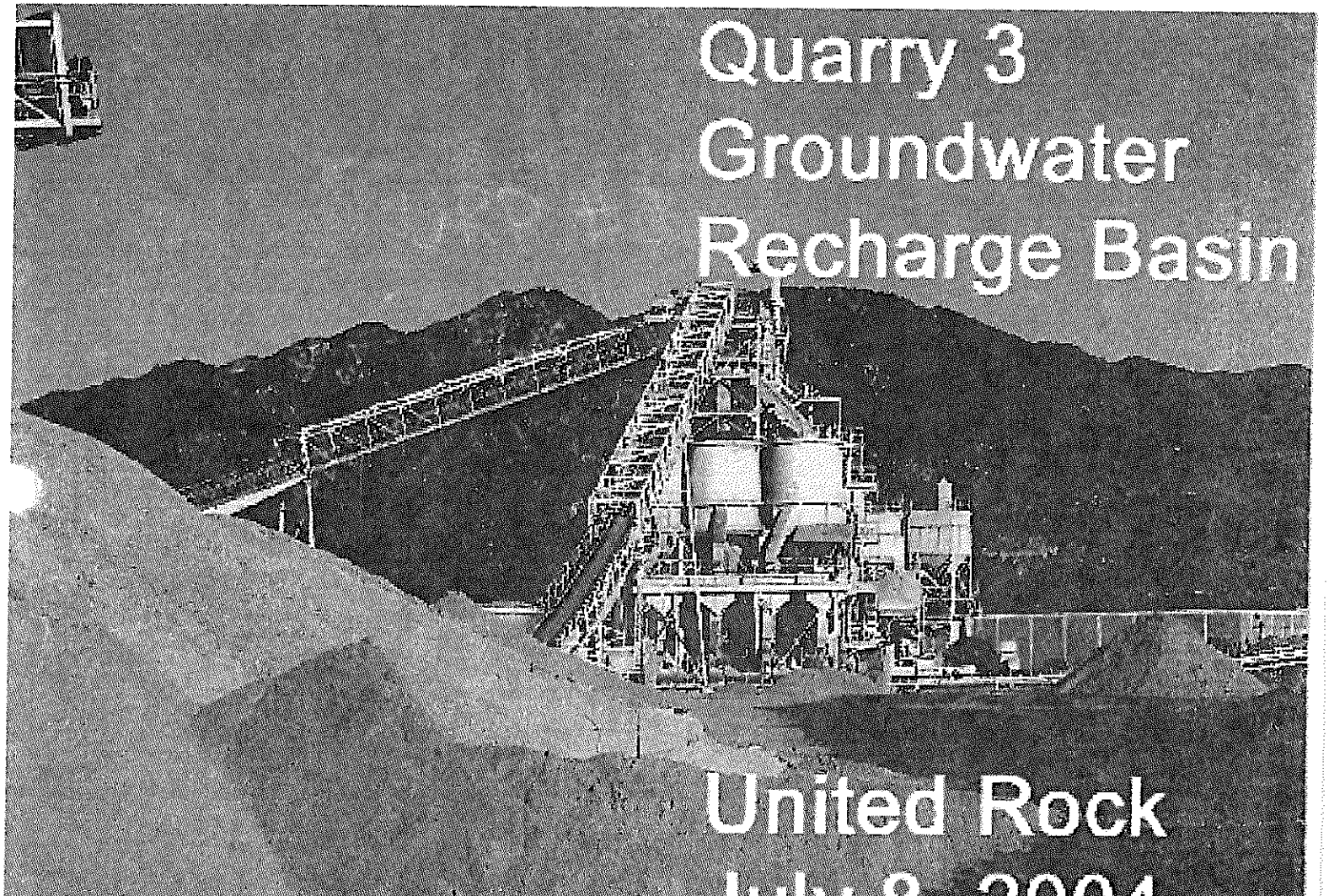
The backfilling operations shall be performed in a manner consistent with the recommendations in the approved geotechnical investigation report. Annual reports of the backfilling quality control activities shall be submitted to the City of Irwindale.

## Settlement Monitoring

Once the backfilling is complete, a settlement monitoring program shall be established. This program shall consist of placing at least one settlement monument per two acres of surface area and monitoring the settlement to a precision of 0.001 ft or better for a period of at least six months. This monitoring program must demonstrate that the static settlement criteria have been satisfied before building permits can be issued.

# IPW – Reclamation Plan, July 2004

# United Rock Products
# July 8, 2004



# UNITED ROCK PRODUCTS

July 8, 2004

Mr. Vicente Mas
Acting Director of Planning
City of Irwindale
5050 North Irwindale Avenue
Irwindale, California 91706

Re: Reclamation Plans for United Rock Products' Quarries 2 and 3

Dear Vicente:

In connection with United's application for Conditional Use Permit No. 5-04 CUP for Quarry No. 2 and Conditional User Permit No. 6-04 CUP for Quarry No. 3, enclosed please find a Reclamation Plan for Quarry No. 2 and Quarry No. 3. There are two options for Quarry No. 3. Option one contemplates a water recharge basin as the final end-use. Option two contemplates backfilling to street level.

We have implemented all of the State's comments (Pompey letters to Kwok Tam dated June 16, 2004), as necessary. However, please note that with respect to comment #5 on the Quarry 2 comment letter, we believe the reclamation plan already adequately addresses the issue. Mr. Pompey stated that performance specifications attached to the text needed to be referenced in the text as the controlling factors to be used on the Site and that the engineering characteristics of the backfill should be described. We believe this issue is addressed in Section 2.5.6.1, which states that "fill will ... meet the April 2004 Irwindale Performance Specifications for Proposed Mine Backfills." The performance specifications are attached as Appendix 3 (incorporated as part of the Reclamation Plan) and contains the engineering characteristics of the backfill.

Also, with respect to Mr. Pompey's comment #6 (types of inert materials acceptable as backfill were not included in the plan), please see Section 2.5.6.1 which provides, "Backfill materials will be clean construction debris or other Class U (inert) waste, soil removed from sedimentation, flood control, or debris reservoirs, exported soil from grading operations in the Los Angeles area, or similar acceptable inert materials as permitted by applicable Federal, State and Local regulations" and "only materials that are certified inert and free of contamination (consisting of aggregate mining wastes not considered useable product, including fine sand, silt, and clay, or non-durable rock material) will be used as backfill." We believe this text adequately addresses the State's comments.

As we have discussed, United will post replacement financial assurance bonds with the City as follows: $2.5 million for each of its Quarries 1, 2 and 3 (for Quarry 1: $500,000 for the Triangle portion and $2 million for the remainder) for reclamation of Quarries 1, 2, and 3. Also, United will post $500,000 as the Financial Assurance Bond for the plant site. The City has asserted that these Financial Assurance Bonds represent a partial amount of the needed Financial Assurance to fully reclaim these Quarries as stated in the enclosed Reclamation Plans. United and the City intend that this dispute will be resolved by

formation of the Irwindale Mining Joint Power Authority (JPA), as approved by the State Mining and Geology Board, and additional Financial Assurance amounts will be covered by the JPA.

Should you have any questions regarding the enclosed Reclamation Plans, please give me a call. We look forward to the conditional approval of these Reclamation Plans by the City Council on July 20, 2004.

Sincerely,

Frank Keohane
General Manager, United Rock Products

# RECLAMATION PLAN
# UNITED ROCK PRODUCTS
# QUARRY NO. 3
# GROUNDWATER RECHARGE BASIN
# IRWINDALE, CALIFORNIA
*JULY 8, 2004*

**Prepared By:**

**United Rock Products**
**1245 East Arrow Highway**
**Irwindale, California 91706**

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3 Performance Specification for Proposed Mine Backfill
4 Guidelines for Stability Analyses of Open-Pit Mine Slopes, Irwindale, December 2003
5 Geotechnical Characterization of Quarry Deposits for United Rock Products Pits 2 and 3, Irwindale, December 2003
6 Guidelines for Drainage and Erosion Control for Open-Pit Mines, Irwindale, July 2004
7 GeoPentech Slope Stability Report for United Rock Products Pit #2 and 3, April 2004
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# 1. INTRODUCTION

## 1.1 DESCRIPTION AND PURPOSE OF RECLAMATION PLAN

This document is the Reclamation Plan for United Rock Products' Quarry No. 3 (the "Site"). The Project consists of an approximate 110-acre Quarry from which sand and gravel are mined, and subsequently processed and sold for construction materials. The Site is part of a larger construction aggregate mine and processing operation that is owned and operated by United Rock Products (URP). URP is the owner and operator of surface and subsurface mineral rights whose operations and facilities include land and aggregate resources within the City of Irwindale. The Site is located within the boundaries of the City of Irwindale in Los Angeles County, California. Specifically, the Site is located in the southeast quarter of Section 36, Township 1 North, Range 11 West, of the San Bernardino Baseline and Meridian.

Under the provisions of the State of California Surface Mining and Reclamation Act of 1975 (SMARA), regulations promulgated thereunder ("SMARA Regulations"), and City of Irwindale Ordinance No. *534,* an updated, revised or amended reclamation plan for the Project must be filed with the City every 5 years, or following a significant modification or change to project operations. The City is the Lead Regulatory Agency for the Project.

A Reclamation Plan for the Project was first prepared in October 1972 by Keobig & Keobig, Inc. of Los Angeles, California. In May 1990, Dames & Moore prepared Supplement No. 1 to the Reclamation Plan. Supplement No. 2 was prepared in December 1999 by Dames and Moore. This Reclamation Plan supersedes the original Reclamation Plan and Supplement Nos. 1 and 2.

The purpose of this Reclamation Plan is to describe the methods for reclamation and the proposed future use of the Site after the termination of aggregate mining and processing.

## 1.2 ORGANIZATION AND RESPONSIBILITIES

Section 2.0 of this document presents the body of the Reclamation Plan in a form consistent with the Suggested Model Reclamation Plan of the California Division of Mines and Geology. Maps, reports, references, and a legal description of the Site are attached as figures and appendices at the end of this document. Upon review and approval of this Reclamation Plan, URP will be responsible for implementing the specific plan elements. As the Lead Regulatory Agency, the City has the duty to evaluate URP's compliance with the Plan.

Preparation of a reclamation plan requires significant forecasting on the part of the operator based upon current assumptions, and it is reasonable to expect that the conditions and assumptions on which a plan is based will change over time. Accordingly, this Reclamation Plan contains a procedure for periodic review and updating of the contents hereof in accordance with Section 2.5.9. Moreover, URP will not deviate from the approved Reclamation Plan without first submitting and obtaining approval from the City of an amendment and/or supplement in compliance with SMARA, the SMARA Regulations, and local ordinances.

## 2. RECLAMATION PLAN

This Reclamation Plan supercedes and replaces the previous approved reclamation plan, as amended and supplemented, for Quarry 3. The purpose of this Reclamation Plan is to reclaim the Quarry to be used as a groundwater recharge basin. Reclamation will meet the criteria in the City's April 2004 Performance Criteria for proposed Mine Backfills for post-reclamation land uses. The April 2004 Performance Criteria for proposed Mine Backfills is attached as Appendix 3. This Reclamation Plan includes all information about mining and reclamation of the Site to ensure that impacts from the operation will be minimized, both during and after mining of the Site.

The San Gabriel Watermaster has expressed interest in accepting the Site upon completion of reclamation for use as a groundwater recharge basin. A preliminary letter of interest to that effect is attached hereto as Exhibit I. URP will allow the Site to be used by such entity upon completion of reclamation for use as a groundwater recharge basis, or to another appropriate governmental entity for use as a groundwater recharge basis.

Since the quarry is located near the Santa Fe Dam Spillway, a diversion structure will be constructed to divert water to the quarry for groundwater recharge. Also, a silting pond with vegetation will be constructed in the southeast corner of the quarry to filter the incoming water before allowing the water to drain to the lower portion of the Quarry. A conceptual layout of the future groundwater recharge basin is attached in Exhibit H.

### 2.1 OWNER, OPERATOR, AND AGENT

#### 2.1.1 Applicant

United Rock Products
1245 East Arrow Highway
Irwindale, California 91706
Telephone - (626) 358-4558

#### 2.1.2 Name of Mineral Property

United Rock Products Quarry No. 3

#### 2.1.3 Property Owners or Owners of Surface Rights

Same as Applicant

#### 2.1.4 Owners of Mineral Rights

Same as Applicant

#### 2.1.5 Lessees

None

### 2.1.6 Operator

Same as Applicant

### 2.1.7 Agent(s) for Service of Process

Frank Keohane, General Manager
United Rock Products
1245 East Arrow Highway
Irwindale, California 91706
Telephone - (626) 358-4558

William F. Capps, Esq. (legal counsel)
Jeffer, Mangels, Butler & Marmaro LLP
1900 Avenue of the Stars, 7th Floor
Los Angeles, California 90067
Telephone - (310) 203-8080

## 2.2 LOCATION

### 2.2.1 Description, including legal, of the extent of the mined lands involved by this operation, including total acreage

The Site includes approximately 110 acres in the southeast quarter of Section 36, Township 1 North, Range 11 West of the San Bernardino Baseline and Meridian in Los Angeles County, California. A full legal description of the Site, including descriptions of the utility and road easements affecting the Site is included in Appendix 1.

### 2.2.2 Description of the access route to the operation Site

Principal access to the Site is via a gated entrance from Meridian Street, approximately 2,000 feet east of the intersection of Meridian Street and Mountain Avenue. Other gated entrances are located approximately 1,000 feet east of the principal entrance on Meridian Street and at the northeast corner of the Site on Buena Vista Street (See Exhibit C).

### 2.2.3 Location and Vicinity Map

Exhibit A presents a location and vicinity map for the Project.

## 2.3 DESCRIPTION

### 2.3.1 Mineral Commodity Mined

Construction aggregates including sand and gravel.

### 2.3.2 Geologic description, including brief general geologic setting, more detailed geologic description of the mineral deposit mined, and principal minerals or rock types present

The Site is developed on the alluvial fan of the San Gabriel River, below the San Gabriel

Mountains. This fan extends out approximately eight miles to the southwest from the mountains and has a maximum width of about four miles near its base. The gradient of the fan averages slightly less than 1 percent. The deposits being mined include the wash deposits of the San Gabriel River and the slightly older fan deposits laid down by the river. Both units are of Holocene age (less than about 14,000 years old) and consist mostly of uncemented silts, sands, gravels, cobbles and boulders. Individual rock fragments consist of crystalline rocks such as granite, granodiorite, diorite, granitic gneiss, schist and quartz. These rock types are derived from outcrops in the drainage basin of the river. The largest particles tend to be deposited near the fan head, while finer-grained materials are deposited further downstream (Kohler, 1982).

The Site is located south of the midpoint of the alluvial fan where the deposits include a range of high quality aggregates containing very few fines. Deposits of high-grade construction aggregates are known to be about 200 feet thick near the south end of the fan. At the URP facilities, the thickness of the commercially valuable aggregate deposits within the fan has not been accurately measured, but is estimated to be 600 feet. (Kohler, 1982).

### 2.3.3 Description of environmental setting of the Site and the surrounding areas, including existing area land use, soil, vegetation, groundwater elevation and surface water characteristics, average annual rainfall and other factors pertaining to environmental impacts and their mitigation and reclamation

The Site is near the base of the San Gabriel Mountains, which form the northern edge of the greater Los Angeles urban basin. Most of the land surrounding the Site is used for the mining and processing of sand, gravel, and related construction products, and has been intermittently mined for this purpose since about 1910. The area surrounding the Site is developed with industrial, manufacturing, wholesaling, distribution, service and commercial land uses that depend upon immediate highway access and visibility. There is a residential development north/north-west of the Site. This land use corridor is a significant regional employment center.

As the Site has already been intensively developed by sand and gravel extraction operations, there is little or no soil present in the sense of a mineral and organic layer capable of supporting plant life without major human intervention. The soils present at the ground surface are the same sand and gravel materials being mined and processed. Vegetation is mostly limited to opportunistic species that have colonized disturbed areas. The Site does not appear to support any known rare, unique or endangered flora or fauna. Other than normally occurring avifauna, minimal animal life has been observed on the property, which does not provide a suitable habitat for unique plant or animal life. The Site is not identified as being within any biotic habitat conservation districts.

Groundwater beneath the Site is part of the San Gabriel Valley aquifer. The elevation of the groundwater table fluctuates greatly in response to wet and dry cycles, major storms, and nearby groundwater spreading operations managed by the Los Angeles County Department of Public Works (DPW). However, the historic high groundwater level is approximately at an elevation of 332 msl. This level was taken from groundwater elevations measured in State Well No. 4217 (just west of Quarry No. 3) in July 1944. Other DPW data indicate that the mean annual precipitation at the Site varies from about 18 to 20 inches per year.

The primary surface stream draining the area is the San Gabriel River. Because the river crosses a large alluvial fan, there was no well-defined stream channel down the fan before the area was developed. Instead, the entire fan surface was covered by small distributary channels and surface flows switched from channel to channel with every flood. The present 'channel' of the San Gabriel River is a manmade floodway. Other small streams in the area also occupy manmade flood channels or storm drains.

Santa Fe Dam, a major flood control structure constructed by the United States Army Corps of Engineers on the San Gabriel River, lies to the east across the right-of-way of Interstate Highway 605. The emergency spillway for the Santa Fe Dam terminates at the northeast property boundary of the URP plant site, approximately 1,500 feet south of the southeastern property boundary of Quarry No. 3. The spillway channel is designed for the 200-year flood event, and has a very low gradient slope, which conveys water at slow velocity. A terminal channel at the end of the spillway diverts water southeast under the freeway back to the San Gabriel River channel. The emergency spillway presents no flood hazard at Quarry No. 3.

Furthermore, the June 2003 Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map indicated that Quarry 3 is located in Zone C, an area outside the 500-year floodplain. It is unlikely that Quarry 3 would be inundated due to the overflow from the Santa Fe Dam spillway. In the event of a major storm, the storm water in the spillway will be diverted back to the San Gabriel River. Exhibit D is a copy of the June 2003 FEMA map.

## 2.4 EXISTING SURFACE MINING OPERATIONS

**Summary of Existing Operations**

| | |
|---|---|
| Size | 110 acres |
| EXISTING DEPTH | |
| Maximum Depth | 150 msl |
| Average Depth | 235 msl |
| VOLUME REMOVED | |
| To Date (10/28/03) | 19.9 MCY; 29.85 MT |
| Remaining Permitted | 7.53 MCY; 11.3 MT |
| Max Total Permitted | 27.43; 41.14 MT |
| Current Rate Per Year (MCY; MT) | N/A |
| Maximum Tons/Yards per Year in Last 3 Years | N/A |
| Average Tons/Yards per Year in Last 3 Years | N/A |
| SLOPES | |
| Above Water | 1:1 |
| Below Water | N/A |
| WATER LEVEL | |
| High Groundwater Level | 332 msl |
| Average Groundwater Level | 250 msl |
| Current Groundwater Level | 200 msl |
| WATER USE | |

| | |
|---|---|
| Gallons Per Day (6 days per week) | 5,000 |
| From | 2 wells on plant site |
| HOURS OF OPERATION | |
| Mining | Currently none (was 6am to 12pm six per week; occasional Sunday.) |
| Trucks Loading/Unloading and Leaving Site | None |
| EMPLOYEES | 53 |
| ADT (one way) | |
| Aggregate Trucks | N/A |
| Other – reclamation trucks: | N/A |
| Other: | |
| Employee Cars | Up to 20 |
| ZONING CURRENT | |
| Current | Q-Quarry |

### 2.4.1 Starting Date of Operation

Mining at the Site began in 1910 and has been actively mined since that time. This facility was already in operation as of January 1, 1976 and continued to be in operation when URP acquired the Site in 1988. URP has continued to actively mine the Site since that time. The Site has been mined for as long as or longer than it has been zoned **Q** (Quarry).

### 2.4.2 Estimated Life of Operation

Mining operations are expected to end by December 31, 2037 or when the permitted maximum depth is reached, as described in Section 2.4.6.4. below, whichever first occurs. The Reclamation schedule is to commence upon completion of mining.

It is estimated that reclamation will start in the year 2037, and will take two to three years to complete. Therefore, reclamation is anticipated to be complete by December 31, 2040.

### 2.4.3 Duration of First Phase

This operation is not phased.

### 2.4.4 Continuity of Operation

Continuous.

### 2.4.5 Volume of Inert Fill Operation

Minimal. Import soil will be placed in the slope areas in preparation for the planting of vegetation necessary for long term slope stability for the use of a groundwater recharge basin.

### 2.4.6 Total anticipated production

#### 2.4.6.1 Mineral commodities to be removed (Proposed)

Approximately 19,900,000 cubic yards (29,850,000 tons) of material has been removed to date (October 2003). Approximately 17,140,000 cubic yards (25,720,000 tons) of available reserves remain to be mined down to a depth of 440 feet below grade ( –20 msl, the maximum permitted depth).[1] Total production for the life of the project will not exceed 17,140,000 cubic yards.

#### 2.4.6.2 Residuals retained on-site

Based on the expected residuals production rate of about 40,000 tons/year during full-scale operations, a total of about 600,000 tons of silt will be disposed between 2002 and the end of mining operations of December 31, 2037. These materials are sold whenever possible and otherwise are disposed of on-site in Quarry 1 or 2 with other materials suitable for use as inert fill. The placement of these residual materials will be permitted under a waste discharge permit issued by the Regional Water Quality Control Board ("RWQCB") (URP has filed an application with the Los Angeles RWQCB for a waste discharge permit for Quarry 2). Appendix 10 is a copy of the waste discharge permit for Quarry 3.

#### 2.4.6.3 Residuals disposed of off-site

None. Since the processing of mined material is at the plant site, there will be no residuals disposed offsite.

#### 2.4.6.4 Maximum permitted depth

The Irwindale Slope Stability Committee Guidelines (Appendix 4) have established the necessary condition for estimating maximum slope height. With that, the calculated maximum depth that will meet all safety conditions established in the Committee Guidelines is 440 feet below grade (–20 msl). The Quarry will be mined in a manner that allows development of slope gradients of 2:1 or flatter below the calculated water surface elevation of 225 msl and 1:1 above the elevation of 225 msl.

### 2.4.7 Mining Method

The property will be operated as an open quarry sand and gravel operation. The present mining plan involves the excavation of the Quarry floor and transport of the excavated material by conveyor to the plant site for processing. As the Quarry floor is lowered, groundwater will be intercepted. Excavation will proceed under water via clamshell dredging across the entire Quarry bottom. Side slopes of the Quarry are to have gradients no steeper than 2:1 (horizontal:vertical) from water surface elevation of 225 msl as stated in the Irwindale Slope Stability Committee Guidelines. Appendix 4 is the Committee Guidelines.

---

[1] All elevation and contour data referenced herein are based on the Los Angeles County Department of Public Works Bench Mark No. 525, which is a brass cap stamped "LA CO RD 1950", located in a monument well at the centerline intersection of Buena Vista and Arrow Highway. The North American Vertical Datum of 1988 elevation, as published by the L.A.D.P.W. in the year 2000, is 390,668 feet.

### 2.4.8 Description of the nature of the processing and explanation of the disposal method of the tailings or waste from processing

Processing will take place at the URP plant site (which is not the subject matter of this Reclamation Plan), located south of the Site across Buena Vista Street. The sand and gravel plant processes excavated material into construction aggregate. The excavated material is moved by belt conveyor from the active Quarries into a surge pile on the plant site. The material is then drawn from the bottom of the surge pile onto another belt conveyor and taken to the plant for processing. The first separation is made on a large shaking screen with the rocks larger than 1-1/2 inches in diameter being sent to the crushers and the rocks smaller than 1- 1/2 inches in diameter and part of the sand being sent to the washing facility. The large rocks are crushed in a series of crushers and taken by belt conveyors to additional shaking screens where they are separated into products by size.

Each product is stockpiled separately above a tunnel containing a belt conveyor. The product is withdrawn from the stockpile and moved to one of a series of bins built over long platform scales. As a truck moves onto the scale, it is loaded from the overhead bin and driven to the delivery site. Aggregates are delivered to the asphalt plant and concrete batch plant by conveyor belt directly from the stockpiles of the sand and gravel plant. The smaller material moves by belt conveyor to the washing facility where it is cleaned by high-pressure sprays while being passed across shaking screens. The screens separate the material into gravel (particles larger than 1/4 inch in diameter) and sand that contains a specified percent of each size fraction. The sand is then drained in large dewatering screws, and the gravel and sand are stockpiled above another scale. The washed products are mostly used as aggregates in Portland Cement Concrete.

Fines from the washing process are directed to the siltation pond on the URP plant site. The siltation pond is used for the settling out of fines. Once the fines have settled, the water is recycled.

### 2.4.9 Estimation of quantity and quality of water required by the proposed operation, specifying proposed sources of this water, method of its conveyance to this property and the quantity and quality and method of disposal of used or surplus water

Approximately 5,000 gallons per day of water is expected to be used for road dust suppression within the Quarry. The chemical quality of the water is not critical for dust suppression uses. The water is obtained by pumping from two deep wells located at the URP plant site. Due to the nature of the use, most of the water evaporates and is not known to be discharged to any body of surface water or groundwater. URP periodically inspects and verifies water quality. These inspections have not yielded any indications of significant contaminants to date. URP's water monitoring obligations will continue throughout the period of mining and reclamation.

To wash the smaller sand and gravel materials, URP uses a 600 horse power, 3,500 gallons per minute floating pond well. This well is located in the last of three silt ponds, referred to as pond 3. Water is pumped from pond 3 to the wash processing plant where it is directed to the individual wash screens and sprayed onto the aggregate. This process separates the silt from the aggregate. The wash water, mixed with silt is then routed to the first of the three settling ponds, referred to as pond 1. The

suspended solids (silt) are allowed to separate and fall to the bottom of pond 1. The wash water proceeds to pond 2 and the process continues. When the water reaches pond 3 most of the solids have separated and the 600hp well re-circulates the same water. Occasionally, an additional well (I.R.W.2), located at the plant site, is used to provide make up water (water lost due to evaporation). A dragline crane is used to remove the silt from the ponds. The silt is stacked and allowed to dry and eventually sold as topsoil or fill material. The total volume of well water used is 900 acre feet per year.

### 2.4.10 Description of phases of the mining operation that allow concurrent reclamation, and a proposed time schedule for such concurrent activities

URP intends to reclaim the site upon termination of resource extraction on this property. Due to the nature of the mining method, which relies upon gradual lowering of the Quarry floor over the entire Quarry, concurrent mining and reclamation are not possible and no staging or phasing of reclamation is proposed.

### 2.4.11 Maps

1. Boundaries and topographic details of the Site;

2. Location of all streams, roads, railroads, water wells, and utility facilities within 500 feet of the Site; proposed access roads to be constructed in conducting the surface mining operation; and

3. Location of areas mined, and of waste dumps and tailings ponds.

Figure 1 illustrates the boundaries and topographic details of the Site including the location of all streams, roads, railroads, water wells and utility facilities within 500 feet of the site. Figure 2 illustrates existing access and haul roads and was developed from an aerial photo survey flown over the Site October 2002. Exhibit E illustrates the reclaimed Quarry as a Groundwater Recharge Basin and a cross section of Quarry No. 3 after reclamation.

## 2.5 RECLAMATION PLAN

**Table 2**
**Quarry No. 3 Reclamation Information**

| Category | Groundwater Recharge Basin Specific Information |
|---|---|
| Area Covered by Reclamation Plan | 110 acres |
| Volume of Backfill Required to street grade. | N/A |
| Annual Rate of Fill | N/A |

| | |
|---|---|
| Duration of Backfilling Operations | N/A |
| Type of Backfill | N/A |
| Level of Compaction | N/A |
| Average Depth of Quarry After Reclamation | 440 feet below grad (-20 msl) |
| Maximum Depth of Quarry After Reclamation | 440 feet below grad (-20 msl) |
| Inclinations of Residual Slopes | 1 1/2:1 with vegetation drainage berm around Quarry perimeter; 2:1 below water (1:1 perimeter slopes above 275 msl may be allowed if permitted by the future Water Agency that owns the quarry) |
| Zoning/Reclaimed Land Use | Open space (water recharge use) |

### 2.5.1 Areas to be covered by the reclamation plan

The area to be covered by the reclamation plan consists of approximately 110 acres, as shown on Exhibit H.

### 2.5.2 Description of the ultimate physical condition of the Site and proposed use(s), or potential uses, of the mined lands as reclaimed

Upon the termination of mining, any remaining equipment will be removed and the Quarry will be reclaimed to be a Groundwater Recharge Basin. The Quarry will be prepared in accordance with standard engineering procedures and regulatory guidelines in effect at the time to support this end use. The construction standards and specifications of this groundwater recharge basin shall be reviewed and approved by the water agency that maintains the facility. The entire final slope areas in the Quarry will be prepared to (1) meet stability guidelines and (2) revegetated, in accordance with the following guidelines:

1. The Irwindale July 2004 Guidelines For Drainage and Erosion Control For Open-Quarry Mines (Appendix 6)

2. The Irwindale December 2003 Guidelines For Stability Analyses of Open-Quarry Mine Slopes (Appendix 4)

### 2.5.3 Description of the relationship of the interim uses other than mining and the ultimate physical condition to (a) zoning regulations and (b) general plan and plan elements

The ultimate physical condition of the Site will be consistent with the City's General Plan, redevelopment plan, and zoning ordinance. As of this date, the City planning department states that Quarries 1, 2 and 3 of URP will be zoned as mixed-use industrial and/or commercial. The reclamation now proposed for the Quarry as a water recharge basin will not preclude ultimate development as described in the City of Irwindale Quarry Rehabilitation Plan (1976) or in proposals for a mixed-use industrial and/or commercial project, should development of that type appear feasible and desirable at some point in the future.

### 2.5.4 Evidence that all owners of a possessory interest in the land have been notified of the proposed use(s) or potential uses

URP represents and warrants that it is the sole owner of a possessory interest in the property. As the proponent of this plan, URP is aware of the proposed use of the property.

### 2.5.5 Description of soil conditions and proposed soil salvage plan

Native soils, in the sense of a mineral and organic layer that will readily support vegetation, are not present on the Site. Soil required for vegetation will be imported during the reclamation process. No soil salvage plan is therefore proposed.

### 2.5.6 Description of the methods, their sequence and timing, to be used in bringing the reclamation of the land to its end state.

The proposed reclamation of Quarry 3 is to develop the mined Quarry as a groundwater recharge basin. There is no need for any backfilling operation; however, minimum top soil will be imported to the Quarry to prepare the slopes for vegetation in order to achieve long term slope stability.

#### 2.5.6.1 Grading

The Site will be carefully prepared in accordance with the applicable requirements of the Main San Gabriel Basin Watermaster.

All imported top soil will meet the following:

- That backfill material will be as compact and homogeneous as possible to eliminate the potential for settlement, particularly differential settlement. The backfill material will be compacted to a level suitable for supporting the growth of vegetation.

- That only materials free of contamination will be used as top soil. URP will conduct periodic soils tests for contaminants and will provide the test results to the City for review. Site access will be tightly controlled, as described in Section 2.5.6.7 below, until reclamation is complete.

- A geotechnical engineer will establish parameters for import soil placement.
- Ongoing soil placement operations will be verified by a geotechnical engineer regularly.
- A certified ground surface contour map will be provided to the City when reclamation is completed. This contour/topographic map shall be prepared by a Surveyor licensed in the State of California.

### 2.5.6.2 Financial Assurances

URP has posted replacement Financial Assurance Bonds with the City of Irwindale as follows: $2.5 million for each of its Quarries 1, 2 and 3 (for Quarry 1: $500,000 for the Triangle portion and $2 million for the remainder) for their reclamation. Also, URP has posted $500,000 as the Financial Assurance Bond for URP's plant site. These bonds, along with additional financial assurance amounts covered by the Irwindale Mining Joint Powers Authority, as approved by the State Mining and Geology Board, cover reclamation of the Quarries under the new CUPs and are attached in Appendix 2, along with the executed JPA documents.

### 2.5.6.3 Slope Stability Issues

Slope stability issues for Quarries 2 and 3 were evaluated by Geologic Associates in 2003. The December 2003 final report, Geotechnical Characterization of Quarry Deposits United Rock Products Pits 2 and 3 (the "GLA Report"), was reviewed and approved by the State Mining and Geology Board and the Department of Conservation in April 2004. The GLA Report incorporates the December 2003 Irwindale Slope Stability Analyses Guidelines for Open Pit Mine Slopes. Based on Irwindale's recent topography study, all existing perimeter slopes at Quarries 2 and 3 were analyzed under the static and dynamic condition following the guidelines outlined in SP 117, SCEC SP 117, and the 2003 Irwindale Slope Stability Analyses Guidelines. Furthermore, this report included detail analysis on the future maximum slope height that will be extended to depths of 440 feet below grad (–20 msl).

The results of the GLA Report identified areas within both Quarries 2 and 3 that are required to be remediated in order to have adequate stability for both static and seismic conditions. As a follow up action to the GLA Report, URP retained GeoPentech of Santa Ana to conduct a Finite Element Analysis of the concerned areas as stated in the GLA Report (the "GeoPentech Report"), and to recommend adequate remediation measures. As a result of these two independent analysis, URP will commence and diligently pursue completion of required slope remediation of the concerned areas immediately. [2] The

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[2] GeoPentech is currently evaluating W15S at Quarry 2 for remediation. Remediation methods currently considered include barrier-type structures (soldier piles or cast-in-place drilled piers or slurry wall) that would be placed at the top of the slope and near the property line. Other remedial alternative methods may include placement of buttress fill at the toe of the slope. A combination of both methods (barrier-type and buttress fill) may also be considered if found feasible. Conceptual plans are anticipated to be completed by August 1, 2004, Engineered Plans 2 week after, and remediation work is expected to start mid- September.

The next area requiring remediation is W16N at Quarry 3. Remediation methods for this slope will include a barrier-type structures (soldier piles or cast-in-place drilled piers or slurry wall) that would be placed at the top of the slope with a buttress fill if required. Engineered plans are anticipated to be ready by August 31,

GLA Report and the Geopentech Report are attached as Appendix 5 and 7, respectively. A typical cross section with the maximum slope height for Quarry 3 is attached in Exhibit E.

**Final Slope Configuration**

The purpose of the Reclamation Plan for Quarry 3 is to reclaim all perimeter slopes with suitable backfill material to a standard of 1:1 to 2:1 with necessary drainage devices and vegetation for long term use as a groundwater recharge basin. The cross section of the Quarry upon completion of reclamation is shown in Exhibit E. All perimeter slopes will be constructed in accordance with Chapter 33 of the 2002 Los Angeles County Building Code or its latest version and shall meet the April 2004 Irwindale Performance Specifications for Proposed Mine Backfills (attached hereto in Appendix 3). Furthermore, all perimeter slope will have adequate erosion control measures designed in accordance with the July 2004 Irwindale Guidelines For Drainage and Erosion Control For Open-Quarry Mines.

During the mining phase, all quarry walls will have adequate static and seismic stability that meets the December 2003 Irwindale Guidelines For Stability Analyses of Open-Pit Mine Slopes. All perimeter slopes shall meet the slope configuration cross section that is attached in Exhibit E.

### 2.5.6.4 Stabilization of permanent waste dumps, tailings, etc.

No permanent waste disposal locations or tailings ponds exist or will be maintained in the future on the reclaimed site.

### 2.5.6.5 Rehabilitation of pre-mining drainage

The pre-mining drainage system was a series of poorly-defined distributary channels on the surface of the alluvial fan. This drainage system has been completely obliterated by urban development on the fan and cannot be effectively rehabilitated. Local drainage from surrounding areas has been diverted around the site by small ditches and storm drains.

### 2.5.6.6 Removal, disposal or utilization of residual equipment, structures, refuse, etc.

All equipment, structures, and other facilities associated with the mining and processing operation will be dismantled and removed from the Site. All refuse, abandoned equipment, and similar materials will likewise be removed for disposal in a manner permitted by law. It is possible that some inert wastes, such as pieces of waste concrete and similar materials, may be incorporated into the grading required for reclamation. This will be done in a manner compatible with the law, local regulations, and the local standard of grading practice, as specified in Section 2.5.6.1 above.

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2004 and work to commence upon completion of W15S at Quarry 2.

For W8S at Quarry 3, the remediation method considered will be a buttress fill. Engineered plans are anticipated to be completed by September 31, 2004. Work to commence upon completion of W16N.

### 2.5.6.7 Control of contaminants, especially with regard to surface runoff and groundwater

Erosion and sedimentation will be controlled during all phases of construction, operation, reclamation and closure of the mining operation. Surface runoff and drainage from mining operations will be controlled by berms, silt fences, sediment ponds, revegetation, hay bales, or other erosion control measures, to ensure that surrounding land and water resources are protected from erosion, gullying, sedimentation and contamination. Currently, the Quarry is bermed to control erosion and prevent surface water from flowing over the Quarry walls. Existing and future erosion control measures will be maintained in such a manner to control erosion and prevent surface water from flowing over the Quarry walls. Specific control measures shall be designed in accordance with the Irwindale July 2004 Guidelines For Drainage and Erosion Control for Open-Quarry Mines.

At the termination of mining and processing operations, areas in which fuel, oil, or other contaminants may be present will be identified and mitigated in a manner consistent with the laws and practices effective at this time. This mitigation may involve the removal and disposal or treatment of small areas of contaminated sand and gravel. Water on the Site will be storm runoff originating on the property itself and is not expected to contain contaminants other than sediment. As this water will leave the Site via infiltration or evaporation, no adverse impacts to either surface water or groundwater resources are expected. If infiltration or evaporation proves insufficient, URP shall devise and submit a drainage program that shall be subject to City approval, using standards of approval within its authority.

### 2.5.6.8 Control of Dust Emissions

Dust is controlled pursuant to the requirements of the South Coast Air Quality Management District ("AQMD") Rule 403. The dust control plan includes the following or similar measures that will be implemented by URP to reduce dust emissions:

- Water sprays to keep materials moist.
- Setting low speed limits on unpaved roads on Site. A "low speed limit" of 10 MPH shall be established at the Site, and speed limit signs shall be posted in a manner to provide full and sufficient notice to drivers of the maximum allowable speed on Site.
- Watering of storage piles.
- Use of spray wash racks to wash trucks prior to leaving the Site.
- Constructing wind fencing (berms, shrubbery, constructed walls, etc.). Wind fencing shall be constructed in a manner to minimize dust emissions originating from the Site. The locations of all wind fencing should be documented and mapped.
- High wind conditions. URP shall require additional watering or cessation of operations when winds exceed 25 mph.

- Street Sweeping: URP shall use mobile wet process street sweepers to maintain entrance/exit areas at city streets.

- Revegetation. URP shall revegetate inactive disturbed areas at the Site.

If mining or reclamation equipment will be operated at the edge of the Quarry within 500 feet of residential property boundaries, URP shall first construct a berm to separate surrounding residential areas from the noise associated with mining and reclamation operations. Throughout the implementation of the reclamation plan, water will be used to control dust production from haul roads, working areas, and other areas where dust is likely to be produced. Service roads, machinery and working areas will be sprayed down on a scheduled basis.

Currently, berms are used to prevent surface water from flowing over the Quarry walls. Prior to installation of the berms, some gullying occurred on the Quarry slopes. URP will address the surface erosion during operations, and will implement erosion measures in accordance with the Irwindale July 2004 Guidelines For Drainage and Erosion Control for Open-Quarry Mines.

Berms will be maintained to prevent surface water from flowing over the Quarry walls or into the street. New berms will be constructed as necessary to accomplish this objective.

### 2.5.6.9 Site Security Measures

The likely sources of contamination will be the illegal, inadvertent and/or malicious dumping of contaminants into the Quarries. URP shall perform the following measures to reduce the risk of contamination, as well as provide for the protection of public safety:

#### *A. Controlled Access*

1. Restrict access to Quarry areas to authorized vehicles and equipment only;

2. Monitor entrances continuously for unauthorized vehicles; and

3. Secure all gates with locks, except at entrances during business hours.

#### *B. Security*

1. Construct and maintain in good, first-class condition and in accordance with City zoning ordinances, appropriate berms, walls and fences around the Site. The construction of this security fencing will be in accordance to the attached fencing detail as shown in Exhibit F; and

2. Repair any damage to berms, walls and/or fences within two days of discovery.

#### *C. Daily Patrolling*

1. Inspect security berms, walls and fences on a daily basis; and

2. Police Quarry areas and remove any deleterious/hazardous materials in accordance with governmental requirements.

### *D. Protection of Public Safety*

The Site will remain secure by a combination of berms, walls and a minimum six-foot-high chain link fence and necessary locking gates will be installed and maintained at the perimeter of the Site. All gates will be locked when not in use for the ordinary course of business on the Site. Security measures will ensure that the general public is excluded from the Site. A contact person(s) will be identified who is available on a 24-hour basis to respond to emergencies and unlawful access to the Site. Other security measures (as identified above in the water quality protection measures) will also be implemented to restrict access.

### 2.5.6.10 Emergency Procedures

Within thirty (30) days of the approval of Reclamation Plan an Emergency Plan must be prepared as an attachment to this Plan. Required remedial actions will be established in the Emergency Plan to minimize the time period between the discovery of the contamination and the completion of remediation. If, at any time, contamination is found to be at or above established action levels, the City will be immediately notified and URP will be required to take (and pay for) all necessary remedial actions.

### 2.5.6.11 Groundwater Monitoring

Groundwater beneath the Site is part of the San Gabriel Aquifer. Such surface water within the Quarry is in direct contact with groundwater and, therefore, is representative of upper groundwater conditions surrounding the Quarry area. On the basis of this condition, water samples collected from within the Quarry will be tested annually to identify potential impacts to the aquifer.

URP will conform to the requirements of the Los Angeles Region Water Quality Control Board and the San Gabriel Basin Watermaster. URP currently holds 2 waste discharge permits. One is for Quarry 1 (not part of this project) and the other is for Quarry 3; however, no fill is being received at this time in Quarry 3. In addition, URP has filed an application with the Los Angeles Regional Water Control Board for waste discharge permit for Quarry 2.

Surface water sample collection will consist of slowly lowering a sterile, disposable, polyethylene bailer on a monofilament line approximately one to two feet below the air-water interface. The bailer will then be raised to the surface and fitted with a low-flow velocity sampling port to minimize sample turbulence and volatilization. Each sample container will be slowly filled with a water sample at a maximum rate of 100 milligrams per liter per minute (ml/min). During sample collection, water collected from the Quarry will also be monitored for field parameters, including temperature, pH, and electrical conductivity.

Sample containers and handling procedures will conform with the established protocols for each specific parameter as described in EPA SW-846. The sample bottles, once filled and preserved as required, will be properly labeled. Each label will include Quarry identification number, sample number, date and time sampled, job number, site name and location, and sampling personnel's initials. The sealed and labeled samples will be placed in ice chests containing blue ice and transported to a DHS-Certified testing laboratory. Chain-of-custody records will be maintained throughout the sampling

program.

The types of analyses and reporting requirements will be determined in consultation with the Watermaster and the City Engineer. Based on the current monitoring program, it is anticipated that the quarterly testing will consist of the following six parameters:

- Aromatic Hydrocarbons by EPA Method 8020;
- Halogenated Volatile Organic Compounds (HVOCs) by EPA Method 8010;
- pH by EPA Method 150.1;
- Total Suspended Solids (TSS) by EPA Method 160.2;
- Specific Conductance by EPA Method 120.1; and
- Total Recoverable Petroleum Hydrocarbons (TRPH) by EPA Method 418.1.

The monitoring program will continue during mine and reclamation operations until reclamation has been completed.

Erosion will be controlled around the Site perimeter by providing positive control of runoff and rainwater. Water will not be allowed to concentrate and flow over the slope face. Water will be directed away from the top of the slope and toward drainage devices that are approved by the City Engineer. Water will not be allowed to pool in the setback area of the top of the slope. A maintenance program will also be implemented to maintain positive control of runoff through completion of reclamation.

This Reclamation Plan has been submitted to the Los Angeles Region Water Quality Control Board and the San Gabriel Basin Watermaster for review and comment in accordance with Public Resources Code § 2770.6 and incorporates their recommendations and requirements.

### 2.5.6.12 Treatment of stream beds and stream banks

The Site does not contain stream beds or stream banks and therefore none will need rehabilitation. The flood control channel and emergency spillway facilities constructed by the Corps of Engineers southeast of the Site will not be affected by the proposed reclamation.

### 2.5.6.13 Drainage and Erosion Control

The operation and reclamation of the Site will meet the following provisions, methods and standards, or the provisions of the "Guidelines For Drainage And Erosion Control For Open-Pit Mines in Irwindale, California" (the "Guidelines") dated July 2004, prepared by the Irwindale Drainage And Erosion Committee.

During the mining and reclamation phases, erosion control and drainage measures will be implemented throughout the Quarry in accordance with the July 2004 Irwindale Guidelines For Drainage and Erosion Control For Open-Pit Mines.

Drainage

The Site will be operated and maintained to control all drainage of storm water and other water sources, through planned drainage systems to points of final discharge to limit erosion. The planned drainage systems will be in accordance with Figures 1 through 6 of Exhibit G hereto, or the Guidelines references above. Upon completion of mining, the Quarry will be used as groundwater recharge basin. During this phase the planned drainage systems will be in accord with Figure No. 7 of Exhibit G or the Guidelines.

Erosion Control

Erosion Control during reclamation will be accomplished through the continued practice of maintaining and monitoring of all erosion drainage devices and facilities, as required in the Mining Phase Storm Water Pollution Prevention Plan (SWPPP). This SWPPP is attached in Appendix 8.

The Site will be operated and maintained to limit significant erosional affects of "overtopping erosion" at the top of the Quarry slopes, incident erosion" due to rainfall on the Quarry slopes and "wave lap erosion" where the Quarry slopes are exposed to a groundwater lake. Each of these forms of erosion are described in detail in the referenced Guidelines. The intent of the Guidelines, and the methods, procedures and standards provided therein, is to prevent "significant erosion" which is defined as erosion that threatens public safety, slope stability, slope geometry, or that causes intrusion into the setback area of the Quarry.

***Overtopping Erosion:***

Overtopping erosion may be limited by the installation and maintenance of the drainage control systems shown in Figures 1 through 7 of Exhibit G hereto.

***Incident Erosion*:**

Incident erosion shall be controlled to prevent the occurrence of "significant erosion". The performance standard for controlling incident erosion will be as follows or as provided in Guidelines:

Table 1 describes 5 classes of erosional features increasing in intensity from 1 to 5. Table 2 lists the suggested corresponding remedial measures for each class. The qualitative descriptions listed in Table 1 and the corresponding remedial measures in Table 2 are appropriate for the particular conditions found in the Irwindale sand and gravel quarries.

Any area larger than 10,000 square feet on a final quarry perimeter slope (including the erosion and drainage control berm at the top of the slope) that receives an average evaluation score of Class 2 as stated in Table 1 (or higher) and that persists for more than one year will be investigated. The investigator will determine the need for remedial measures. Areas receiving an average score of Class 3 or higher will receive treatment to correct the problem as set forth in Table 2 on remedial measures. Any observable reason for problematic erosion will be noted and the appropriate remedial measure stated as part of the annual monitoring report.

**Table1 - QUALITATIVE DESCRIPTIONS OF SOIL SURFACE STATUS**

| | |
|---|---|
| CLASS 1: | No soil loss or erosion, well-dispersed accumulation of vegetation litter from past year's growth plus smaller amounts of older litter. |
| CLASS 2: | Some soil erosion; small deposits of soil in form of fans or cones at end of small gullies or rills, or as accumulations on back of plant crowns or behind litter, litter not well dispersed or no accumulation from past year's growth obvious. |
| CLASS 3: | Soil movement or loss more noticeable and preventing establishment of revegetation; some plants on pedestals or in hummocks; active rills evident, poorly dispersed litter and bare spots not protected by litter. |
| CLASS 4: | Soil movement and loss readily recognizable; topsoil remnants with vertical sides, roots frequently exposed, litter in relatively small amounts and washed into erosion-protected patches. |
| CLASS 5: | Advanced erosion; active gullies greater in cross section than 1 square foot exceeding 20 feet in length and creating a hazard to slope stability or berm integrity at top of slope. |

**Table 2 – REMEDIAL MEASURES FOR EROSION CONTROL**

| | |
|---|---|
| CLASS 1: | No action required. |
| CLASS 2: | Document and continue observation. Mulch limited critical areas with weed-free straw, rice straw or other approved mulch material @ 2000 lbs. per acre. |
| CLASS 3: | Mulch eroding area with weed-free straw or rice straw @ 2000 lbs. per acre. |
| CLASS 4: | Regrade (cut and/or fill) area to redistribute and prevent concentration of surface flows. Direct runoff to established watercourses. Mulch intervening bare areas. |
| CLASS 5: | Regrade (cut and/or fill) area to prevent concentration of surface flows. Direct runoff to established watercourses. Arrest onset of gully development by placement of graded rock interceptors or wattles to slow concentrated runoff within 1 week following any rainfall event. Mulch intervening bare areas. |

***Wave Lap Erosion*:**

In the event that wave lap erosion occurs, as describe in the Guidelines, it will be mitigated by employment of one or more of the following methods:

1. Reduce slope steepness to a slope inclination not subject to wave lap erosion.
2. Armor the slope to prevent wave lap erosion.
3. Implement other procedures approved by the lead agency and based on technical data and analysis for site specific conditions.

### 2.5.6.14 Re-Vegetation Plan

Proposed Re-vegetation Plan:

Revegetation on the final reclaimed slopes for this Quarry will be in accordance with the erosion control seed mix as stated below. The seed mix could change upon request of the operator of the water recharge basin.

*Seed Mixes*

Slopes between than 1:1 to 1 ½:1

| Species | Seed application rate (pounds PLS*/acre) |
|---|---|
| *Vulpia microstachys* (annual – native grass) | 5 |
| *Bromus inermis* (perennial non-native grass) | 8 |
| *Elymus glaucus* (perennial non-native grass) | 10 |
| *Elymus elymoides* (perennial native grass) | 9 |
| *Trifolium hirtum* (annual non-native clover) | 8 |
| Total = | 40 |

Slopes between than 1 ½:1 to 2:1

| | |
|---|---|
| *Vulpia microstachys* (annual – native grass) | 5 |
| *Elymus glaucus* (perennial native) | 7 |
| *Elymus elymoides* (perennial native) | 7 |
| *Bromus carinatus* (perennial native) | 6 |
| *Eriogonum fasciculatum* (native shrub) | 3 |
| *Salvia melifera* (native shrub) | 3 |
| *Lotus scoparius* (native shrub nitrogen fixer) | 3 |
| *Epilobium canum* (native shrub) | 3 |
| Total = | 40 |

Slopes 2:1 or flatter

| | |
|---|---|
| *Vulpia microstachys* (annual – native grass) | 5 |
| *Elymus glaucus* (perennial native grass) | 5 |
| *Bromus carinatus* (perennial native grass) | 5 |
| *Lotus scoparius* (native shrub nitrogen fixer) | 5 |
| *Malosoma laurina* (native shrub) | 5 |
| *Prunus illicifolia* (native shrub) | 5 |
| *Salvia melifera* (native shrub) | 5 |
| *Salvia leucophylla* (native shrub) | 5 |
| Total = | 40 |

Revegetation will be achieved above the "Extrapolated Groundwater Elevation" or future high groundwater elevation as provided in Figure 3 of the "Guidelines For Stability Analyses Of Open Pit Mine Slopes in Irwindale, California" prepared by the Irwindale

Slope Stability Committee, dated December 24, 2003, which elevation for Quarry 3 is 285 msl and which is shown in Figure No. 8 of Exhibit G hereto. The Quarry slope areas below this elevations will not be subject to any specific revegetation performance standard.

The seed mix will be applied in a hydromix slurry, and will be applied in the fall or winter to coincide with the first rains of the season. All species presented will germinate the first year from untreated seed.

ReVegetation Implementation:

Revegetation will be implemented in phases concurrent with ongoing mining operations in Quarry 3 as follows:

The final perimeter Quarry slopes will be divided into five sections as described hereafter, for phased revegetation implementation.

Each section of Quarry slope shall be revegetated in sequenced phases. Each phase shall be revegetated over a period not exceeding five years from the date revegetation was commenced on that phase. Revegetation of the first phase shall commence not later than one year after approval of the Reclamation Plan.

The first segment of the final Quarry slopes and the first phase of the revegetation will be comprised of revegetating all areas of the perimeter Quarry slopes requiring slope grading, regarding, filling or cutting in order to comply with any slope stability mitigation solutions.

The second and subsequent final Quarry slope segments and phases of revegetation will be approximately established by dividing the remainder of the final Quarry perimeter slopes into four segments of about equal slope surface area. Each such segment and phase shall then be revegetated in a sequential fashion until all final Quarry slopes have been revegetated.

Please also see Exhibit J, Revegetation Phasing Plan.

Revegetation Performance Standard:

Success of revegetation will be judged based upon the effectiveness of the vegetation for the approved end use, and by comparing the quantified measures of vegetative cover, density and species-richness of the reclaimed mined-lands to similar parameters of naturally occurring vegetation in the areas. The vegetative density, cover and species-richness of the naturally occurring habitats documented upon approval of the Reclamation Plan may be used as the basis of comparison for successful revegetation.

Revegetative success will be achieved at the time of closure of the Site on all final reclaimed slopes when the following cover or density values are obtained:

Slopes between 1½:1 to 1:1

Cover: 95%

Slopes between 1½:1 to 2:1

| | |
|---|---|
| Cover: | 95% |
| Species Richness: | 3-perennial grasses/100m$^2$ |
| | 3-shrub species/100m$^2$ |
| Density: | 8-shrubs/100m$^2$ |

Slopes 2:1 or flatter

| | |
|---|---|
| Cover: | 95% |
| Species Richness: | 2-perennial grasses/100m$^2$ |
| | 4-shrub species/100m$^2$ |
| Density: | 8-shrubs/100m$^2$ |

Monitoring must be conducted annually for a minimum of 6 years. Failure to achieve the performance standards within the specified period will require remedial measures, including replanting. Monitoring will continue until the performance standards have been achieved.

Weed Removal:

Noxious weeds will be managed when they threaten the success of the proposed revegetation, to reduce spreading to other areas and to minimize fire hazards. The Site and surrounding areas are dominated by urban land uses and are generally lacking vegetation except for artificially maintained non-native landscaping. The planned end use of the Site does not require revegetation with native plant species. Therefore, weed control is necessary for maintaining public safety; fire hazard reduction and removal of toxic plant species, such as castor bean (*Ricinus communis*). The Site perimeter (from the property line to the top of the quarry slopes) will be cleared twice a year, more frequently if necessary to abate fire or health hazards. Such clearing may be accomplished by mechanical means (blading), manual methods, use of herbicides and any combination of these methods. Weed control on the slopes will be conducted if weed densities appear to interfere with meeting the revegetation success criteria, and as control efforts can be safely conducted on the excavated slopes. The recharge area will be managed by a water agency/authority and weed control will be consistent with those goals, objectives and practices.

### 2.5.7 Enforcement

In the event URP fails to perform any obligations under this Plan, City shall have the right to take any action permitted under law, including SMARA, and City ordinances, to compel compliance, including all equitable and legal remedies, whether specific performance, injunctive relief, or legal damages, and may impose any fines and penalties as may be permitted by law.

### 2.5.8 Monitoring, Correction of Deficiencies

The Plan requires the submission to and subsequent approval by the City of various plans and measures as detailed herein, including landscaping plans, emergency response plans, etc. Failure to submit and obtain approval of, or implement such plans in a timely manner in accordance with their terms, shall be a violation of this Plan.

This Plan also requires monitoring of various reclamation activities, including water quality, air quality, contamination, slope stability, vegetation, backfill quality and placement, and other matters. In the event this monitoring activity discloses any conditions contrary to law or the provisions of this Plan, URP shall immediately notify City of the existence of said conditions. Corrections to conditions revealed through the City's monitoring of reclamation activities shall follow the protocol approved by the City within its authority.

### 2.5.9 Periodic review and revision to the Reclamation Plan and Supplements

This Reclamation Plan shall be reviewed every five years by the City. The City's review shall be undertaken in accordance with SMARA, the SMARA Regulations, and the City's Mining Ordinance. Upon its review, the City may require revision of the Reclamation Plan and/or its supplements if it finds that such revisions are necessary due to:

1. Material changes in the environmental conditions under which reclamation will be undertaken;

2. Material changes in environmental conditions affecting reclamation;

3. Material changes in technical capacity, methods, or processes for accomplishing reclamation;

4. Material changes to adjacent properties which may impact the reclamation operation;

5. Material changes in the City of Irwindale's Specific or General plans concerning the alternative land uses for which the reclaimed lands may be developed; or

6. Any other material changes to the environment, adjacent land, methods of reclamation, laws, or other conditions affecting the Reclamation Plan.

Any amendment to this Reclamation Plan created pursuant to this section shall be submitted to the Director of the Department of Conservation for review, consistent with Public Resources Code § 2774(c). Until reclamation has actually commenced, the City may propose and approve changes to the reclamation plan and/or supplements that are consistent with SMARA, the SMARA Regulations, and the Mining Ordinance for the purpose of reclaiming the Quarry for readily usable alternative land uses. The City shall not propose to modify the Reclamation Plan in a manner that will make reclamation economically infeasible when compared to the approved mining operations and/or the approved Reclamation Plan.

### 2.5.10 Description of the specific reclamations to be accomplished during the first phase

Short-term phasing has not been selected. Currently planned mining operations do not allow for concurrent reclamation. The sand and gravel resource must first be mined to the permitted depth before undergoing reclamation.

### 2.5.11 Description of how reclamation of this Site in this manner may affect future mining at this Site and in the surrounding area

This Site is part of a larger operation involving several sites, which will be reclaimed as the sand and gravel Quarries attain their maximum permitted depths at the termination of rock production. Reclamation of the Site will not affect mining or processing operations at the other sites.

## 3. REFERENCES

S.L. Kohler, 1982. Part IV: Mineral Land Classification of the **Greater Los Angeles Area**: Classification of Sand and Gravel Resource Areas, **San Gabriel Valley**, Production-Consumption Region. Kohler, 1982. California Department of Conservation Division of Mines and Geology, special Report 143.

The undersigned does hereby accept responsibility for reclaiming the lands described in accordance with this Reclamation Plan and the conditions imposed by the City of Irwindale as Lead Agency.

UNITED ROCK PRODUCTS

Frank Keohane 7-8-04

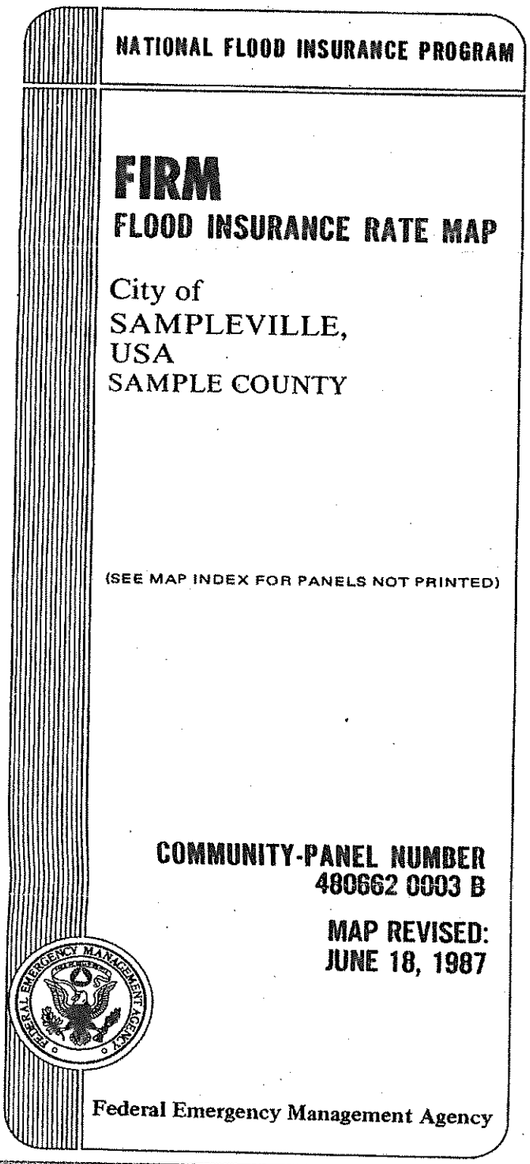
By: Frank Keohane, Date

Its: General Manager

# Getting Information from the Title Box

Figure 6

## Title Box from a Z-Fold Flood Map for an Individual Community




Community Name

Community-Panel Number

Map Revised Date

## Found on All Flood Maps

### Flood Insurance Risk Zone Designations

The zone designations indicate the magnitude of the flood hazard in specific areas of a community. Following are the zone definitions:

Zone A
Special Flood Hazard Areas inundated by the 100-year flood; base flood elevations are not determined.

Zones A1-30 and Zone AE
Special Flood Hazard Areas inundated by the 100-year flood; base flood elevations are determined.

Zone AO
Special Flood Hazard Areas inundated by the 100-year flood, with flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths are determined. For areas of alluvial fan flooding, velocities are also determined.

Zone AH
Special Flood Hazard Areas inundated by the 100-year flood; flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations are determined.

Zone AR
Special Flood Hazard Areas that result from the decertification of a previously accredited flood protection system that is in the process of being restored to provide a 100-year or greater level of flood protection.

Zones AR/A1-30, AR/AE, AR/AH, AR/AO, and AR/A
Special Flood Hazard Areas that result from the decertification of a previously accredited flood protection system that is in the process of being restored to provide a 100-year or greater level of flood protection. After restoration is complete, these areas will still experience residual flooding from other flooding sources.

Zone A99
Special Flood Hazard Areas inundated by the 100-year flood to be protected from the 100-year flood by a Federal flood protection system under construction; no base flood elevations are determined.

Zone V
Special Flood Hazard Areas inundated by the 100-year flood; coastal floods with velocity hazards (wave action); no base flood elevations are determined.

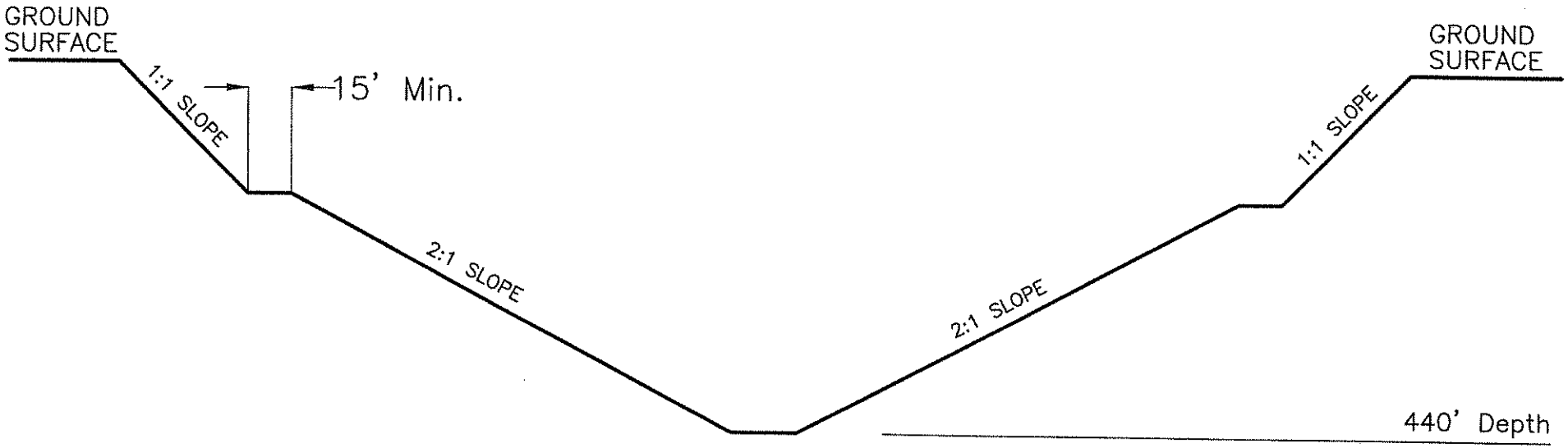
Zones V1-30 and Zone VE
Special Flood Hazard Areas inundated by the 100-year flood; coastal floods with velocity hazards (wave action); base flood elevations are determined.

Zone B and Zone X (shaded)
Areas of 500-year flood; areas subject to the 100-year flood with average depths of less than 1 foot or with contributing drainage area less than 1 square mile; and areas protected by levees from the base flood.

Zone C and Zone X (unshaded)
Areas determined to be outside the 500-year floodplain.

Zone D
Areas in which flood hazards are undetermined.

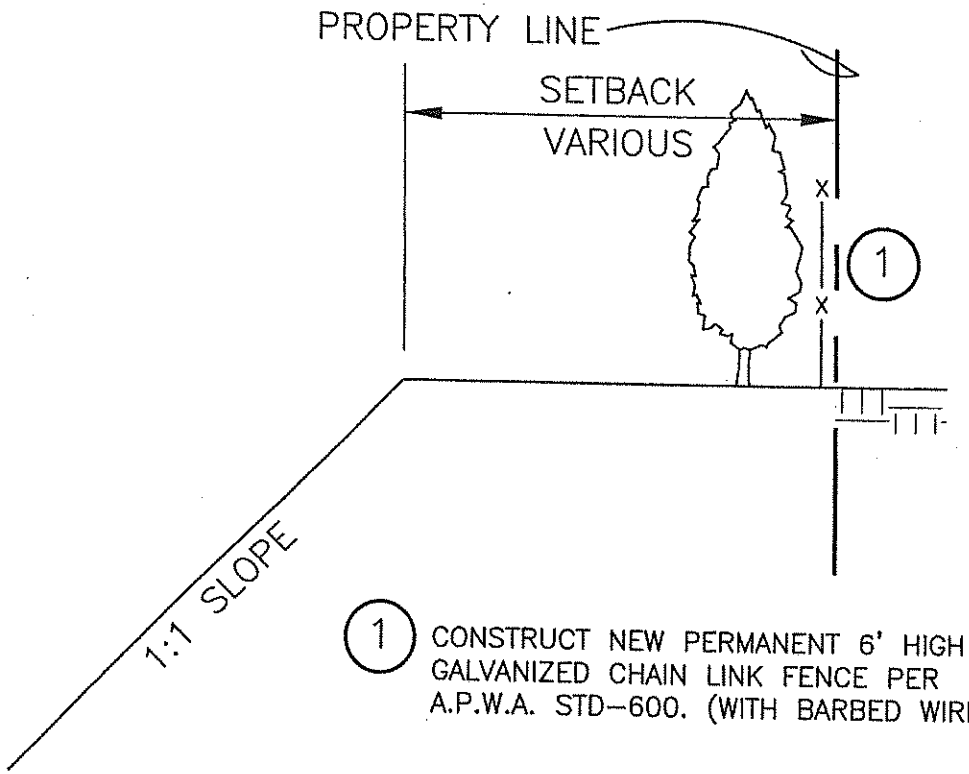
# UNITED ROCK PIT No. 3




## TYPICAL X-SECTION

N.T.S.

CITY OF IRWINDALE
PUBLIC WORKS DEPARMENT
BY: EDGAR ROJAS
APRIL 2004

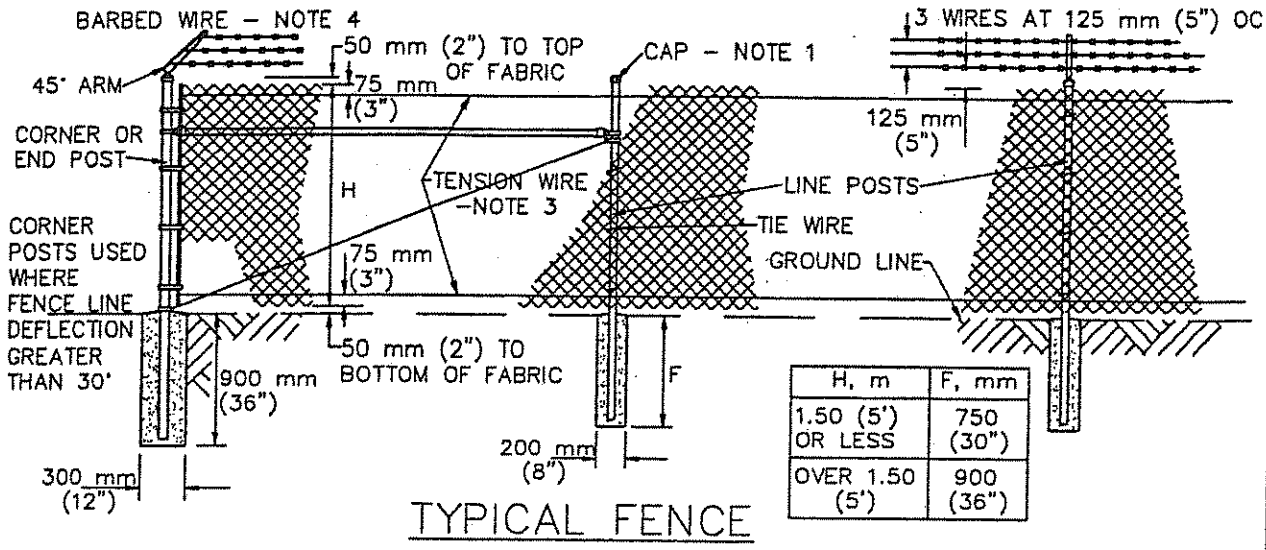



(1) CONSTRUCT NEW PERMANENT 6' HIGH GALVANIZED CHAIN LINK FENCE PER A.P.W.A. STD–600. (WITH BARBED WIRE).

# FENCING DETAIL

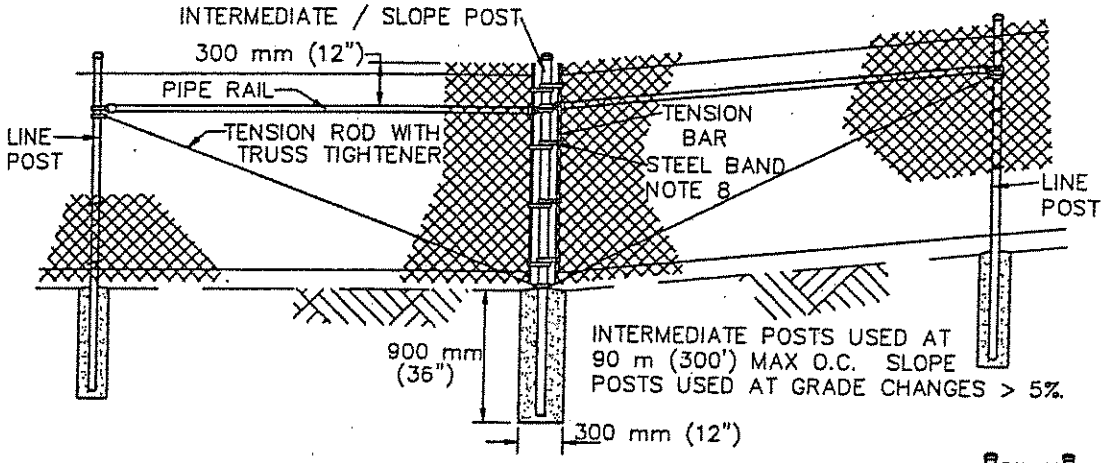
N.T.S.

PUBLIC WORKS DEPARTMENT 11/03/2003

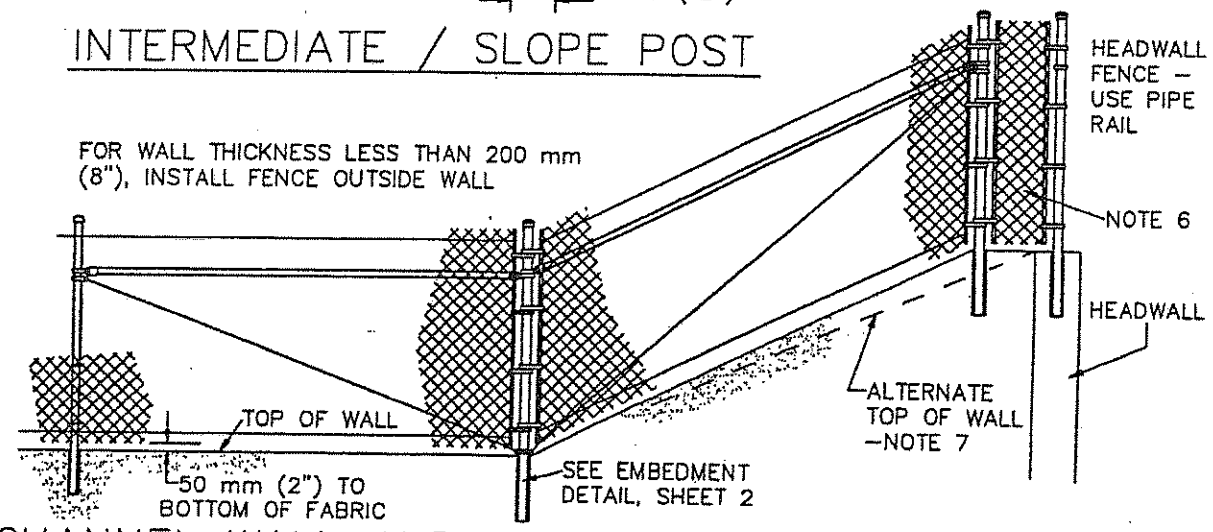



| H, m | F, mm |
|---|---|
| 1.50 (5') OR LESS | 750 (30") |
| OVER 1.50 (5') | 900 (36") |

## TYPICAL FENCE




## INTERMEDIATE / SLOPE POST




## CHANNEL WALL AND WINGWALL AT HEADWALL

**AMERICAN PUBLIC WORKS ASSOCIATION - SOUTHERN CALIFORNIA CHAPTER**

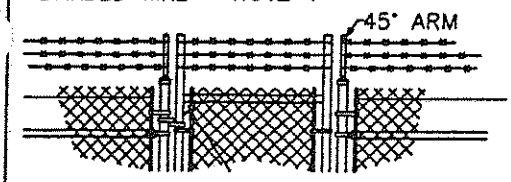
PROMULGATED BY THE PUBLIC WORKS STANDARDS INC., GREENBOOK COMMITTEE 1984 REV. 1996

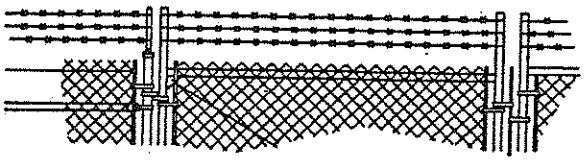
# CHAIN LINK FENCE AND GATES

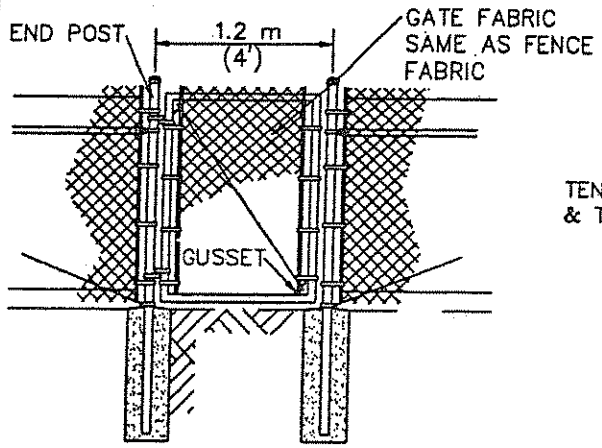
USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

STANDARD PLAN METRIC 600 - 1

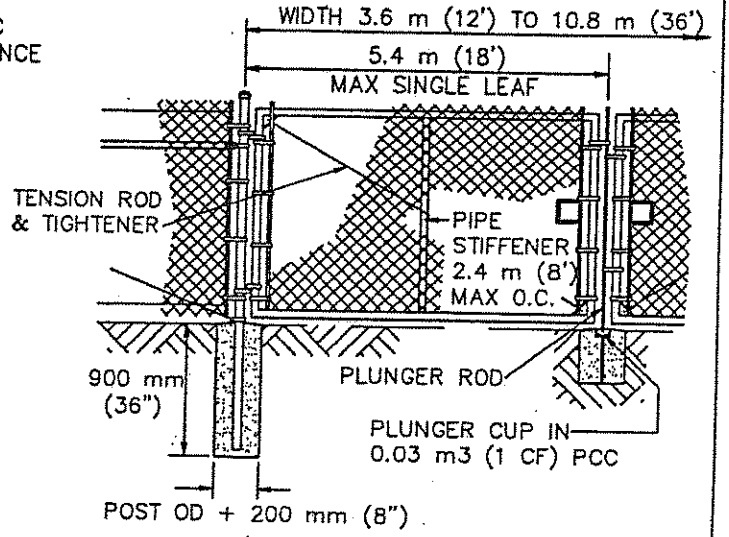
SHEET 1 OF 3



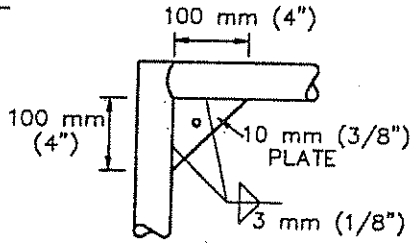





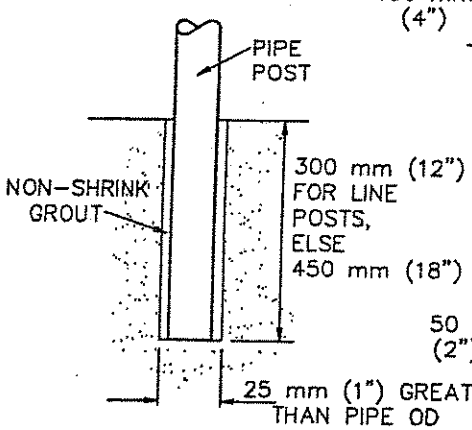

WALK GATE



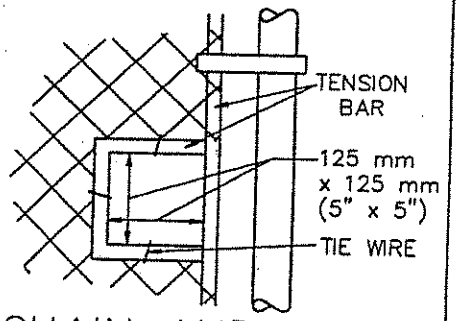

DRIVE GATE



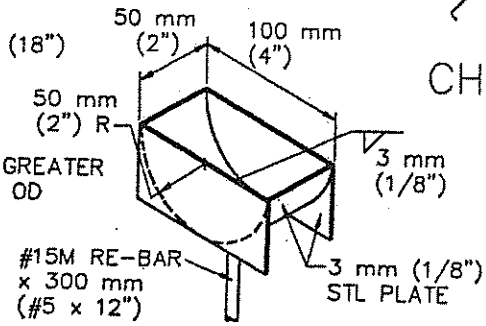

GUSSET




POST
EMBEDMENT




CHAIN AND LOCK
CUT-OUT




PLUNGER CUP
ISOMETRIC

| AMERICAN PUBLIC WORKS ASSOCIATION - SOUTHERN CALIFORNIA CHAPTER | STANDARD PLAN METRIC 600 - 1 SHEET 2 OF 3 |
|---|---|
| **CHAIN LINK FENCE AND GATES** | |

NOTES:

1. SECURE DRIVE–FIT GALVANIZED CAP TO POST WITH 6 mm (1/4") ROUND–HEAD RIVET.

2. H DENOTES FABRIC WIDTH AND NOMINAL FENCE HEIGHT. H = 1.5 m (5') UNLESS OTHERWISE NOTED.

3. IF FENCE WITH TOP RAIL IS SPECIFIED, DELETE STEEL TENSION WIRE AT TOP, AND PIPE RAILS AT INTERMEDIATE, SLOPE, END AND CORNER POSTS. EXTEND TENSION ROD TO TOP RAIL.

4. BARBED WIRE SHALL BE USED ONLY WHEN SPECIFIED.

5. POST SPACING IS MAXIMUM 3.0 m (10').

6. FILL CLEAR OPENINGS GREATER THAN 75 mm (3") WITH FABRIC. FOR OPENINGS LESS THAN 450 mm (18"), TIE FABRIC TO POSTS.

7. USE ONE POST FOR COMBINED SLOPE AND CORNER POST IF TOP OF CHANNEL WALL IS CONSTRUCTED AS SHOWN FOR "ALTERNATE".

8. STEEL BANDS AT TENSION BARS SHALL BE 3 mm X 25 mm (1/8" x 1"), MINIMUM, SPACED AT MAXIMUM 400 mm (16").

9. DIMENSIONS SHOWN ON THIS PLAN FOR METRIC AND ENGLISH UNITS ARE NOT EXACTLY EQUAL VALUES. IF METRIC UNITS ARE USED, ALL VALUES USED FOR CONSTRUCTION SHALL BE METRIC VALUES. IF ENGLISH UNITS ARE USED, ALL VALUES USED FOR CONSTRUCTION SHALL BE ENGLISH VALUES. HOWEVER, ASTM 615 REINFORCING STEEL MAY BE SUBSTITUTED FOR ASTM 615M STEEL.

**EXHIBIT "G"**

UNITED
ROCK PRODUCTS
CORP.

# Conceptual

# Erosion and Drainage Control Plans

**For**

# Quarry No. 2 and Quarry No. 3

May 28, 2004

**JMS Consulting Engineer**
3825 Farimeade Road, Pasadena, CA 91107
(626) 351-4269 JockMScott@AOL.com

May 28, 2004

Frank Keohane
General Manager
United Rock Products, Corp.
1245 East Arrow Hwy.
Irwindale, CA 91706

Re: Conceptual Erosion and Drainage Control Plans for Quarries No. 2 and No. 3

Dear Mr. Keohane,

This report presents the conceptual erosion and drainage control plans for Quarry No. 2 and Quarry No. 3 at United Rock Products. I have employed the principles of generally accepted civil engineering design and the preliminary recommendations from the Irwindale Erosion & Drainage Control Committee into the development of the following plans. The fundamental objectives of these plans is to protect public health and safety, adjacent properties, and lifeline systems (such as essential public utilities) from erosion and drainage issues within the quarry properties, and to help facilitate reclamation of the quarries. As such, the following is intended to be bridge from the conceptual plans and the more precise civil engineering design for erosion and drainage control systems for these quarries.

I greatly appreciate this opportunity to be of service to United Rock. If you have any questions or desire further development of these concepts, please advise.

Sincerely,

Jock M. Scott, P.E.



# United Rock Products, Corp.

# Revised "Erosion, Drainage and ReVegetstion Plan"

# For Quarry No. 3

# July 5, 2004

**Draft 1a:** Note, items in green are direct quotes from SMARA

The operation and reclamation of United Rock Quarry No. 3 shall meet the following provisions, methods and standards, or the provisions of the "Guidelines For Drainage And Erosion Control For Open-Pit Mines in Irwindale, California" (Guidelines) dated July 2004, prepared by the Irwindale Drainage And Erosion Committee.

**Drainage:**

Quarry No. 3 shall be operated and maintained to control all drainage of storm water and other water sources, through planned drainage systems to points of final discharge to limit erosion. The planned drainage systems shall be in accord with **Figures 1 through 6** hereto, or the Guidelines references above. Upon completion of mining the quarry will be used as groundwater recharge basis. During this phase the planned drainage systems shall be in accord with **Figure No. 7** or the Guidelines.

**Erosion:**

Quarry No. 3 shall be operated and maintained to limit significant erosional affects of "overtopping erosion" at the top of the quarry slopes, incident erosion" due to rainfall on the quarry slopes and "wave lab erosion" where the quarry slopes are exposed to a groundwater lake. Each of these forms of erosion are described in detail in the referenced Guidelines. The intent of the Guidelines, and the methods, procedures and standards provided therein, is to prevent "significant erosion" which is defined as erosion that threatens public safety, slope stability, slope geometry, or that causes intrusion into the setback area of the quarry. Thus, some erosion is acceptable.

**Overtopping Erosion:**

Overtopping erosion may be limited by the installation and maintenance of the drainage control systems shown in **Figures 1 through 7** hereto.

**Incident Erosion:**

Incident erosion shall be controlled to prevent the occurrence of "significant erosion". The performance standard for controlling incident erosion shall be as follows or as provided in Guidelines:

**Table 1** describes 5 classes of erosional features increasing in intensity from 1 to 5. **Table 2** lists the suggested corresponding remedial measures for each class.

The qualitative descriptions listed in **Table 1** and the corresponding remedial measures in **Table 2**, are appropriate for the particular conditions found in the Irwindale sand and gravel quarries. These standards may not apply to other areas.

Any area larger than 10,000 square feet on a final quarry perimeter slope (including the erosion and drainage control berm at the top of the slope) that receives an average evaluation score of Class 2 as stated in **Table 1** (or higher) and that persists for more than one year will be investigated. The investigator will determine the need for remedial measures. Areas receiving an average score of Class 3 or higher will receive treatment to correct the problem as set forth in **Table 2** on remedial measures. Any observable reason for problematic erosion will be noted and the appropriate remedial measure stated as part of the annual monitoring report.

**Table1 - QUALITATIVE DESCRIPTIONS OF SOIL SURFACE STATUS**

| | |
|---|---|
| CLASS 1: | No soil loss or erosion, well-dispersed accumulation of vegetation litter from past year's growth plus smaller amounts of older litter. |
| CLASS 2: | Some soil erosion; small deposits of soil in form of fans or cones at end of small gullies or rills, or as accumulations on back of plant crowns or behind litter, litter not well dispersed or no accumulation from past year's growth obvious. |
| CLASS 3: | Soil movement or loss more noticeable and preventing establishment of revegetation; some plants on pedestals or in hummocks; active rills evident, poorly dispersed litter and bare spots not protected by litter. |
| CLASS 4: | Soil movement and loss readily recognizable; topsoil remnants with vertical sides, roots frequently exposed, litter in relatively small amounts and washed into erosion-protected patches. |
| CLASS 5: | Advanced erosion; active gullies greater in cross section than 1 square foot exceeding 20 feet in length and creating a hazard to slope stability or berm integrity at top of slope. |

**Table 2 – REMEDIAL MEASURES FOR EROSION CONTROL**

| | |
|---|---|
| CLASS 1: | No action required. |
| CLASS 2: | Document and continue observation. Mulch limited critical areas with weed-free straw, rice straw or other approved mulch material @ 2000 lbs. per acre. |
| CLASS 3: | Mulch eroding area with weed-free straw or rice straw @ 2000 lbs. per acre. |
| CLASS 4: | Regrade (cut and/or fill) area to redistribute and prevent concentration of surface flows. Direct runoff to established watercourses. Mulch intervening bare areas. |
| CLASS 5: | Regrade (cut and/or fill) area to prevent concentration of surface flows. Direct runoff to established watercourses. Arrest onset of gully development by placement of graded rock interceptors or wattles to slow concentrated runoff within 1 week following any rainfall event. Mulch intervening bare areas. |

**Wave Lap Erosion:**

In the event that wave lap erosion occurs, as describe in the Guidelines, it shall be mitigated by employment of one or more of the following methods:

1. Reduce slope steepness to a slope inclination not subject to wave lap erosion.
2. Armor the slope to prevent wave lap erosion.
3. Implement other procedures approved by the lead agency and based on technical data and analysis for site specific conditions.

**Vegetation and Revegetation:**

Vegetative cover suitable for the proposed end use and capable of self-regeneration without continued dependence on irrigation, soil amendments or fertilizer shall be established on the quarry slopes. The cover, density and species-richness shall be sufficient to stabilize the surface against effects of long-term erosion and shall be similar to naturally occurring habitats in the surrounding area. The vegetative density, cover and species-richness of naturally occurring habitats, and other site specific conditions, shall be documented by a competent professional Restorationist, experienced with the local species and conditions, upon the approval of the Reclamation Plan.

Native Plant species shall be used for revegetation, except when introduced species are necessary to meet the end uses specified in the approved reclamation plan. Areas to be developed for industrial or commercial use shall be revegetated for the interim period, as necessary, to control erosion, In this circumstance, non-native plant species may be used if they are not noxious weeds and if they are species known not to displace native species in the area.

**ReVegetation:**

Vegetative species-richness may be achieved by incorporating the following species seed mixes at the application rates indicated with native species as the final revegetation plantings, or as recommended by a professional Restorationist and approved by the lead agency. Three mixes are presented based on the steepness of the slope:

**Slopes between than 1:1 to 1 ½:1**

| Species | Seed application rate (pounds PLS*/acre) |
|---|---|
| *Vulpia microstachys* (annual – native grass) | 5 |
| *Bromus inermis* (perennial non-native grass) | 8 |
| *Elymus glaucus* (perennial non-native grass) | 10 |
| *Elymus elymoides* (perennial native grass) | 9 |
| *Trifolium hirtum* (annual non-native clover) | 8 |
| Total = | 40 |

**Slopes between than 1 ½:1 to 2:1**

| | |
|---|---|
| *Vulpia microstachys* (annual – native grass) | 5 |
| *Elymus glaucus* (perennial native) | 7 |
| *Elymus elymoides* (perennial native) | 7 |
| *Bromus carinatus* (perennial native) | 6 |
| *Eriogonum fasciculatum* (native shrub) | 3 |
| *Salvia melifera* (native shrub) | 3 |
| *Lotus scoparius* (native shrub nitrogen fixer) | 3 |
| *Epilobium canum* (native shrub) | 3 |
| Total = | 40 |

**Slopes 2:1 or less**

| | |
|---|---|
| *Vulpia microstachys* (annual – native grass) | 5 |
| *Elymus glaucus* (perennial native grass) | 5 |
| *Bromus carinatus* (perennial native grass) | 5 |
| *Lotus scoparius* (native shrub nitrogen fixer) | 5 |
| *Malosoma laurina* (native shrub) | 5 |
| *Prunus illicifolia* (native shrub) | 5 |
| *Salvia melifera* (native shrub) | 5 |
| *Salvia leucophylla* (native shrub) | 5 |
| Total = | 40 |

Revegetation will be achieved above the "Extrapolated Groundwater Elevation" or future high groundwater elevation as provided in Figure 3 of the "Guidelines

For Stability Analyses Of Open Pit Mine Slopes in Irwindale, California" prepared by the Irwindale Slope Stability Committee, dated December 24, 2003, which elevation for Quarry 3 is El 285 msl and which is shown in **Figure No. 8** hereto. The quarry slope areas below this elevations will not be subject to any specific revegetation performance standard.

**ReVegetation Implementation:**

Revegetation will be implemented in phases concurrent with ongoing mining operations in Quarry 3 as follows:

The final perimeter quarry slopes will be divided into five sections as described hereafter, for phased revegetation implementation.

Each section of quarry slope shall be revegetated in sequenced phases. Each phase shall be revegetated over a period not exceeding five years from the date revegetation was commenced on that phase. Revegetation of the first phase shall commence not later than one year after approval of the Reclamation Plan.

The first segment of the final pit slopes and the first phase of the revegetation shall be comprised of revegetating all areas of the perimeter quarry slopes requiring slope grading, regarding, filling or cutting in order to comply with any slope stability mitigation solutions.

The second and subsequent final quarry slope segments and phases of revegetation shall be approximately established by dividing the remainder of the final quarry perimeter slopes into four segments of about equal slope surface area. Each such segment and phase shall then be revegetated in a sequential fashion until all final quarry slopes have been revegetated.

**Revegetation Performance Standard:**

Success of revegetation shall be judged based upon the effectiveness of the vegetation for the approved end use, and by comparing the quantified measures of vegetative cover, density and species-richness of the reclaimed mined-lands to similar parameters of naturally occurring vegetation in the areas. The vegetative density, cover and species-richness of the naturally occurring habitats documented upon approval of the Reclamation Plan may be used as the basis of comparison for successful revegetation.

Revegetative success shall be achieved when the following cover or density values are obtained:

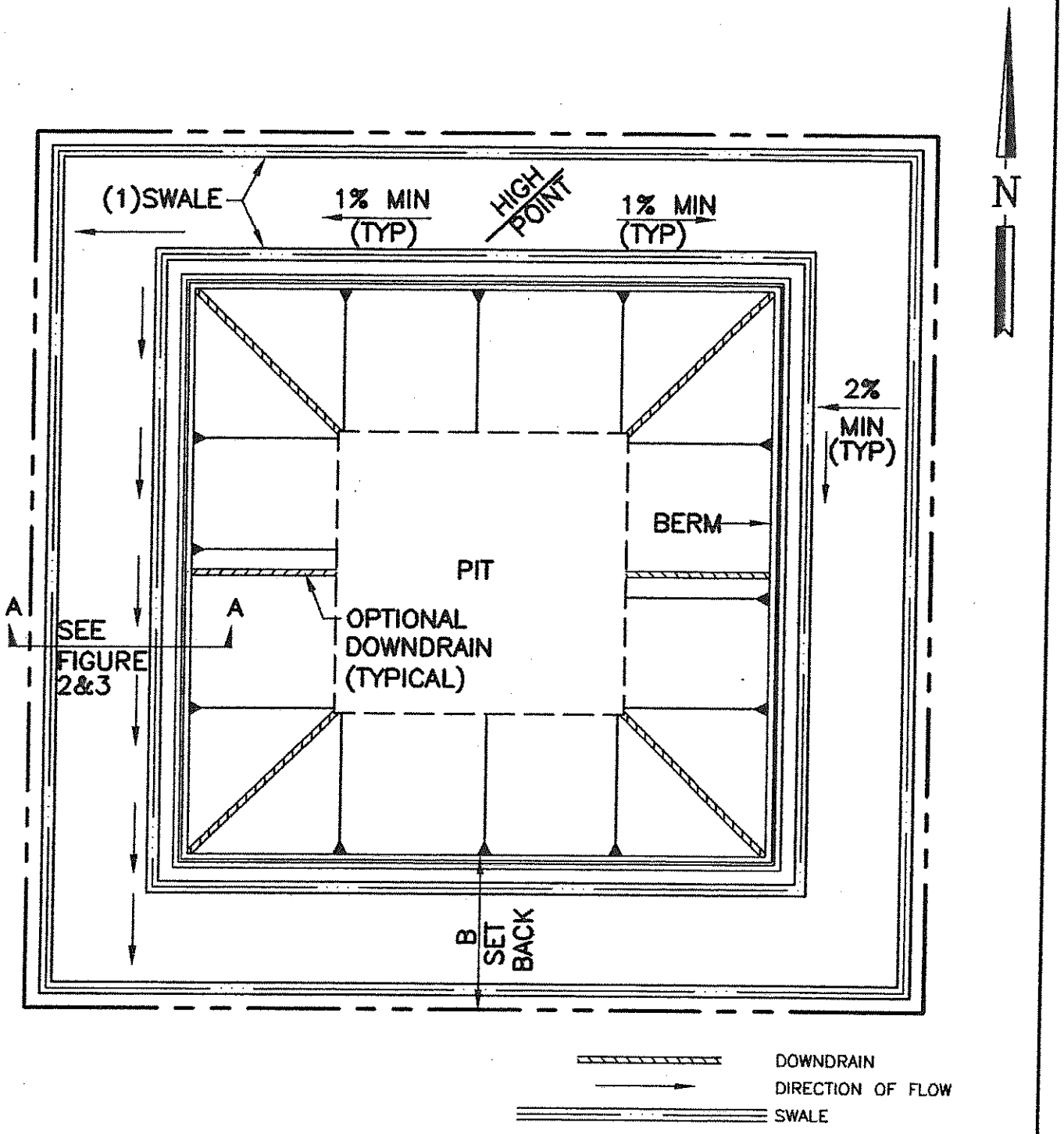
1. Cover or Density equal to minimum of 70% of slope surface area.
2. No bare areas larger than 10,000 sq. ft. same as erosion .

Revegetative success shall be achieved when the following species-richness minimums are obtained:

| | |
|---|---|
| Slopes 1:1 to 2:1 | 3 perennial grasses /100 sq. m.<br>3 shrubs species/ 100 sq. m.<br>8 shrubs/100 sq. m. |
| Slopes 2:1 or flatter | 2 perennial grasses/100 sq. m.<br>4 shrubs species/100 sq. m.<br>8 shrubs/100 sq. m. |

**Weed Removal**:

Noxious weeds will be managed when they threaten the success of the proposed revegetation, to reduce spreading to other areas and to minimize fire hazards. The site and surrounding areas are dominated by urban land uses and are generally lacking vegetation except for artificially maintained non-native landscaping. The planned end use of the site does not require revegetation with native plant species. Therefore, weed control is necessary for maintaining public safety; fire hazard reduction and removal of toxic plant species, such as castor bean (*Ricinus communis*). The site perimeter (from the property line to the top of the quarry slopes) shall be cleared twice a year, more frequently if necessary to abate fire or health hazards. Such clearing may be accomplished by mechanical means (blading), manual methods, use of herbicides and any combination of these methods. Weed control on the slopes will be conducted if weed densities appear to interfere with meeting the revegetation success criteria, and as control efforts can be safely conducted on the excavated slopes. The recharge area will be managed by a water agency/authority and weed control will be consistent with those goals, objectives and practices.




(1) ONE SWALE REQUIRED EITHER AT BERM OR AT ADJACENT TO PROPERTY LINE

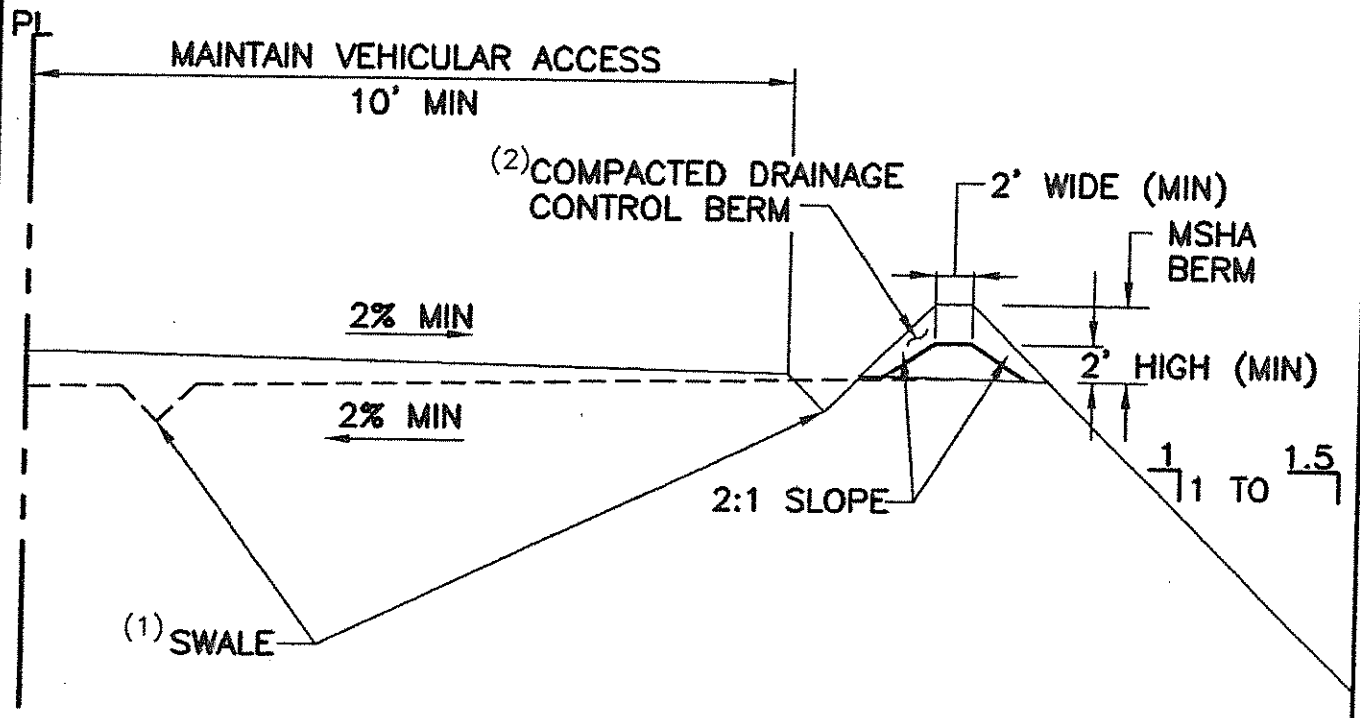
EARTH SWALES SHALL BE 2% MIN. (HARDSCAPE SURFACE CAN BE AT A FLATTER GRADE BASED ON DESIGN)

MAC/BAS ENGINEERING
1 Pamela Way
Trabuco, CA 92679
Tel: (949) 709-5180
Fax: (949) 709-5280
E-mail: macbas@cox.net

IRWINDALE EROSION CONTROL

FIGURE 1
TYPICAL PIT DRAINAGE
DRAINAGE PLAN VIEW

| | |
|---|---|
| JOB NO. | |
| DATE | 4-2004 |
| DRAWN BY | M.T.B. |
| FILE NAME | FIGURE |




(1) ONE SWALE REQUIRED EITHER AT BERM OR AT ADJACENT TO PROPERTY LINE

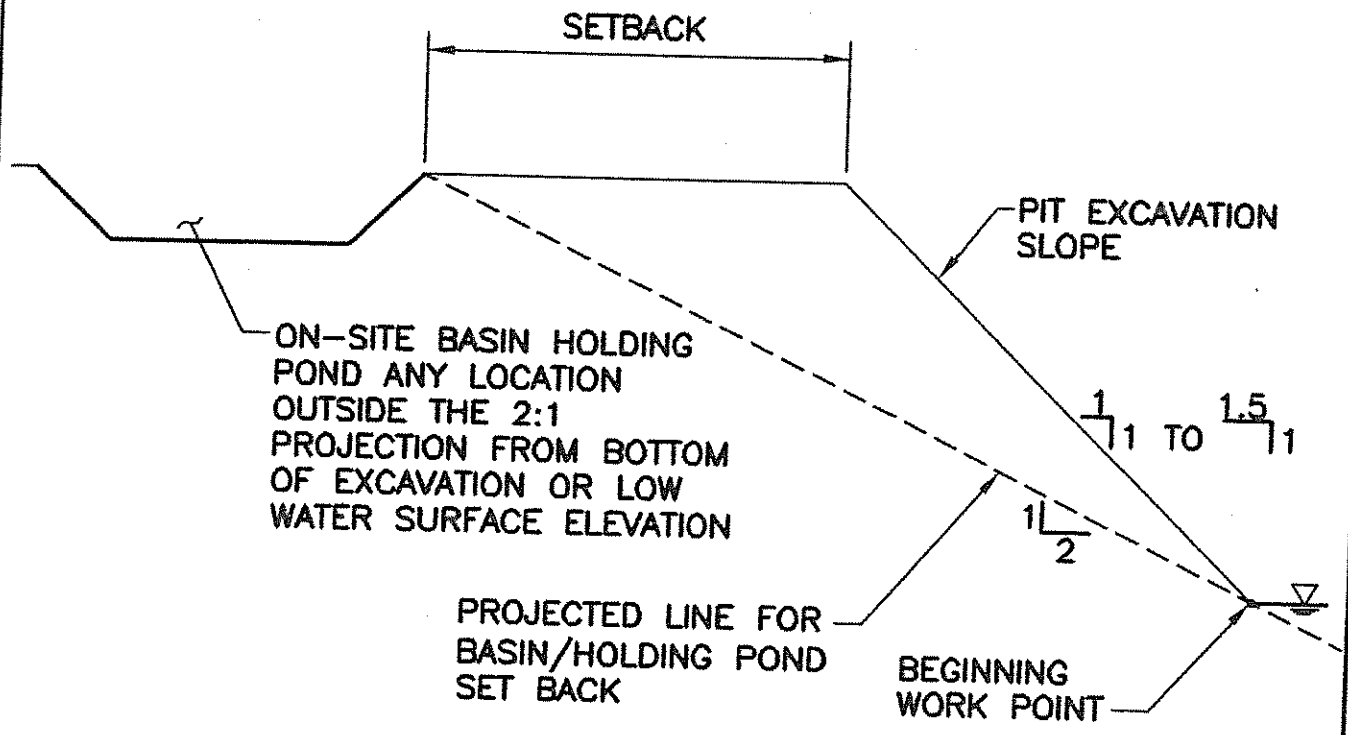
(2) DRAINAGE CONTROL BERM SHALL BE CONSTRUCTED OF MATERIAL WITCH HAS A PERMEABILITY EQUAL OR LESS THAN THE NATIVE MATERIAL ON-SITE.

MAC/BAS ENGINEERING
1 Pamela Way
Trabuco, CA 92679
Tel: (949) 709-5180
Fax: (949) 709-5280
E-mail: macbas@cox.net

IRWINDALE EROSION CONTROL

FIGURE 2
TYPICAL DRAINAGE ADJACENT TO PIT
SECTION A

| | |
|---|---|
| JOB NO. | |
| DATE | 4-2004 |
| DRAWN BY | M.T.B. |
| FILE NAME | FIGURE |

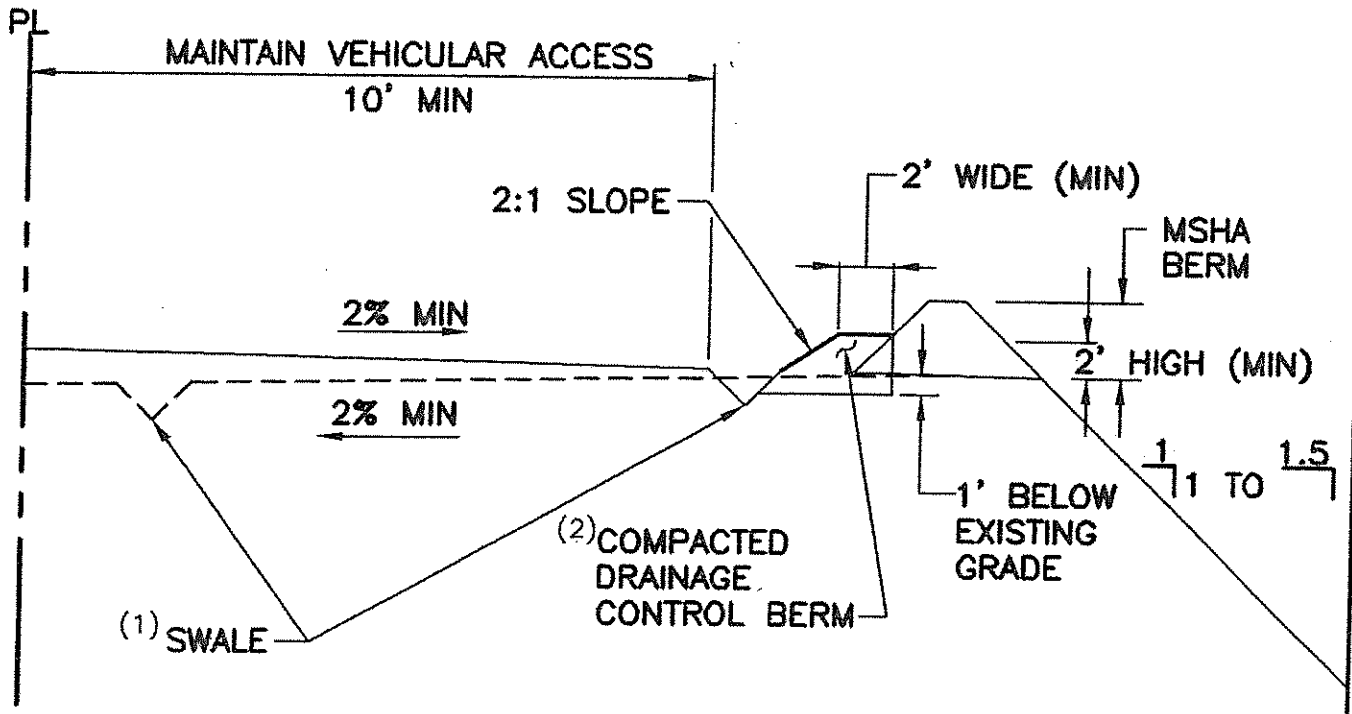



MAC/BAS ENGINEERING
1 Pamela Way
Trabuco, CA 92679
Tel: (949) 709-5180
Fax: (949) 709-5280
E-mail: macbas@cox.net

IRWINDALE EROSION CONTROL

FIGURE 3
SETBACK FOR HOLDING/DETENTION PONDS

| | |
|---|---|
| JOB NO. | |
| DATE | 4-2004 |
| DRAWN BY | M.T.B. |
| FILE NAME | FIGURE |




(1) ONE SWALE REQUIRED EITHER AT BERM OR AT ADJACENT TO PROPERTY LINE

(2) DRAINAGE CONTROL BERM SHALL BE CONSTRUCTED OF MATERIAL WITCH HAS A PERMEABILITY EQUAL OR LESS THAN THE NATIVE MATERIAL ON-SITE.

MAC/BAS ENGINEERING
1 Pamela Way
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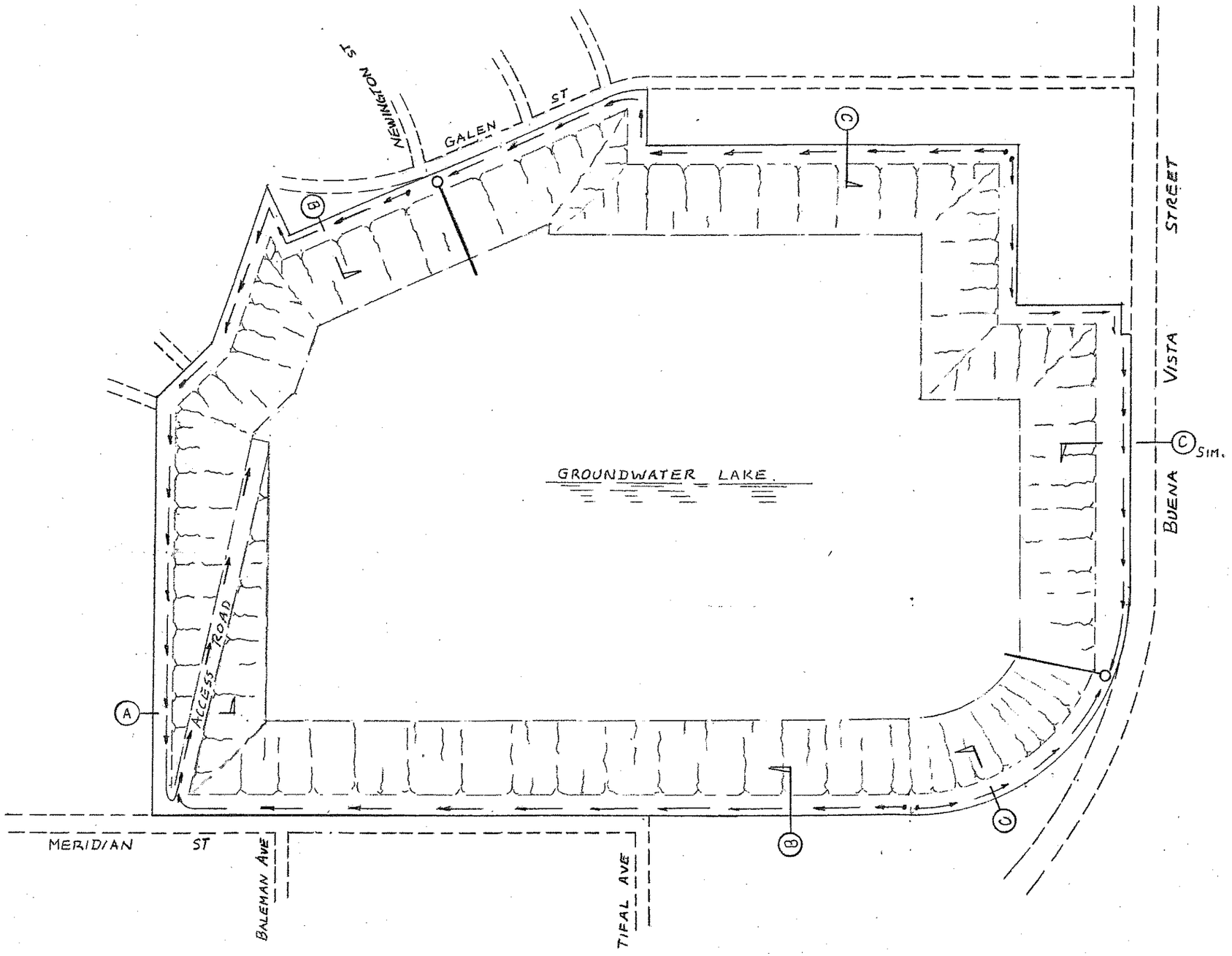
Tel: (949) 709-5180
Fax: (949) 709-5280
E-mail: macbas@cox.net

IRWINDALE EROSION CONTROL

FIGURE 4
TYPICAL DRAINAGE ADJACENT TO PIT
SECTION A

| | |
|---|---|
| JOB NO. | |
| DATE | 4-2004 |
| DRAWN BY | M.T.B. |
| FILE NAME | FIGURE |




N

1" = 300' APX.

## United Quarry No. 3

Notes & Legend:

1. **All mine slopes are 1:1 from top of pit to the current groundwater surface and 2:1 below water.**
2. **An MSHA and Drainage Control berm will be located at the top of all quarry slopes.**
3. **Drainage swales and pipes will be installed as shown hereon.**
4. **Minimum graded slope for Drainage swales is 1%.**
5. **Quarry slopes above water will be protected from surface erosion by naturally occurring drought tolerant vegetation.**
6. **No surface water will be discharged from the site.**

**Indicates the beginning of a Drainage swale commencing at the high point in elevation.**

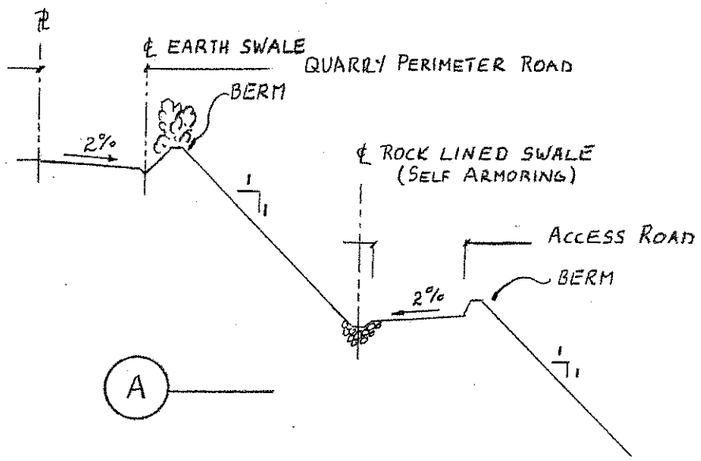
**Indicates the direction of flow for the Drainage swale.**

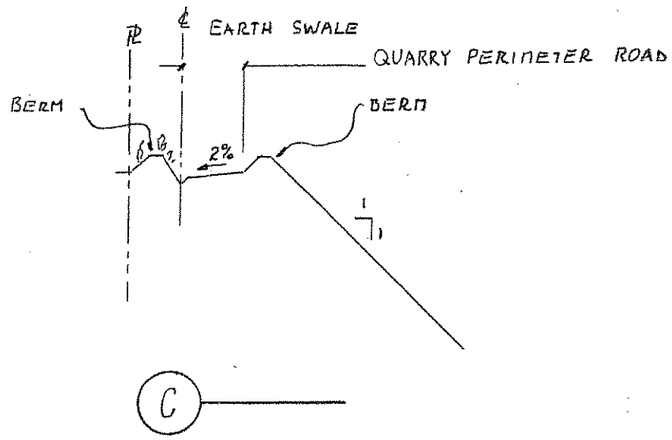
**Indicates a concrete flow collection point with piped flow to the groundwater lake surface, appropriately anchored.**

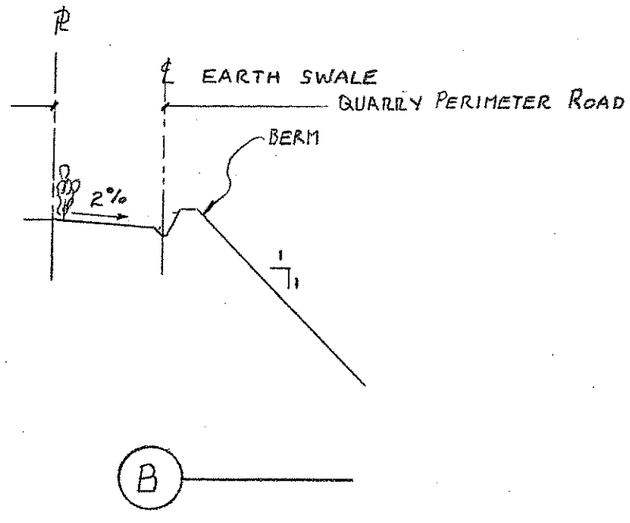
**Indicates Cross Section or Detail, see Figure No. 9.**

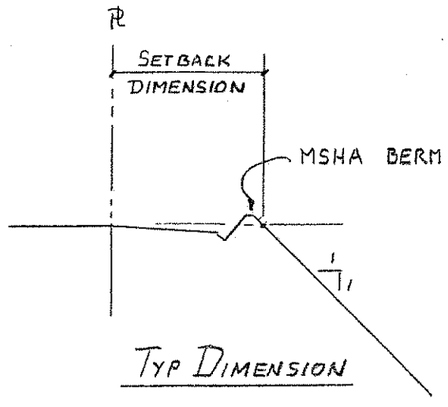
**Reclamation Plan: Erosion and Drainage Control During Mining**

**Figure No. 5**



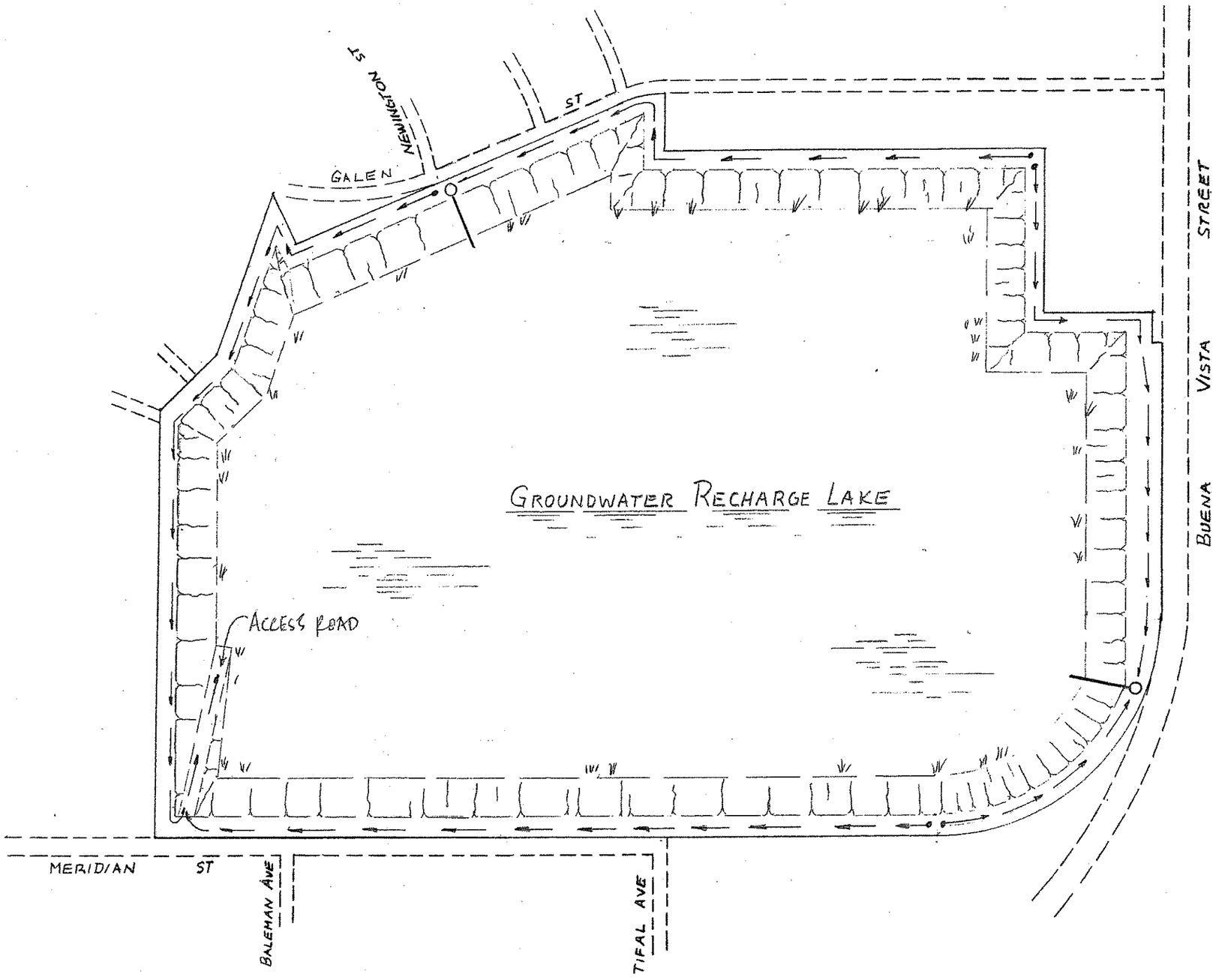

# United Quarry No. 3

Notes:

1. **All Erosion and Drainage Control details show here are based on the 2004 quarry conditions and topography. These details are conceptual only and may change based on detail design. For location of cross section around quarry perimeter, see Figures 5 and 8.**
2. **The mine operator may change the Erosion and Drainage Control system from time to time based on the needs of its operation, but the new design will comply with the concept herein.**
3. **The berm adjacent to the earth swale shall be the "Drainage Control Berm". The berm at the top of the quarry slope is the MSHA berm, but may serve as the Drainage Control Berm is constructed appropriately.**
4. **All setbacks are measured from the property line to the intersection of the Quarry slope with the toe of the MSHA berm.**
5. **Quarry slopes above water will be protected from surface erosion by naturally occurring drought tolerant vegetation.**
6. **No surface water will be discharged from the site.**

**Reclamation Plan:** **Erosion and Drainage Control Typical Cross Sections**

**Figure No. 6**




N

1" = 300' APX.

## United Quarry No. 3

Notes:

1. **All Erosion and Drainage Control systems installed during the mining phase shall be left in place when the quarry transitions to the groundwater recharge phase. Any modifications to such systems to accommodate the water recharge operation will be provided by the agency conducting the water recharge. For conceptual details of the mining phase erosion and drainage control system, see Figures 9.**

2. **Any improvements required to convert the mined quarry to groundwater recharge operations will be implemented by the agency conducting the water recharge operation.**

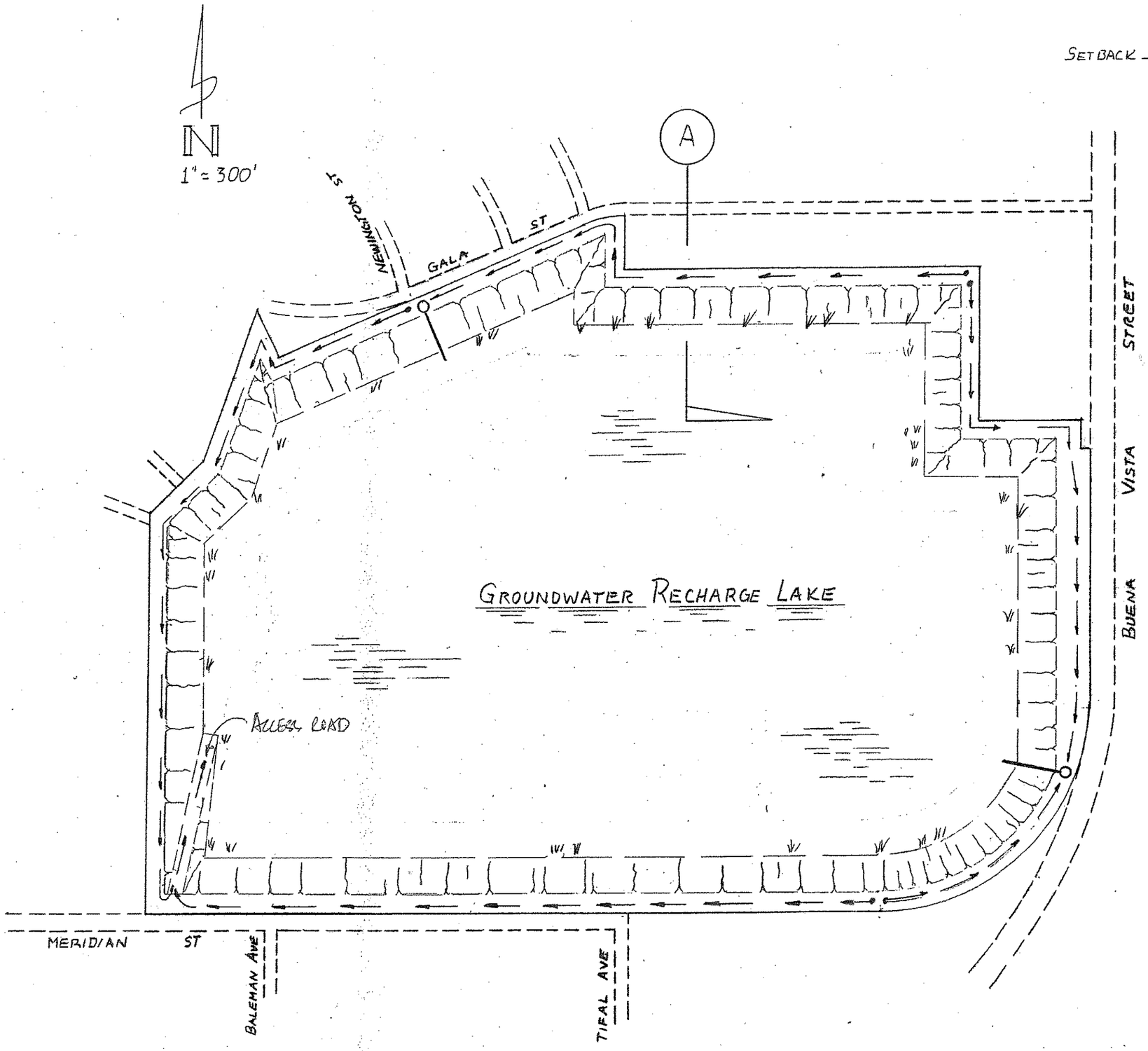
3. **All mine slopes are 1:1 from top of quarry to apx 200 ft. below ground surface and 2:1 below 200 feet.**

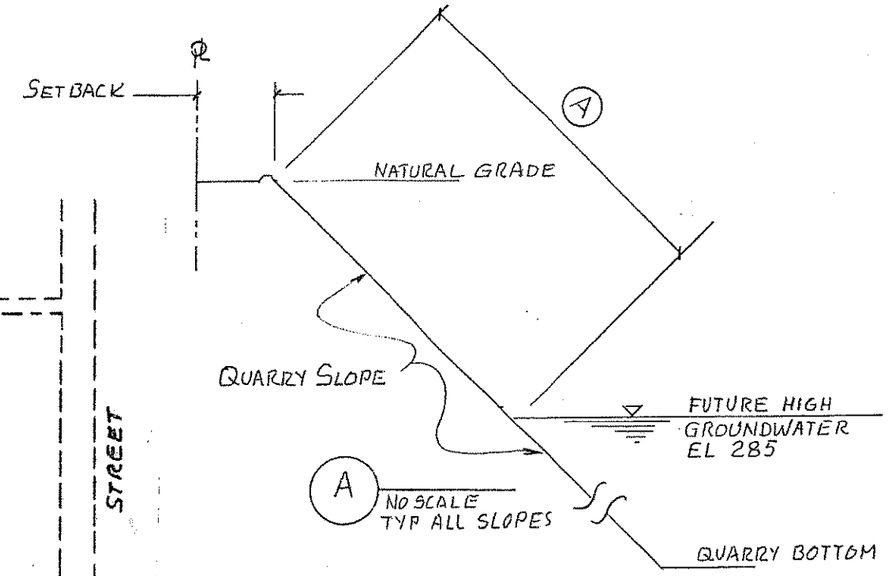
4. **Quarry slopes above water will be protected from surface erosion by naturally occurring drought tolerant vegetation.**

5. **No surface water will be discharged from the site.**

**Reclamation Plan: Erosion and Drainage Control For Post Mining Groundwater Recharge Basin**

**Figure No. 7**




## United Quarry No. 3

Notes

(A.) **The upper portion of the quarry slope, between the future high groundwater level (El. 285) and the Final Fill Elevation shall be revegetated with natural species, and may include an introduced seed mix to assure vegetative cover, density and species richness upon completion of reclamation. In the event that the elevation of the Groudwater Recharge Lake is higher than El 285, then the slope revegetation shall only extend from natural grade to the Groundwater Recharge Lake elevation. The quarry slope below the future high groundwater elevation (El. 285) shall not be subject to any specific revegetation performance standard.**

**Reclamation Plan: Erosion and Drainage Control During & After Mining, and During Water Recharge**

**Figure No. 8**

# Mined Quarry Slopes Natural Re-Vegetation

# For

# Slope Erosion Control

# Photo Log

## PURPOSE:

The following photographs (Photo No. 1 through Photo No. 20) were taken during mid May 2004 at the mining sites of Hanson Aggregates, United Rock Products and Vulcan Materials Company in Irwindale, CA. The purpose of the photographs is to document the state of re-vegetation that occurs naturally and unassisted after the quarry slope is cut during the mining process. The mine quarries walls represented in these photographs range in slope from as steep as about 1:1 to as flat as 2:1, with the majority ranging between 1 ¼ : 1 to about 1 ½ : 1. These slope also represent quarry walls with exposures to the north, south, east and west and with a range of soil types typically found within these mine sites. The slopes range in age from about 2 years old to more than 30 years old with little to no evidence of surface erosion.

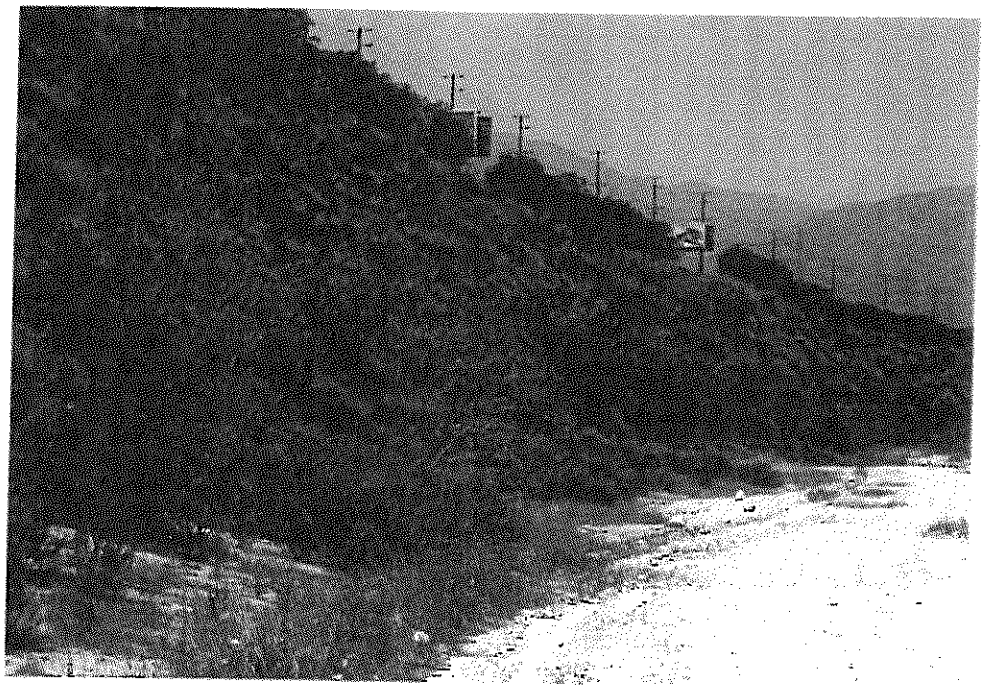


Photo No. 1 Durbin, east facing pit wall, vegetation well established, no erosion of slope surface soils, slope age = 12 yr. Apx. slope inclination = 1.4 : 1

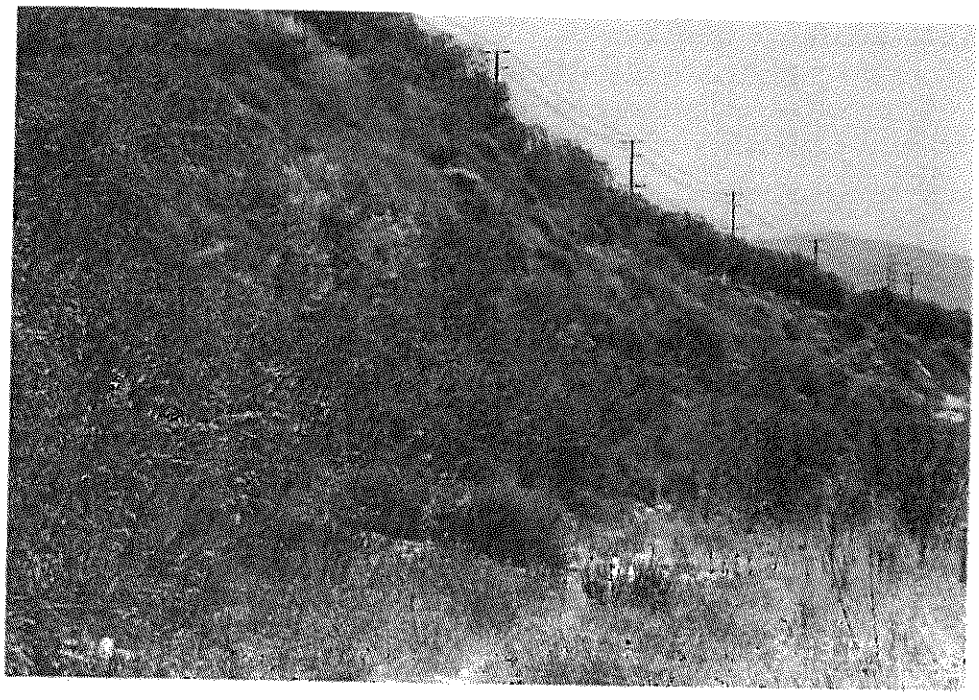


Photo No. 2 Durbin, east facing pit wall, vegetation well established, no erosion of slope surface soils, slope age = 12 yr. Apx. slope inclination = 1.4 : 1



Photo No. 3 Durbin, east facing pit wall, vegetation well established, no erosion of slope surface soils, slope age = 12 yr. Apx. slope inclination = 1.4 : 1

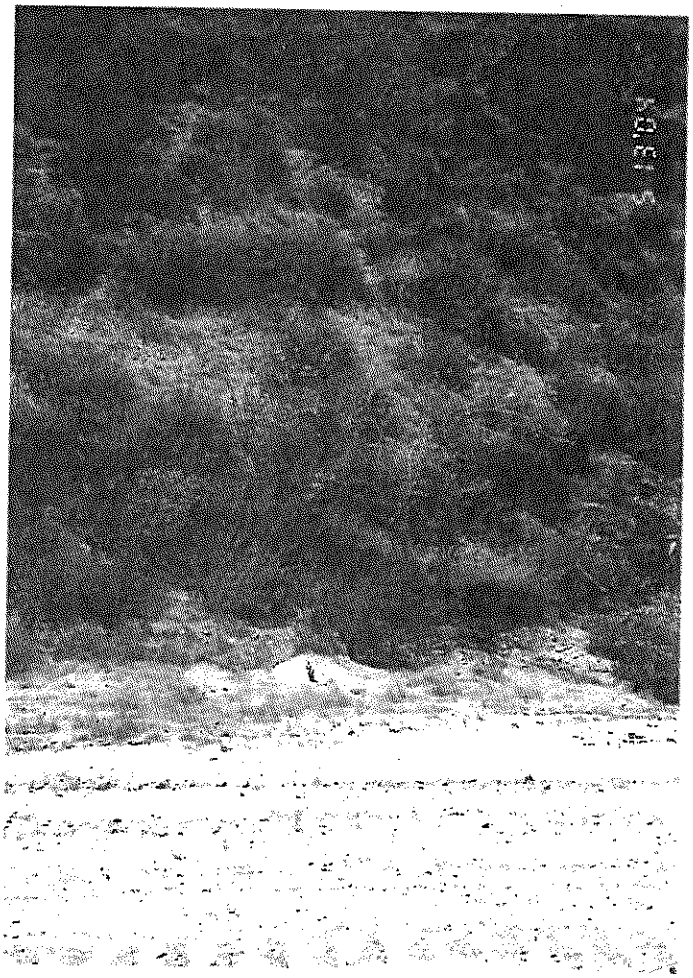


Photo No. 4

Durbin, east facing pit wall, vegetation well established, no erosion of slope surface soils, slope age = 12 yr. Apx. slope inclination = 1.4 : 1

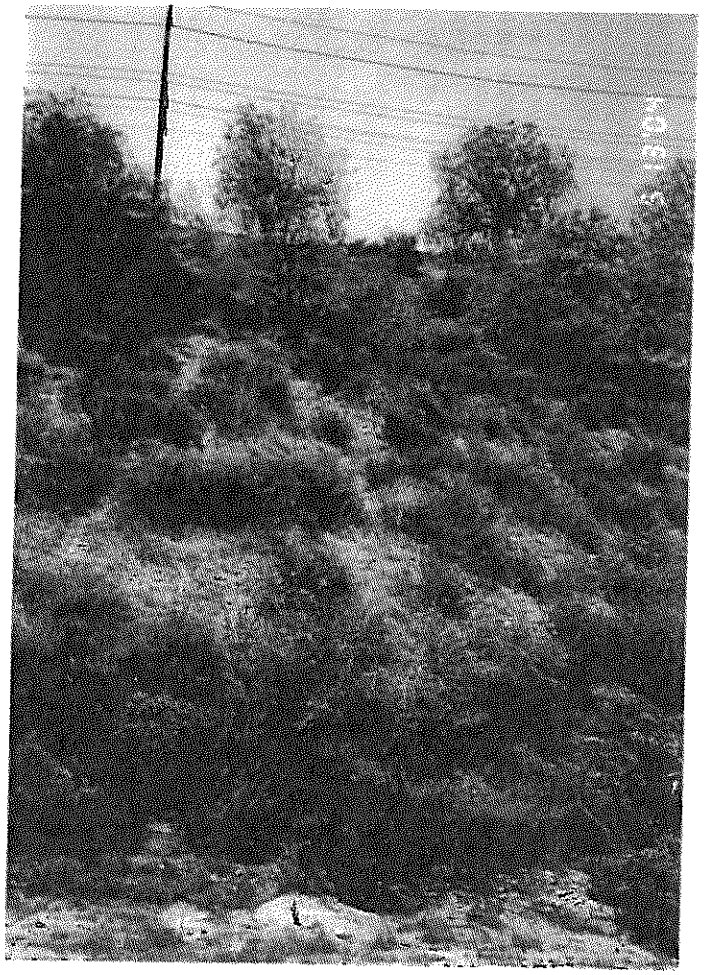


Photo No. 5

Durbin, east facing pit wall, vegetation well established, no erosion of slope surface soils, slope age = 12 yr. Apx. slope inclination = 1.4 : 1



Photo No. 6 Durbin, north facing pit wall, vegetation well established, no erosion of slope surface soils, slope age = 7 yr. Apx. slope inclination = 1.2 : 1

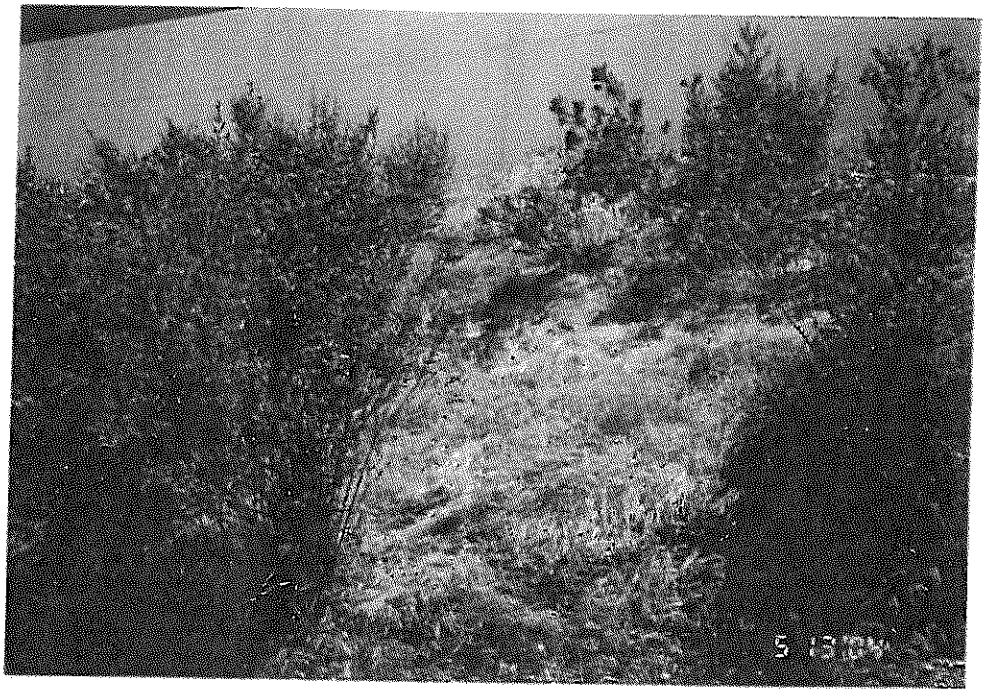


Photo No. 7 Durbin, north facing pit wall, vegetation well established, no erosion of slope surface soils, slope age = 7 yr. Apx. slope inclination = 1.2 : 1

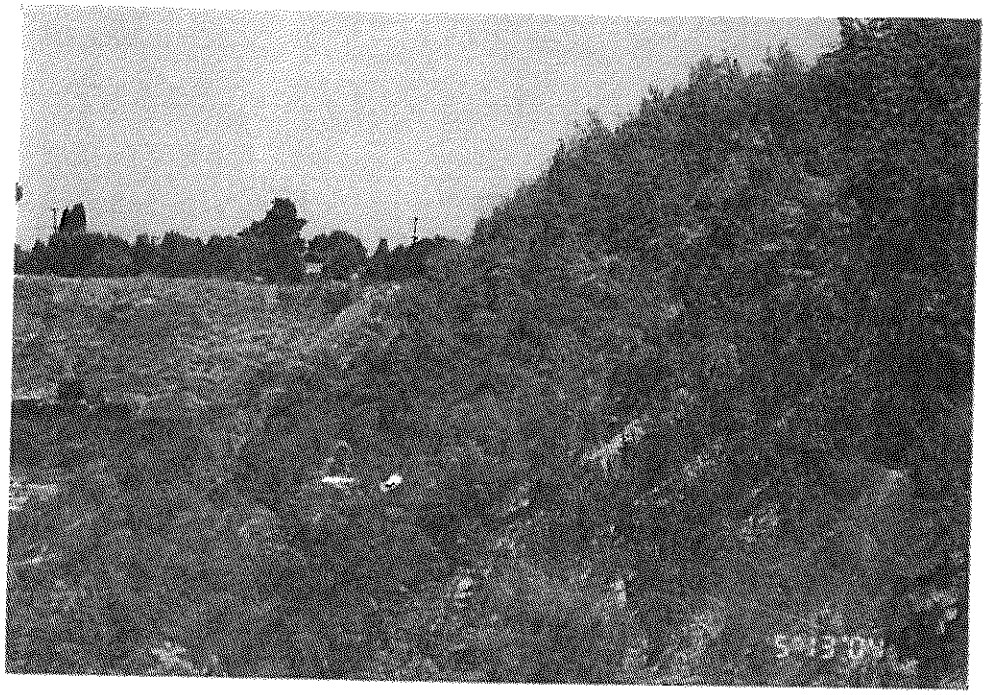


Photo No. 8 Durbin, north facing pit wall, vegetation well established, no erosion of slope surface soils, slope age = 2 yr. Apx. slope inclination = 1.2 : 1

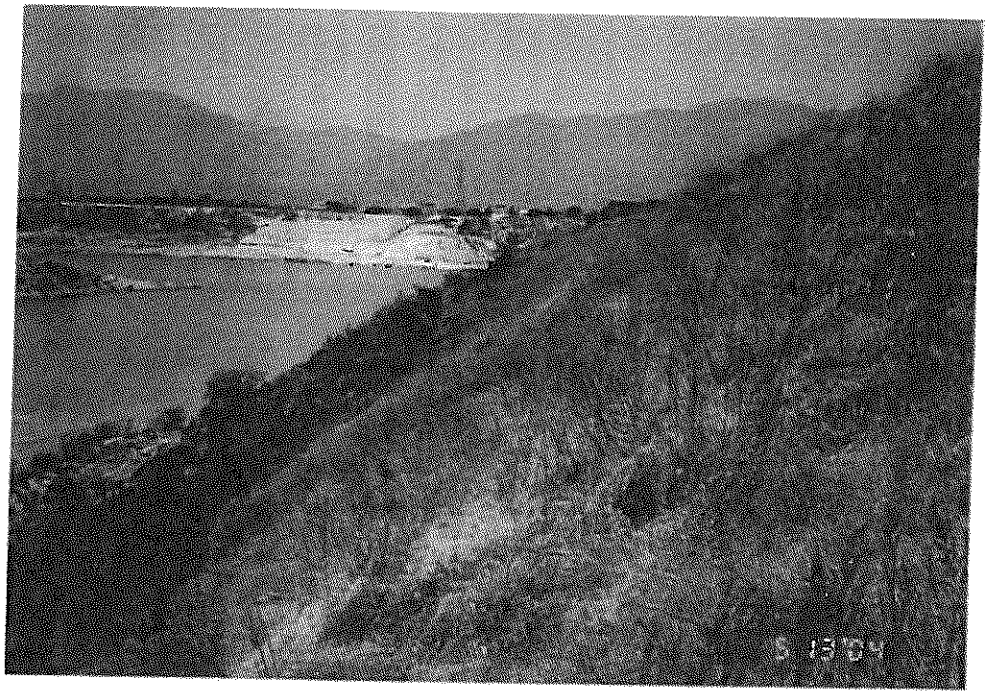


Photo No. 9 Durbin, west facing pit wall, vegetation well established, no erosion of slope surface soils, slope age = 20 yr. Apx. slope inclination = 1.2: 1

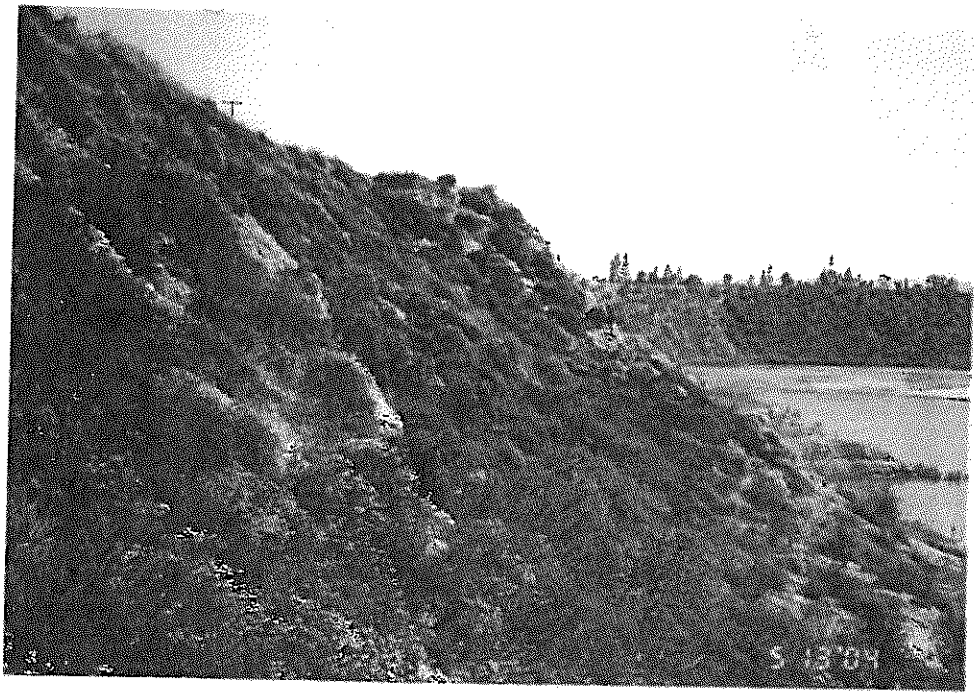


Photo No. 10 Durbin, west facing pit wall, vegetation well established, no erosion of slope surface soils, slope age = 20 yr. Apx. slope inclination = 1.2: 1



Photo No. 11 United, north facing pit wall, vegetation well established, no erosion of slope surface soils, slope age = 20 yr. Apx. slope inclination = 1.25: 1



Photo No. 12 United, south facing pit wall, vegetation well established, no erosion of slope surface soils, slope age = 20 yr. Apx. slope inclination = 1.4: 1

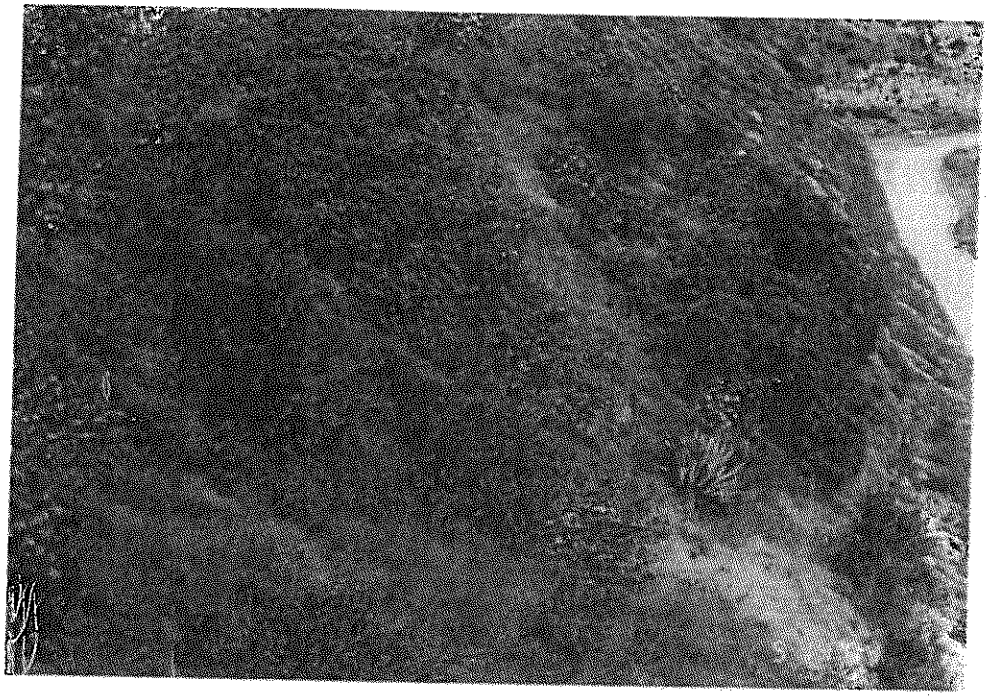


Photo No. 13 Hanson, north facing pit wall, vegetation well established, no erosion of slope surface soils, slope age = 10+ yr. Apx. slope inclination = 1.3: 1

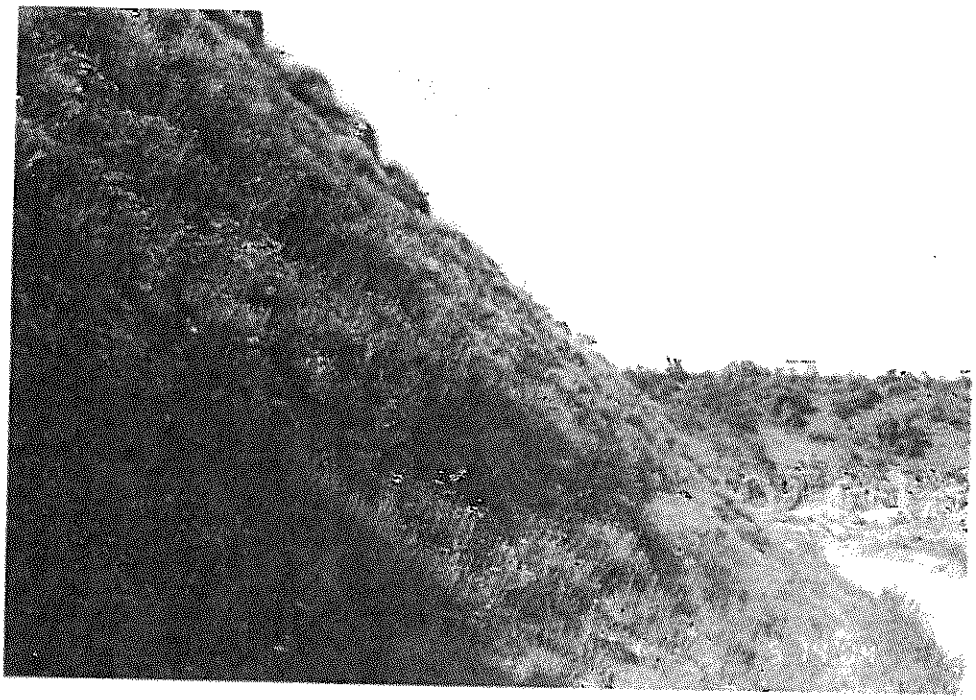


Photo No. 14 Hanson, north facing pit wall, vegetation well established, no erosion of slope surface soils, slope age = 10+ yr. Apx. slope inclination = 1.13: 1

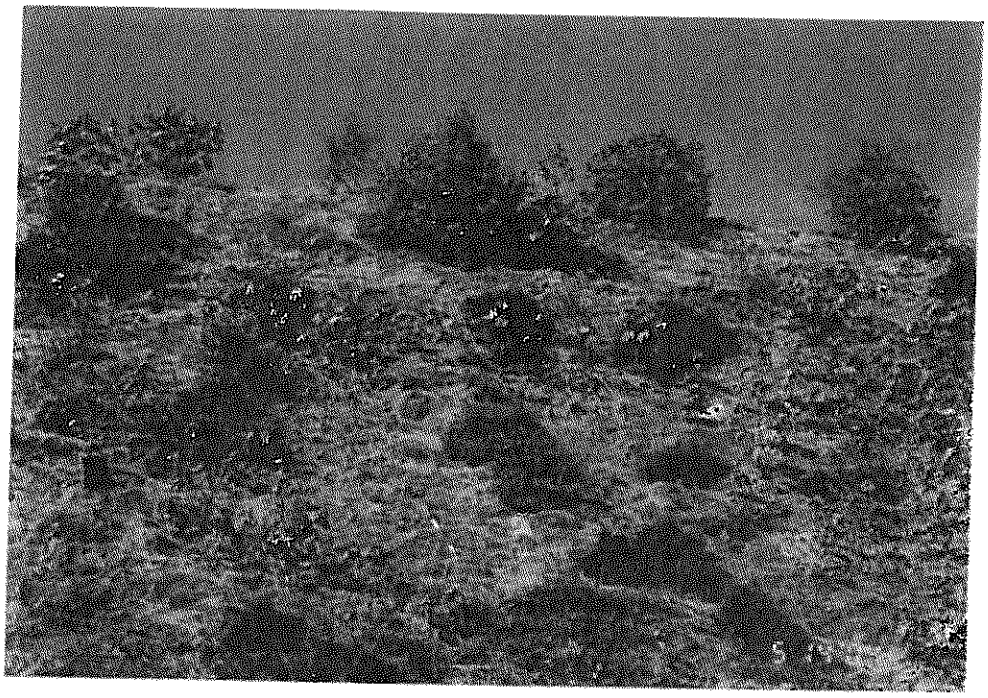


Photo No. 15 Hanson, north facing pit wall, vegetation well established, no erosion of slope surface soils, slope age = 10+ yr. Apx. slope inclination = 1.2: 1

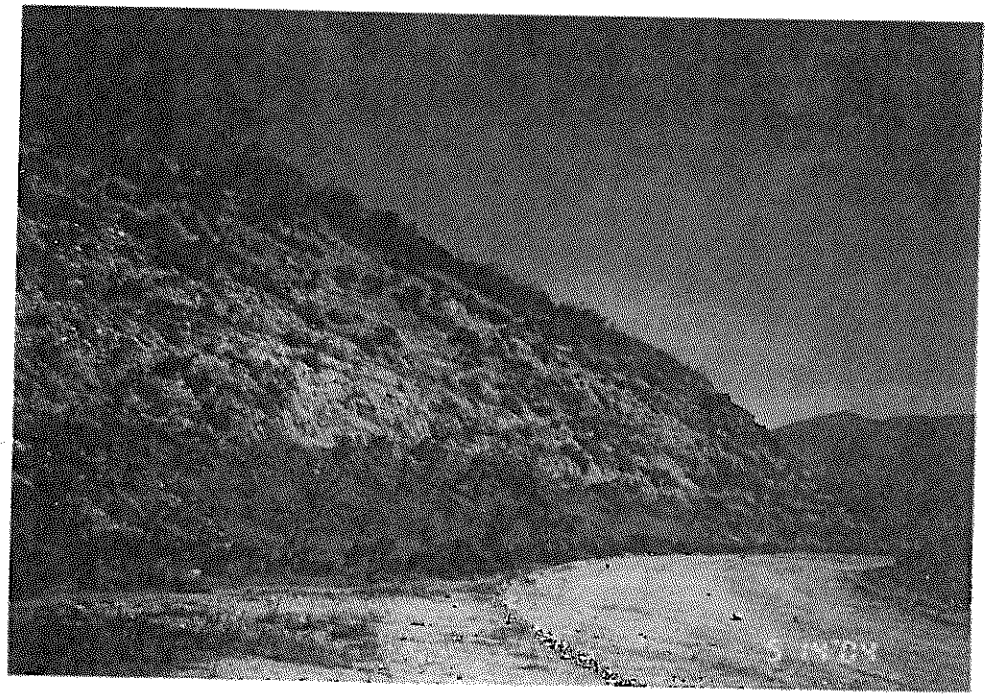


Photo No. 16 Hanson, east facing pit wall, vegetation in progress, no erosion of slope surface soils, slope age = 7 yr. Apx. slope inclination = 1.5: 1



Photo No. 17 Hanson, north facing pit wall, vegetation in progress, no erosion of slope surface soils, slope age = 7 yr. Apx. slope inclination = 1.5: 1

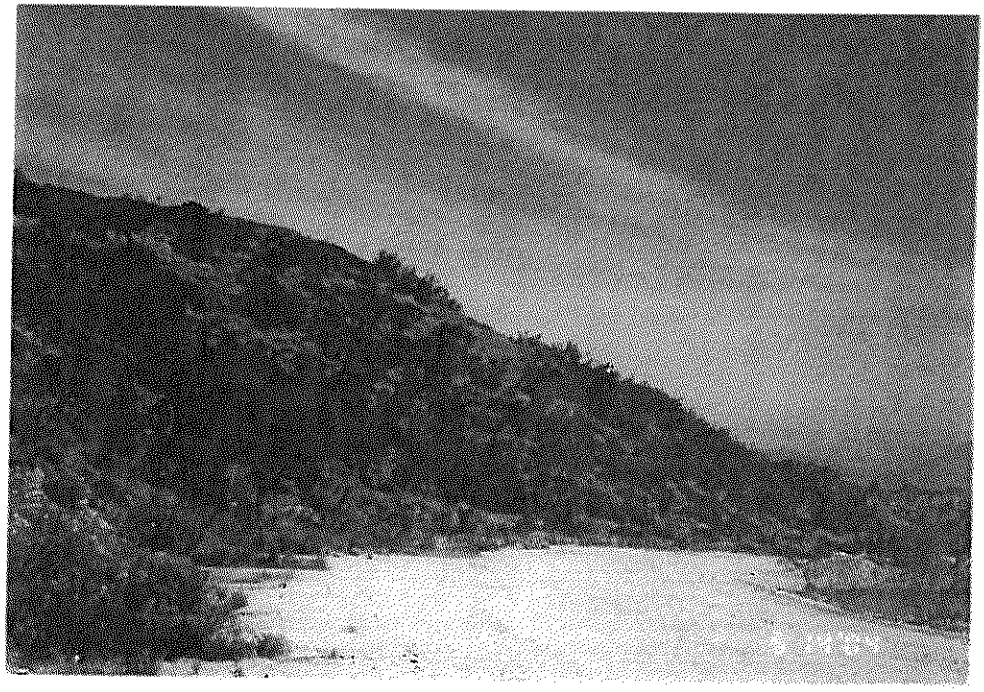


Photo No. 18 Hanson, north-east facing pit wall, vegetation well established, no erosion of slope surface soils, slope age = 10+ yr. Apx. slope inclination = 2 : 1



Photo No. 19 Hanson, north facing pit wall, vegetation well established, no erosion of slope surface soils, slope age = 20 yr. Apx. slope inclination = 1.25 : 1



Photo No. 20 Reliance east & west facing slopes wall, vegetation well established, no erosion of slope surface soils, slope age = 30+ yr. Apx. slope = 1.3 : 1

# Mined Quarry Slope Natural Re-Vegetation
# For
# Slope Erosion Control

# Appendix A

## Assessment of Re-Vegetation Status Of Manning Quarry

**By**

**City of Irwindale and West Coast Arborists, Inc.**

**April 2004**

April 12, 2004

RECEIVED

APR 19 2004

CITY OF IRWINDALE
PUBLIC WORKS DEPARTMENT

City of Irwindale
**ATTN: Mr. Kwok Tam**
5050 Irwindale Avenue
Irwindale, CA 91706

**RE: MANNING PIT VEGETATION ASSESSMENT**

Dear Mr. Tam,

Pursuant to your request, I examined the existing vegetation within the Manning Pit Quarry located in the City of Irwindale, California. Specifically, West Coast Arborists, Inc. (WCA) inventoried the prevailing vegetative species within Manning Pit as well as provided recommendations for additional species that would be beneficial to use for slope restoration purposes. The following list details the three (3) most prevalent vegetative species within the Manning Pit quarry and their respective characteristic attributes.

| BOTANICAL NAME | COMMON NAME | CHARACTERISTICS |
|---|---|---|
| *Acacia longifolia* | Sydney Golden Wattle | Large, rounded, billowy shrub that can reach 20' tall and 20' wide. Fast growing and hardy. Efficient at binding soil and resists oak root fungus. |
| *Bamboo sp.* | Bamboo | Require little to regular water. Fast growing. Plants are evergreen. |
| *Rhus laurina* | Laurel Sumac | Evergreen shrub. Native to the coastal foothills of Southern California. Fast growing. Provides good bank coverage. Can reach 15' tall and 15' wide. |

In an effort to restore the slopes within the Manning Pit quarry, plants that are drought tolerant, native to Southern California, and vigorous are recommended. Each of the aforementioned species satisfies one or more of these characteristics; however, should the City proceed with planting additional vegetative plants, the following recommendations have been provided.

| BOTANICAL NAME | COMMON NAME | CHARACTERISTICS |
|---|---|---|
| *Adenostoma fasciculatum* | Chamise | Native to the coastal hills of California. Has tiny, needle-like clustered leaves with small, white flowers. Can reach 5-12' in height and nearly as wide. Makes a good ground cover for rugged slopes. |
| *Fallugia paradoxa* | Apache Plume | Native to the mountains of medium and high deserts of California as well as the southwestern U.S. Grows 4-6' in height and 5' wide. Produces straw-colored branches with flaky bark. Has flowers that resemble single white roses. Thrives in gritty, well-drained soil. |
| *Fremontodendron 'California Glory'* | Flannel Bush | Native to California. Fast growing to 20' tall and 12' wide. Very showy 3" diameter flowers. Prolific bloom over long periods. Completely drought tolerant. |

Should you have any questions or comments or require additional information, please feel free to contact me at (800) 521-3714.

Sincerely,

Nick Alago

Nick Alago, WCA Area Manager
Certified Arborist, WC-4396

## ASSUMPTIONS AND LIMITING CONDITIONS

1. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the Consultant can neither guarantee nor be responsible for the accuracy of information provided by others.

2. Loss or alteration of any part of this report invalidates the entire report.

3. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person to whom it is addressed, without the prior written or verbal consent of the Consultant.

4. This report and any values expressed herein represent the opinion of the Consultant, and the Consultant's fee is in no way contingent upon the reporting of a stipulated result, nor upon any finding to be reported.

5. Unless expressed otherwise: 1) information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection and 2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the tree(s) or property in question may not arise in the future.

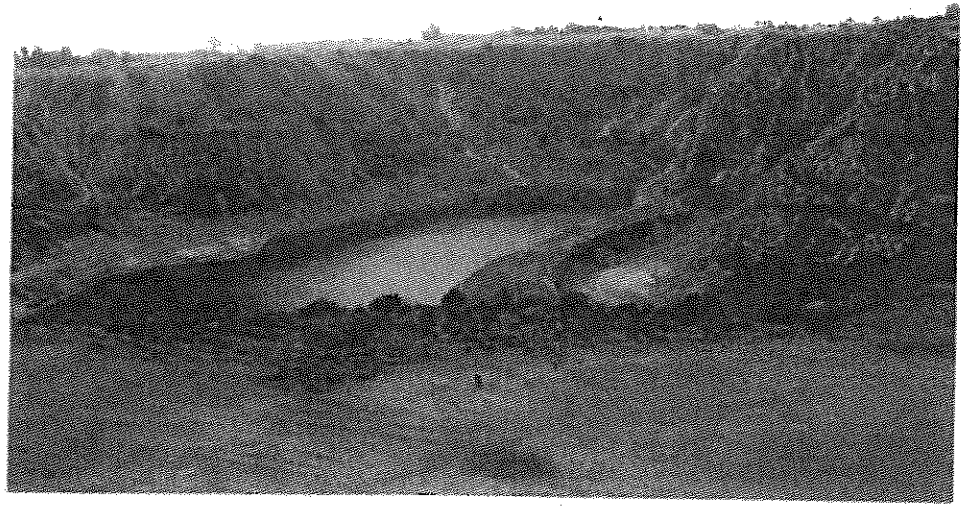
4-9-04







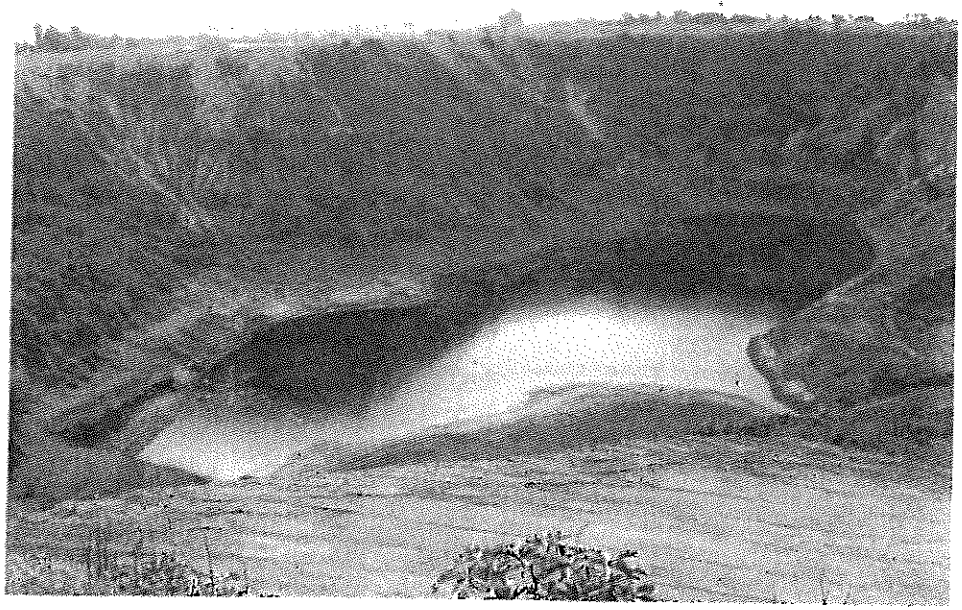






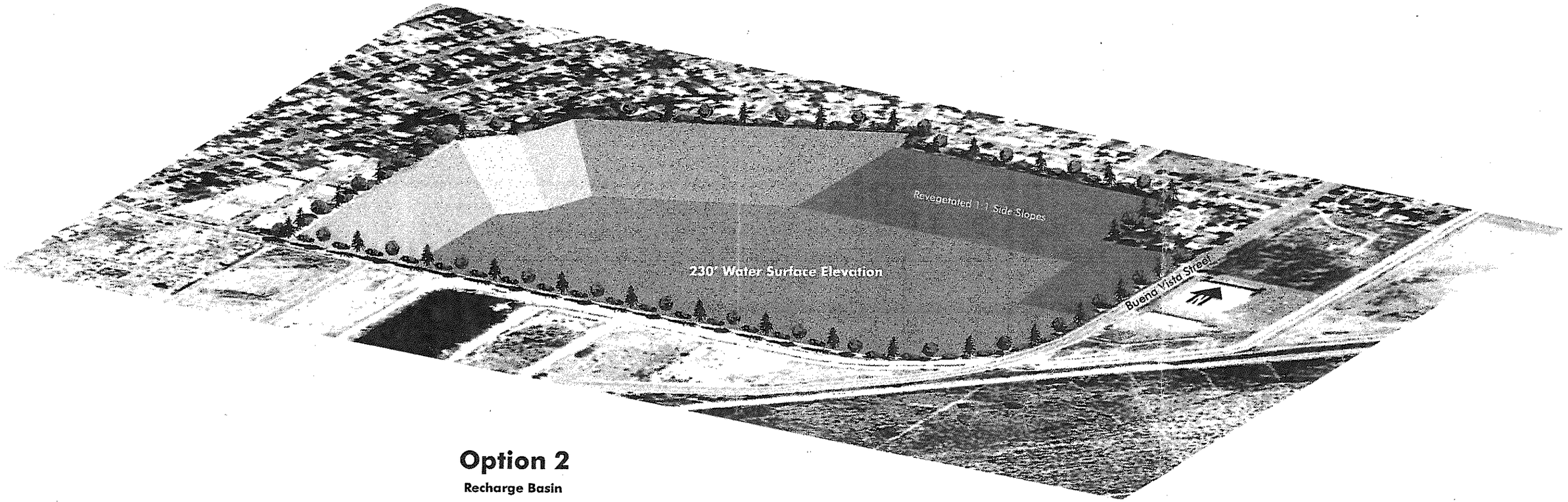













## Option 2

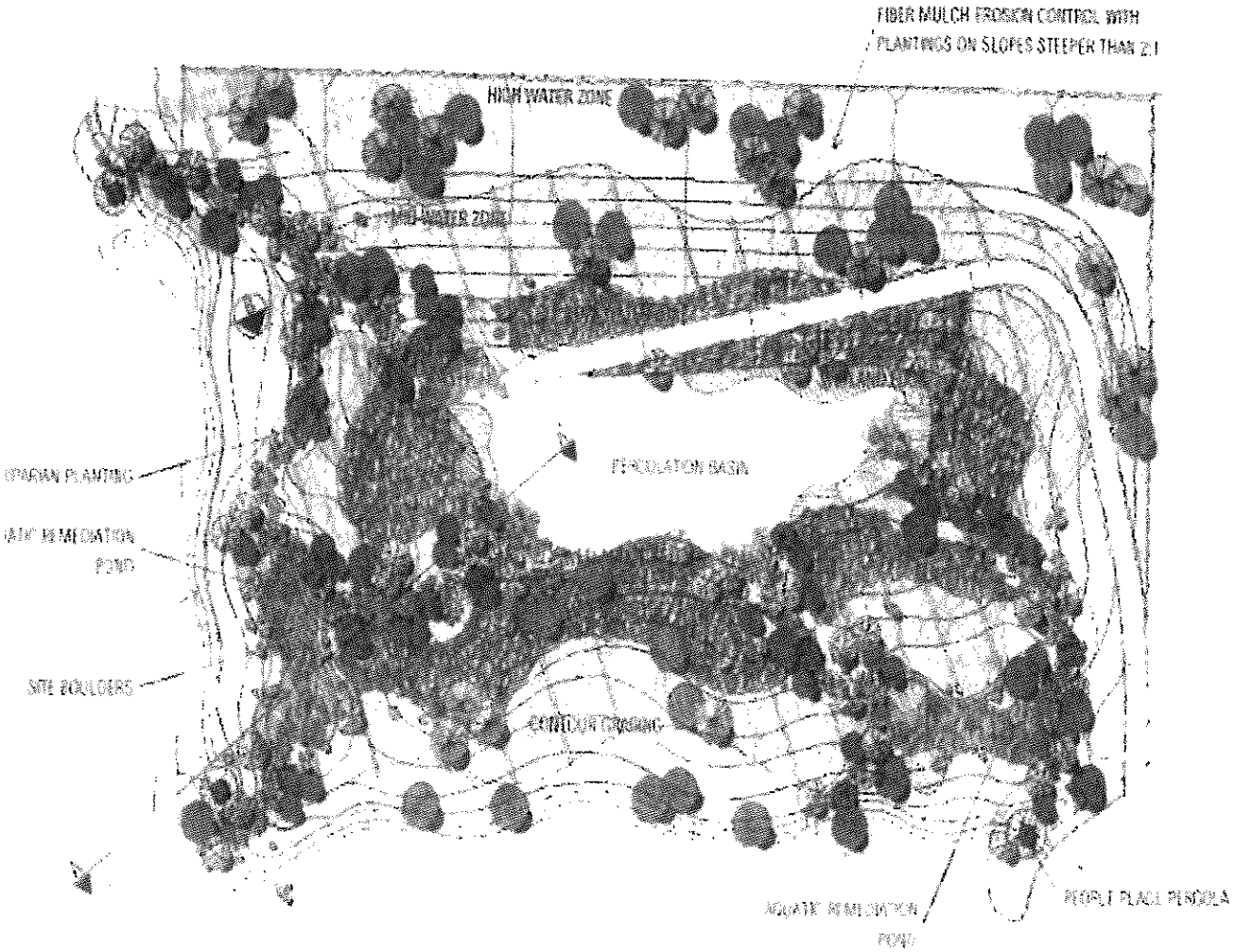
**Recharge Basin**

# Proposed Redevelopment

United Rock - Quarry 3
Irwindale, California

Figure 1

LILBURN
CORPORATION




PRELIMINARY PLANTING LIST

RIPARIAN PLANTING

Trees
Plantanus racemosa
Alnus rhombifolia
Salix sp
Quercus agrifolia

Shrubs
Baccharis viminea
Cornus stolonifera
Ribes speciosum
Typha latifolia
Ceanothus sp

SLOPE PLANTINGS

High Water Zone
Acacia redolens
Coprosma kirkii Verde Vista
Myoporum pacificum
Illinus estingiifolia
Quercus agrifolia

Low Water Zone
Salix sp
Cornus stolonifera
Equisetum hymenale
Platanus racemosa
Typha latifolia
Alnus rhombifolia
Baccharis viminea

Mid Water Zone
Myoporum pacificum
Westringia rosmarinifolia
Hydrocotyle ranunculoides

AQUATIC REMEDIATION PLANTS (Pond, Wetland)

Underwater
Chara Sp
Ceratophyllum demersum
Bacopa caroliniana

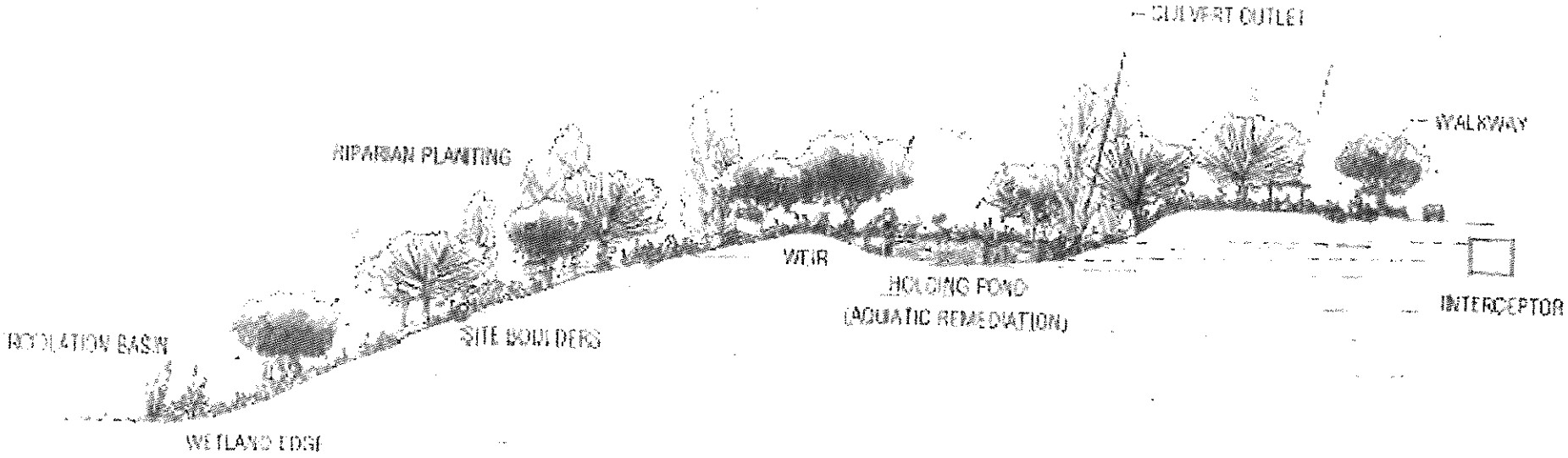
Emergent Plants
Iris sp
Typha latifolia
Naphar sp

Marginal
Acorus sp
Carex palustris
Cyperus sp
Juncus effusus
Scirpus
Equisetum hymenale
Eleocharis montevidensis

Floating Plants
Nymphaea sp
Hydrocotyle sp

EROSION CONTROL
Fiber mulch with contour planting on slopes over 2:1

LANDSCAPE CONCEPT PLAN




SECTION A:
AQUATIC REMEDIATION TRANSECT

Main San Gabriel Basin
WATERMASTER

September 3, 2003

RECEIVED

SEP - 8 2003

CITY OF IRWINDALE
OFFICE OF CITY MANAGER

Mr. Steve Blancarte
City Manager
City of Irwindale
5050 North Irwindale Avenue
Irwindale, CA 91706

RE: Gravels Pits as Recharge Facilities

Dear Steve:

It was a pleasure to meet with you and your staff recently to discuss the possible future use of various gravel pits in Irwindale. This will confirm that the Main San Gabriel Basin Watermaster supports the future use of pits such as United Rock Pit #3 and the city-owned Manning Pit as spreading grounds or as multi-use facilities that would enhance groundwater recharge. These two sites appear to be located adjacent to other spreading grounds and/or flood control facilities and could be incorporated into the County's water conservation network.

As I pointed out during our meeting, the Watermaster, as a court-appointed entity, does not own property. However, I believe that the joint powers authority recently formed by the Rivers and Mountains Conservancy and Los Angeles County would be an ideal agency to acquire and maintain these pits as spreading grounds or multi-use open space facilities. I have spoken to representatives of both the County and the RMC, and both have expressed interest in further discussing the potential presented by these sites.

Finally, you requested information regarding grading or other physical specifications that these sites should meet in order to be used for water conservation purposes. County personnel indicate that these requirements would be determined on a case-by-case basis, and we will further explore those issues when we meet with County and RMC representatives. Your City representatives will also be included once we learn their availability for scheduling that meeting.

I look forward to working with you on these potential projects. If you have any questions or would like additional information, please don't hesitate to contact me.

Sincerely,

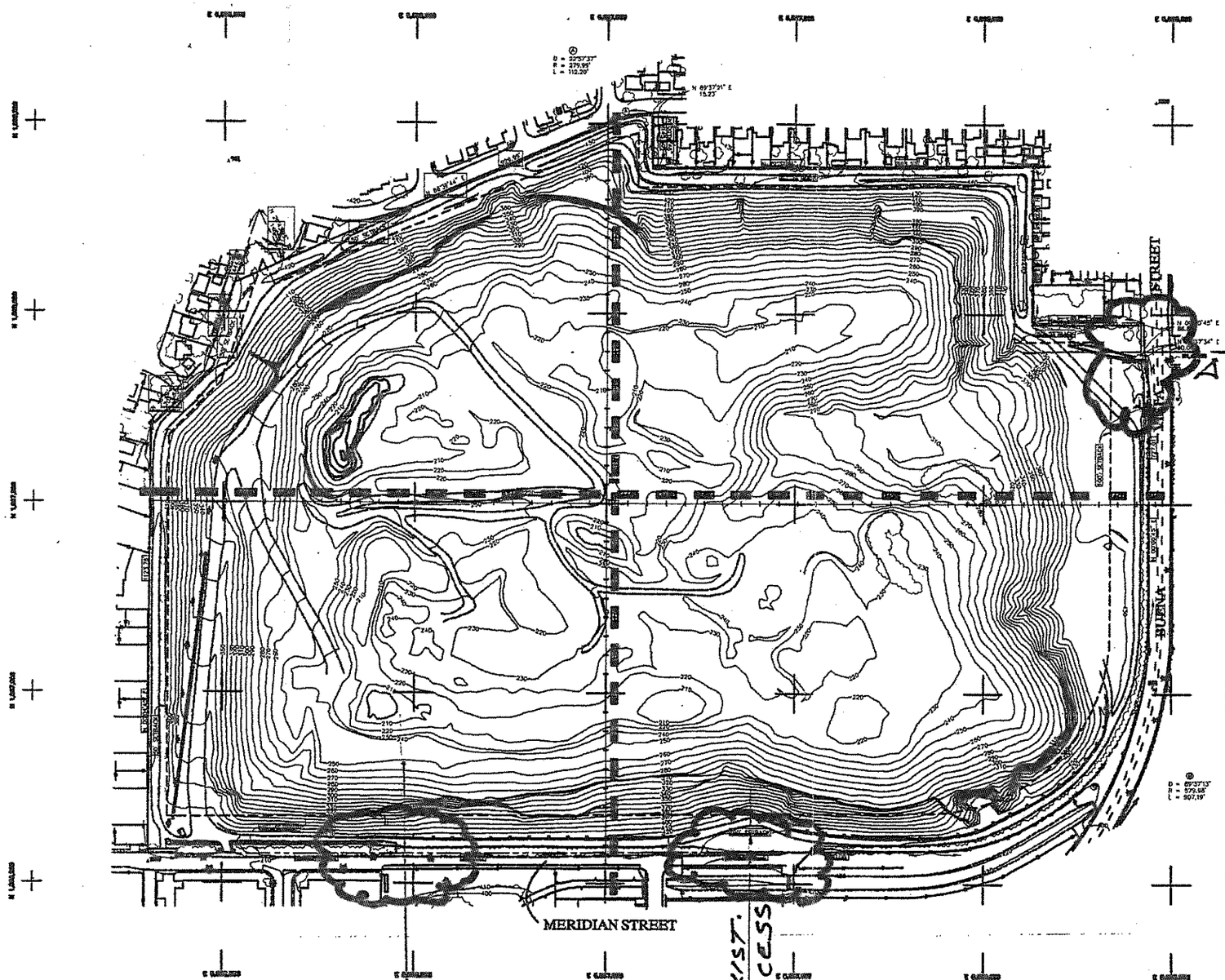
Carol Thomas Williams
Executive Officer

CW/s
cc: Steve Johnson/Stetson Engineers

725 North Azusa Avenue • Azusa, California 91702 • Telephone (626) 815-1300 • Fax (626) 815-1303
http://www.watermaster.org

Printed on Recycled Paper.

CONSTRUCT NEW PERMANENT 6' HI. GALVANIZED CHAIN LINK FENCE. PER A.P.W.A. STD-600.




# UNITED ROCK PRODUCTS
# SAND AND GRAVEL PIT #3

IRWINDALE, CALIFORNIA

BASIS OF BEARINGS AND COORDINATES:

NGS CONTROL POSITIONS IN LATITUDE AND LONGITUDE USED:

BASIS OF VERTICAL CONTROL

COMBINATION FACTOR:

SURVEYOR'S STATEMENT:

MONUMENT DESCRIPTIONS:

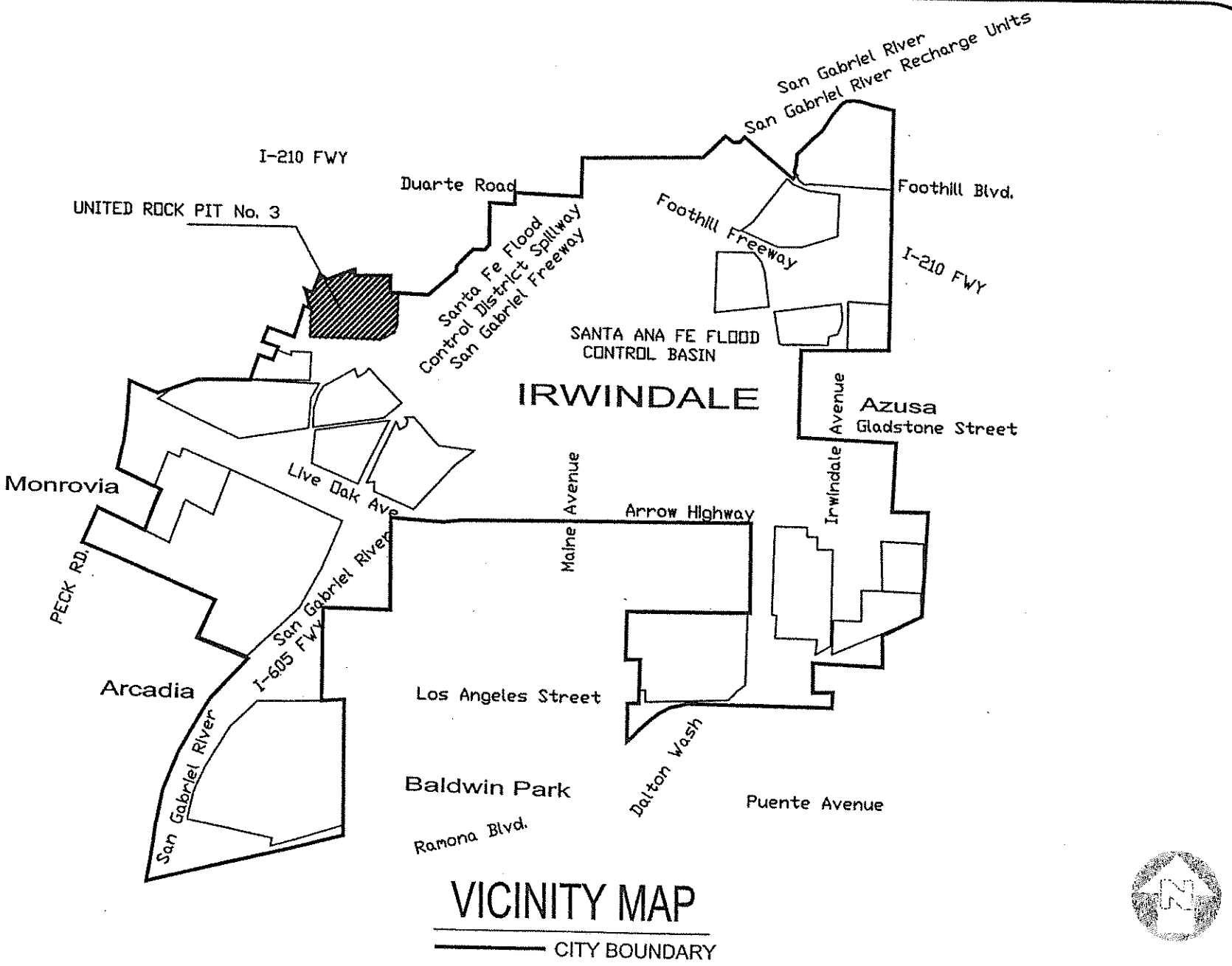
LEGEND

GRAPHIC SCALE

BOUNDARY AND TOPOGRAPHY

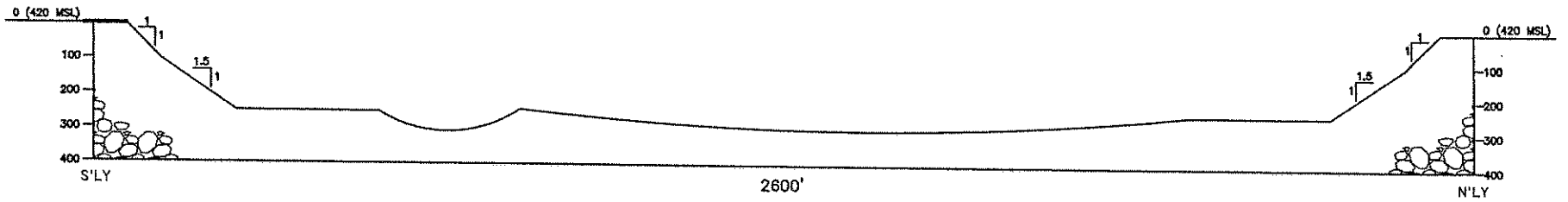
JOHNSON-FRANK & ASSOC., INC.

# FIGURES

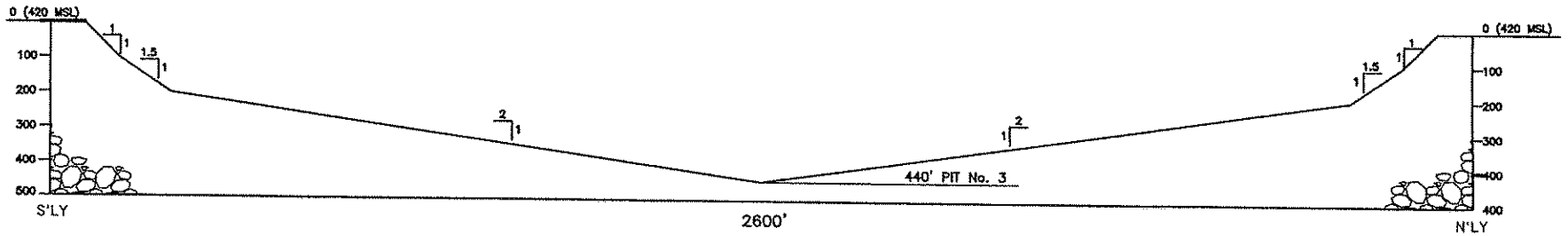

San Gabriel River
San Gabriel River Recharge Units
I-210 FWY
Duarte Road
UNITED ROCK PIT No. 3
Foothill Blvd.
Foothill Freeway
Santa Fe Flood
Control District Spillway
San Gabriel Freeway
I-210 FWY
SANTA ANA FE FLOOD
CONTROL BASIN
IRWINDALE
Azusa
Gladstone Street
Irwindale Avenue
Monrovia
Live Oak Ave
Maine Avenue
Arrow Highway
Irwindale
PECK RD.
San Gabriel River
I-605 FWY
Arcadia
Los Angeles Street
San Gabriel River
Baldwin Park
Dalton Wash
Puente Avenue
Ramona Blvd.
VICINITY MAP
CITY BOUNDARY

# EXHIBIT "B"

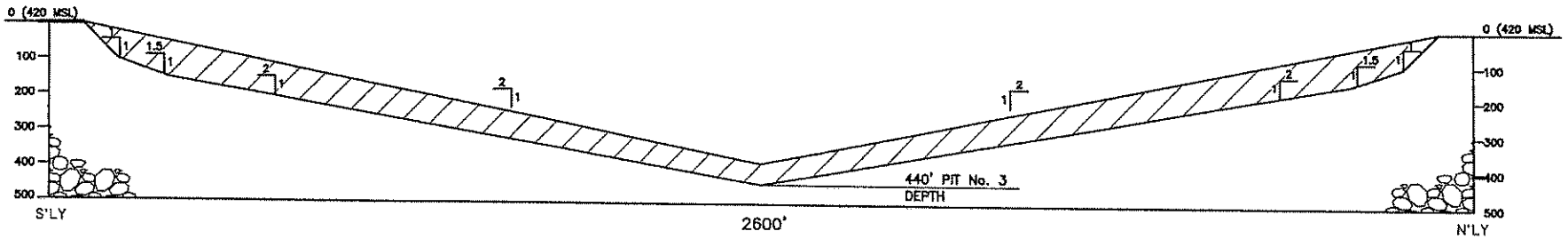
## UNITED ROCK PIT No. 3




EXISTING CONDITION




FUTURE CONDITION UPON MINING COMPLETION




FUTURE CONDITION UPON MINING COMPLETION

RECLAMATION-ENGINEERED FILL/SLOPE STABLISHMENT

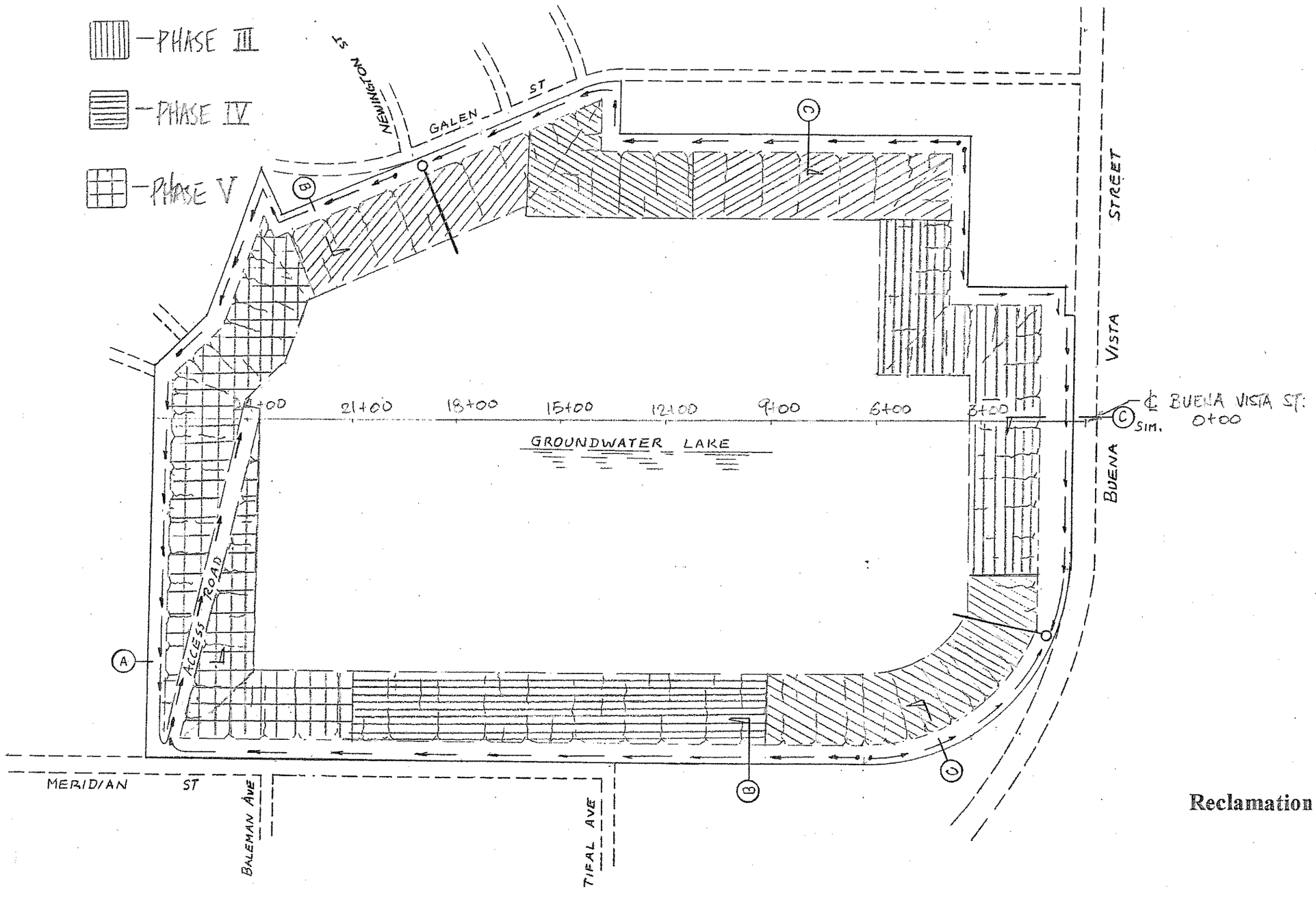
TYPICAL X-SECTION

N.T.S.

CITY OF IRWINDALE
PUBLIC WORKS DEPARTMENT
BY: EDGAR ROJAS
APRIL 2004

REVEGETATION SEQUENCE

- PHASE I
- PHASE II
- PHASE III
- PHASE IV
- PHASE V




N

1" = 300' APX.

## United Quarry No. 3

Notes & Legend:

1. **All mine slopes are 1:1 from top of pit to the current groundwater surface and 2:1 below water.**
2. **An MSHA and Drainage Control berm will be located at the top of all quarry slops.**
3. **Drainage swales and pipes will be installed as shown hereon.**
4. **Minimum graded slope for Drainage swales is 1%.**
5. **Quarry slopes above water will be protected from surface erosion by naturally occurring drought tolerant vegetation.**
6. **No surface water will be discharged from the site.**

**Indicates the beginning of a Drainage swale commencing at the high point in elevation.**

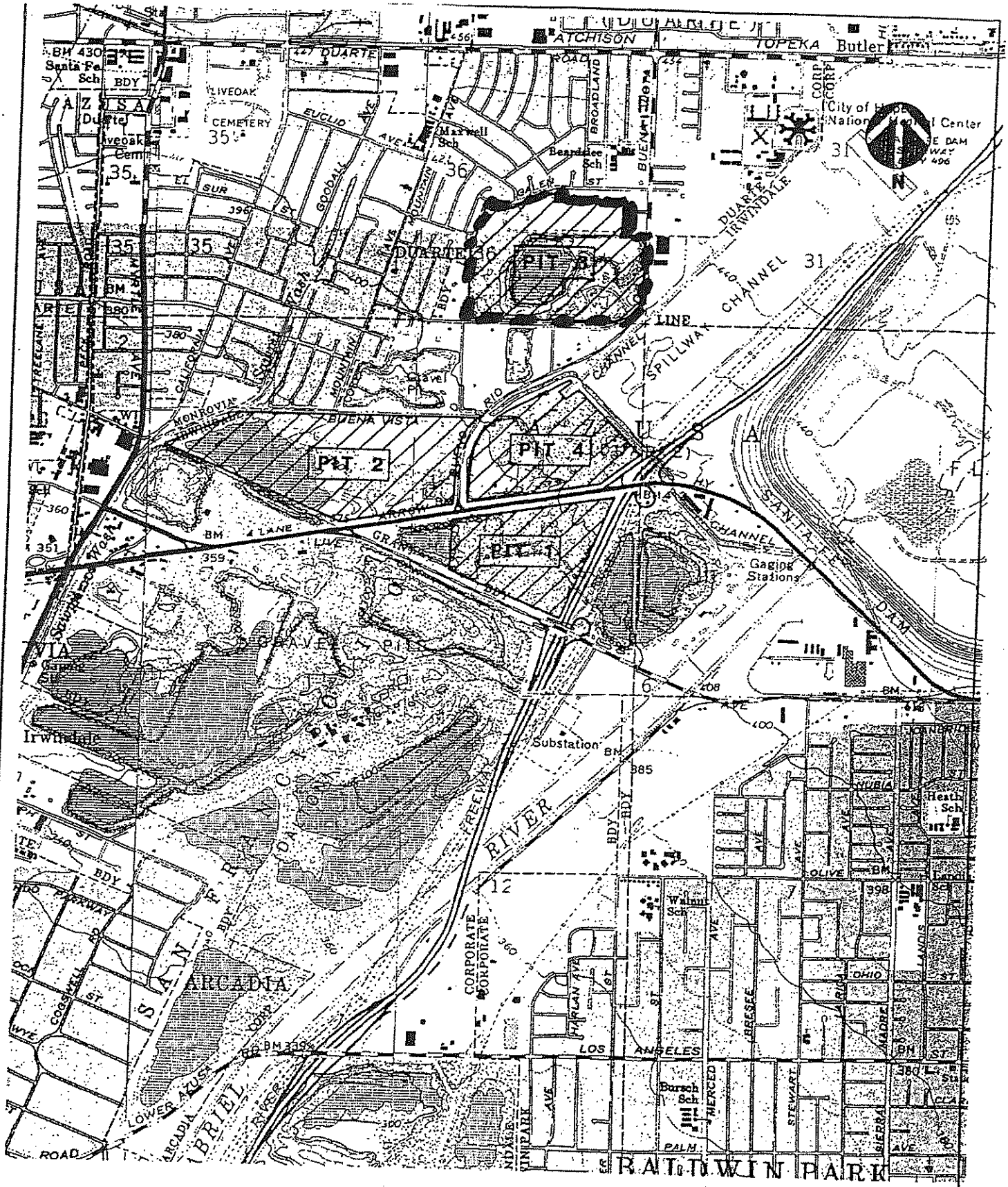
**Indicates the direction of flow for the Drainage swale.**

**Indicates a concrete flow collection point with piped flow to the groundwater lake surface, appropriately anchored.**

**Indicates Cross Section or Detail, see Figure No. 9.**

**Reclamation Plan:** REVEGETATION PHASING PLAN

EXHIBIT J



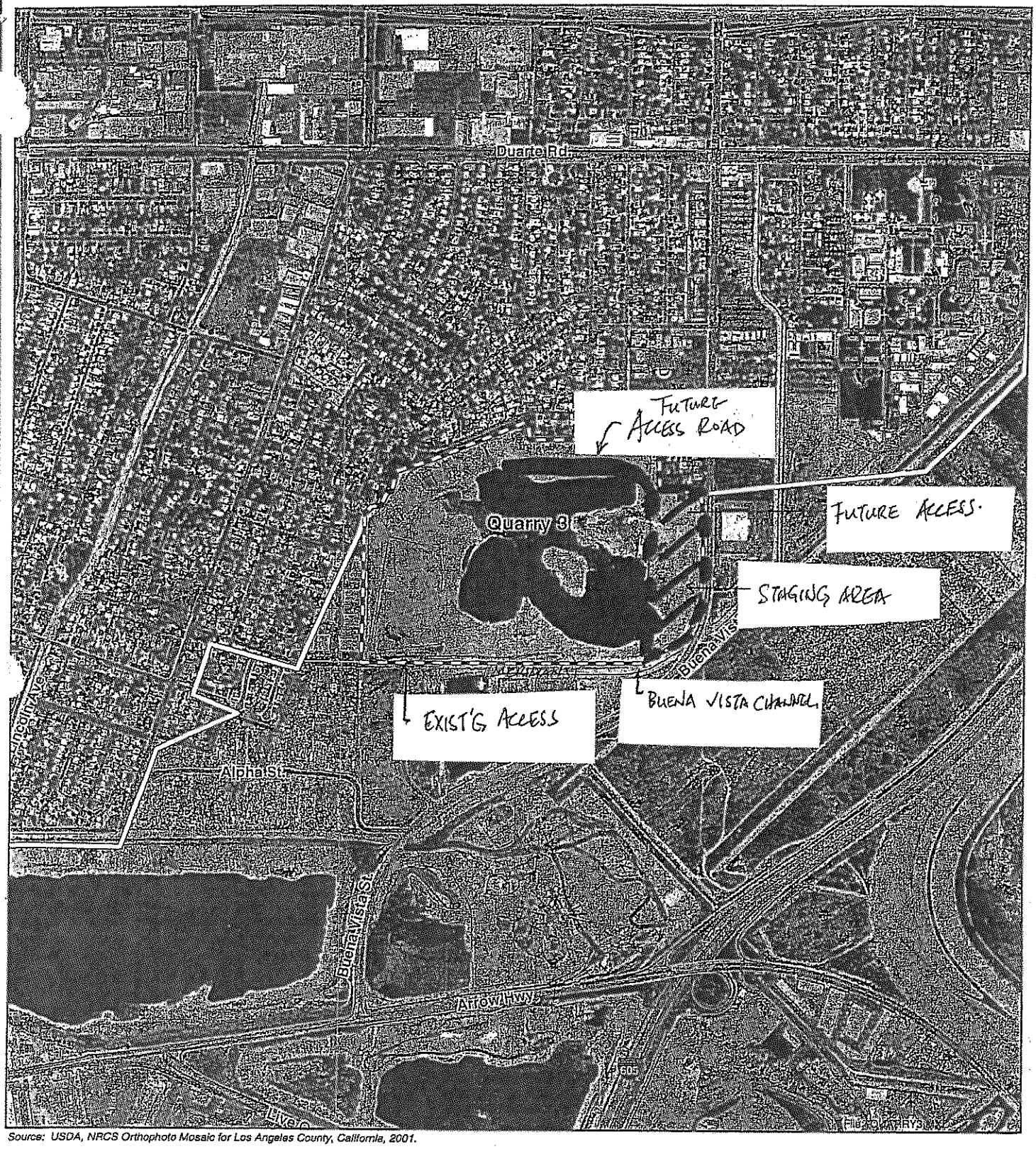

NO SCALE

# VICINITY MAP

## PITS 1, 2, 3 & 4
## 1245 E. ARROW HIGHWAY
## IRWINDALE, CALIFORNIA

UNITED ROCK PRODUCTS CORP RECLAMATION PLAN

FIG 1




*Source: USDA, NRCS Orthophoto Mosaic for Los Angeles County, California, 2001.*

## Legend

- Quarry Boundary
- City of Irwindale Boundary

N
W E
S

0 250 500 1,000 1,500 Feet

Universal Transverse Mercator
North American Datum 1927
Zone 11

UNITED ROCK QUARRY AND RECLAMATION PLAN EIR

*FIGURE 2*
*QUARRY 3*

GREYSTONE®

| Community (CRS) | County | Comm. No. | FIRM Index Date | Pre-/Post-FIRM Date | Reg. Program Entry Date | Community Map Repository | Telephone |
|---|---|---|---|---|---|---|---|
| Inglewood | Los Angeles | 065036 | NSFHA/C | 02/20/79 | 02/20/79 | Engineering | 310-412-5333 |
| Inyo County | Inyo | 060073 | 08/05/86 | 09/04/85 | 09/04/85 | Public Works | 760-878-2411 |
| Ione | Amador | 060016 | 06/06/00 | 07/08/80 | 07/08/80 | City Admin. | 209-274-2413 |
| Irvine (8) | Orange | 060222 | 01/03/97 CW | 02/15/80 | 02/15/80 | Planning | 949-724-6455 |
| Irwindale | Los Angeles | 060129 | NSFHA/C | 02/12/79 | 02/12/79 | Engineering | 626-962-8881 |
| Isleton | Sacramento | 060265 | 07/02/87 | 12/01/78 | 12/01/78 | Public Works | 916-777-6082 |
| Jackson | Amador | 060448 | 07/17/97 | 08/19/85 | 08/19/85 | Engineering | 209-223-1646 |
| Kerman | Fresno | 060665 | NSFHA CW | | Not in NFIP | ——— | ——— |
| Kern County (8) | Kern | 060075 | 09/06/95 | 09/29/86 | 09/29/86 | Planning | 661-861-2615 |
| King City | Monterey | 060199 | 10/15/81 | 10/15/81 | 10/15/81 | Planning | 831-385-3281 |
| Kings County | Kings | 060086 | 08/04/88 | 08/04/88 | 08/04/88 | Planning | 559-582-3211 |
| Kingsburg | Fresno | 060050 | NSFHA CW | 11/30/83 | 11/30/83 | City Admin. | 559-897-5821 |
| La Canada Flintridge | Los Angeles | 060669 | NSFHA/D | | 09/07/84 | Bldg & Safety | 626-790-8651 |
| La Habra | Orange | 060224 | 01/03/97 CW | 02/15/80 | 02/15/80 | Planning | 562-905-9720 |
| La Habra Heights | Los Angeles | 060701 | NSFHA/D | | 09/07/84 | Engineering | 213-695-0551 |
| La Mesa | San Diego | 060292 | 07/02/02 CW | | 06/26/76 | Engineering | 619-463-6611 |
| La Mirada | Los Angeles | 060131 | 07/02/80 | 07/02/80 | 07/02/80 | Planning | 562-943-0131 |
| La Palma | Orange | 060225 | 01/03/97 CW | 07/21/78 | 07/21/78 | Public Works | 714-523-1140 |
| La Puente | Los Angeles | 065039 | NSFHA/C | | 05/25/78 | Community Dev. | 626-330-4511 |
| La Quinta | Riverside | 060709 | 08/19/91 | 06/19/85 | 07/01/85 | Engineering | 760-777-7075 |
| La Verne | Los Angeles | 060133 | NSFHA/D | | 09/07/84 | Planning | 714-596-8706 |
| Lafayette | Contra Costa | 065037 | 12/20/02 | 03/16/81 | 03/16/81 | Planning | 925-284-1976 |
| Laguna Beach | Orange | 060223 | 01/03/97 CW | 09/18/85 | 09/28/79 | Building | 949-497-0715 |
| Laguna Hills | Orange | 060760 | 01/03/97 CW | 09/14/79 | 10/31/97 | Engineering | 714-707-2655 |
| Laguna Niguel | Orange | 060764 | 01/03/97 CW | 09/14/79 | 10/09/97 | Building | 714-362-4300 |
| Laguna Woods | Orange | 060768 | 01/03/97 CW | 09/14/79 | Not in NFIP | Community Dev. | 949-452-0600 |
| Lake County (7) | Lake | 060090 | 03/02/98 | 10/17/78 | 10/17/78 | Flood Control | 707-263-2343 |
| Lake Elsinore | Riverside | 060636 | 06/18/96 | 09/17/80 | 09/17/80 | Community Dev. | 909-674-3124 |
| Lake Forest | Orange | 060759 | 01/03/97 CW | 09/14/79 | 09/15/94 | Planning | 949-707-5583 |
| Lakeport | Lake | 065038 | 09/28/90 | 09/01/78 | 09/01/78 | Engineering | 707-263-5614 |
| Lakewood | Los Angeles | 060130 | NSFHA/LOMR | 04/15/79 | 04/15/79 | Community Dev. | 562-866-9771/2300 |
| Lancaster | Los Angeles | 060672 | 01/06/82 | 01/06/82 | 01/06/82 | Building | 661-723-6144 |
| Larkspur | Marin | 065040 | 03/15/84 | 03/15/84 | 03/15/84 | Planning | 415-924-5110 |
| Lassen County | Lassen | 060092 | 11/21/01 | 09/04/87 | 09/04/87 | Planning | 530-257-8311 |
| Lathrop | San Joaquin | 060738 | See Co Map | | 01/28/91 | Planning Dept. | 209-858-5657 |
| Lawndale | Los Angeles | 060134 | NSFHA/C | | 10/30/78 | Community Dev. | 310-970-2130 |
| Lemon Grove | San Diego | 060723 | 07/02/02 CW | 03/16/88 | 11/14/97 | Public Works | 619-464-6934 |
| Lemoore | Kings | 060089 | 04/03/87 | 04/03/87 | 04/03/87 | Planning | 559-924-6740 |
| Lincoln | Placer | 060241 | 11/21/01 CW | 02/03/82 | 02/03/82 | Planning | 916-645-3320 |
| Lindsay | Tulare | 060406 | 09/28/84 | 09/28/84 | 09/28/84 | Public Works | 559-562-5945 |
| Live Oak | Sutter | 060395 | 03/23/84 | 03/23/84 | 03/23/84 | Engineering | 530-695-3436 |
| Livermore | Alameda | 060008 | 09/17/97 | 07/05/77 | 07/05/77 | Planning | 510-373-5200 |

# RESOLUTION NO. 2004-39-1983

## A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRWINDALE ESTABLISHING THE IRWINDALE RECLAMATION AUTHORITY - A JOINT POWERS AUTHORITY - TO ASSIST WITH RECLAMATION OF CERTAIN MINING QUARRIES IN THE CITY OF IRWINDALE

### RECITALS

A. Chapter 17.60 of the Irwindale Municipal Code (IMC) governs the allowable uses and standards for such uses applicable to the operation of mining quarries and processing plants (collectively "quarry(ies)") in the Quarry Zone of the City of Irwindale.

B. The City's Charter, at Article XIII, recognizes that mining and processing operations impose negative environmental impacts on the City and that the City's goal is to restore quarries to beneficial, alternate end uses.

C. Based on these findings, Article XIII authorizes the City to adopt regulations that address these goals, including measures to address financial assurance and security needs to ensure successful reclamation of quarries.

D. The City Council has determined that successful reclamation of quarries is a top priority and has placed significant resources dedicated to enforcing requirements under the Irwindale Municipal Code ("IMC"), Surface Mining and Reclamation Act of 1975 ("SMARA") and implementing State Mining and Geology Board Reclamation Regulations ("SMGB Regulation(s)"), to require operators of quarries to post adequate financial assurances.

E. Although the obligation to secure such reclamation is placed upon the operators of quarries under the IMC, SMARA and SMGB Regulations, the City nevertheless finds that there is a risk that quarry operators may fail to fulfill the reclamation goals of the City. The City Council therefore wishes to provide additional safeguards in instances where operators' financial assurances prove inadequate to successfully reclaim the quarries, and provide resources to potential developers of the quarries so that they may be converted to beneficial, alternate end uses.

F. SMARA and the IMC require quarry operators to post financial assurances for each quarry as security for the operators' reclamation

obligations. Under SMGB Regulation section 3803(a), private operators, in posting financial assurances to secure reclamation, are limited to the following instruments: surety bonds, irrevocable letters of credit or trust funds. In addition to the foregoing sources, however, governmental agencies may also pledge revenues in computing appropriate financial assurances.

G. To protect and promote the public health, safety and welfare by further ensuring the successful reclamation and ultimate development of quarries, the City, with the separate action of the Irwindale Community Redevelopment Agency, wishes to establish a joint powers authority, the Irwindale Reclamation Authority ("Authority"), under Government Code section 6500 et seq. to utilize the authority under SMARA Regulation 3803 allowing governmental agencies to offset reclamation costs by a pledge of revenues in calculating financial assurances through a mechanism whereby the Authority would receive and reassign the SMARA operating rights from participating operators to create a financial assurances mechanism that provides further assurance that the participating quarries will be adequately reclaimed to beneficial end uses.

H. The pledge of revenues of the Authority shall be accomplished through the reclamation fund established under IMC section 17.60.150 et seq. and the assignment to the Authority of filling revenues, or "tipping fees", by the participating operators.

I. United Rock Products Corporation, Inc. ("United") and Hanson Aggregates West, Inc. ("Hanson") have requested to participate in the financial assurances mechanism established through the Authority, and intend to do so by executing appropriate operating rights transfer and retransfer agreements with the Authority. Other operators may later seek to participate in such financial assurances mechanisms by executing similar agreements.

J. All legal prerequisites to the adoption of this Resolution have occurred.

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF IRWINDALE HEREBY RESOLVES AS FOLLOWS:**

Section 1. The City Council hereby specifically finds that all of the facts set forth in the Recitals of this Resolution are true and correct.

Section 2. Under the authority of Government Code sections 6500 et seq., the City Council hereby establishes the Irwindale Reclamation Authority ("Authority") in accordance with the Joint Powers Agreement ("JPA") attached hereto as Exhibit "A". The effectiveness of the Authority shall be contingent upon

the Irwindale Redevelopment Agency ("Agency") adopting a similar resolution establishing the Authority and execution of the JPA. The Authority shall be subject to the terms of the JPA and duly adopted Bylaws.

Section 3. The City Council hereby authorizes the City Manager to execute the JPA on its behalf and cause the Notice of Joint Powers Agreement to be filed with the Secretary of State and execute any other necessary documents to establish the Authority.

Section 4. The City Clerk shall certify as to the passage and adoption of this resolution.

**PASSED, APPROVED AND ADOPTED THIS 20th DAY OF JULY 2004.**

Mark A. Breceda, Mayor

**ATTEST:**

Linda J. Kimbro, CMC
Deputy City Clerk

STATE OF CALIFORNIA }

COUNTY OF LOS ANGELES } ss.

CITY OF IRWINDALE }

I, Linda J. Kimbro, Deputy City Clerk of the City of Irwindale, do hereby certify that the foregoing Resolution No. 2004-39-1983 was duly adopted by the City Council of the City of Irwindale, at a regular meeting held on the 20th day of July 2004, by the following vote:

AYES: Councilmembers: Miranda, Tapia, Garcia, Ramirez, Mayor Breceda

NOES: Councilmembers: None

ABSENT: Councilmembers: None

ABSTAIN: Councilmembers: None

_____

Linda J. Kimbro, CMC

Deputy City Clerk

# RESOLUTION NO. CR(I) 2004-16-435

## A RESOLUTION OF THE IRWINDALE COMMUNITY REDEVELOPMENT AGENCY ESTABLISHING THE IRWINDALE RECLAMATION AUTHORITY - A JOINT POWERS AUTHORITY - TO ASSIST WITH RECLAMATION OF CERTAIN MINING QUARRIES IN THE CITY OF IRWINDALE

### RECITALS

A. Chapter 17.60 of the Irwindale Municipal Code (IMC) governs the allowable uses and standards for such uses applicable to the operation of mining quarries and processing plants (collectively "quarry(ies)") in the Quarry Zone of the City of Irwindale.

B. The City's Charter, at Article XIII, recognizes that mining and processing operations impose negative environmental impacts on the City and that the City's goal is to restore quarries to beneficial, alternate end uses.

C. Based on these findings, Article XIII authorizes the City to adopt regulations that address these goals, including measures to address financial assurance and security needs to ensure successful reclamation of quarries.

D. The Agency Board has determined that successful reclamation of quarries is a top priority and has placed significant resources dedicated to enforcing requirements under the Irwindale Municipal Code ("IMC"), Surface Mining and Reclamation Act of 1975 ("SMARA") and implementing State Mining and Geology Board Reclamation Regulations ("SMGB Regulation(s)"), to require operators of quarries to post adequate financial assurances.

E. Although the obligation to secure such reclamation is placed upon the operators of quarries under the IMC, SMARA and SMGB Regulations, the Agency nevertheless finds that there is a risk that quarry operators may fail to fulfill the reclamation goals of the Agency. The Agency Board therefore wishes to provide additional safeguards in instances where operators' financial assurances prove inadequate to successfully reclaim the quarries, and provide resources to potential developers of the quarries so that they may be converted to beneficial, alternate end uses.

F. SMARA and the IMC require quarry operators to post financial assurances for each quarry as security for the operators' reclamation obligations. Under SMGB Regulation section 3803(a), private operators, in posting financial assurances to secure reclamation, are

limited to the following instruments: surety bonds, irrevocable letters of credit or trust funds. In addition to the foregoing sources, however, governmental agencies may also pledge revenues in computing appropriate financial assurances.

G. To protect and promote the public health, safety and welfare by further ensuring the successful reclamation and ultimate development of quarries, the Agency, with the separate action of the City of Irwindale's City Council, wishes to establish a joint powers authority, the Irwindale Reclamation Authority ("Authority"), under Government Code section 6500 et seq. to utilize the authority under SMARA Regulation 3803 allowing governmental agencies to offset reclamation costs by a pledge of revenues in calculating financial assurances through a mechanism whereby the Authority would receive and reassign the SMARA operating rights from participating operators to create a financial assurances mechanism that provides further assurance that the participating quarries will be adequately reclaimed to beneficial end uses.

H. The pledge of revenues of the Authority shall be accomplished through the reclamation fund established under IMC section 17.60.150 et seq. and the assignment to the Authority of filling revenues, or "tipping fees", by the participating operators.

I. United Rock Products Corporation, Inc. ("United") and Hanson Aggregates West, Inc. ("Hanson") have requested to participate in the financial assurances mechanism established through the Authority, and intend to do so by executing appropriate operating rights transfer and retransfer agreements with the Authority. Other operators may later seek to participate in such financial assurances mechanisms by executing similar agreements.

J. All legal prerequisites to the adoption of this Resolution have occurred.

**NOW, THEREFORE, THE BOARD OF THE IRWINDALE COMMUNITY REDEVELOPMENT AGENCY HEREBY RESOLVES AS FOLLOWS:**

Section 1. The Agency Board hereby specifically finds that all of the facts set forth in the Recitals of this Resolution are true and correct.

Section 2. Under the authority of Government Code sections 6500 et seq., the Agency Board hereby establishes the Irwindale Reclamation Authority ("Authority") in accordance with the Joint Powers Agreement ("JPA") attached hereto as Exhibit "A". The effectiveness of the Authority shall be contingent upon the City Council of the City of Irwindale adopting a similar resolution establishing

the Authority and execution of the JPA. The Authority shall be subject to the terms of the JPA and duly adopted Bylaws.

Section 3. The Agency Board hereby authorizes the Executive Director to execute the JPA on its behalf and cause the Notice of Joint Powers Agreement to be filed with the Secretary of State and execute any other necessary documents to establish the Authority.

Section 4. The Agency Secretary shall certify as to the passage and adoption of this resolution.

**PASSED, APPROVED AND ADOPTED THIS 20th DAY OF JULY 2004.**

Mark A. Breceda, Chair

**ATTEST:**

Linda J. Kimbro, CMC
Assistant Secretary

STATE OF CALIFORNIA }
COUNTY OF LOS ANGELES } ss.
CITY OF IRWINDALE }

I, Linda J. Kimbro, Assistant Secretary of the Irwindale Community Redevelopment Agency, do hereby certify that the foregoing Resolution No. CR(I) 2004-16-435 was adopted at a regular meeting of the Irwindale Community Redevelopment Agency held on July 20, 2004, by the following vote:

AYES: Agency Members: Miranda, Tapia, Garcia, Ramirez, Chair Breceda

NOES: Agency Members: None

ABSENT: Agency Members: None

ABSTAIN: Agency Members: None

Linda J. Kimbro, CMC
Assistant Secretary

# EXHIBIT F

## ORDINANCE ESTABLISHING RECLAMATION FUND

# ORDINANCE NO. 584

## AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IRWINDALE AMENDING CHAPTER 17.60, QUARRY ZONE, OF THE IRWINDALE MUNICIPAL CODE ESTABLISHING A RECLAMATION FUND TO PROVIDE ADDITIONAL RECLAMATION SECURITY FOR THE PROPER RECLAMATION OF CERTAIN MINING SITES IN THE CITY OF IRWINDALE

### RECITALS

A. Chapter 17.60 of the Irwindale Municipal Code ("IMC") governs the allowable uses and standards for such uses applicable to the operation of mining quarries and processing plants (collectively "quarry(ies)") in the Quarry Zone of the City of Irwindale.

B. The City's Charter, at Article XIII, recognizes that mining and processing operations impose negative environmental impacts on the City and that the City's goal is to restore quarries to beneficial, alternate end uses.

C. Based on these findings, Article XIII authorizes the City to adopt regulations that address these goals, including measures to address financial assurance and security needs to ensure successful reclamation of quarries.

D. Under Chapter 3.18 of the IMC, the City adopted a special mining tax imposed upon excavation and processing of rock materials in the City. Pursuant to Section 3.18.050 thereunder, revenues collected from the special mining tax are deposited into the Mining Impact Fund administered by the City's director of finance.

E. The City Council has determined that successful reclamation of quarries is a top priority and has placed significant resources dedicated to enforcing requirements under the IMC, Surface Mining and Reclamation Act of 1975 ("SMARA") and implementing State Mining and Geology Board Reclamation Regulations ("SMGB Regulation(s)"), to require operators of quarries to post adequate financial assurances.

F. Although the obligation to secure such reclamation is placed upon the operators of quarries under the IMC, SMARA and SMGB Regulations, the City nevertheless finds that there is a risk that quarry operators may fail to fulfill the reclamation goals of the City. The City Council therefore wishes to provide additional safeguards in instances where operators' financial assurances prove inadequate to successfully reclaim the quarries, and provide resources to potential developers of

the quarries so that they may be converted to beneficial, alternate end uses.

G. To protect and promote the public health, safety and welfare by further ensuring the successful reclamation and ultimate development of quarries, the City wishes to establish a reclamation fund derived from a portion of the special mining tax imposed on mining operators under IMC Chapter 3.18 and withdrawn from the Mining Impact Fund, to provide the City additional resources for the successful reclamation of quarries.

H. The purpose of the Mining Impact Fund is, in part, to provide a means of financing the costs of studying, quantifying, analyzing, monitoring, administering, correcting and mitigating negative environmental impacts from mining and processing activities, including but not limited to, the reclamation of properties damaged by mining and processing activities, as further analyzed in the City's 1999 Mining Study.

I. The City has determined that the costs of financial assurances to require reclamation of properties to street level or other useful condition may be difficult to achieve, and as such, finds that it is in the best interest of the City to provide additional resources through the reclamation fund created hereunder to assist with reclamation consistent with the City Council's desires.

J. All legal prerequisites to the adoption of this Ordinance have occurred.

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF IRWINDALE HEREBY ORDAINS AS FOLLOWS:**

Section 1. The City Council hereby specifically finds that all of the facts set forth in the Recitals of this Ordinance are true and correct.

Section 2. The City Council hereby amends Chapter 17.60 of the Irwindale Municipal Code, to add new sections 17.60.150 through 17.60.170, to read as follows:

17.60.150 Creation of reclamation fund.

A. There is hereby authorized a reclamation fund derived from existing revenue collected under the special mining tax pursuant to chapter 3.18 of this code (the "Reclamation Fund"). The Reclamation Fund will be a separate account established for the purposes authorized in this chapter, administered by the director of finance as a special fund of the city and invested in the manner authorized by the city council. The city will make a one-time nine hundred eighty-five thousand seven hundred fifteen dollar

($985,715) initial deposit into the Reclamation Fund and thereafter three hundred twenty-eight thousand five hundred seventy-two dollar ($328,572) deposit per year until such time as the aggregate amount of the Reclamation Fund, including interest and amounts deposited, equals an amount determined to be the reclamation cap (the Reclamation Cap"), as defined below. Thereafter, the city shall not make future deposits in the Reclamation Fund. Interest on any monies in the Reclamation Fund shall accrue to the benefit of the Reclamation Fund and will be utilized towards reducing required contributions by the city (since interest earnings reduce the required contributions to reach the Reclamation Fund Cap). The city may withdraw and place in its general fund any amounts exceeding the Reclamation Fund Cap.

B. The Reclamation Fund is envisioned to be utilized to assist in the reclamation of the mined quarries of the City's principal operators, currently owned by United Rock Products Corporation ("United"), Hanson Aggregates West, Inc. ("Hanson"), and CalMat Co. doing business as Vulcan Materials Company – Western Division ("Vulcan"). To participate, such operators must enter into an Operating Rights Transfer Agreement as provided in subsection 17.60.160.B. The Reclamation Fund Cap shall be determined based on which operators participate, and shall be as follows (or the cumulative amount of the following where more than one operator enters into the Operating Rights Transfer Agreement):

1. United: $8,000,000;
2. Hanson: $3,500,000;
3. Vulcan: $7,000,000.

C. The Reclamation Fund shall be allocated for use in supplementing reclamation of the participating quarries as authorized under this chapter in a manner that is proportional to the financial assurances posted with the city by each participating quarry (i.e. if only one operator participates, the allocation is 100%; if two, for example United and Hanson, then the allocation is approximately 70/30 [8/11.5 = .70). Such allocation shall be computed and monitored by the director of finance.

17.60.160 Purpose and uses of Reclamation Fund.

A. The purpose of the Reclamation Fund is to provide a pledge of revenue to satisfy the requirements of SMARA, at Public Resources Code section 2773.1. The Reclamation Fund is intended to provide resources to potential developers of the participating quarries so that they may be converted to beneficial, alternate end uses. To this end, the Reclamation Fund shall provide a means of supplementing financial assurances required by the SMARA and posted by those mining operators in the city that

wish to participate in the reclamation of their quarries to standards sought by the city.

B. In accordance with SMARA Regulations sections 3806.1 and 3806.2, the Reclamation Fund may be expended by the city, its designee or where required under SMARA, the Department of Conservation, to reclaim to beneficial, alternate uses those participating quarries where an assignment of SMARA operating rights in a form approved by the city and the Department of Conservation ("Operating Rights Transfer Agreement") has been approved and entered into.

C. City shall have sole control of the use, investment and management of the Reclamation Fund, subject only to the limitations in this chapter.

D. The city may implement the provisions hereof by the formation of a joint powers authority authorized to accept operating rights as to private quarry operations, to contribute to the provision of financial assurances for reclamation, and to act to remedy defaults in the performance of reclamation, all in accordance with SMARA and the IMC.

17.60.170 Dissolution of and withdrawals from Reclamation Fund.

A. The city may dissolve and/or return moneys in the Reclamation Fund to the city's mining fund upon the occurrence of any of the following:

1. The determination by any court or governmental agency of competent jurisdiction that the special mining tax under chapter 3.18 of this code is invalid.

2. The determination by any court or governmental agency of competent jurisdiction that the JPA created hereunder, Reclamation Fund or its use is contrary to law.

3. The voluntary or involuntary termination by any quarry operator of its participation in its assignment of SMARA operating rights, as described in this chapter, as to amounts attributable to that operator's quarry(ies).

4. As each participating quarry is reclaimed, the balance in the Reclamation Fund shall be reduced in an amount of such participating reclaimed quarry to the total financial assurances for all participating quarries, as determined by the director of finance. Any such amounts withdrawn from the Reclamation Fund shall be returned to the city's mining fund.

5. Monies remaining in the Reclamation Fund after reclamation of all quarries is completed shall be returned to the city's mining fund, so long as such fund exists, and thereafter to the city's general fund.

6. Should any portion of the Reclamation Fund be used to correct a default of any quarry, the quarry operator shall pledge all future filling revenues to the city for deposit into the Reclamation Fund until such time as the deficit to the Reclamation Fund cased by such expenditure is cured. Unless used to cure any further default of the quarry operator, any amounts so deposited into the Reclamation Fund, plus any accrued interest, shall be returned to the quarry operator at termination of reclamation in accordance with the Reclamation Fund.

B. Upon dissolution of the Reclamation Fund, the city shall notify the participating quarries and Department of Conservation within 60 days of such dissolution.

Section 3. Except as expressly amended herein, the remaining portions of Chapter 17.60 shall remain unmodified and in full force and effect.

Section 4. This Ordinance shall be in full force and effect thirty (30) days after its passage.

Section 5. The City Clerk shall certify as to the passage and adoption of this ordinance and shall cause the same to be posted at the designated locations in the City of Irwindale.

**PASSED, APPROVED AND ADOPTED THIS _____DAY OF_____2004.**

_____
Mark A. Breceda, Mayor

**ATTEST:**

_____
Linda J. Kimbro, CMC
Deputy City Clerk

STATE OF CALIFORNIA }
COUNTY OF LOS ANGELES } ss.
CITY OF IRWINDALE }

I, Linda J. Kimbro, Deputy City Clerk of the City of Irwindale, do hereby certify that the foregoing Ordinance No. 584 was duly introduced at a regular meeting of the Irwindale City Council held on the _____ day of _____ 2004, and was duly approved and adopted on second reading at its regular meeting held on the _____ day of _____ 2004, by the following vote of the Council:

AYES: Councilmembers:

NOES: Councilmembers:

ABSENT: Councilmembers:

ABSTAIN: Councilmembers:

_____
Linda J. Kimbro, CMC
Deputy City Clerk

**AFFIDAVIT OF POSTING**

I, Linda J. Kimbro, Deputy City Clerk, certify that I caused a copy of Ordinance No. 584 adopted by the City Council of the City of Irwindale at its regular meeting held _____, to be posted at the City Hall, Library, and Post Office on _____.

_____
Linda J. Kimbro, CMC
Deputy City Clerk

Dated: _____

# EXHIBIT G

## TRANSFER AGREEMENT

# SMARA OPERATION RIGHTS TRANSFER AND CONVEYANCE AGREEMENT

THIS SMARA OPERATION RIGHTS TRANSFER AND CONVEYANCE AGREEMENT is dated as of August __, 2004 and is made by and among the Irwindale Reclamation Authority, a joint powers authority created under the California Joint Powers Authority law, Government Code Sections 6500 *et. seq.* (the "JPA"), and United Rock Products Corporation, a Delaware corporation ("United"), with respect to the following facts:

A. United owns and operates Quarries 1, 2, 3 and 4 (Quarry 4 also contains certain other operations including a processing plant). As used herein, "Quarry 2" includes portions of United's Quarry 4 / Plant Site that have been incorporated into Quarry 2. The United quarries (except Quarry 4 / Plant Site) are referred to herein as the "Quarries." The Quarries are subject to reclamation in accordance with reclamation plans filed by United and approved by the City of Irwindale (the "City") pursuant to the California Surface Mining and Reclamation Act of 1975 ("SMARA"). Such reclamation plans, as they may be amended from time to time, are herein referred to as the "Reclamation Plans."

B. Sections 3803 and 3806 of regulations promulgated by the State Mining and Geology Board (the "SMGB") designate "governmental entity operators" as entitled to utilize "pledges of revenue or budget set aside" as "financial assurance mechanisms," in addition to the other financial assurance mechanisms permitted to nongovernmental entity operators.

C. Government Code Section 6502 authorizes two or more governmental agencies to by contract form joint powers entities to exercise collectively the powers of any one of such entities. The City of Irwindale and Irwindale Redevelopment Agency have formed the Irwindale Reclamation Authority pursuant to such authority to cause the reclamation of the Quarries, and, ultimately, the quarries of other operators. The JPA is intended to operate as a governmental entity operator to utilize a pledge of revenue to serve as a financial assurance mechanism. This mechanism contemplates a transfer and conveyance of SMARA operating rights between United and the JPA, as provided herein.

D. The Department of Conservation ("DOC") has advised the City, JPA and United that financial assurances arrangements as contemplated in this Agreement, including the posting of surety bonds pursuant to Sections 3, the establishment of the Reclamation Fund pursuant to Section 2 and the pledge to the JPA of fill revenues to offset fill costs, as set forth in this Agreement, will satisfy the requirements of SMARA with respect to financial assurances for the Quarries. The City has granted entitlements for deeper excavation by United (in Quarries 2 and 3). In connection therewith, the JPA has offered execution of this Agreement to United to create an alternative financial assurances mechanism.

NOW, THEREFORE, the parties agree as follows:

1. Transfer and Conveyance of SMARA Operation Rights.

(a) Subject to this Agreement and solely for purposes of complying with Sections 3803 and 3806 of the regulations promulgated by the SMGB, allowing greater flexibility to

public agencies in providing financial assurance mechanisms for reclamation than to private entities, and to assure that "fill revenues" from filling the Quarries with "inert" fill or construction waste that shall accrue to United in conducting the operations of the Quarries shall be counted toward the financial assurance obligations for each of the Quarries, United hereby transfers to the JPA its rights to operate the Quarries pursuant to SMARA, including the right to receive revenues from fill operations conducted in the Quarries.

(b) Simultaneously with the transfer specified in (a) above, the JPA hereby conveys to United its actual operating rights to the mining and reclamation operations for all of the Quarries.

(c) The operating rights transferred to the JPA are in the nature of a transfer in trust, and confer no title or interest in or to any real or personal property of United. The actual operating rights to the Quarries conveyed under this Agreement to United of any nature whatsoever (including, without limitation, the right to conduct all operations within the Quarries, mining, receipt of fill and other revenues, reclamation and other operations) shall remain in United until and unless United shall default in its obligations (i) to reclaim the Quarries as limited by the conditional use permits for the respective Quarries, or (ii) under the respective Reclamation Plans, or (iii) to maintain financial assurances, as required by this Agreement and conditional use permits approved by the City for the Quarries. In such event, the JPA shall have the right to enter the respective Quarries to cure defaults in reclamation and exercise all other rights under this Agreement, including the right to receive fill revenues pursuant to Section 2(f) below.

(d) Except as specifically provided in this Agreement, the JPA shall have no claim to the Quarries, their title, use, operation, income or otherwise. This transfer and conveyance is not intended to include any real estate or other non-SMARA rights in the Quarries.

(e) The JPA shall file with the DOC the annual inspection reports required by Public Resources Code Section 2207, as operator, for the Quarries. United shall certify the accuracy of such inspection reports, submittal of such reports by the JPA shall be subject to United's certification, and the JPA shall have no responsibility regarding the accuracy of such reports.

2. Establishment of Reclamation Fund by JPA and Contributions by the City.

(a) The JPA shall concurrently herewith establish and maintain a reclamation fund (the "Reclamation Fund") which shall be utilized, if necessary, for the reclamation of the Quarries in accordance with the Reclamation Plans and this Agreement.

(b) Concurrently with the execution of this Agreement, the City has agreed that it has or will contribute a $985,715 initial deposit into the Reclamation Fund and thereafter $328,572 on each anniversary of the Effective Date of this Agreement until the aggregate amount of the Reclamation Fund, including interest or other contributions, shall equal $8,000,000 ("Reclamation Fund Cap"). The City's initial and yearly contributions shall be made from existing special mining tax revenues under Irwindale Municipal Code Section 3.18.040, subject to the provisions of Section 4(c) below. Any balances exceeding the Reclamation Fund Cap shall be returned to the City's mining fund.

(c) The JPA may enter into agreements substantially in the same form as this Agreement with other mining operators. Upon such event, the City has agreed that additional amounts shall be added to the Reclamation Fund by the City to provide additional financial assurances for such operators so that the obligation of the Reclamation Fund will be proportional to undertakings assumed. United may elect to terminate this Agreement, provided it concurrently posts financial assurances in accordance with SMARA.

(d) The Reclamation Fund is allocated per Quarry as specified in Sections 3(a) and (b). When each Quarry is fully reclaimed, the cap in the Reclamation Fund shall be reduced in an amount proportional to the amount that the financial assurances for such Quarry is to the total financial assurances for all Quarries, as stated in Sections 3(a) and (b). Any such amounts withdrawn from the Reclamation Fund shall be returned to the City's mining fund.

(e) Any monies remaining in the Reclamation Fund shall be returned to the City after the reclamation of all Quarries is complete and all financial assurances have been released to United pursuant to Section 3 (f) of this Agreement. As to any Quarry where reclamation is complete, this Agreement shall terminate and the JPA shall issue a certificate that it holds no further rights in such Quarry.

(f) Should any portion of the Reclamation Fund be used to correct United's default under the reclamation plans in any Quarry, United shall pledge all future filling revenues to the JPA for deposit into the Reclamation Fund until such time as the deficit to the Reclamation Fund caused by such expenditure is cured. Any unexpended amounts so deposited into the Reclamation Fund, plus any accrued interest, which is not utilized to cure the default shall be returned to United following satisfactory cure of the default.

3. Posting of Financial Assurances by United. The City has calculated the financial assurances required to reclaim all of United's Quarries. This cost shall be secured through the $8,000,000 Reclamation Fund described in Section 2 above and the $8,000,000 of financial assurances provided pursuant to the conditional use permits for the Quarries and described below in this Section 3, in addition to the pledge of fill revenue to the JPA provided for herein.

(a) United shall concurrently herewith post with the City and maintain financial assurances as follows with respect to its quarries: Quarry 1 and the Triangle Parcel referred to in (c) below, $2,500,000 in the form of bonds; Quarry 2, $2,500,000 in the form of bonds; Quarry 3, $2,500,000 in the form of bonds; Quarry 4/plant site, $500,000 in the form of a bond (hereinafter "financial assurances").

(b) $500,000 of the amount posted by United under paragraph 3(a), at the JPA's election, may be transferred as a financial assurance with respect to that certain property adjacent to Quarry 1 owned by Vulcan Materials Company and commonly referred to as the "Triangle Parcel" at such time, if any, as the City or JPA shall acquire the Triangle Parcel. In such case, the financial assurances posted with respect to Quarry 1 shall be decreased to $2,000,000. If the City has not acquired the Triangle Parcel by January 15, 2006, the City has agreed that it shall release the $500,000 bond applicable thereto. If the City acquires the Triangle Parcel by such date, the $500,000 bond applicable thereto shall remain in place until Quarry 1 is reclaimed.

(c) Upon reclamation of Quarry 1 in accordance with its Reclamation Plan and the release of the Quarry 1 financial assurances pursuant to Section 3 (f) of this Agreement, United agrees to increase the total financial assurances with respect to Quarry 2 from $2,500,000 to $4,500,000.

(d) The parties acknowledge and agree that the amount of financial assurances posted by United and the JPA pursuant to this Section 3 may be adjusted to account for the amount of fill and inflation; provided, however, that such inflation adjustment shall be based on the Producer Price Index, but shall not exceed the rate of change in the Consumer Price Index. The City has agreed that fifty per cent of any such adjustment shall be funded by the City and paid by the JPA.

(e) The parties recognize that Section 2773.1(a)(3) of SMARA provides for certain annual rights and obligations regarding the adjustment of financial assurances and the City will perform such annual review. The parties hereby agree that in the event it appears there may be an increase in the amount of financial assurances beyond the inflationary adjustment provided above, fill revenue and other factors will be examined and no adjustment will be made without amendment to this Agreement pursuant to Section 8(c).

(f) Financial assurances posted with respect to a particular Quarry shall be released upon consent of the JPA, the City and DOC when the reclamation required under the reclamation plan for such Quarry has been completed in accordance with such plan ("completion of reclamation"); provided that such release is in accordance with SMARA and applicable SMGB regulations. (As provided in Section 3(c) above, $2 million of the financial assurances posted with respect to United's Quarry 1 shall, upon completion of reclamation in Quarry 1, be transferred to secure reclamation of Quarry 2 until completion of reclamation of Quarry 2 and such financial assurances shall then be released.)

(g) Interest on any monies in the Reclamation Fund shall accrue to the benefit of the Reclamation Fund and be utilized towards reducing contributions required of the City pursuant to Section 2(b) (since interest earnings reduce the required contributions to reach the Reclamation Fund).

4. Obligations Regarding Entitlements.

(a) Minimum Fill Rates and Defaults under the Reclamation Plans. The parties agree to be bound by the conditions of the conditional use permits for the Quarries relating to the requirements for rate of fill and the remedies upon a breach.

(b) Obligations of United Regarding Prioritization of Filling Activities.

The City has agreed that it shall prioritize and require the refilling of the quarries in the City in the following order: United Quarry 1, then United Quarry 2. In accordance with the conditions of approval for the Quarry 2 conditional use permit, however, the City may suspend commencement of reclamation of Quarry 2 one time only for such time as reclamation using third party fill is being conducted at another operator's quarry in the City pursuant to City approval (a "Priority Quarry"). The suspension shall continue for so long as reclamation of the Priority Quarry is occurring. United's obligation to fill Quarry 2 will recommence when such

Priority Quarry has fully completed filling operations. Nothing herein, however, shall restrict United from utilizing fill material it or its affiliates own to refill its quarries. United shall not be restricted from using fill materials provided by third parties for the purposes of slope stabilization required by the City or similar incidental work.

(c) Challenge to Special Mining Tax. The City presently levies a special mining tax pursuant to Irwindale Municipal Code Section 3.18.040 (the "Special Mining Tax"). Should United or any other quarry operator in the City successfully contest or challenge in any venue (i) the existing Special Mining Tax imposed by the City, or (ii) the use of Special Mining Tax revenues as contributions to the Reclamation Fund referred to above, as well as payment of the reasonable expenses of the JPA and any other purpose presently permitted under the ordinance, the obligations of the City to contribute amounts to the Reclamation Fund shall be suspended and thereafter reinstated if the challenge is dismissed or unsuccessful. This Agreement shall thereafter be terminated in accordance with Section 6 unless the contributions to the Reclamation Fund from the Special Mining Tax can be reinstated within a period of 48 months.

5. Operating Matters Relating to the JPA.

(a) United shall appoint a representative to attend meetings of the board of the JPA in a non-voting capacity. The representative shall receive advance written notice of any meeting and copies of all agendas and agenda materials. The representative shall have a special status and shall not be subject to time restrictions and other rules limiting public participation in meetings.

(b) The JPA shall be governed by a board of five members who are residents of the City. The JPA shall adopt an annual budget for its operating expenses each year, which expenses shall include bookkeeping, administration, managing JPA funds, inspection of quarries, oversight of reclamation activities, and other activities reasonably necessary for the operation of the JPA. The parties hereto agree that the sources of revenue for the JPA shall include revenue provided from the City from mining taxes, interest, penalties, gifts, loans and other sources approved by the parties.

(c) United agrees that representatives of the JPA may inspect the Quarries at any reasonable hour during normal business operations upon reasonable notice. Notwithstanding the foregoing, United acknowledges that the City retains all rights under SMARA to inspect the Quarries.

6. Dissolution of the JPA. The Joint Powers Agreement provides for the dissolution of the JPA in accordance with California law. The parties agree to comply with the conditions in United's conditional use permits relating to the termination of the JPA.

7. Special Provisions Benefiting The State Department of Conservation. The parties hereby agree that the DOC shall be entitled to the following rights regarding the JPA and reclamation of the Quarries contemplated by this Agreement:

(a) The DOC may inspect the Quarries pursuant to Public Resources Code Section 2208 or applicable SMARA regulations.

(b) The SMGB and DOC shall retain all powers granted it under SMARA and applicable SMARA regulations.

(c) The DOC shall be a third party beneficiary of this Agreement and, as such, will benefit from and may look to the Reclamation Fund as the primary remedy in the event the reclamation obligations contained in the Reclamation Plans are not performed.

8. Miscellaneous Provisions.

(a) Any notice contemplated or required hereunder shall be in writing and effective five days after deposit in the United States mail, postage prepaid, registered or certified, addressed as follows (or to such other addresses as shall be specified in like manner):

If to United Rock:

United Rock Products Corporation
c/o Colas Inc.
10 Madison Ave.
Morristown, NJ 07960
Attn: Stewart Fuhrmann, Senior Vice President and General Counsel

With copy to:

William F. Capps, Esq.
Jeffer, Mangels, Butler & Marmaro LLP
1900 Avenue of the Stars, 7th Floor
Los Angeles, California 90067

If to the Reclamation Authority:

5050 North Irwindale Avenue
Irwindale, California 91706
Attn:

With copy to:

Fred Galante, Esq.
Aleshire & Wynder
Tower 17
18881 Von Karman Ave.
Suite 400
Irvine, CA 92612

(b) United may assign its rights and obligations hereunder as to each individual quarry provided that any assignee agrees to assume all obligations of United relating to such

quarry under this Agreement, the associated Reclamation Plan, and entitlements (whether by conditional use permit or development agreement) including the posting of a substitute financial assurances instrument in the required amount. After such assumption, the assignor shall be released from such obligations. The assignee shall have the financial capacity to perform its obligations hereunder including the replacement of the then existing financial assurances prior to the transfer becoming effective.

(c) This Agreement constitutes the entire agreement among the parties with respect to the matters hereof and may not be amended, supplemented or varied except in a writing executed by the party to be bound. Nothing herein shall be deemed to limit or restrict the City in the exercise of its police powers in a manner consistent with State law. Nothing herein shall be deemed to be a waiver of United's contentions regarding the calculation of financial assurances.

(d) This Agreement is binding upon and shall inure to the benefit of the parties hereto, their respective agents, successors and assigns.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written, which shall be the Effective Date hereunder.

ATTEST:

_____
Authority Secretary

IRWINDALE RECLAMATION AUTHORITY

_____
By: Mark Breceda
Its: Chair

Approved as to Form
Aleshire & Wynder

By:_____
Fred Galante, Authority Counsel

UNITED ROCK PRODUCTS CORPORATION, a Delaware corporation

_____
By: Stewart Fuhrmann
Its: Secretary

Approved as to Form
Jeffer, Mangels, Butler & Marmaro, LLP

By:_____
William F. Capps, Attorney for United

# EXHIBIT H

## EASEMENT

RECORDING REQUESTED BY:

Mr. Kwok Tam
City of Irwindale
5050 N. Irwindale Avenue
Irwindale, CA 91706

AND WHEN RECORDED RETURN TO:

Mr. Kwok Tam
City of Irwindale
5050 N. Irwindale Avenue
Irwindale, CA 91706

THIS SPACE FOR RECORDER'S USE

# GRANT OF EASEMENT

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

United Rock Products Corporation, a Delaware Corporation,

does hereby grant to the CITY OF IRWINDALE, a municipal corporation in the Los Angeles County, State of California, an easement for public road and highway purposes in the real property in the City of Irwindale, County of Los Angeles, State of California, as described in Exhibit "A" and shown in Exhibit "B" attached hereto.

It is understood that each undersigned grantor grants only that portion of the above described land in which said grantor has an interest.

DATED: August 25, 2004

United Rock Products Corporation, a Delaware Corporation

Stewart M. Fuhrmann, Secretary

# EXHIBIT A

## LEGAL DESCRIPTION

A parcel of land being portions of Lots 22, 23, 36, 37, 38, 39 of the J. R. Loftus Tract No. 1 together with a portion of Van Meter Street, in the City of Irwindale, County of Los Angeles, State of California, as per Map recorded in Book 14, Page 29, of Maps in the office of the County Recorder of said County more particularly described as follows:

Commencing at the intersection of the centerline of Buena Vista Street with the centerline of Bateman Avenue as shown on Parcel Map No. 26217, as per Map recorded in Book 302, Page 69 through 71of Parcel Maps, in the office of the County Recorder of said County, said point of intersection being located along a curve concave southeasterly and having a radius of 1500.00 feet, through which point of intersection a radial line bears North 38°44'57" West;

Thence southwesterly 87.96 feet along said centerline of Buena Vista Street, through a central angle of 3°21'36";

Thence, radial to said curve, South 42°06'33" East 50.00 feet to a point on the southeasterly line of Buena Vista Street as shown on said Parcel Map being also the most westerly corner of Instrument No. 03-0437833, recorded February 13, 2003, Official Records of Los Angeles County, California,

Thence along the southwest line of said instrument South 42°06'33" East 2.45 feet to the beginning of a non-tangent curve, concave southeasterly and having a radius of 40.00 feet, through which point, a radial line bears North 41°23'22" West;

Thence northeasterly 19.51 feet along said curve through a central angle of 27°56'32";

Thence South 85°04'10" East 25.22 feet to the beginning of a non-tangent curve, concave southwesterly and having a radius of 40.00 feet, through which point, a radial line bears North 23°18'30" East;

Thence southeasterly 19.51 feet along said curve through a central angle of 27°56'33";

Thence South 38°44'57" East 42.91 feet to the beginning of a tangent curve, concave westerly and having a radius of 877.00 feet;

Thence southeasterly 7.88 feet along said curve through a central angle of 00°30'53" to the most southerly corner of said Instrument being also the True Point of Beginning;

Thence continuing along said curve southeasterly 434.86 feet through a central angle of 28°24'36";

Thence South 9°49'27" East 864.07 feet to the beginning of a tangent curve, concave southwesterly and having a radius of 40.00 feet;

Thence southerly 18.59 feet along said curve through a central angle of 26°37'22";

Thence South 35°10'34" West 25.22 feet to the beginning of a non-tangent curve, concave northwesterly and having a radius of 40.00 feet, through which point, a radial line bears South 36°26'48" East;

Thence southwesterly 18.59 feet along said curve through a central angle of 26°37'21";

# EXHIBIT A

## LEGAL DESCRIPTION

Thence South 9°49'27" East 2.00 feet to the Northwesterly line of Arrow Highway, 100 feet wide, as shown on a Map recorded in book 111, page 25 through 28, of Record of Surveys in the Office of the County Recorder of said County;

Thence North 80°10'33" East 180.00 feet along said northwesterly line of Arrow Highway;

Thence North 09°49'27" West 2.00 feet to the beginning of a non-tangent curve, concave northerly and having a radius of 40.00 feet through which point a radial line bears South 09°49'27" West;

Thence northwesterly 18.59 feet along said curve through a central angle of 26°37'22";

Thence North 54°49'31" West 25.22 feet to the beginning of a non-tangent curve, concave northeasterly and having a radius of 40.00 feet, through which point, a radial line bears South 3°33'04" West;

Thence northwesterly 18.59 feet along said curve through a central angle of 26°37'29" to a point on a line that is parallel with and 100 feet northeasterly from the above course described as "South 9°49'27" East 864.07 feet";

Thence along said parallel line North 09°49'27" West 864.07 feet to the beginning of a tangent curve concave westerly and having a radius of 977.00 feet;

Thence northwesterly 484.83 feet along said curve through a central angle of 28°25'57" to the most easterly corner of said Instrument being also the beginning of a non-tangent curve concave southeasterly having a radius of 1355.00 feet, a radial through said point bears North 36°20'23" West;

Thence southwesterly along the southerly line said Instrument 100.02 feet through a central angle of 4°13'46" to the True Point of Beginning.

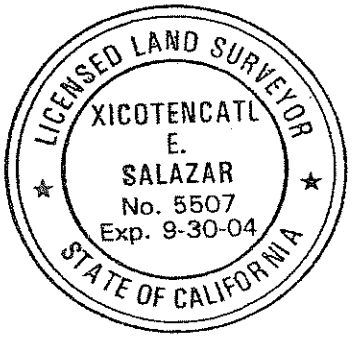
Containing 137,571 square feet, more or less.

All as shown on Exhibit "B" attached hereto and by this reference made a part hereof.

Subject to covenants, conditions, reservations, restrictions, rights of way and easements of record, if any.

Prepared by or under the direction of:

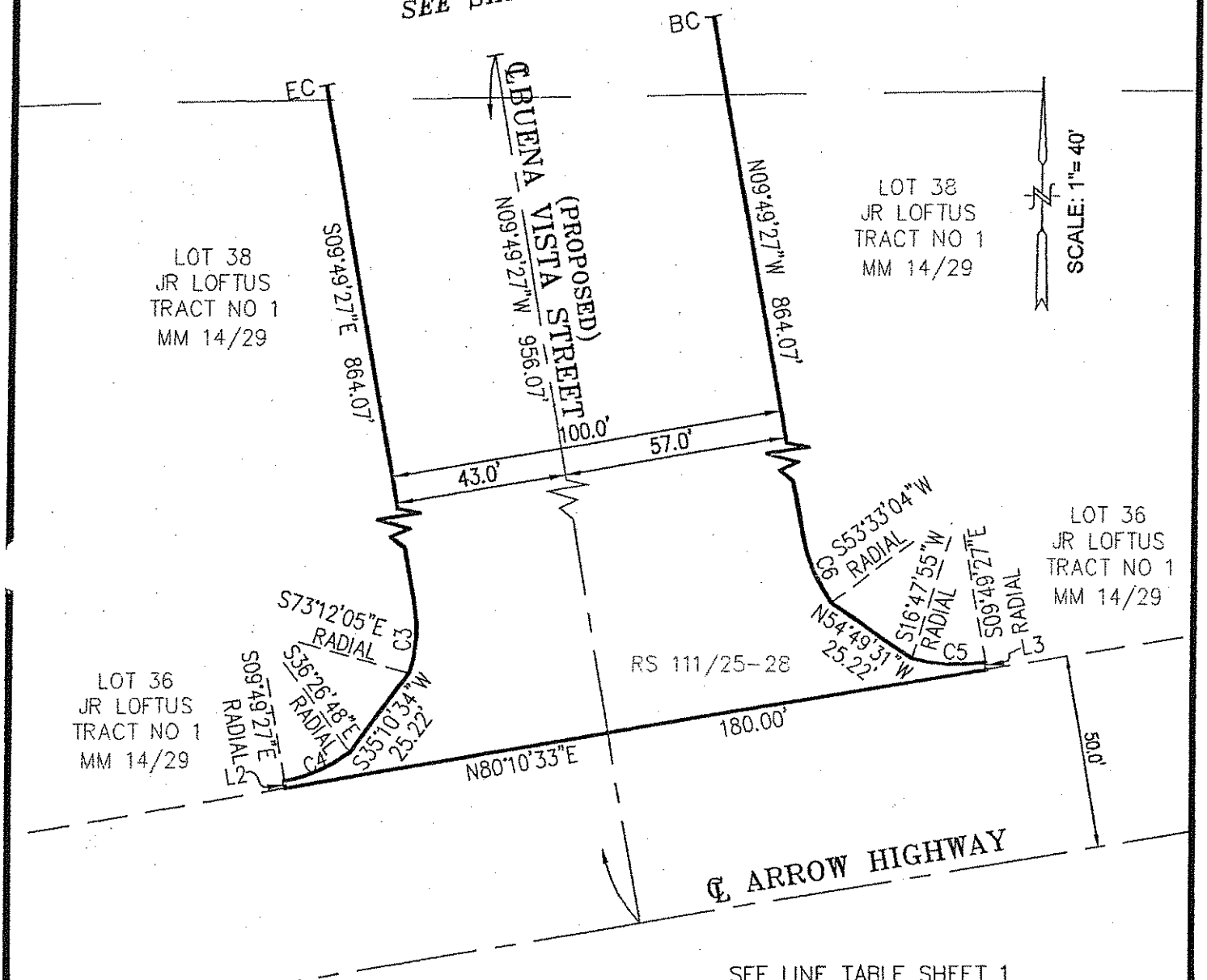
Xicotencatl E. Salazar L.S. 5507
License Expires 9-30-2004



# EXHIBIT B

## TO ACCOMPANY LEGAL DESCRIPTION

SEE SHEET 1




SEE LINE TABLE SHEET 1

### CURVE TABLE

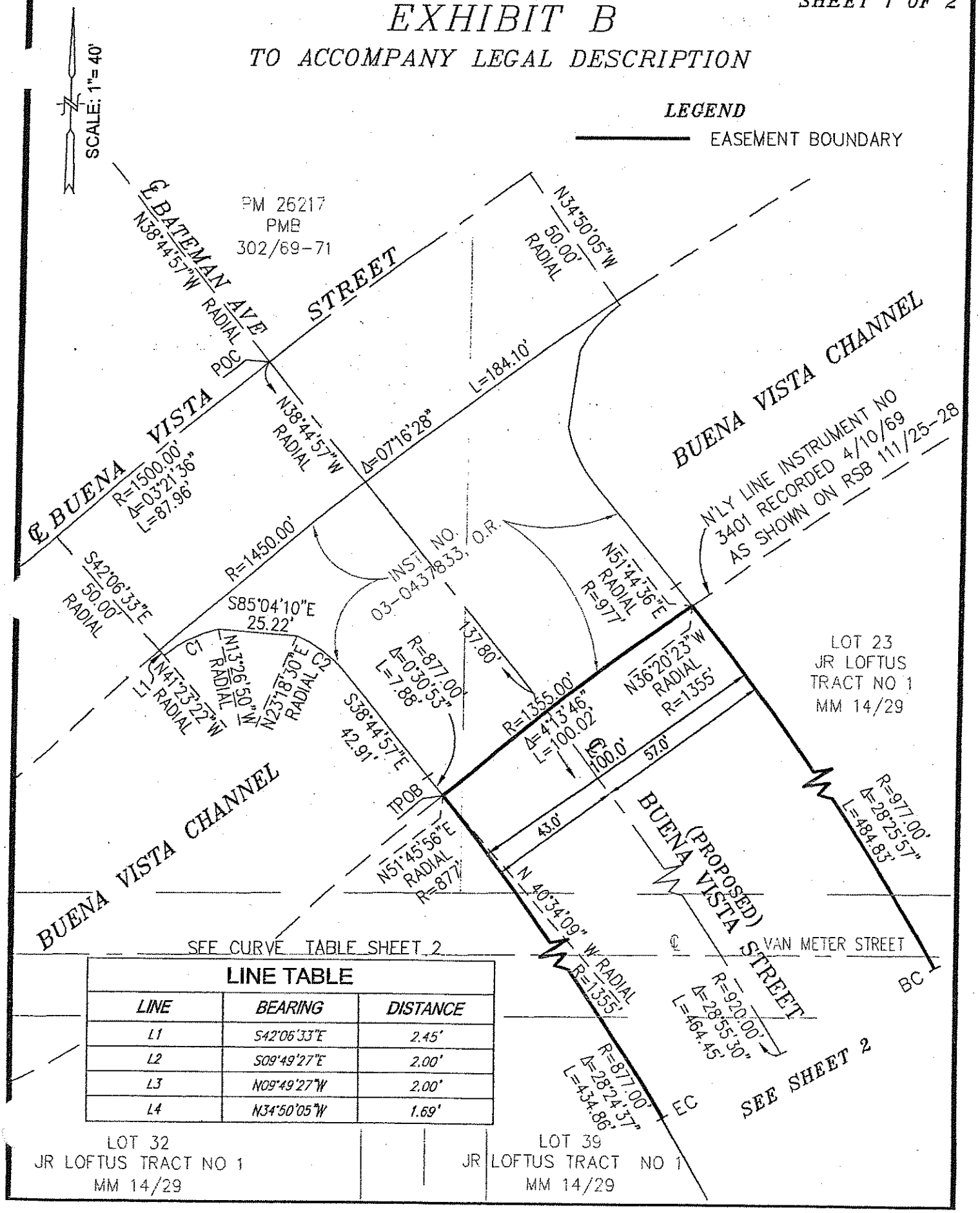
| CURVE | RADIUS | DELTA | LENGTH |
|---|---|---|---|
| C1 | 40.00' | 27°56'32" | 19.51' |
| C2 | 40.00' | 27°56'33" | 19.51' |
| C3 | 40.00' | 26°37'22" | 18.59' |
| C4 | 40.00' | 26°37'21" | 18.59' |
| C5 | 40.00' | 26°37'22" | 18.59' |
| C6 | 40.00' | 26°37'29" | 18.59' |

***LEGEND***

EASEMENT BOUNDARY

# EXHIBIT B

## TO ACCOMPANY LEGAL DESCRIPTION




| LINE TABLE | | |
|---|---|---|
| LINE | BEARING | DISTANCE |
| L1 | S42°06'33"E | 2.45' |
| L2 | S09°49'27"E | 2.00' |
| L3 | N09°49'27"W | 2.00' |
| L4 | N34°50'05"W | 1.69' |

# EXHIBIT I

## BUENA VISTA QUITCLAIM DEED

**WHEN RECORDED MAIL TO:**
Jeffer, Mangels, Butler & Marmaro
1900 Avenue of the Stars, 7th Floor
Los Angeles, California 90067
Attn: William Capps, Esq.

**MAIL TAX STATEMENTS TO:**
United Rock Products Corporation
1245 East Arrow Highway
Irwindale, CA 91706
Attn: General Manager

---

Assessor's Parcel Number: _____ (Space above this line is for recorder's use)

QUITCLAIM DEED

In accordance with Section 11932 of the California Revenue and Taxation Code, Grantor has declared the amount of the transfer tax which is due by a separate statement which is not being recorded with this Quitclaim Deed.

FOR VALUE RECEIVED, CITY OF IRWINDALE, a California corporation ("Grantor"), hereby remises, releases and forever quitclaims to UNITED ROCK PRODUCTS CORPORATION, a Delaware corporation ("Grantee"), all of Grantor's right, title and interest, if any, in and to the real property located in the City of Irwindale, County of Los Angeles, State of California, described in Exhibit A attached hereto and incorporated by reference.

IN WITNESS WHEREOF, the undersigned Grantor has executed this Quitclaim Deed as of _____, 2004.

CITY OF IRWINDALE,
a California corporation

By: _____
Name: _____
Its: _____

MAIL TAX STATEMENTS AS SET FORTH ABOVE

EXHIBIT "A" TO QUITCLAIM DEED

LEGAL DESCRIPTION OF PROPERTY

STATE OF _____ )
)
COUNTY OF _____ )

On _____, _____, before me, _____,
personally appeared _____,

[ ] personally known to me [ ] proved to me on the basis of satisfactory evidence

to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

_____
Signature of Notary

(SEAL)

**CAPACITY CLAIMED BY SIGNER:**

[ ] Individual(s)
[ ] Partner(s)
[ ] Trustee(s)
[ ] Corporate _____
Officer(s) _____
Title(s)

[ ] Attorney-In-Fact
[ ] Subscribing Witness
[ ] Guardian/Conservator
[ ] Other: _____
_____
_____

Name of Instrument: **QUITCLAIM DEED**

# EXHIBIT J

## MERIDIAN DEED

**WHEN RECORDED MAIL TO:**
Jeffer, Mangels, Butler & Marmaro
1900 Avenue of the Stars, 7th Floor
Los Angeles, California 90067
Attn: William Capps, Esq.

**MAIL TAX STATEMENTS TO:**
United Rock Products Corporation
1245 East Arrow Highway
Irwindale, CA 91706
Attn: General Manager

---

Assessor's Parcel Number: _____ (Space above this line is for recorder's use)

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FOR VALUE RECEIVED, CITY OF IRWINDALE, a California corporation ("Grantor"), hereby remises, releases and forever quitclaims to UNITED ROCK PRODUCTS CORPORATION, a Delaware corporation ("Grantee"), all of Grantor's right, title and interest, if any, in and to the real property located in the City of Irwindale, County of Los Angeles, State of California, described in Exhibit A attached hereto and incorporated by reference.

IN WITNESS WHEREOF, the undersigned Grantor has executed this Quitclaim Deed as of _____, 2004.

CITY OF IRWINDALE,
a California corporation

By: _____
Name: _____
Its: _____

MAIL TAX STATEMENTS AS SET FORTH ABOVE

EXHIBIT "A" TO QUITCLAIM DEED

LEGAL DESCRIPTION OF PROPERTY

STATE OF _____ )
)
COUNTY OF _____ )

On _____, _____, before me, _____,
personally appeared _____,

[ ] personally known to me [ ] proved to me on the basis of satisfactory evidence

to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

_____
Signature of Notary

(SEAL)

**CAPACITY CLAIMED BY SIGNER:**

[ ] Individual(s)
[ ] Partner(s)
[ ] Trustee(s)
[ ] Corporate _____
Officer(s) _____
Title(s)

[ ] Attorney-In-Fact
[ ] Subscribing Witness
[ ] Guardian/Conservator
[ ] Other: _____
_____
_____

Name of Instrument: **QUITCLAIM DEED**

# IPW – Conditional Use Permit 6-04

# RESOLUTION NO. 2004-44-1988

## A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRWINDALE, LOS ANGELES COUNTY, GRANTING FINAL APPROVAL OF CONDITIONAL USE PERMIT NO. 6-04 AND ITS ATTENDANT RECLAMATION PLAN AND FINANCIAL ASSURANCES TO ALLOW UNITED ROCK PRODUCTS CORPORATION TO CONTINUE MINING QUARRY NO. 3 AND TO RECLAIM THE QUARRY SITE AS A WATER RECHARGE BASIN

## A. Recitals

(i) (i) The Applicant, United Rock Products Corporation (URPC), pursuant to Chapters 17.60 and 17.63 of the Irwindale Municipal Code (IMC) and the provisions of the California Surface Mining and Reclamation Act (SMARA), is requesting final approval of the required Reclamation Plan and Financial Assurances related to a conditional use permit for the continued mining of Quarry No. 3 (the "Project Site") until December 31, 2037, or until reaching the maximum permitted depth of 440 feet, whichever event occurs first, and final approval of the required Reclamation Plan and Financial Assurances (the "Proposed Project"). Conditional Use Permit No. 5-04 CUP supersedes all of the prior entitlements relating to the Project Site granted by the City to URPC or to any of its predecessors, including but not limited to CUP No. 92-3, CUP No. 97-1, Modification No. 2-01 and Modification No. 1-03 to CUP No. 92-3 and CUP No. 97-1. Hereinafter in this Resolution, the subject Conditional Use Permit shall be referred to as the "Application."

(ii) The Project Site consists of a 110-acre sand and gravel quarry located in the City of Irwindale, Los Angeles County, and is generally bounded by the Irwindale City limits on the north and west, Buena Vista Street on the east, and Meridian Street on the south. The access to the Site is located on Meridian Street adjacent to Tifal Avenue. Approximately three quarters of the Site is zoned Q (Quarry) and the northern quarter is zoned A-1 (Agricultural).

(iii) Pursuant to the authority and criteria contained in the California Environmental Quality Act of 1970 (CEQA), as amended (Public Resources Code, Section 2100 *et seq.*), the State CEQA Guidelines (California Code of Regulations, Title 14, Section

1500 *et seq.*), and the CEQA Guidelines of the City of Irwindale, the City, as the Lead Agency, has prepared a Draft

(iv) Environmental Impact Report (DEIR) and a Final Environmental Impact Report (FEIR) for the Proposed Project. The DEIR identified no significant impacts after implementation of the recommended Mitigation Measures. The DEIR, State Clearinghouse Number 2003101088, was circulated for review and comment from May 6 to June 21, 2004. The City received comments on the DEIR from seven (7) public agencies. Responses to the comments have been prepared and, together with the comments; have been included in the FEIR. The FEIR has been made available for review by the public at the City of Irwindale Planning Department and the City of Irwindale Public Library. The FEIR was certified by the City Council on July 20, 2004.

(iv) Pursuant to Section 17.60.050 of the IMC, the City Council has final approval authority for any use permit, including the approval of reclamation plans and financial assurances, to allow for mining to a depth exceeding one hundred and fifty feet (150').

(v) On July 15, 2004, at a special meeting, the Planning Commission of the City of Irwindale conducted a duly noticed public hearing on the Application, Reclamation Plan, Financial Assurances, and related Final Environmental Impact Report (FEIR) and approved Resolution No. 426(04) recommending that the City Council (1) certify the Final Environmental Impact Report, (2) certify to the California Department of Conservation that the Reclamation Plan and the Financial Assurances prepared for Quarry No. 2 comply with SMARA, (3) conditionally approve the Reclamation Plan and the Financial Assurances, (4) conditionally approve Conditional Use Permit No. 6-04 CUP subject to the stated Conditions of Approval, and (5) direct staff to forward the Reclamation Plan and Financial Assurances to DOC for their review and comment.

(vi) On July 20, 2004, the City Council adopted Resolution No. 2004-38-1982 to (1) certify the Final Environmental Impact Report, (2) certify to the California Department of Conservation that the Reclamation Plan and the Financial Assurances prepared for Quarry No. 2 comply with SMARA, (3) conditionally approve the Reclamation Plan and the Financial Assurances, (4) conditionally approve Conditional Use Permit No. 6-04 CUP subject to the

stated Conditions of Approval, and (5) direct staff to forward the Reclamation Plan and Financial Assurances to DOC for their review and comment. On July 26, 2004, staff transmitted the conditionally approved Reclamation Plan and Financial Assurances to the DOC.

(vii) On August 5, 2004, the Planning Commission conducted a duly noticed public hearing, at which time they received input from staff, the City Attorney, and the Applicant, heard public testimony, discussed the proposed Project, reviewed the comments on the Reclamation Plan and Financial Assurances from DOC and responses to said comments prepared by staff, closed the public hearing; and, after discussion, approved Resolution No. 428(04) recommending that the City Council grant final approval to Conditional Use Permit No. 6-04 CUP and grant final approval to the Reclamation Plan and Financial Assurances.

(viii) All legal prerequisites to the adoption of this resolution have occurred.

**B. Resolution.**

NOW THEREFORE, it is found, determined and resolved by the City Council of the City of Irwindale as follows:

1. The City Council hereby specifically finds that all of the facts set forth in the Recitals, Part A, of this Resolution are true and correct.

2. Based upon substantial evidence presented to this City Council during the public hearing conducted with regard to the Application, including written staff reports, the Reclamation Plan and Financial Assurances, the certified FEIR, the comments on the Reclamation Plan received from the State Department of Conservation and the City's responses to same, and verbal testimony, this City Council hereby specifically finds as follows:

a. The Reclamation Plan complies with SMARA, Sections 2772 and 2773, and any other applicable provision.

b. The Reclamation Plan complies with applicable State Regulations.

c. The Reclamation Plan and potential uses of reclaimed land pursuant to the plan, are consistent with Chapter 17.63 of the IMC, the General Plan, and any applicable resource plan or element.

d. The Reclamation Plan has been revised pursuant to CEQA and the City's environmental review, and all significant adverse impacts from reclamation of the surface mining operations will be mitigated to the maximum extent feasible.

e. The land and/ or other resources such as water bodies to be reclaimed, will be restored to a condition that is compatible with, and blends in with, the surrounding natural environment, topography and other resources.

f. The Reclamation Plan will restore the mined lands to a usable condition which is readily adaptable for alternative land uses consistent with the General Plan and any applicable resource plan.

g. A written response to the State Department of Conservation has been prepared, describing the disposition of major issues raised by that Department. Where the City's position varies from the recommendations or any objections raised by the State Department of Conservation, the City's response shall address, in detail, why specific comments and suggestions by that Department were not accepted.

3. The City Council hereby specifically finds and determines that the Reclamation Plan and Financial Assurances prepared for Quarry No. 3 comply with the provisions of the California Surface Mining and Reclamation Act.

4. The City Council hereby specifically finds and determines that, after their review and consideration of the Final Environmental Impact Report, prepared in compliance with the provisions of the California Environmental Quality Act (CEQA) of 1970, as amended, and guidelines promulgated thereunder, for the Proposed Project, the Proposed Project will not have any significant impact on the environment after the implementation of the recommended Mitigation Measures. This Commission further finds that said FEIR reflects the independent judgment of the City of Irwindale, as the Lead Agency. The FEIR was certified by the City Council on July 20, 2004.

5. Based upon the substantial evidence and conclusions set forth hereinabove, this City Council hereby grants final approval of Conditional Use Permit 6-04 CUP, subject to the attached Conditions of Approval, and grants final approval of the Reclamation Plan and Financial Assurances,

6. The Deputy City Clerk shall:

a. Certify to the adoption of this Resolution; and

b. Forthwith transmit a certified copy of this Resolution, by certified mail, return receipt requested, to the Applicant at the address as set forth on the Application.

PASSED, APPROVED, AND ADOPTED this 9th day of August 2004.

Mark A. Breceda, Mayor

ATTEST:

Linda J. Kimbro, CMC
Deputy City Clerk

STATE OF CALIFORNIA }
COUNTY OF LOS ANGELES } ss.
CITY OF IRWINDALE }

I, Linda J. Kimbro, CMC, Deputy City Clerk of the City of Irwindale, do hereby certify the foregoing Resolution No. 2004-44-1988 was adopted at an adjourned meeting of the City Council held on the 9th day of August 2004, by the following vote:

| | | |
|---|---|---|
| AYES: | Councilmembers: | Miranda, Tapia, Garcia, Ramirez, Mayor Breceda |
| NOES: | Councilmembers: | None |
| ABSENT: | Councilmembers: | None |
| ABSTAINED: | Councilmembers: | None |

Linda J. Kimbro, CMC
Deputy City Clerk

# Conditions of Approval

## United Rock Products, Inc. (URP) Quarry No. 3
## CONDITIONAL USE PERMIT No. 6-04

Before final acceptance of the use authorized under this CONDITIONAL USE PERMIT ("CUP"), all conditions listed below shall be completed to the satisfaction of the department head of the appropriate department, or their designee, depending on which department recommended the condition.

Any agreements, easements or covenants required to be entered into shall be in a form approved by the City Attorney.

## GENERAL CONDITIONS:

1. This CUP No. 6-04 CUP modifies and supercedes CUP No. 92-3, CUP No. 97-1, CUP Modification No. 2-01 to CUP No. 92-3 and CUP 97-1, and CUP Modification No. 1-03 to CUP No. 92-3 and CUP No. 97-1, in that CUP No. 6-04 permits mining until (i) a maximum allowable mining depth in Quarry No. 3 ("Site") as depicted in the Mine Slope Profile, as defined in condition no. 58 below and attached as Exhibit "B" hereto, based on a maximum depth of 440 feet (-15 mean sea level ("msl"), or (ii) until December 31, 2037, whichever occurs first.

2. All conditions, requirements, ordinances, rules, regulations and/ or policies, as they may be amended from time to time, applied and/or enforced by any local agency, Federal or State agency, the State of California, the County of Los Angeles or any other public or quasi-public entity including the City of Irwindale, and each of its departments and divisions, with jurisdiction over the Site (collectively "Applicable Law") shall be satisfied by the Applicant, and such conformance shall be maintained at all times while the use approved by this Resolution is in operation.

3. The Applicant shall fully cooperate with the City of Irwindale and any agency or entity with jurisdiction over either or both the Site and uses approved thereon regarding the filing of any materials, execution of documents, instruments or similar items and all other acts, actions or undertaking deemed reasonably necessary by the City of Irwindale to further the purposes of this Resolution. The Applicant's full cooperation shall be at no cost to the City.

4. The use authorized by this CUP shall commence within twelve (12) months from the date of approval. If the use does not commence

within that time, or if thereafter the activities have been abandoned for ninety (90) or more continuous days, the CUP approval shall expire and become null and void, unless good cause is shown by the Applicant by a written request for extension received by the Director of Planning prior to such expiration or abandonment. The Quarry will not be considered abandoned if the Applicant performs activities related to the operations, maintenance or security of the Quarry, as authorized under this CUP. Upon receipt of written request for extension, the Director of Planning may grant an extension of this CUP approval for a period not to exceed one (1) year from the original date of expiration, or may refer such request to the Planning Commission for determination.

5. This CUP may be revoked for any violation of or noncompliance with any of the conditions of approval of this CUP or Applicable Law in accordance with Sections 17.63.140 and 17.80.140 of the Zoning Ordinance, as it may be amended from time to time.

6. The Applicant shall defend, indemnify and hold harmless the City of Irwindale, its agents, officers, consultants and employees from any claim, action or proceeding against the City of Irwindale or its agents, officers, consultants or employees to attach, set aside, void or annul any approval of the City of Irwindale, its legislative body, Planning Commission, or other advisory agencies, or administrative officers concerning CUP No. 6-04 CUP, including but not limited to the Environmental Impact Report, or for any damage to persons or property, losses, costs, penalties, obligations, or liabilities arising out of or in connection with Applicant's acts or omission on the Site, whether or not such act or omission resulted or was undertaken pursuant to any condition or approval granted under this CUP. The City of Irwindale will promptly notify the Applicant of any such claim, action or proceeding against the City of Irwindale and the Applicant will either undertake defense of the matter and pay the City's associated legal costs or will advance funds to pay for the defense of the matter by the City Attorney. If the City of Irwindale fails to promptly notify the Applicant of any such claim, action or proceeding, or fails to cooperate fully in the defense, the Applicant shall not, thereafter, be responsible to defend, indemnify or hold harmless the City of Irwindale. Notwithstanding the foregoing, the City retains the right to settle or abandon the matter without the Applicant's consent as to the City's liabilities or rights only, but should it do so, the City shall waive the indemnification herein, except, the City's decision to settle or abandon the matter following an adverse judgment or failure to appeal, shall not cause a waiver of the indemnification rights herein. At the time of the issuance of this CUP, the City has no actual knowledge of any pending or threatened claim which would result in indemnification under this condition.

7. Unless otherwise specifically provided in the conditions below, applicant shall secure all approvals required under the conditions of this CUP prior to the effectiveness of this CUP.

8. The Applicant shall at all times maintain the Site and use and appearance thereof in full compliance with Applicable Law.

9. The Applicant agrees to allow City inspectors and/ or designees of the City to reasonably inspect the Site during normal working hours or at any time operations are occurring on site to assure compliance with Applicable Law, provided the City complies with Mine Safety Health Administration Regulations. In cases of emergencies, City shall have the right to inspect the Site, whether or not operations are occurring on site, provided City gives prior notice to Applicant as may be reasonably possible.

10. Any and all fees required to be paid to any public agency shall be paid prior to commencing the use pursuant to this CUP.

11. Approval of this application shall not excuse compliance with Applicable Law.

12. The Applicant shall maintain the Site at all times free and clear of any accumulation of trash, debris, waste. Applicant shall further maintain the Site in a manner that shall avoid any determination by the City that any condition on the Site constitutes a nuisance, pursuant to the City's Municipal Code.

13. Except as in accordance with Applicable Law, the Applicant shall maintain the Site at all times free and clear of and shall not discharge or otherwise release any hazardous substances, hazardous wastes and/or hazardous materials as such terms are defined in their broadest form under any applicable federal, state or local law or regulation, and any other kind of soil, air, or water contamination, and combustible and/ or flammable materials (collectively "Hazardous Materials"). Any Hazardous Materials lawfully used on the Site will be handled in accordance with Applicable Law.

14. The end of the mining phase will occur when either of the following conditions occurs: (a) the mining depth reaches the maximum depths shown on the Mine Slope Profiles created pursuant to condition no. 58 below and attached hereto as Exhibit "B", based on a maximum depth of 440 feet (-15 msl), or (b) by December 31, 2037, whichever occurs first.

15. For all excavation approved by this CUP, the Applicant shall maintain the setback existing as of the date of approval of this CUP.

16. All graffiti shall be removed within 48 hours after Applicant becomes aware, or the City notifies Applicant, of its application. The graffiti shall be removed by either painting over the evidence of such vandalism with paint, which has been color- matched to the surface to which is applied, or the graffiti may be removed with solvents or detergent as appropriate.

17. All plans required by these conditions shall identify the responsible on-site management employee and other persons who have the authority and responsibility to ensure that the intent and purpose of the plans are carried out. These employees will be responsible for coordinating with the City Manager's Office a response to complaints or concerns expressed by persons affected by the operations on the subject Site. Applicant must provide a written update to the City of the identification of such responsible on-site management employees within forty-eight (48) hours of any change.

18. In the event that any conflicts in the conditions of approval herein appear to or do exist, the more stringent requirement/ condition shall apply. The conditions herein shall prevail over any conflicting conditions in the Reclamation Plan.

19. The Reclamation Plans shall be reviewed every five years by the City subject to this condition and condition no. 20 below. If the Director of Public Works finds that revisions are necessary, he or she shall schedule a public hearing before the City Council pursuant to Irwindale Municipal Code section 17.80.140, and shall give Applicant notice pursuant to such section. Revision may be necessary due to:

    (a) Material changes in the environmental conditions affecting reclamation;

    (b) Material changes in technical capacity, methods, or processes for accomplishing reclamation;

    (c) Material changes to adjacent properties which may impact the reclamation operation;

    (d) Material changes in the City of Irwindale's Specific or General Plans concerning the alternative land uses for which the reclaimed lands may be developed; or

(e) Any other material changes to the environmental, adjacent land, methods of reclamation, Applicable Law, or other conditions affecting the reclamation plan.

20. Any reclamation plan amendment created pursuant to this CUP shall be submitted to the Director of the Department of Conservation for review, consistent with Public Resources Code Section 2774(c), as may be amended from time to time. Until reclamation has actually commenced, the City may propose and approve changes to the reclamation plans and/ or supplements that are consistent with the SMARA Regulations, and the mining ordinance, and which reclaim the mined lands into readily usable alternative land uses. The City must consider the reclamation efforts and expenditures already sustained by the Applicant and shall not modify the reclamation plan in a manner that will cause such prior expenditures to be wasted or which will make reclamation economically infeasible when compared to the previously approved reclamation plans.

21. Financial Assurances Mechanism. Applicant shall at all times provide sufficient financial assurances in accordance with the State Mining and Reclamation Act of 1975 ("SMARA") and regulations promulgated thereunder ("SMARA Regulations").

22. Alternative Financial Assurances. SMARA Regulation sections 3803 and 3806 authorize governmental operators to utilize "pledges of revenue or budget set-asides" as financial assurance mechanisms to secure reclamation of its quarries. To take advantage of this SMARA Regulation, the City and Irwindale Community Redevelopment Agency ("Redevelopment Agency") have considered establishing a joint powers authority formed pursuant to Government Code Section 6500, *et seq.*, the Irwindale Reclamation Authority ("JPA") to assist Applicant in meeting its financial assurances obligations through an alternative financial assurances mechanism ("Alternative Mechanism"). The effectiveness of the Alternative Mechanism shall be contingent on two conditions: (i) formation of a JPA by the City and Redevelopment Agency; and (ii) a written acceptance by the California Department of Conservation ("State") that this Alternative Mechanism is an adequate substitute for the financial assurances which would otherwise be required. The Applicant shall not be required to provide the Alternative Mechanism if these two conditions are not fulfilled. If the conditions are met, Applicant shall provide the following:

(a) Transfer and Conveyance of Operation Rights. Applicant shall execute a document ("SMARA Operation Rights Transfer and Conveyance Agreement") transferring to the JPA and conveying from the JPA to Applicant its operation rights. The assignment and conveyance shall be deemed not to be an interest in real estate but instead to be a transfer solely for purposes of assigning primary reclamation responsibility back to Applicant for Quarry 1, Quarry 2 (not including the Plant Site), and Quarry 3 to the JPA and shall carry no other consequence other than as specifically set forth herein.

(b) Amounts Posted by Applicant. Applicant shall post financial assurances instruments in favor of the City and State in the amount of $2.5 million for each of its Quarries 1, 2 and 3 and $500,000 for Quarry 4/Plant Site (Total financial assurances = $8 million). Such financial assurances shall remain in place for each quarry until the quarry has been fully reclaimed in accordance with the reclamation plans for the respective quarries and then shall be fully exonerated unless there is a default. Notwithstanding the foregoing, when Applicant's Quarry 1 reclamation is complete, the full amount of the financial assurance (less $500,000) shall be added to Quarry 2. Although the City shall retain all rights to annually adjust the financial assurances amounts under SMARA section 2773.1(a)(3), the financial assurance posted by Applicant currently reflect the amounts required to reclaim the sites based on the maximum depths expected to be reached. As such, any increase in the financial instruments posted by Applicant shall require an amendment to this CUP, subject to the mutual approval of City and Applicant.

(c) Termination of JPA. In the event the JPA is terminated for any reason, at least 2 years prior written notice of termination shall be given to the Applicant before such termination shall be effective. This provision shall be included in the SMARA Operation Rights Transfer and Conveyance Agreement. During said 2 year period, the reclamation plan shall be reviewed pursuant to condition nos. 19 and 20, and revised in a manner such that the then posted financial assurances will be sufficient for reclamation.

23. Default. In the event of a material default of the terms of the reclamation plan obligations, the City shall give Applicant reasonable notice and opportunity to cure. Should Applicant fail to promptly commence and diligently pursue a cure for such default,

the City may pursue any or a combination of the following remedies:

(a) Financial Assurances. In accordance with SMARA, at section 2773.1(b), as may be amended, the City may use the financial assurances posted by Applicant as necessary to reasonably cure the default.

(b) Additional Rights. In the event of a material default, in addition to utilizing Applicant's financial assurances, the City shall have all of the following rights, after providing Applicant with a thirty (30) day notice of violation:

(i) enter the site and remedy the default;

(ii) charge Applicant for all costs in excess of the financial assurances and reclamation revenue;

(iii) lien the property for all excess, uncompensated expenses;

(iv) expend portions of the Reclamation Fund contributed by the JPA, but not Applicant's financial assurances, for any purpose it deems appropriate to assist in the reclamation of such quarry expeditiously and in an economically prudent manner; provided, however, the City shall be responsible for any actual damage to Applicant which results from its introduction of materials that do not qualify as Approved Fill. Eligible costs under this paragraph shall include, but not be limited to, the costs of Approved Fill, transportation of same, equipment and labor costs for reclamation, engineering and consulting fees and all other similar or related costs and expenses.

(c) Applicant shall at all times maintain ownership and control of Quarry 3 and shall continue the conduct of reclamation activity. However, in the event of a material default in reclamation under the reclamation plan, Applicant shall give the City, its contractors and agents access to the quarry so that the City may cause additional reclamation to occur in accordance with these conditions. Such access shall be in accordance with Applicant's normal safety requirements and the City shall indemnify and hold Applicant harmless from any liability arising from such access, including injury or death to the employees of City, its contractors and/or agents,

unless such injury or death is caused by the negligence of Applicant.

(d) Without limitation of its other legal remedies, Applicant shall have the right to appeal to the State any decision by the City to exercise its remedies under Condition No. 23 (in accordance with the appeal provisions under SMARA Regulation Section 3650(b), referencing SMARA Section 2770(e), which authorizes an appeal to the State of a determination by a lead agency under Section 2773.1(b) that an operator is incapable of performing its reclamation obligations).

24. In the event Applicant fails to perform any obligations under the Reclamation Plans, the City shall have the right to take any action permitted under Applicable Law to compel compliance, including all equitable and legal remedies, whether specific performance, injunctive relief, or legal damages, and may impose any fines and penalties as may be permitted by law.

25. It is understood that the implementation of this CUP places unique and costly burdens on the City of Irwindale, therefore: United Rock Products, Inc. shall be responsible for reimbursing, within thirty (30) days after the City's invoice therefore, to the City of Irwindale all actual and reasonable costs incurred by the City in preparing, reviewing, analyzing, enforcing, or otherwise seeing that any and all conditions of this CUP are met.

26. All recommendations in the *Reclamation Plan United Rock Products Quarry No. 3 (dated July 8, 2004), as may be amended from time to time,* shall be adhered to.

27. Applicant agrees that it shall adhere to the following requirements pertaining to the provision of preference in employment to residents of the City of Irwindale and further recognizes that such preference and continuing adherence to the requirements hereof are a material part of the approval of this permit. These employment preference provisions are also subject to Federal and State law as well as Union contracts.

(a) Applicant shall, at least two (2) weeks prior to any advertisement or other announcement of positions becoming available at Applicant's facility, provide written notice to the City Manager of the City of Irwindale and the Irwindale Chamber of Commerce of all pertinent information relative to each such position. Such information shall include, but is not limited to, minimum requirements, skills, experience and

training involved for the position, whether the same if full-time, part-time or seasonal and wage or pay rate therefore.

(b) Applicant shall offer the employment position in question to qualified Irwindale residents prior to offering the same to non-residents when, after all testing and screening have been completed, the Irwindale resident is as qualified for the position as the non-resident applicant.

(c) For the purpose of this requirement, the term "employment position" shall include training, intern and apprenticeship programs instituted or operated by Applicant.

(d) Notwithstanding the provisions of subparagraph a. above, Applicant shall not be required to give two (2) weeks notice in the event a bona fide need arises, to fill the position in a lesser period of time due to an emergency. In such event, Applicant shall provide the maximum notice possible under the circumstances.

(e) Applicant may, at Applicant's option and expense, prepare an employment preference program, subject to written approval by the City Council of the City of Irwindale, which preference program provides alternative methods for providing employment preference to Irwindale residents.

## PLANNING DEPARTMENT CONDITIONS:

**Landscaping.**

28. All landscaped areas will be kept in a first-class clean and free of weeds and debris condition. All plant materials shall be kept healthy. In the event such materials are not kept in such condition, they shall be replaced with similar materials, as required by the landscape plan, within 30 days.

29. Meridian Street. Applicant shall install the same landscaping along the perimeter of the Site along the Meridian Street Frontage as the one existing on the realigned Buena Vista Street (Avenida Barbosa). The perimeter shall consist of a 6-foot high masonry wall topped with a 2-foot extension that is at a 45 degree angle into the Site. This extension shall be strung with barbed wire placed to discourage entry per American Association of Public Works Standards, as may be amended from time-to-time. Landscaping along the perimeter and outside of the wall shall consist of the same or similar plant material, and the automatic irrigation system.

Landscaping plans and specifications as described above shall be submitted to the City within 90 days of approval of the CUP for review and approval by the City Engineer and Director of Planning. The approved landscaping work shall be completed within 12 months of the completion by the City of the planned right-of-way improvements, including curbs and gutters, along the Meridian Street Frontage.

30. Remainder of the Perimeter. Along the Flood Control Channel, the six (6) foot high existing wall and chain link fence shall be extended by adding the 45 degree arm brackets and barbed wire in the manner described in condition no. 29 above. Applicant shall install and maintain a 10-foot wide landscaped strip along the perimeter enclosed by the chain link fencing. This landscaped strip shall consist of two (2) rows of plant material, including shrubs such as oleander or a similar species placed immediately adjacent to the fence and a row of perennial trees such as pepper trees placed behind the oleanders. All the required plant material shall require both of the following: (i) Shrubs: 2 gallon size and spaced 3 ft. on center; and (ii) Trees: 24 gallon size and spaced 18 ft. on center. Applicant shall install and maintain a 10-foot wide landscaping strip along the perimeter fenced with the existing masonry wall. This landscaped strip shall consist of ground cover of a low water drought tolerant succulent or similar material and perennial trees such as pepper trees or similar drought resistant trees. All the required plant material to be installed shall be 1 gallon size low water drought tolerant succulent or similar material, spaced12 inches on center; and 24 gallon size trees, spaced 18 feet on center. The landscaping plans for the rest of the perimeter shall require the existing plant material to remain, the proposed new plant material (as described in this condition), and the automatic irrigation system identifying those existing sections/components that will remain.

## Slope Revegetation

31. Applicant shall revegetate the mine slopes in accordance with the approved reclamation plan for the Site in phases concurrent with ongoing mining operations on the Site as follows:

    (a) The final perimeter quarry slopes will be divided into five sections as described in the reclamation plan for phased revegetation implementation.

    (b) Each section of quarry slope shall be revegetated in sequenced phases. Each phase shall be revegetated over a

period not exceeding five years from the date revegetation was commenced on that phase. Revegetation of the first phase shall commence not later than one year after approval of this CUP.

(c) The first segment of the final pit slopes and the first phase of the revegetation shall be comprised of revegetating all areas of the perimeter quarry slopes requiring slope grading, regrading, filling or cutting in order to comply with any slope stability mitigation solutions.

(d) The second and subsequent final quarry slope segments and phases of revegetation shall be approximately established by dividing the remainder of the final quarry perimeter slopes into four segments of about equal slope surface area. Each such segment and phase shall then be revegetated in a sequential fashion until all final quarry slopes have been revegetated.

32. Should any plant material become unhealthy or die, Applicant shall replace same with equivalent materials within 30 days in accordance with the revegetation plan contained in the approved reclamation plan. Success of revegetation will be judged by comparing the quantified measures of vegetative cover, density, and species-richness of the reclaimed mined-lands to similar parameters of naturally occurring vegetation in the area. Successful revegetation will be deemed complete when plant cover has been established over 75 percent of the Site for three consecutive years.

33. The perimeter landscape, berming, fencing, and screening will be designed and maintained in such a manner as to reduce the ability of trash and debris to blow off the Site.

**Air Quality/ Dust Control.**

34. Air Quality Mitigation Measures - The following mitigation measures are required as Best Management Practices (BMPs) during mining operations, reclamation, and post-reclamation phases of the Proposed Project to reduce tailpipe exhaust emissions of CO, NOx, Sox, PM10, and fugitive dust.

(a) Heavy-duty diesel trucks and other mobile equipment shall be properly tuned and maintained to manufacturer's specifications to ensure minimum emissions under normal operations.

(b) Apply water or chemical dust suppressants to unstabilized disturbed areas and/ or unpaved roadways in sufficient quantity and frequency to maintain a stabilized surface; minimum of three times per day on days with no precipitation.

(c) Water or water-based chemical additives shall be used in such quantities to control dust on areas with extensive traffic including unpaved surfaces.

(d) Vehicles hauling dirt or fill shall comply with California Highway Patrol (CHP) requirements and all applicable rules and regulations, as may be amended from time to time.

(e) Vehicle speeds shall be limited to 15 mph.

(f) Continue to operate a vacuum sweeper to reduce and prevent trackout onto Arrow Highway.

(g) All truckloads leaving the Site must be covered. This condition will be suspended until a similar condition is imposed upon the operations of Hanson Aggregates and Vulcan Materials, or their successors.

Applicant shall incorporate additional or modified measures if other BMPs are adopted by ordinance or policy of the City.

35. Dust is controlled pursuant to the requirements of the South Coast Air Quality Management District (SCAQMD) Rule 403, as may be amended from time to time. The control plan includes the following or similar measures that will be implemented by Applicant to reduce dust emissions:

(a) Water sprays to keep materials moist.

(b) Set low speed limits on unpaved roads on the Site. A "low speed limit" of 10 MPH shall be established at the Site, and speed limit signs shall be posted in a manner to provide full and sufficient notice to drivers of the maximum allowable speed on the Site

(c) Water storage piles.

(d) Use of spray wash racks to wash trucks prior to leaving the Site.

(e) Construct wind fencing (berms, shrubbery, constructed walls, etc.). Wind fencing shall be constructed in a manner to minimize dust emissions originating from the Site. The locations of all wind fencing should be documented and mapped.

(f) When winds exceed 25 MPH, Applicant shall require additional watering or cessation of operations.

(g) Applicant shall use street sweepers to maintain entrance and exit areas at City streets.

(h) Applicant shall revegetate inactive disturbed areas at the Site.

36. Applicant shall implement permanent necessary measures, as approved by the City Engineer, to minimize the tracking of mud and/or dirt to the public right of way. These measures shall be maintained to the satisfaction of the City Engineer.

37. The Applicant shall apply for and maintain permits from the South Coast Air Quality Management District (SCAQMD). In addition, the applicant shall continue to abide by the following specific measures which have already been agreed to by Applicant as part of the settlement of the Notice of Violation No.P34396 issued by SCAQMD based on ambient upwind/ downwind tests conducted by SCAQMD pursuant to Rule 403, as amended from time to time, including, but not limited to, the following:

(a) Purchase and operate a Tymco vacuum sweeper (or other sweeper of similar function and capability as may be approved by SCAQMD) to reduce and prevent trackout onto Arrow Highway.

(b) Operate a full-time water truck on-site to water all unpaved roads inside the property.

(c) Improve dust controls on transfer points.

(d) Monitor and control dust from storage piles.

(e) Operate a wash rack for drivers to wet down material before leaving facility.

(f) Operate a wheel washer to remove soil from vehicle tires as needed.

(g) Purchase and install a second clean track for the landfill quarry.

**Zoning Code Changes.**

38. Applicant acknowledges that the City of Irwindale may modify its Q zone to create Quarry Overlay Zone providing mining standards applicable to the Site and other mining sites in the City for so long as mining is conducted at such sites.

**Noise Control.**

39. Applicant shall comply with the Irwindale Municipal Code Noise Standards. Additionally, if noise impacts exceed the applicable noise standard under the Irwindale Municipal Code, the use of construction type of equipment near residential dwellings shall be limited to a Monday through Friday work schedule of 7:00 a.m. to 7:00 p.m. and between 7:00 a.m. to 12:00 p.m. Saturday. Such hours may be further modified if the City amends the Q zone or adopts more restrictive requirements applicable to mining operations in the City.

40. If mining or reclamation equipment will be operated at the edge of the Quarry within 500 feet of residential property boundaries, Applicant shall first construct and maintain a berm to separate surrounding residential areas from the noise associated with mining and reclamation operations.

41. Construction equipment shall be equipped with manufacturer recommended mufflers or equivalent.

42. Construction equipment shall be turned off when not in operation.

43. The use of heavy equipment which emits relatively low noise levels as compared to other available heavy equipment of similar type or function.

44. The dredge used at the site shall be electrically powered.

45. As a component of the Management and Security Plan described in condition no. 46 below, the Applicant shall prepare a noise and vibration management plan which, among other requirements, describes the procedures by which the Applicant shall ensure that on-site noise generation conforms, at all times, to the standards set forth in the codes of both the City of Irwindale and the City of Duarte. Such plan shall include, but not be limited to, the description of mitigation measures to minimize and/ or avoid

impacts identified by current acoustical studies and analysis of emergency situations which may require the exceeding of such noise and vibration studies.

## PUBLIC WORKS DEPARTMENT CONDITIONS:

**Security Plan.**

46. The Applicant shall, within sixty (60) days of the adoption of this Resolution, prepare and submit an updated Site Management and Security Plan to the City Manager. Such plan shall indicate how the routine business operation of the Applicant shall be conducted, shall describe security measures which ensure that the general public is excluded from the Site and shall identify a contact person(s) who is available on a twenty-four (24) hour basis to respond to emergencies and unlawful access to the site, in addition to additional matters specified in this CUP. Applicant must provide a written update to the City of the identification of such contact person(s) within forty-eight (48) hours of any change. The City Manager or his designee shall review and comment upon such plan within thirty (30) calendar days thereafter; Applicant shall have thirty (30) days to prepare a final plan that complies with such comments. Applicant shall include other studies or plans required by this CUP as components of this plan, which shall also be approved consistent with this condition. The City Manager shall have final authority to approve, conditionally approve or disapprove such plan.

47. The likely source of contamination will be the illegal, inadvertent and/ or malicious dumping of Hazardous Materials into the Quarries. Applicant shall ensure that there is no risk of contamination to the groundwater and ensure the safety of the general public with the implementation of the following:

    (a) Controlled Access.

        (i) Restrict Quarry areas to authorized vehicles and equipment;
        (ii) Monitor entrances continuously for unauthorized vehicles; and
        (iii) Secure all gates with locks, except at entrances during business hours.

    (b) Security.

(i) Construct and maintain in good, first-class condition, appropriate berms, walls and fences around the Site in accordance with City zoning ordinances. The construction of the security fencing will be in accordance with the fencing detail included in the Reclamation Plans; and

(ii) Repair any damage to berms, walls and/ or fences within two days of discovery.

(c) Daily Patrolling.

(i) Inspect security berms, walls and fences on a daily basis; and

(ii) Police Quarry areas and remove any deleterious or Hazardous Materials in accordance with government requirements.

(d) Protection of Public Safety. The Site will remain secure by a combination of berms, 6-foot high walls and a minimum 6–foot high chain link fence, both topped with a 2-foot extension that is at a 45 degree angle into the Site. This extension shall be strung with barbed wire placed to discourage entry per American Association of Public Works Standards, as may be amended from time-to-time. Necessary locking gates will be installed and maintained at the perimeter of the Site. All gates will be locked when not in actual use for the ordinary course of business on the Site. A contact person(s) will be identified who is available on a 24-hour basis to respond to emergencies and unlawful access to the Site. Applicant must provide a written update to the City of the identification of such contact person within forty-eight (48) hours of any change. Other security measures (as identified above in the water quality protection measures) will also be implemented to restrict access.

48. Within thirty (30) days of the approval of the Reclamation Plan, an Emergency Plan must be prepared as an attachment to the Reclamation Plan. Approval of the Emergency Plan shall follow the same process outlined at condition no. 46 above for preparation and approval of the Site Management and Security Plan. Required remedial actions should be established in the Emergency Plan, which will minimize the time period between the discovery of the contamination and the completion of remediation. If, at any time, contamination is found to be at or above established action levels, the City shall be immediately notified and Applicant shall be required to take (and pay for) all necessary remedial actions.

**Traffic and Circulation.**

49. As a component of the Site Management and Security Plan described in condition no. 46 above, the Applicant shall prepare a commercial traffic management plan. The plan shall include, but not be limited to, identification of truck routes, identification of times of day when commercial traffic entering or exiting the Site will be permitted and when prohibited, and the methods by which such standards will be enforced by the Applicant.

50. Applicant shall prepare an onsite traffic circulation plan that includes adequate sight distance at the project access roadways where they intersect with the public roadways. The minimum sight distance should be provided to meet the City of Irwindale and Caltrans requirements, as may be amended from time to time.

**Drainage/ Runoff.**

51. Applicant shall comply with the June 2004 Irwindale Guidelines for Drainage and Erosion Control for Open-Pit Mines, as may be amended from time to time, ("Drainage and Erosion Guidelines") to address the following erosion and drainage issues.

    (a) Provide appropriate measures to keep surface water from flowing over the rim of the pits to avoid overtopping-induced erosion.

    (b) Protect pit slopes from incident-precipitation induced erosion.

    (c) Protect pit slopes that are exposed to groundwater lakes from wave-lap erosion.

    (d) Applicant shall prepare detailed plans for the implementation of erosion and drainage measures as stated above, and submit to City for review and approval by the City Engineer within 45 days from the adoption of this CUP.

**Water Quality.**

52. Applicant shall implement necessary measures to ensure protection of the groundwater quality as stated in the Main San Gabriel Basin Watermaster Resolution No 3-88-57.

(a) The Applicant shall develop a Stormwater Pollution Prevention Program (SWPPP) in accordance with National Pollution Discharge Elimination System (NPDES) requirements and Irwindale Municipal Code Chapter 8.28, as they may be amended from time to time, and, within 60 days of the date of this CUP, submit it to the City for review and approval by the City Engineer pursuant to Irwindale Municipal Code Chapter 8.28. At a minimum, the SWPPP will identify erosion minimization and control Best Management Practices (BMPs) and pollution elimination/ minimization BMPs, as well as stormwater runoff water quality monitoring procedures.

(b) Following at least 48 hours prior notice to the City, Applicant shall collect on an annual basis, surface and groundwater samples from upgradient and downgradient groundwater monitoring wells at the Quarry as long as groundwater is exposed. Applicant shall allow City or its consultants to attend any collection of groundwater samples and, upon at least 48 hours prior notice by City allow City or its consultants to independently collect groundwater samples. Water samples collected from within the Quarry will be tested annually in accordance with the Regional Water Quality Control Board and the Watermaster requirements. The annual sampling shall include a complete VOC Analysis using EPA Method 524.2. Results shall be submitted to the City, the Watermaster and the Regional Water Quality Control Board (RWQCB).

(c) Based on a plan approved by the City Engineer, Applicant shall implement measures to reduce the potential for Hazardous Materials in fill materials or to later reclaimed areas through compliance with all Waste Discharge Requirements, as may be amended from time to time, as established by the RWQCB and prohibit:

(i) the use of Hazardous Materials;

(ii) the use of toxic wastes (i.e., insecticides, poisons and radioactive materials);

(iii) the use of asbestos or asbestos products;

(iv) the use of asphalt products unless placed above the high water mark.

## Soils.

53. Applicant shall immediately commence remediation of all the problem areas that were identified by City's Notice of Violation dated February 18, 2004, as described in this condition. The stations shall be referenced by Figure 4-2 and Figure 4-3 of December 2003 GLA's Report. These areas include Section W8 (North Slope); 2) Section W8 (South Slope); 3) Section W16 (North Slope). Such remediation shall be completed to the satisfaction of the City Engineer within nine (9) months of project approval, or as otherwise agreed by the City Engineer. Prior to commencing such repairs, Applicant shall submit a slope remediation plan outlining the repairs to be performed in accordance with the December 24, 2003 Guidelines for Slope Stability Analysis of Open Pit Mine Slopes, Irwindale, California, as may be amended with the approval of the City ("Slope Study"), which plan shall be approved by the City Engineer.

54. The Applicant shall investigate all the over-steepened area between elevation 280 msl and the existing groundwater surface elevation (currently at elevation of 200 msl) in accordance with the Drainage and Erosion Guidelines and to mitigate all areas that are subjected to wave-lap erosion with one of the following methods:

    (a) Reduce slope steepness to slope inclination not subject to wave lap erosion.
    (b) Armor the slope to prevent wave lap erosion.
    (c) Implement other procedures approved by the City Engineer and based on technical data and analysis for site specific conditions.

55. Applicant shall at all times follow the Slope Study in performing necessary stability assessments, and preparing corrective measures for areas that are identified by City as problem areas. Applicant shall retain a qualified geotechnical engineering consultant to perform the assessment study and prepare a report for City, which shall be subject to the review and approval of the City Engineer.

56. The Applicant shall monitor mine depth, slopes, drainage and erosion conditions and setback distances on an annual basis. The City will be notified of all situations found to be out of compliance with permit requirements. Areas found to be out of compliance will be corrected by Applicant within sixty (60) days from the Notice issued by the City, or such longer period as otherwise agreed to by the City Engineer in writing.

57. At Applicant's cost, annually, City shall conduct a bathymetric survey of the pit to determine the then existing slope ratios and mined depths in the Quarry. Such survey shall be conducted by a qualified, licensed land surveyor selected by the City Engineer. A copy of the completed bathymetric survey shall be provided to the Applicant. Within ninety (90) days of the City providing a bathymetric survey to Applicant that confirms any situation found to be out of compliance, Applicant shall correct such situation following a method of correction approved by the City Engineer and within the time approved by the City Engineer.

58. The acceptable slope ratio below the estimated high groundwater elevation, as defined in the Slope Study shall be 2:1 (h:v) with the slope above this groundwater elevation maintained at a minimum of 1:1 (h:v). The construction of all final slopes will be in accordance with Chapter 33 of the 2002 Los Angeles County Building Code or its latest version and shall meet the April 2004 Irwindale Performance Criteria for Proposed Mine Backfills, as may be amended from time to time. All perimeter slopes will have adequate erosion control measures designed in accordance with the Drainage and Erosion Guidelines. The City Engineer will develop a slope profile based on cross sections of the ultimate allowable mining depth, at each 25 foot intervals of the Site ("Mine Slope Profile") and attach same as Exhibit "B" hereto. The Mine Slope Profile shall establish the maximum allowable mining area in the Site.

59. At all times, all quarry walls will have adequate static and seismic stability that meets the Slope Study. All perimeter slopes shall meet the slope configuration cross section that is included in Exhibit "A" hereto.

**Reclamation.**

60. Before commencement of the filling operations, the Applicant shall secure all necessary permits from the applicable governmental agencies having jurisdiction over fill operations. The permitting procedures imposed by such agencies may require additional environmental assessment, the cost of which shall be borne by the Applicant.

61. Before commencement of reclamation, Applicant shall unconditionally offer to transfer the Site to a water agency with appropriate jurisdiction to operate and maintain the Site as a groundwater recharge basin. The Reclamation Plan for Quarry No.

3 is to reclaim the entire perimeter slopes with fill that meets the Backfill Specifications (as defined in condition no. 62 below) to a standard of 2:1 (or such steeper slope ratio as may be approved by the governmental agency having primary jurisdiction over the operation or use of the Quarry as a groundwater recharge basin) with necessary drainage devices and vegetation for long term use as a groundwater recharge basin.

62. All final perimeter slope areas shall be reclaimed to a standard of 2:1 (H:V) with suitable backfill material free of Hazardous Materials or other contamination that can support re-vegetation as stated in the approved reclamation plan ("Backfill Specifications"). All perimeter slopes shall be constructed in accordance with Chapter 33 of the 2002 Los Angeles County Building Code or its latest version. Furthermore, all perimeter slopes shall have adequate erosion control measures designed in accordance with the Drainage and Erosion Guidelines.

63. In filling any area of Quarry 3, Applicant will comply with the Waste Discharge Requirements of the Regional Water Quality Control Board, Los Angeles Region, as may be amended from time to time, and adhere to a sampling and waste load checking program approved by the City Engineer (the "Program"). The Program includes requirements with respect to signage, site security measures, identification of unacceptable waste, including non-hazardous material that is not inert, and specific inspection procedures. Under the Program, only fill that meets the Backfill Specifications (as defined in condition no. 62 above) will be accepted into the Site and materials will be inspected at the site of origin, at the scale house, and at the working disposal face. At the inspection house, loads will be visually inspected for unacceptable materials and will be inspected for any volatile organic compounds by the use of a portable organic vapor analyzer probe placed randomly at selected points.

64. The Applicant shall retain a geotechnical engineer to prepare a Backfill Specification Plan in accordance with the Backfill Specifications and submit it to the City Engineer for review and approval prior to the commencement of the filling operations.

65. Quarterly results of backfill operations and compaction results shall be submitted to the City Engineer on a form approved by the City Engineer.

66. The Applicant shall test each load of fill material for compliance with the Backfill Specifications. All backfill material and fill placement shall be subject to the approval of the City Engineer.

67. City shall have the right, after providing at least 48 hours notice to Applicant, to independently inspect and monitor the (i) fill loads for the presence of any Hazardous Materials and (ii) to ascertain whether fill has been placed and compacted as required under this CUP, using a consultant retained by the City. The reasonable costs for such tests shall be paid by Applicant if performed no more than quarterly; provided that should any test find a violation of the conditions of this CUP, City shall have the right to conduct additional tests as necessary to ensure compliance with these conditions and the reasonable costs for such additional tests paid by Applicant. Should the fill material be found unacceptable, Applicant shall correct, to the satisfaction of the City Engineer, any materials improperly accepted or placed into the Site.

68. No permanent waste disposal locations or tailings ponds are permitted.

69. All equipment, structures, and other facilities associated with the mining operations will be dismantled and completely removed from the Site upon termination of mining. Thereafter, and in accordance with any additional requirements in the approved reclamation plan, upon termination of reclamation, all equipment, structures and other facilities associated with the reclamation operations will be dismantled and completely removed from the Site. All refuse, abandoned equipment, and similar materials will likewise be removed for disposal in a manner permitted by law. It is possible that some inert wastes, such as pieces of waste concrete and similar materials, may be incorporated into the grading required for reclamation. This will be done in a manner compatible with Applicable Law, as specified in the reclamation plan.

70. At the termination of mining and/or reclamation operations, areas in which Hazardous Materials may be present will be identified and mitigated in a manner consistent with Applicable Law. Applicant shall prepare a mitigation plan, subject to the approval of the City Engineer to accomplish such mitigation. This mitigation may involve the removal and disposal or treatment of areas of contaminated sand and gravel. If infiltration or evaporation proves insufficient, Applicant shall devise and submit a drainage program that shall be subject to City Engineer approval, using standards of approval within his/her authority.

71. The Applicant shall agree and consent, in writing, without qualification and in the form provided by the City, to each and every condition of approval as set forth herein within thirty (30) days of the adoption of the resolution by the City Council approving the CUP. Failure of Applicant to unqualifiedly accept every such condition shall void this CUP, the approvals granted hereunder and each and every condition hereof, and in such instance this CUP shall be of no validity, force or effect. Applicant's acceptance of the conditions of this CUP shall be considered to be binding and obligate Applicant to the faithful adherence to every condition hereof. There shall be no severability to the conditions hereof.

## ACCEPTANCE

**I/We, the undersigned, have read and do hereby accept all of the conditions on this document and all other conditions imposed by Conditional Use Permit No. 6-04 CUP, and do agree that I/We shall conform with and abide by such conditions.**

Frank Keahuna
Applicant's Signature

Frank Keahuna
Applicant's Name

8-26-2004
Date

by
Property Owner's Signature

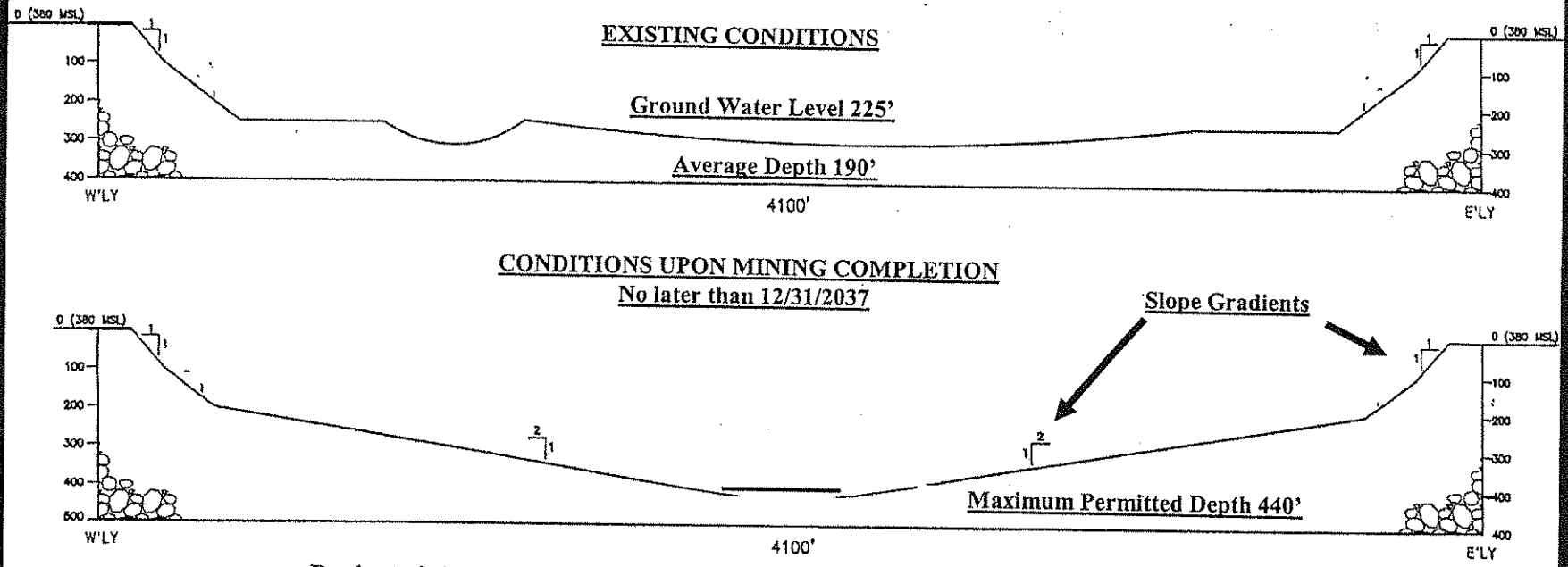
United Rock Products Corp
Property Owner's Name

8-26-2004
Date

EXHIBIT "A"

# PROPOSED MINING

## QUARRY NO. 3




**Projected Amount of Material to be Removed: 37 MCY/55.56 MMT**

**All mining will be performed in compliance with:**

1. *December 2003 Irwindale Guidelines for Stability Analyses of Open-Pit Mine Slopes*
2. *July 2004 Irwindale Guidelines for Drainage and Erosion Control for Open-Pit Mines*
3. *Regulations of: a. South Coast Air Quality Control District*

Exhibit "B"

[MINE SLOPE PROFILE]

# City of Irwindale
# Department of Building and Safety

D. B. 17 7-40 25M

DEPARTMENT OF BUILDING AND SAFETY
COUNTY OF LOS ANGELES
WM. J. FOX, CHIEF ENGINEER

APPLICATION FOR PERMIT
# PLUMBING 1

## NATURE OF INSTALLATION

| | | | | | |
|---|---|---|---|---|---|
| ROUGH PLUMBING | | FIXTURES | | COMPLETE | |
| HEATER | | CESSPOOL | ✓ | SEPTIC TANK | |
| GAS | | MISCELLANEOUS | | | |

| DISTRICT NO. | GROUP | ZONE | PERMIT No. |
|---|---|---|---|
| 25 | 5 | M3 | 27508 |
| RECEIVED BY | READY FOR FIRST INSPECTION | | DATE ISSUED |
| Miles | Now | | 7-15-41 |

## APPLICANT FILL IN HEAVILY OUTLINED PORTION ONLY

PLUMBER
NAME [illegible]
ADDRESS [illegible]
CITY [illegible] TEL No. [illegible]
COUNTY CERT. NO. EXPIRES

JOB ADDRESS Meridian Ave
LOCALITY [illegible]
NEAREST CROSS ST. Mountain

OWNER
NAME [illegible]
MAIL ADDRESS [illegible]
CITY [illegible] TEL No.

I AM THE LEGAL POSSESSOR OF THE ABOVE LOS ANGELES COUNTY CERTIFICATE OF QUALIFICATION.

[illegible]
PLUMBER

I AM THE LEGAL OWNER OF THE PROPERTY DESCRIBED ABOVE.

OWNER

## LOCATION OF SEPTIC TANK, OR CESSPOOL

NORTH
WEST EAST
SOUTH

## CORRECTIONS

Caused by [illegible] before [illegible] Closed out 7-16-41 [illegible]

ORIGINAL

## DESCRIPTION OF WORK

| | |
|---|---|
| ____ BATH TUB | ____ FURNACE |
| ____ SHOWER | ____ DISHWASHER |
| ____ LAVATORY | ____ REFRIGERATOR |
| ____ KITCHEN SINK | ____ WATER SOFTENER |
| ____ FLOOR SINK | ____ SAND TRAP |
| ____ SLOP SINK | ____ FLOOR DRAIN |
| ____ WASH TRAY | ____ URINAL |
| ____ WATER CLOSET | ____ DRINKING FOUNTAIN |
| ____ WATER HEATER | ____ DENTAL LAVATORY |
| ____ METER ____ GAS OUTL | ____ SODA FOUNTAIN |
| ____ | ____ |
| ____ | ____ |

____ TOTAL NUMBER OF FIXTURES
1 CESSPOOL ____ SEPTIC TANK

$ [illegible]

TOTAL FEE

## APPROVALS

| | DATE | INSPECTOR'S NAME |
|---|---|---|
| ROUGH PLUMBING | | |
| GAS PIPING | | |
| GAS VENT | | |
| CESSPOOL | | |
| SEPTIC TANK | | |
| SEWER | | |
| UTILITY CO. NOTIFIED | | |
| FINAL | | |

DEPARTMENT OF COUNTY ENGINEER
DIVISION OF BUILDING AND SAFETY
COUNTY OF LOS ANGELES
WILLIAM J. FOX, COUNTY ENGINEER
CASSATT D. GRIFFIN, SUP'T OF BUILDING

# BUILDING
## APPLICATION

1

## FOR APPLICANT TO FILL IN

BUILDING ADDRESS 1137 E. Meridian
LOCALITY Duarte, Calif.
NEAREST CROSS ST.
OWNER Arrow Rock Co.
MAIL ADDRESS 1137 E. Meridian
CITY Duarte TEL. NO. EL 3-2021
ARCHITECT OR ENGINEER F. J. Mirault TEL. NO. SU 1-6611
ADDRESS 1122 Burbank Blvd.
CONTRACTOR [illegible] TEL. NO.
ADDRESS
LEGAL DESCRIPTION | LOT NO. 14 | BLOCK
TRACT
SIZE OF LOT | NO. OF BLDGS. NOW ON LOT
USE OF EXISTING BLDG. | NO. OF FAMILIES

## DESCRIPTION OF WORK

NEW | ALTERATION X | ADDITION
REPAIR X | DEMOLITION
SQ. FT. SIZE 95 [illegible] | NO. OF ROOMS | STORIES
EXT. WALL COVERING | ROOF COVERING
USE OF STRUCTURE Rock & Sand Storage Bins
Replace Exist. Wood Structure with Steel Structure

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE INFORMATION GIVEN IS CORRECT.
I AGREE TO COMPLY WITH ALL COUNTY ORDINANCES AND STATE LAWS REGULATING BUILDING CONSTRUCTION.

SIGNATURE OF PERMITTEE Arrow Rock Co.
ADDRESS 1137 E Meridian
AUTHORIZED AGT. [illegible]

$ VALUATION $10,000

P. C. $ FEE $11.20
FEE $33.50

## FOR OFFICE USE ONLY 1053 C B

| DISTRICT NO. | PLAN CK. OR REC. NO. | PERMIT NO. |
|---|---|---|
| 5 CO | 6776 | D 65[illegible] |
| RECEIVED BY | DATE OF APPL. | DATE ISSUED |
| [illegible] | 12-12-52 | 1-30-53 |

BUILDING ADDRESS 1137 E Meridian
LOCALITY Duarte
NEAREST CROSS ST. Mt. Bethany

| FIRE ZONE | NO. OF PLANS | TYPE | GROUP |
|---|---|---|---|
| | 2 | IV | |

BLDG. SETBACK LINE [illegible] ORD. NO. 1494
USE ZONE M-2 APPROVED BY [illegible] DATE 12 Dec 52
HOUSE NUMBERING
MAP NUMBER NO. ASSIGNED BY

CORRECTIONS
R.G. per conf. Approved Order 1/30/53 Act. Asst. Farm Mirault 4-C 4 Mr. Temp. sign req. for max. 15' R.

ORIGINAL

## APPROVALS

| | INSPECTOR'S SIGNATURE | DATE |
|---|---|---|
| FOUNDATION: LOCATION FORMS, MATERIALS | | |
| FRAME: FIRE STOPS, BRACING, BOLTS | | |
| FURNACE: LOCATION, GAS VENT, DUCTS | | |
| LATH, INT. | | |
| LATH. EXT. | | |
| PLASTER, INT. | / | |
| PLASTER, EXT. | | |
| HOUSE NUMBER CORRECT AND POSTED | | |
| FINAL | [illegible] | 11-20-53 |

76A636A DBS 3 9-52

DEPARTMENT OF BUILDING AND SAFETY
COUNTY OF LOS ANGELES
WM. J. FOX, CHIEF ENGINEER

8/11/49

APPLICATION FOR PERMIT

# BUILDING 1

## FOR APPLICANT TO FILL IN

BUILDING ADDRESS [illegible]

LOCALITY [illegible]

NEAREST CROSS ST. [illegible]

OWNER [illegible]

MAIL ADDRESS 2815 Glendale Blvd

CITY Los Angeles TEL. NO. NO 12125

ARCHITECT OR ENGINEER TEL. NO.

ADDRESS

CONTRACTOR Arrow Rock Co TEL. NO. NO 12125

ADDRESS 2815 Glendale Blvd L.A.

LEGAL DESCRIPTION | LOT NO. 14 | Section ~~BLOCK~~ 36

~~TRACT~~ T1N, Range 11 West

Rancho Azusa, Quarter

SIZE OF LOT 40 Acres | NO. OF BLDGS. NOW ON LOT 5

USE OF EXISTING BLDG. Rock Plant | NO. OF FAMILIES | NO. OF ROOMS

## DESCRIPTION OF WORK

| | | | | | |
|---|---|---|---|---|---|
| NEW | ✓ | ALTERATION | | ADDITION | |
| REPAIR | | MOVING | | DEMOLISH | |

SQ. FT. SIZE 364 | NO. OF ROOMS 1 | STORIES 1

WALL COVERING Steel | ROOF COVERING Steel

USE OF NEW BUILDING Switch House

All steel building - no lathe, plaster.

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE ABOVE IS CORRECT AND AGREE TO COMPLY WITH ALL COUNTY ORDINANCES AND STATE LAWS REGULATING BUILDING CONSTRUCTION.

SIGNATURE OF PERMITTEE Arrow Rock Co

AUTHORIZED AGT. By: M. F. Joyce

DBS-3 50M SETS 1-48 $ 1090.00

VALUATION

P. C. $ FEE 3.00

$ FEE 6.00

## FOR OFFICE USE ONLY

| DISTRICT NO. | PLAN CK. NO. | PERMIT NO. |
|---|---|---|
| 5-CO | [illegible] | 68761 |
| RECEIVED BY | DATE OF APPL. | DATE ISSUED |
| RMM | 8/11/49 | 9.7.49 |

BUILDING ADDRESS [illegible]

LOCALITY Duarte

NEAREST CROSS ST.

FIRE ZONE — | NO. OF PLANS 2 | TYPE IV | GROUP G

BLDG. SETBACK LINE — | ORD. NO.

APPROVED BY | DATE

USE ZONE M-2 | APPROVED BY Lowell | DATE 8/11/49

## CORRECTIONS

Note 50' buffer on northerly & westerly line of Lot 14.
Lowell 8/11/49

ORIGINAL

## APPROVALS

| FOUNDATION: LOCATION FORMS, MATERIALS | INSPECTOR | DATE |
|---|---|---|
| FRAME: FIRE STOPS, BRACING, BOLTS | | |
| LATH, INT.: | | |
| LATH, EXT.: | | |
| PLASTER, INT. | | |
| PLASTER, EXT. | | |
| FINAL | [illegible] | |

TESTING OF MATERIALS
GENERAL
PHYSICAL - CHEMICAL
CEMENT - STEEL - OIL
ASPHALT - CLAY
SOIL INVESTIGATIONS
ROAD AND BUILDING
FOUNDATIONS
BEARING, COMPACTION
AND SHEAR TESTS

# RAYMOND G. OSBORNE
LABORATORIES, INC.
TESTING AND INSPECTION ENGINEERS

OFFICE AND LABORATORIES
110 WEST NINTH STREET
PHONE TRINITY 7727
INSPECTION AND TESTING
STRUCTURAL STEEL
SHOP AND FIELD
RIVETING - WELDING
PIPE INSPECTION
STEEL, CONCRETE AND CLAY
EASTERN REPRESENTATION

LOS ANGELES 15

June 30, 1953

## REPORT ON INSPECTION OF STRUCTURAL STEEL

Job Identification: ARROW ROCK COMPANY
1137 East Meridian
Duarte, California

General Contractor:

Building Permit: No. 10536-B

Date of Inspection: June 16, 1953

REPORT

Alteration to Rock Plant -

Replacing a wood structure with a structural steel structure.

This work was done according to County approved plans dated Jan. 14, 1953.

All weld rods used conformed to A.W.S. - E6010 and E6012, sizes 5/32 and 3/16".

There will be a small amount of welding when they erect this structure. Welding completed to date on fabrication.

Inspector: Louis L. Perley

---

Respectfully submitted,

RAYMOND G. OSBORNE LABORATORIES, INC.

By Harold J. Ecke

Reported to:

2 - Arrow Rock Co.
1 - L. A. County Bldg. Dept.
1 - San Gabriel Dist. #5
4

DEPARTMENT OF BUILDING AND SAFETY
COUNTY OF LOS ANGELES
William J. Fox, Chief Engineer

## SPECIAL INSPECTOR'S WEEKLY REPORT

This report covers work completed during week ending June 16, 1953

Location of job 1137 E. Meridian, Duarte District No. #5

Work Inspected Struct. steel Building Permit No. 105368

General Contractor ARROW Rock CO.

Masonry Contractor

Description Work

Alteration To Rock Plant - IT will be The Replacing of A wood structure with A structural steel structure. This work was Done According To County Approved Plans Dated Jan 14, 1953 All weld Rod used Conformed To A.W.S. E 6010 & E 6012 Sizes used were 5/32 & 3/16

Remarks

There will be A small Amount of welding when They Erect This Structure, welding Completed To Date on Fabrication

6-16-53
Date

Louis L. Pixley
Special Inspector

76R266F 10-49

CITY OF IRWINDALE

1

6A638A CE #803 5-61

# APPLICATION FOR BUILDING PERMIT

**COUNTY OF LOS ANGELES**
**DEPARTMENT OF COUNTY ENGINEER**
**BUILDING AND SAFETY DIVISION**
JOHN A. LAMBIE, COUNTY ENGINEER
WILLIAM A. JENSEN, SUP'T OF BUILDING

## FOR APPLICANT TO FILL IN

BUILDING ADDRESS 1137 MERIDAN
LOT NO. 14 SEC 36 BLOCK
TRACT TIM R 11 W Rancho Azusa Dunite
SIZE OF LOT (4/0 acres) NO. OF BLDGS. NOW ON LOT
USE OF EXISTING BLDG.
OWNER TEL. NO.
ADDRESS
ARCHITECT OR ENGINEER TEL. NO.
ADDRESS
CONTRACTOR FRED KATZ TEL. NO. 8-702188
ADDRESS 8600 VENICE BL. LA

## DESCRIPTION OF WORK

NEW (ADD) ALTER REPAIR DEMOLISH
SQ. FT. SIZE NO. OF STORIES NO. OF FAMILIES
USE OF STRUCTURE INSTALL LOW PRES. BOILER & ROOF
SIGNATURE OF APPLICANT
VALUATION $ 1,265

P.C. FEE $ PMT. FEE $ 11.50

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE ABOVE IS CORRECT AND AGREE TO COMPLY WITH ALL COUNTY ORDINANCES AND STATE LAWS REGULATING BUILDING CONSTRUCTION. I CERTIFY THAT IN DOING THE WORK AUTHORIZED HEREBY I WILL NOT EMPLOY ANY PERSON IN VIOLATION OF THE LABOR CODE OF THE STATE OF CALIFORNIA RELATING TO WORKMEN'S COMPENSATION INSURANCE.

SIGNATURE OF PERMITTEE Fred Katz
ADDRESS 8600 Venice Bl.

BUILDING ADDRESS 1137 Meridan
LOCALITY Irwindale
NEAREST CROSS ST. Tifal

| DISTRICT NO. | GROUP | TYPE CONST. | PROCESSED BY |
|---|---|---|---|
| 5106 | F | Bk | Costa |

STATISTICAL CLASSIFICATION CLASS. NO. 23 DWELL. UNITS
SEWER MAP BK PG
WATER CERTIFICATE: NOT REQUIRED ☐ RECEIVED ☐
MAP NO. 2058 HIGHWAY (CIRCLE) STATE MAJOR SECOND, LOCAL
USE ZONE Q SPECIAL CONDITIONS

| BUILDING SETBACK | YARD | HWY | STREET NAME | EXIST. WIDTH |
|---|---|---|---|---|
| FRONT P. L. | | | | |
| SIDE P. L. | | | | |

## INSPECTION RECORD

5-17-65 Boiler Set
No Roof on Vent

| APPROVALS | DATE | INSPECTOR'S SIGNATURE |
|---|---|---|
| FOUNDATION: LOCATION FORMS, MATERIALS | | |
| FRAME: FIRE STOPS, BRACING, BOLTS | | |
| FURNACE: LOCATION, GAS VENT, DUCTS | | |
| LATH, INT. | | |
| LATH, EXT. | | |
| HOUSE NUMBER CORRECT AND POSTED | | |
| FINAL | | |

INSPECTOR COPY

CLYDE N. DIRLAM, PRINCIPAL STRUCTURAL ENGINEER

**PLAN CHECK VALIDATION** CK. M.O. CASH

**PERMIT VALIDATION** CK. M.O. CASH

14C 07973 APR 26 1 11.50

76A663 DBS 5A 11-49

# DEPARTMENT OF BUILDING AND SAFETY
## COUNTY OF LOS ANGELES
WILLIAM J. FOX, CHIEF ENGINEER

# APPLICATION FOR PERMIT
# ELECTRIC 1

| DISTRICT NO. | GROUP | ZONE | PERMIT NO. |
|---|---|---|---|
| 5 | G | M2 | 117314 |
| RECEIVED BY | READY FOR FIRST INSPECTION | | DATE ISSUED |
| Musso | | | 2-17-50 |

FOR APPLICANT TO FILL IN

ELECTRICIAN K. B. ELECTRIC CO.
ADDRESS 61 E. DUARTE RD.
CITY ARCADIA TEL. NO. DO-72336
COUNTY LICENSE NO. 742 EXPIRES 6-30-50

BUILDING ADDRESS 1137 E. MERIDIAN
LOCALITY DUARTE
NEAREST CROSS ST. BATEMAN.
OWNER ARROW ROCK CO.
MAIL ADDRESS
CITY TEL. NO.

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE ABOVE IS CORRECT AND AGREE TO COMPLY WITH ALL COUNTY ORDINANCES AND STATE LAWS REGULATING ELECTRICAL WIRING.

I CERTIFY THAT I POSSESS THE ABOVE VALID LOS ANGELES COUNTY LICENSE, OR I AM THE LEGAL OWNER OF THE RESIDENTIAL PROPERTY DESCRIBED ABOVE.

SIGNATURE OF PERMITTEE [signature]

## PERMIT FEES

| NUMBER | OUTLETS EACH | | FEE | |
|---|---|---|---|---|
| 1 | LIGHT | 5c | $ | 5 |
| 2 | RECEPTACLES | 5 | | 10 |
| 5 | FIXTURES | 5 | | 25 |
| | WALL SWITCHES | 5 | | |
| | ELEC. RANGES | 25 | | |
| | ELEC. HEATERS | 25 | | |
| | MISC. | | | |

NUMBER OF CIRCUITS INSTALLED:
TOTAL
LIGHTS RECEPTACLES

## MOTORS

| NUMBER NEW | NUMBER MVD. | HP | HORSEPOWER OVER | HORSEPOWER INC. | FEE EACH | | |
|---|---|---|---|---|---|---|---|
| | | | | ½ & LESS | $ .25 | | |
| | | | ½ | 2 | .50 | | |
| | | | 2 | 5 | 1.00 | | |
| | | | 5 | 15 | 1.50 | | |
| | | | 15 | 50 | 2.50 | | |
| | | | 50 | 200 | 5.00 | | |
| | | | 200 | 500 | 10.00 | | |
| | | | 500 | 1000 | 15.00 | | |
| | | | OVER 1000 | | 20.00 | | |

M.G. SET/FREQ. CHANGER-HP
WELDERS: AC-KVA
GENERATORS - KW
TRANSFORMERS - KVA
TEMP. MOTORS (75% OF ORIG.)
MOVED MOTORS (75% OF ORIG.)
MISC.

## SIGNS

TYPE: NO. TRANS.
TYPE: NO. LAMPS

FOR EACH PERMIT:

| | | | |
|---|---|---|---|
| WIRING | $1.00 | 1 | 00 |
| FIXTURES | $1.00 | / | — |
| SUPPLEMENTARY | .50 | | |
| TOTAL FEE | | $2 | 48 |

## INSPECTION RECORD

ORIGINAL

## APPROVALS

| | DATE | INSPECTOR'S NAME |
|---|---|---|
| CONDUIT | 3/20 | [signature] |
| WIRING | | |
| FIXTURES | | |
| POWER | | |
| UTILITY CO. NOTIFIED | | |
| FINAL | 3/20 | [signature] |

76A663 DBS 5A 11-49

# DEPARTMENT OF BUILDING AND SAFETY
## COUNTY OF LOS ANGELES
WILLIAM J. FOX, CHIEF ENGINEER

# APPLICATION FOR PERMIT
# ELECTRIC 1

| DISTRICT NO. | GROUP | ZONE | PERMIT NO. |
|---|---|---|---|
| 5 | 6 | M2 | 117224 |
| RECEIVED BY | READY FOR FIRST INSPECTION | | DATE ISSUED |
| [illegible] | | | 4-12-50 |

FOR APPLICANT TO FILL IN

ELECTRICIAN K. B. ELECT. Co.
ADDRESS 61 E. Duarte Rd
CITY Arcadia TEL. NO. DO 72 [illegible]
COUNTY LICENSE NO. 742 EXPIRES

## PERMIT FEES

| NUMBER | OUTLETS EACH | | FEE |
|---|---|---|---|
| | LIGHT | 5c | $ |
| | RECEPTACLES | 5 | |
| | FIXTURES | 5 | |
| | WALL SWITCHES | 5 | |
| | ELEC. RANGES | 25 | |
| | ELEC. HEATERS | 25 | |
| | MISC. | | |

NUMBER OF CIRCUITS INSTALLED:
TOTAL
LIGHTS RECEPTACLES

## MOTORS

| NUMBER NEW | NUMBER MVD. | HP | HORSEPOWER OVER | HORSEPOWER INC. | FEE EACH | |
|---|---|---|---|---|---|---|
| | | | | ½ & LESS | $ .25 | |
| | | | ½ | 2 | .50 | |
| 1 | | 5 | 2 | 5 | 1.00 | 1 00 |
| ~~1~~ | | ~~5~~ | 5 | 15 | ~~1.50~~ | ~~1 50~~ |
| | | | 15 | 50 | 2.50 | |
| | | | 50 | 200 | 5.00 | |
| | | | 200 | 500 | 10.00 | |
| | | | 500 | 1000 | 15.00 | |
| | | | OVER 1000 | | 20.00 | |

M.G. SET/FREQ. CHANGER-HP
WELDERS: AC-KVA
GENERATORS - KW
TRANSFORMERS - KVA
TEMP. MOTORS (75% OF ORIG.)
MOVED MOTORS (75% OF ORIG.)
MISC.

## SIGNS

TYPE: NO. TRANS.
TYPE: NO. LAMPS

FOR EACH PERMIT:

| | | |
|---|---|---|
| WIRING | $1.00 | 1 — |
| FIXTURES | $1.00 | |
| SUPPLEMENTARY | .50 | |
| TOTAL FEE | | $ 20 |

BUILDING ADDRESS 1137 Maridrao
LOCALITY Duarte
NEAREST CROSS ST. Mountain
OWNER Arrow Rock Co.
MAIL ADDRESS
CITY TEL. NO.

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE ABOVE IS CORRECT AND AGREE TO COMPLY WITH ALL COUNTY ORDINANCES AND STATE LAWS REGULATING ELECTRICAL WIRING.

I CERTIFY THAT I POSSESS THE ABOVE VALID LOS ANGELES COUNTY LICENSE, OR I AM THE LEGAL OWNER OF THE RESIDENTIAL PROPERTY DESCRIBED ABOVE.

SIGNATURE OF PERMITTEE M. Kloezeman

## INSPECTION RECORD

ORIGINAL

## APPROVALS

| | DATE | INSPECTOR'S NAME |
|---|---|---|
| CONDUIT | 4-18 | Baker |
| WIRING | | |
| FIXTURES | | |
| POWER | | |
| UTILITY CO. NOTIFIED | | |
| FINAL | 4/18/50 | Baker |

DBS 5A 25M SETS 1-48

# DEPARTMENT OF BUILDING AND SAFETY
## COUNTY OF LOS ANGELES
WM. J. FOX, CHIEF ENGINEER

## APPLICATION FOR PERMIT
# ELECTRIC 1

**ELECTRICIAN**

NAME

ADDRESS

CITY TEL. NO.

COUNTY CERT. NO. EXPIRES

| DISTRICT NO. | GROUP | ZONE | PERMIT NO. |
|---|---|---|---|
| | | | |
| RECEIVED BY | READY FOR FIRST INSPECTION | | DATE ISSUED |
| | | | |

## APPLICANT FILL IN HEAVILY OUTLINED PORTION ONLY

### DESCRIPTION OF WORK

NUMBER OF OUTLETS ON CIRCUITS
LOCATION BY ROOMS

| CIRCUIT | LIGHT OUTLETS A | B | C | D | E | SW. | PLUGS F | G | H | FIXT |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | |
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| | | | | | | | | | | |
| TOTAL | | | | | | | | | | |

JOB ADDRESS

LOCALITY

NEAREST CROSS ST.

**OWNER**

NAME

MAIL ADDRESS

CITY TEL. NO.

I AM THE LEGAL POSSESSOR OF THE ABOVE LOS ANGELES COUNTY CERTIFICATE OF QUALIFICATION..

ELECTRICIAN.

I AM THE LEGAL OWNER OF THE PROPERTY DESCRIBED ABOVE

OWNER.

### CORRECTIONS

ORIGINAL

| | | |
|---|---|---|
| NO. OF OUTLETS | $ | |
| NO. OF FIXTURES | $ | |
| NO. OF MOTORS H.P. | $ | |
| NO. OF SIGNS TRANS. | $ | |
| NO. OF RANGES OR HEATERS | $ | |
| MISCELLANEOUS | $ | |
| PERMIT FEE | $ | |
| TOTAL FEE | $ | |

### APPROVALS

| | DATE | INSPECTOR'S NAME |
|---|---|---|
| CONDUIT | | |
| WIRING | | |
| FIXTURES | | |
| POWER | | |
| UTILITY CO. NOTIFIED | | |
| FINAL | | |

76A663 DBS 5A 5-49 ℗

**DEPARTMENT OF BUILDING AND SAFETY**
**COUNTY OF LOS ANGELES**
WILLIAM J. FOX, CHIEF ENGINEER

# APPLICATION FOR PERMIT
# ELECTRIC 1

| DISTRICT NO. | GROUP | ZONE | PERMIT NO. |
|---|---|---|---|
| 5 | G | Mo | 104971 |
| RECEIVED BY | READY FOR FIRST INSPECTION | | DATE ISSUED |
| Bohn | | | 12-2-49 |

**FOR APPLICANT TO FILL IN**

ELECTRICIAN K.B. ELECTRIC
ADDRESS [illegible]
CITY [illegible] TEL. NO. 0672334
COUNTY LICENSE NO. 742 EXPIRES

**PERMIT FEES**

| NUMBER | OUTLETS EACH | | FEE |
|---|---|---|---|
| 4 | LIGHTS | 5c | $ 20 |
| 3 | RECEPTACLES | 5 | 15 |
| 4 | FIXTURES | 5 | 20 |
| 2 | WALL SWITCHES | 5 | 10 |
| | ELEC. RANGES | 25 | |
| | ELEC. HEATERS | 25 | |
| | MISC. | | |

NUMBER OF CIRCUITS INSTALLED:
LIGHTS RECEPTACLES

**MOTORS**

| NUMBER NEW | NUMBER MVD. | HP | HORSEPOWER OVER | HORSEPOWER INC. | FEE EACH | |
|---|---|---|---|---|---|---|
| 1 | | | | ½ & LESS | $ .25 | |
| | | | ½ | 2 | .50 | |
| | | | 2 | 5 | 1.00 | |
| | | | 5 | 15 | 1.50 | |
| 1 | | 20 | 15 | 50 | 2.50 | 2 50 |
| | | | 50 | 200 | 5.00 | |
| | | | 200 | 500 | 10.00 | |
| | | | 500 | 1000 | 15.00 | |
| | | | OVER 1000 | | 20.00 | |

M.G. SET/FREQ. CHANGER-HP
WELDERS: AC-KVA
GENERATORS - KW
TRANSFORMERS - KVA
TEMP. MOTORS (75% OF ORIG.)
MOVED MOTORS (75% OF ORIG.)
MISC.

**SIGNS**

TYPE: NO. TRANS.
TYPE: NO. LAMPS

FOR EACH PERMIT:

| | | |
|---|---|---|
| WIRING | $1.00 | 1 00 |
| FIXTURES | $1.00 | 1 00 |
| SUPPLEMENTARY | .50 | |
| TOTAL FEE | | $ 5 15 |

BUILDING ADDRESS 1137 E. MERIDIAN
LOCALITY DUARTE
NEAREST CROSS ST.
OWNER ARROW ROCK CO.
MAIL ADDRESS SAME.
CITY TEL. NO.

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE ABOVE IS CORRECT AND AGREE TO COMPLY WITH ALL COUNTY ORDINANCES AND STATE LAWS REGULATING ELECTRICAL WIRING.

I CERTIFY THAT I POSSESS THE ABOVE VALID LOS ANGELES COUNTY LICENSE, OR I AM THE LEGAL OWNER OF THE RESIDENTIAL PROPERTY DESCRIBED ABOVE.

SIGNATURE OF PERMITTEE [illegible]

**INSPECTION RECORD**

W/S - Temp Ctl
Bon

ORIGINAL

**APPROVALS**

| | DATE | INSPECTOR'S NAME |
|---|---|---|
| CONDUIT | | |
| WIRING | | |
| FIXTURES | | |
| POWER | | |
| UTILITY CO. NOTIFIED | | |
| FINAL | | |

Supplement to Permit # 90224

COUNTY OF LOS ANGELES
Department of County Engineer
DIVISION OF BUILDING & SAFETY
WILLIAM J. FOX, County Engineer

APPLICATION FOR PERMIT

# ELECTRIC 1

| DISTRICT NO. | GROUP | ZONE | PERMIT NO. |
|---|---|---|---|
| 5 | — | M-2 | 91103 |
| RECEIVED BY | READY FOR FIRST INSPECTION | | DATE ISSUED |
| Haeger | | | 12/1/53 |

FOR APPLICANT TO FILL IN

ELECTRICIAN K.B. ELECTRIC CO.
ADDRESS 61 E. DUARTE RD.
CITY ARCADIA TEL. NO. DO 7-8612
COUNTY LICENSE NO. 291 EXPIRES 6/30/54

BUILDING ADDRESS 1137 E. MERIDIAN
LOCALITY DUARTE
NEAREST CROSS ST.

OWNER ARROW ROCK CO.
MAIL ADDRESS
CITY TEL. NO.

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE ABOVE IS CORRECT AND AGREE TO COMPLY WITH ALL COUNTY ORDINANCES AND STATE LAWS REGULATING ELECTRICAL WIRING.

I CERTIFY THAT I POSSESS THE ABOVE VALID LOS ANGELES COUNTY LICENSE, OR I AM THE LEGAL OWNER OF THE RESIDENTIAL PROPERTY DESCRIBED ABOVE.

SIGNATURE OF PERMITTEE D.T. Rogers

## PERMIT FEES

| | NUMBER | EACH | FEE |
|---|---|---|---|
| LIGHT OUTLETS | 16 | | |
| RECEPTACLES | 6 | | |
| WALL SWITCHES | 5 | | |
| TOTAL OUTLETS | 25 | 5c | $ 1 25 |
| ELEC. RANGES | | 25 | |
| ELEC. HEATERS | | 25 | |
| FIXTURES | 18 | 5 | 90 |
| MISC. | | | |
| NUMBER OF LIGHT CIRCUITS | | | |
| NUMBER OF RECEPTACLE CIRCUITS | | | |

## MOTORS

| NUMBER NEW | NUMBER MVD. | HP | HORSEPOWER OVER | HORSEPOWER INC. | FEE EACH | | |
|---|---|---|---|---|---|---|---|
| | | | | ½ & LESS | $ .25 | | |
| | | | ½ | 2 | .50 | | |
| | | | 2 | 5 | 1.00 | | |
| | | | 5 | 15 | 1.50 | | |
| | | | 15 | 50 | 2.50 | | |
| | | | 50 | 200 | 5.00 | | |
| | | | 200 | 500 | 10.00 | | |
| | | | 500 | 1000 | 15.00 | | |
| | | | OVER 1000 | | 20.00 | | |
| M.G. SET/FREQ. CHANGER-HP | | | | | | | |
| WELDERS: AC-KVA | | | | | | | |
| GENERATORS - KW | | | | | | | |
| TRANSFORMERS - KVA | | | | | | | |
| TEMP. MOTORS (75% OF ORIG.) | | | | | | | |
| MOVED MOTORS (75% OF ORIG.) | | | | | | | |
| MISC. | | | | | | | |

## SIGNS

| | | | |
|---|---|---|---|
| NO. | NO. TRANS. | | |
| NO. | NO. LAMPS | | |

| FOR EACH PERMIT: | | | |
|---|---|---|---|
| WIRING | $1.00 | | |
| FIXTURES | $1.00 | | |
| SUPPLEMENTARY | .50 | | 50 |
| TOTAL FEE | | $ 2 | 65 |

## INSPECTION RECORD

ORIGINAL

## APPROVALS

| | DATE | INSPECTOR'S NAME |
|---|---|---|
| CONDUIT | | |
| WIRING | | |
| FIXTURES | | |
| POWER | | |
| UTILITY CO. NOTIFIED | | |
| FINAL | | |

76A663 DBS# 5A 2-53

COUNTY OF LOS ANGELES
Department of County Engineer
DIVISION OF BUILDING & SAFETY
WILLIAM J. FOX, County Engineer

# APPLICATION FOR PERMIT
# ELECTRIC 1

| DISTRICT NO. | GROUP | ZONE | PERMIT NO. |
|---|---|---|---|
| 5 | – | M-2 | 90224 |
| RECEIVED BY | READY FOR FIRST INSPECTION | | DATE ISSUED |
| Haeger | | | 11/17/53 |

FOR APPLICANT TO FILL IN

ELECTRICIAN K. B ELECTRIC Co
ADDRESS 61 E DUARTE RD.
CITY ARCADIA TEL. NO. D074812
COUNTY LICENSE NO. 291A. EXPIRES 6-30-54

BUILDING ADDRESS 1137. E Meridian St
LOCALITY Duarte
NEAREST CROSS ST.

OWNER Arrow Rock Co
MAIL ADDRESS
CITY TEL. NO.

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE ABOVE IS CORRECT AND AGREE TO COMPLY WITH ALL COUNTY ORDINANCES AND STATE LAWS REGULATING ELECTRICAL WIRING.

I CERTIFY THAT I POSSESS THE ABOVE VALID LOS ANGELES COUNTY LICENSE, OR I AM THE LEGAL OWNER OF THE RESIDENTIAL PROPERTY DESCRIBED ABOVE.

SIGNATURE OF PERMITTEE M K Loezeman

## PERMIT FEES

| | NUMBER | EACH | FEE |
|---|---|---|---|
| LIGHT OUTLETS | 14 | | |
| RECEPTACLES | 5 | | |
| WALL SWITCHES | 10 | | |
| TOTAL OUTLETS | 29 | 50 | $ 1 45 |
| ELEC. RANGES | | 25 | |
| ELEC. HEATERS | | 25 | |
| FIXTURES | 14 | 5 | 70 |
| MISC. ~~[illegible]~~ | | | |
| NUMBER OF LIGHT CIRCUITS | | | |
| NUMBER OF RECEPTACLE CIRCUITS | | | |

## MOTORS

| NUMBER NEW | NUMBER MVD. | HP | HORSEPOWER OVER | HORSEPOWER INC. | FEE EACH | FEE |
|---|---|---|---|---|---|---|
| | | | | ½ & LESS | $ .25 | |
| | | | ½ | 2 | .50 | |
| | 3 | 5 | 2 | 5 | 1.00 | 3 00 |
| | 1 | 10 | 5 | 15 | 1.50 | 1 50 |
| | 1 | 25 | 15 | 50 | 2.50 | 2 50 |
| | | | 50 | 200 | 5.00 | |
| | | | 200 | 500 | 10.00 | |
| | | | 500 | 1000 | 15.00 | |
| | | | OVER 1000 | | 20.00 | |

M.G. SET/FREQ. CHANGER-HP
WELDERS: AC-KVA
GENERATORS - KW
TRANSFORMERS - KVA
TEMP. MOTORS (75% OF ORIG.)
MOVED MOTORS (75% OF ORIG.)
MISC.

## SIGNS

NO. NO. TRANS.
NO. NO. LAMPS

FOR EACH PERMIT:

| | | |
|---|---|---|
| WIRING | $1.00 | 1 00 |
| FIXTURES | $1.00 | 1 00 |
| SUPPLEMENTARY | .50 | |
| TOTAL FEE | | $ 11 15 |

## INSPECTION RECORD

ORIGINAL

## APPROVALS

| | DATE | INSPECTOR'S NAME |
|---|---|---|
| CONDUIT | | |
| WIRING | | |
| FIXTURES | | |
| POWER | | |
| UTILITY CO. NOTIFIED | | |
| FINAL | 11-20-53 | [illegible] |

76A663 DBS# 5A 2-53

76A667 -CE#817 4-64

# CITY OF IRWINDALE

## APPLICATION FOR PLUMBING PERMIT

1

COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
BUILDING AND SAFETY DIVISION
JOHN A. LAMBIE, COUNTY ENGINEER
WILLIAM A. JENSEN, SUP'T OF BUILDING

| | |
|---|---|
| BUILDING ADDRESS | 1137 Merridan |
| LOCALITY | Irwindale |
| NEAREST CROSS ST. | Tidal |
| OWNER | Fred Kate |
| MAIL ADDRESS | 5600 Venice Blvd |
| CITY | TEL. NO. 870-2158 |
| CONTRACTOR | Earl (Pat) Standley, Inc. |
| ADDRESS | P.O. Box 408 |
| CITY | El Monte TEL. NO. 444-1559 |
| CONTRACTOR'S REGISTRATION NO. | 149236 STATE ☑ COUNTY ☐ |

FOR APPLICANT TO FILL IN

| NUMBER | FIXTURE OR ITEM | EACH | FEE | |
|---|---|---|---|---|
| | WATER CLOSET | $1.25 | | |
| | BATH TUB | 1.25 | | |
| | SHOWER | 1.25 | | |
| | LAVATORY | 1.25 | | |
| | SINK | 1.25 | | |
| | DISHWASHER | 1.25 | | |
| | LAUNDRY TUB | 1.25 | | |
| | CLOTHES WASHER | 1.25 | | |
| | WATER HEATER | 1.50 | | |
| 4 | GAS SYSTEM ____ OUTLETS | 1.50 | 1 | 50 |
| | OUTLETS OVER 5 PER SYSTEM | .30 | | |
| 1 | Water System | | 1 | 50 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| | | |
|---|---|---|
| PERMIT | $ | 2 00 |
| TOTAL FEE | | 5 00 |

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE ABOVE IS CORRECT AND AGREE TO COMPLY WITH ALL COUNTY ORDINANCES AND STATE LAWS REGULATING PLUMBING.

I HEREBY CERTIFY THAT I AM PROPERLY REGISTERED AND/OR LICENSED AS REQUIRED BY LOS ANGELES COUNTY AND STATE OF CALIFORNIA OR THAT I AM THE LEGAL OWNER OF, AND INTEND TO RESIDE IN, THE ABOVE DESCRIBED RESIDENTIAL PROPERTY.

SIGNATURE OF PERMITTEE Earl C Stan

| DISTRICT NO. | GROUP | ZONE | PROCESSED BY |
|---|---|---|---|
| 5.06 | F | Q | Costa |

INDUSTRIAL WASTE APPROVAL

INSPECTION RECORD

5-11 to Meet test on gas
7-16-65 ready to test C
Stand by inspection pressure
test - to fill Check &
call back - Dennis

| APPROVALS | DATE | INSPECTOR'S SIGNATURE |
|---|---|---|
| UNDER SLAB WORK | | |
| ROUGH PLUMBING | | |
| GAS PIPING | | |
| GAS VENT | | |
| HOT WATER HEATER | | |
| PLUMBING FIXTURES | | |
| GAS TEST | 5-18 | |
| UTILITY CO. NOTIFIED | | |
| | | |
| FINAL | | |

VALIDATION
CK. M. O. CASH

ROBERT A. WOOD
SUPERVISING MECHANICAL ENG'R

AC 07995 APR 26 5 5.00

# CITY OF IRWINDALE

1

\663-CE806 10-61

# APPLICATION FOR ELECTRICAL PERMIT

COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
BUILDING AND SAFETY DIVISION
JOHN A. LAMBIE, County Engineer
WILLIAM A. JENSEN, Sup't of Building

| BUILDING ADDRESS | 1127 MORIANN |
|---|---|
| LOCALITY | IRWINDALE |
| NEAREST CROSS ST. | ~~FAIRGROVE~~ TIFFIN |
| OWNER | FRED KATZ |
| MAIL ADDRESS | 8600 VENICE |
| CITY | L.A. TEL. NO. |
| ELECTRICIAN | ROBERT F HUGHES |
| ADDRESS | 2207 N TROY |
| CITY | S. EL MONTE TEL. NO. 442-3270 |
| STATE LICENSE NO. | 192242 |

FOR APPLICANT TO FILL IN

| ITEM | NO. | EACH | FEE |
|---|---|---|---|
| OUTLETS: (First 20) LIGHTS 4 RECEPT. 5 SW. | 9 | $.20 | $ 1 80 |
| OUTLETS: (Add'l Units) LIGHTS RECEPT. SW. | | .10 | |
| LIGHTING FIXTURES: (First 20) | 4 | .20 | 80 |
| LIGHTING FIXTURES: (Additional) | | .10 | |
| RANGES CLO. DRYERS WTR. HTRS. | | 1.00 | |
| GARB. DISP. STA. COOK<br>DISHWASH. AUTO.-WASH.<br>SPACE HTRS. STA. APP. (½ H.P. MAX.) | | .50 | |
| MOTORS: OVER — NOT OVER — H.P. | | | |
| 0 — 1 | | 1.00 | |
| 1 — 3 | | 1.50 | |
| 3 — 8 | | 2.00 | |
| 8 — 15 | | 2.50 | |
| 15 — 50 | | 3.00 | |
| 50 — 100 | | 5.00 | |
| SIGNS: NO. TRANS. / NO. LAMPS | | | |
| SERVICE 0-600V-Not over 200A | | 1.00 | 1 00 |
| SERVICE 0-600V-Over 200 A. | | 2.00 | |
| SERVICE OVER 600V | | 5.00 | |
| MISC. | | | |
| | | | |
| PERMIT ISSUING FEE | | 2.00 | 2 00 |
| SUPPLEMENTARY PERMIT ISSUING FEE | | 1.00 | |
| TOTAL FEE | | | $ 5 60 |

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE ABOVE IS CORRECT AND AGREE TO COMPLY WITH ALL COUNTY ORDINANCES AND STATE LAWS REGULATING ELECTRICAL WIRING.

I HEREBY CERTIFY THAT I AM PROPERLY REGISTERED AND/OR LICENSED AS REQUIRED BY LOS ANGELES COUNTY AND STATE OF CALIFORNIA OR THAT I AM THE LEGAL OWNER OF THE ABOVE DESCRIBED RESIDENTIAL PROPERTY.

SIGNATURE OF PERMITTEE Robt. F Hughes

| DISTRICT NO. | GROUP | ZONE | PROCESSED BY |
|---|---|---|---|
| 5106 | F | Q | Coster |

INSPECTION RECORD

5-17-62 Rec'd ~~rec'd~~ [illegible]
Cmp SW to ME

| APPROVALS | DATE | INSPECTOR'S SIGNATURE |
|---|---|---|
| CONDUIT | | |
| WIRING | 5-20-62 | [illegible] |
| FIXTURES | | |
| POWER | 5-20-62 | |
| UTILITY CO. NOTIFIED | | |
| FINAL | | |

INSPECTOR COPY

VALIDATION

CK MO CASH

ARTHUR C. VEIT
Supervising Electrical Engineer

| AC 0 7 9 8 | APR 26 | 2 | 5.60 | M |
|---|---|---|---|---|

# CITY OF IRWINDALE

# APPLICATION FOR ELECTRICAL PERMIT

1

A663-CE806 10-61

COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
BUILDING AND SAFETY DIVISION
JOHN A. LAMBIE, COUNTY ENGINEER
WILLIAM A. JENSEN, SUP'T OF BUILDING

FOR APPLICANT TO FILL IN

| ITEM | NO. | EACH | FEE |
|---|---|---|---|
| OUTLETS: (FIRST 20) LIGHTS RECEPT. SW. | 3 | $.20 | $ 60 |
| OUTLETS: (ADD'L UNITS) LIGHTS RECEPT. SW. | | .10 | |
| LIGHTING FIXTURES: (FIRST 20) | | .20 | |
| LIGHTING FIXTURES: (ADDITIONAL) | | .10 | |
| RANGES CLO. DRYERS WTR. HTRS. | | 1.00 | |
| GARB. DISP. STA. COOK DISHWASH. AUTO.-WASH. SPACE HTRS. STA. APP. (½ H.P. MAX.) | | .50 | |
| MOTORS: OVER NOT OVER H.P. | | | |
| 0 — 1 | | 1.00 | |
| 1 — 3 | | 1.50 | |
| 3 — 8 | | 2.00 | |
| 8 — 15 | | 2.50 | |
| 15 — 50 | | 3.00 | |
| 50 — 100 | | 5.00 | |
| SIGNS: NO. TRANS. / NO. LAMPS | | | |
| SERVICE 0-600V-NOT OVER 200A | | 1.00 | |
| SERVICE 0-600V-OVER 200 A. | | 2.00 | |
| SERVICE OVER 600V | | 5.00 | |
| MISC. | | | |
| TEMPORARY POWER POLE | | | 1 00 |
| PERMIT ISSUING FEE | | 2.00 | 2 00 |
| SUPPLEMENTARY PERMIT ISSUING FEE | | 1.00 | |
| TOTAL FEE | | | $ 3 60 |

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE ABOVE IS CORRECT AND AGREE TO COMPLY WITH ALL COUNTY ORDINANCES AND STATE LAWS REGULATING ELECTRICAL WIRING.

I HEREBY CERTIFY THAT I AM PROPERLY REGISTERED AND/OR LICENSED AS REQUIRED BY LOS ANGELES COUNTY AND STATE OF CALIFORNIA OR THAT I AM THE LEGAL OWNER OF THE ABOVE DESCRIBED RESIDENTIAL PROPERTY.

SIGNATURE OF PERMITTEE Paul E. Marhay

BUILDING ADDRESS 1137 MERIDIAN RD.
LOCALITY DUARTE, CALIF.
NEAREST CROSS ST.
OWNER FRED KATZ
MAIL ADDRESS 8600 VENICE BLVD.
CITY L.A 34 TEL. NO. UP02188
ELECTRICIAN
ADDRESS
CITY TEL. NO.
STATE LICENSE NO.

| DISTRICT NO. | GROUP | ZONE | PROCESSED BY |
|---|---|---|---|
| 5.06 | RP | M2 | Costel |

INSPECTION RECORD

| APPROVALS | DATE | INSPECTOR'S SIGNATURE |
|---|---|---|
| CONDUIT | | |
| WIRING | | |
| FIXTURES | | |
| POWER | | |
| UTILITY CO. NOTIFIED | | |
| FINAL | | |

INSPECTOR COPY

VALIDATION
CK MO CASH

ARTHUR C. VEIT
SUPERVISING ELECTRICAL ENGINEER

LAC 19583 JUN 10 2 3.60

COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
**DIVISION OF BUILDING & SAFETY**
WILLIAM J. FOX, COUNTY ENGINEER

APPLICATION FOR PERMIT

# ELECTRIC 1

| DISTRICT NO. | GROUP | ZONE | PERMIT NO. |
|---|---|---|---|
| 5 | 6 | 1-2 | 6749 |
| RECEIVED BY | READY FOR FIRST INSPECTION | | DATE ISSUED |
| | | | 5/ |

FOR APPLICANT TO FILL IN

ELECTRICIAN K.B. ELECTRIC

ADDRESS 61 E DUARTE RD

CITY ARCADIA TEL. NO. [illegible]

COUNTY LICENSE NO. 291 EXPIRES [illegible]

BUILDING ADDRESS 1137 E MERIDIAN

LOCALITY DUARTE

NEAREST CROSS ST.

OWNER ARDEN ROCK CO.

MAIL ADDRESS

CITY TEL. NO.

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE ABOVE IS CORRECT AND AGREE TO COMPLY WITH ALL COUNTY ORDINANCES AND STATE LAWS REGULATING ELECTRICAL WIRING.

I CERTIFY THAT I POSSESS THE ABOVE VALID LOS ANGELES COUNTY LICENSE, OR I AM THE LEGAL OWNER OF THE RESIDENTIAL PROPERTY DESCRIBED ABOVE.

SIGNATURE OF PERMITTEE [signature]

## PERMIT FEES

| | NUMBER | EACH | FEE |
|---|---|---|---|
| LIGHT OUTLETS | | | |
| RECEPTACLES | | | |
| WALL SWITCHES | | | |
| TOTAL OUTLETS | | 5c | $ |
| ELEC. RANGES | | 25 | |
| ELEC. HEATERS | | 25 | |
| FIXTURES | | 5 | |
| MISC. | | | |
| NUMBER OF LIGHT CIRCUITS | | | |
| NUMBER OF RECEPTACLE CIRCUITS | | | |

## MOTORS

| NUMBER NEW | NUMBER MVD. | HP | HORSEPOWER OVER | HORSEPOWER INC. | FEE EACH | FEE |
|---|---|---|---|---|---|---|
| | | | | ½ & LESS | $ .25 | |
| | | | ½ | 2 | .50 | |
| 1 | | 5 | 2 | 5 | 1.00 | 1 00 |
| | | | 5 | 15 | 1.50 | |
| 1 | | 20 | 15 | 50 | 2.50 | 2 50 |
| | | | 50 | 200 | 5.00 | |
| | | | 200 | 500 | 10.00 | |
| | | | 500 | 1000 | 15.00 | |
| | | | OVER 1000 | | 20.00 | |
| M.G. SET/FREQ. CHANGER-HP | | | | | | |
| WELDERS: AC-KVA | | | | | | |
| GENERATORS - KW | | | | | | |
| TRANSFORMERS - KVA | | | | | | |
| TEMP. MOTORS (75% OF ORIG.) | | | | | | |
| MOVED MOTORS (75% OF ORIG.) | | | | | | |
| MISC. | | | | | | |

## SIGNS

| | | |
|---|---|---|
| NO. | NO. TRANS. | |
| NO. | NO. LAMPS | |

| FOR EACH PERMIT: | | |
|---|---|---|
| WIRING | $1.00 | 1 00 |
| FIXTURES | $1.00 | |
| SUPPLEMENTARY | .50 | |
| TOTAL FEE | | $ 4 50 |

## INSPECTION RECORD

ORIGINAL

## APPROVALS

| | DATE | INSPECTOR'S NAME |
|---|---|---|
| CONDUIT | | |
| WIRING | | |
| FIXTURES | | |
| POWER | | |
| UTILITY CO. NOTIFIED | | |
| FINAL | [illegible] | [illegible] |

76A663 DBS 5A 7-51

# DEPARTMENT OF BUILDING AND SAFETY
## COUNTY OF LOS ANGELES
WILLIAM J. FOX, CHIEF ENGINEER

## APPLICATION FOR PERMIT
# ELECTRIC 1

| DISTRICT NO. | GROUP | ZONE | PERMIT NO. |
|---|---|---|---|
| 5 | C | D-1 | 24132 |
| RECEIVED BY | READY FOR FIRST INSPECTION | | DATE ISSUED |
| M. Arnold | | | 12-3-54 |

FOR APPLICANT TO FILL IN

ELECTRICIAN BROWN & CURTIS
ADDRESS 109 W. LEMON AVE
CITY MONROVIA TEL. NO. EL-86137
COUNTY LICENSE NO. 63022 EXPIRES 6/30/54

BUILDING ADDRESS 1137 E MERIDIAN
LOCALITY DUARTE
NEAREST CROSS ST. BUENA VISTA
OWNER ARROW ROCK CO.
MAIL ADDRESS SAME
CITY TEL. NO.

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE ABOVE IS CORRECT AND AGREE TO COMPLY WITH ALL COUNTY ORDINANCES AND STATE LAWS REGULATING ELECTRICAL WIRING.

I CERTIFY THAT I POSSESS THE ABOVE VALID LOS ANGELES COUNTY LICENSE, OR I AM THE LEGAL OWNER OF THE RESIDENTIAL PROPERTY DESCRISED ABOVE.

SIGNATURE OF PERMITTEE BROWN & CURTIS (C. Edwards)

## PERMIT FEES

| | NUMBER | EACH | FEE |
|---|---|---|---|
| LIGHT OUTLETS | | | |
| RECEPTACLES | | | |
| WALL SWITCHES | | | |
| TOTAL OUTLETS | | 50 | $ |
| ELEC. RANGES | | 25 | |
| ELEC. HEATERS | | 25 | |
| FIXTURES | | 5 | |
| MISC. | | | |
| NUMBER OF LIGHT CIRCUITS | | | |
| NUMBER OF RECEPTACLE CIRCUITS | | | |

### MOTORS

| NUMBER NEW | NUMBER MVD. | HP | HORSEPOWER OVER | HORSEPOWER INC. | FEE EACH | |
|---|---|---|---|---|---|---|
| | | | | ½ & LESS | $ .25 | |
| | | | ½ | 2 | .50 | |
| | | | 2 | 5 | 1.00 | |
| | | | 5 | 15 | 1.50 | |
| | | | 15 | 50 | 2.50 | |
| | | | 50 | 200 | 5.00 | |
| | | | 200 | 500 | 10.00 | |
| | | | 500 | 1000 | 15.00 | |
| | | | OVER 1000 | | 20.00 | |
| M.G. SET/FREQ. CHANGER-HP | | | | | | |
| WELDERS: AC-KVA | | | | | | |
| GENERATORS - KW | | | | | | |
| / TRANSFORMERS - KVA 20 | | | | | | 2 50 |
| TEMP. MOTORS (75% OF ORIG.) | | | | | | |
| MOVED MOTORS (75% OF ORIG.) | | | | | | |
| MISC. | | | | | | |

### SIGNS

| | | |
|---|---|---|
| NO. | NO. TRANS. | |
| NO. | NO. LAMPS | |

| FOR EACH PERMIT: | | |
|---|---|---|
| WIRING | $1.00 | 1 00 |
| FIXTURES | $1.00 | |
| SUPPLEMENTARY | .50 | |
| TOTAL FEE | | $ 3 50 |

## INSPECTION RECORD

Final - 12-23-54

ORIGINAL

## APPROVALS

| | DATE | INSPECTOR'S NAME |
|---|---|---|
| CONDUIT | | |
| WIRING | | |
| FIXTURES | | |
| POWER | | |
| UTILITY CO. NOTIFIED | | |
| FINAL | 12-23-54 | |

COUNTY OF LOS ANGELES
Department of County Engineer
DIVISION OF BUILDING & SAFETY
WILLIAM J. FOX, County Engineer

# APPLICATION FOR PERMIT
# ELECTRIC 1

| DISTRICT NO. | GROUP | ZONE | PERMIT NO. |
|---|---|---|---|
| 5 | | M-2 | 1221 |
| RECEIVED BY | READY FOR FIRST INSPECTION | | DATE ISSUED |
| B Parker | | | |

FOR APPLICANT TO FILL IN

ELECTRICIAN K. B. ELECTRIC Co
ADDRESS 61 E DUARTE RD.
CITY ARCADIA TEL. NO. D07481
COUNTY LICENSE NO. 291 EXPIRES 6-30-[illegible]

## PERMIT FEES

| | NUMBER | EACH | FEE |
|---|---|---|---|
| LIGHT OUTLETS | | | |
| RECEPTACLES | | | |
| WALL SWITCHES | | | |
| TOTAL OUTLETS | | 5c | $ |
| ELEC. RANGES | | 25 | |
| ELEC. HEATERS | | 25 | |
| FIXTURES | | 5 | |
| MISC. | | | |
| NUMBER OF LIGHT CIRCUITS | | | |
| NUMBER OF RECEPTACLE CIRCUITS | | | |

## MOTORS

| NUMBER NEW | NUMBER MVD. | HP | HORSEPOWER OVER | HORSEPOWER INC. | FEE EACH | FEE |
|---|---|---|---|---|---|---|
| | | | | ½ & LESS | $ .25 | |
| | | | ½ | 2 | .50 | |
| | | | 2 | 5 | 1.00 | |
| | | | 5 | 15 | 1.50 | |
| | | | 15 | 50 | 2.50 | |
| 1 | | | 50 | 200 | 5.00 | 5 00 |
| | | | 200 | 500 | 10.00 | |
| | | | 500 | 1000 | 15.00 | |
| | | | OVER 1000 | | 20.00 | |

| | |
|---|---|
| M.G. SET/FREQ. CHANGER-HP | |
| WELDERS: AC-KVA | |
| GENERATORS - KW | |
| TRANSFORMERS - KVA | |
| TEMP. MOTORS (75% OF ORIG.) | |
| MOVED MOTORS (75% OF ORIG.) | |
| MISC. | |

## SIGNS

| | | |
|---|---|---|
| NO. | NO. TRANS. | |
| NO. | NO. LAMPS | |

FOR EACH PERMIT:

| | | |
|---|---|---|
| WIRING | $1.00 | 1 00 |
| FIXTURES | $1.00 | |
| SUPPLEMENTARY | .50 | |
| TOTAL FEE | | $ 6 00 |

BUILDING ADDRESS 1137 E MERIDIAN
LOCALITY DUARTE
NEAREST CROSS ST. ~~[illegible]~~ S Sifal
OWNER ARROW ROCK Co
MAIL ADDRESS
CITY TEL. NO.

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE ABOVE IS CORRECT AND AGREE TO COMPLY WITH ALL COUNTY ORDINANCES AND STATE LAWS REGULATING ELECTRICAL WIRING.

I CERTIFY THAT I POSSESS THE ABOVE VALID LOS ANGELES COUNTY LICENSE, OR I AM THE LEGAL OWNER OF THE RESIDENTIAL PROPERTY DESCRIBED ABOVE.

SIGNATURE OF PERMITTEE [illegible]

## INSPECTION RECORD

ORIGINAL

## APPROVALS

| | DATE | INSPECTOR'S NAME |
|---|---|---|
| CONDUIT | | |
| WIRING | | |
| FIXTURES | | |
| POWER | | |
| UTILITY CO. NOTIFIED | | |
| FINAL | 5 [illegible] | [illegible] |

76A663 DBS# 5A 2-53

IRWINDALE

6A663-CE806 12-58

# APPLICATION FOR ELECTRIC PERMIT

1

COUNTY OF LOS ANGELES
DEPARTMENT OF COUNTY ENGINEER
BUILDING AND SAFETY DIVISION
JOHN A. LAMBIE, COUNTY ENGINEER
CASSATT D. GRIFFIN, SUP'T OF BUILDING

BUILDING ADDRESS 1137 MERIDIAN
LOCALITY IRWINDALE
NEAREST CROSS ST. ———
OWNER PETER KIEWIT SONS
MAIL ADDRESS P.O. Box 748
CITY ARCADIA TEL. NO. EA 5-0121
ELECTRICIAN ELECTRIC SERVICE & SUPPLY
ADDRESS 2704 EAST FOOTHILL BLVD.
CITY PASADENA TEL. NO. SY 5-8641
STATE LICENSE NO. 169577

DISTRICT NO. 50 | GROUP D-4 | ZONE | PROCESSED BY Underwood

## FOR APPLICANT TO FILL IN
## PERMIT FEES

| ITEM | NUMBER | EACH | FEE |
|---|---|---|---|
| OUTLETS: LIGHTS 34 RECEPT. SW. | | $ .10 | $ 40 |
| LIGHTING FIXTURES | | .10 | |
| ELEC. RANGES CLO. DRYERS WATER HEATERS | | .50 | |
| ELEC. SPACE HTRS. DISHWASHERS GARBAGE DISPOSERS AUTO.- WASHERS STA. COOKING UNITS | | .25 | |
| MOTORS: OVER INC. H.P. | | | |
| 0 — ½ | | .25 | |
| ½ — 2 | | .50 | |
| 2 — 5 | | 1.00 | |
| 5 — 15 | | 1.50 | |
| 15 — 50 | | 2.50 | |
| 50 — 200 | | 5.00 | |
| SIGNS: NO. TRANS. / NO. LAMPS | | | |
| SERVICE 0-600V | | 1.00 | 1 00 |
| SERVICE OVER 600V | | 5.00 | |
| MISC. | | | |
| | | | |
| | | | |
| WIRING PERMIT | | 1.00 | 1 00 |
| FIXTURE PERMIT | | 1.00 | |
| SUPPLEMENTARY PERMIT | | .50 | |
| TOTAL FEE | | | $ 2 40 |

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE ABOVE IS CORRECT AND AGREE TO COMPLY WITH ALL COUNTY ORDINANCES AND STATE LAWS REGULATING ELECTRICAL WIRING.

I HEREBY CERTIFY THAT I AM PROPERLY REGISTERED AND/OR LICENSED AS REQUIRED BY LOS ANGELES COUNTY AND STATE OF CALIFORNIA OR THAT I AM THE LEGAL OWNER OF THE ABOVE DESCRIBED RESIDENTIAL PROPERTY.

SIGNATURE OF PERMITTEE [signature]

## INSPECTION RECORD

## APPROVALS

| | DATE | INSPECTOR'S SIGNATURE |
|---|---|---|
| CONDUIT | | |
| WIRING | 4/14/83 | [signature] |
| FIXTURES | | |
| POWER | | |
| UTILITY CO. NOTIFIED | 4/14/83 | [signature] |
| FINAL | " | " |

VALIDATION
CK MO CASH

ARTHUR C. VEIT,
SUPERVISING ELECTRICAL ENGINEER

LAC 835 18 APR 14 2 2.40 *

# DEPARTMENT OF BUILDING
# COUNTY OF LOS ANGELES

## APPLICATION FOR PERMIT
## BUILDING

1

| PLANS FILED | BLDG. ZONE | FIRE ZONE | DISTRICT NO. | PLAN CHK. FEE RECEIPT NO. | PERMIT NO. |
|---|---|---|---|---|---|
| TYPE OF BLDG. I II III IV V X | | GROUP | DATE OF APPL. | RECEIVED BY | DATE ISSUED |
| BLDG. SETBACK LINE | | ORD. NO. | | | |

**APPLICANT FILL IN HEAVILY OUTLINED PORTION ONLY**

ARCHITECT OR ENGINEER
- NAME
- ADDRESS
- CITY
- STATE LICENSE NO. TEL. NO.

CONTRACTOR
- NAME
- ADDRESS
- CITY
- STATE LICENSE NO. TEL. NO.

BUILDING ADDRESS
LOCALITY
NEAREST CROSS ST.

OWNER
- NAME
- MAIL ADDRESS
- CITY TEL NO.

LEGAL DESCRIP.

| LOT | SIZE OF LOT |
|---|---|
| BLOCK | NO. OF BLDGS. NOW ON LOT |
| TRACT | USE OF BLDG. NOW ON LOT |

### CLASS OF WORK

| | | | | | |
|---|---|---|---|---|---|
| NEW | | ADDITION | | DEMOLISH | |
| ALTERATION | | REPAIR | | MOVING | |

| | | |
|---|---|---|
| USE OF BLDG. | | NO. OF ROOMS |
| SIZE OF BLDG. | STORIES | NO. OF FAMILIES |

### DESCRIPTION OF WORK

### SPECIFICATIONS

FOUNDATION

| | EXTERIOR | PIERS |
|---|---|---|
| MATERIAL | | |
| THICKNESS—TOP | | |
| THICKNESS—BOTTOM | | |
| DEPTH IN GROUND | | |

SUPERSTRUCTURE

| | SIZE | SPACING | SPAN |
|---|---|---|---|
| R. W. PLATES (SILL) | | | |
| GIRDERS | | | |
| JOISTS—FLOOR | | | |
| JOISTS—CEILING | | | |
| BEARING WALLS | | | |
| PARTITIONS | | | |
| ROOF RAFTERS | | | |
| SILL BOLTS | | | |

COVERING

| WALL | ROOF |
|---|---|
| | |

### CORRECTIONS

I HEREBY ACKNOWLEDGE THAT I HAVE READ THIS APPLICATION AND STATE THAT THE ABOVE IS CORRECT AND AGREE TO COMPLY WITH ALL COUNTY ORDINANCES AND STATE LAWS REGULATING BUILDING CONSTRUCTION.

SIGN
OWNER OR AUTHORIZED AGENT

ORIGINAL

### FINAL APPROVAL

| VALUATION $ | P.C. FEE $ | DATE | INSPECTOR'S NAME |
|---|---|---|---|
| | FEE $ | | |

76J425 DBS 63 2/52

**DEPARTMENT OF COUNTY ENGINEER**
**COUNTY OF LOS ANGELES**
**WILLIAM J. FOX, COUNTY ENGINEER**
**DIVISION OF BUILDING AND SAFETY**

To: **Chief Building Inspector—Attn. Supervisor of Special Inspectors**

SUBJECT: JOB ASSIGNMENT OF SPECIAL INSPECTORS

**This portion to be filled in by the personnel of the district office**

DISTRICT NO. 5 JOB LOCATION 1137 E MERIDIAN, Duarte

CONTRACTOR ARROW ROCK Address SAME

OWNER ARROW ROCK Address SAME

SPECIAL INSPECTOR Louis L. Perley Address 7237 E. Hart St. Paramount

CARD NO. 177 Phone METCALF 37277 TR-7727

CLASSIFICATION:- CONCRETE ( ) MASONRY ( ) WELDING (X) ( )

**This portion to be filled in by Special Inspector**

I made personal contact with the above District Office: DATE June 11, 1953

I will commence inspection of the above job: DATE June 11, 1953

I will agree to give constant personal inspection on the above job on work assigned to me as SPECIAL INSPECTOR during progress of said assigned work.

Louis L. Perley
Signature of Special Inspector

Make duplicate copies.
Original Copy to Central Office.

# Appendix G

# Aerial Photographs

LACDPW - Irwindale Quarry

1137 Meridian Street

Irwindale, CA 91706

Inquiry Number: 4723693.9

September 12, 2016

# The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

# EDR Aerial Photo Decade Package

09/12/16

**Site Name:**

LACDPW - Irwindale Quarry
1137 Meridian Street
Irwindale, CA 91706
EDR Inquiry # 4723693.9

**Client Name:**

Leighton Consulting
17781 Cowan
Irvine, CA 92614
Contact: Meredith Church

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

***Search Results:***

| Year | Scale | Details | Source |
|---|---|---|---|
| 2012 | 1"=500' | Flight Year: 2012 | USDA/NAIP |
| 2010 | 1"=500' | Flight Year: 2010 | USDA/NAIP |
| 2009 | 1"=500' | Flight Year: 2009 | USDA/NAIP |
| 2005 | 1"=500' | Flight Year: 2005 | USDA/NAIP |
| 2002 | 1"=500' | Flight Date: May 22, 2002 | USDA |
| 1994 | 1"=500' | Acquisition Date: June 01, 1994 | USGS/DOQQ |
| 1990 | 1"=500' | Flight Date: September 06, 1990 | USDA |
| 1981 | 1"=500' | Flight Date: February 21, 1981 | EDR Proprietary Brewster Pacific |
| 1977 | 1"=500' | Flight Date: April 25, 1977 | EDR Proprietary Brewster Pacific |
| 1972 | 1"=500' | Flight Date: November 18, 1972 | EDR Proprietary Brewster Pacific |
| 1964 | 1"=500' | Flight Date: July 28, 1964 | USGS |
| 1952 | 1"=500' | Flight Date: August 02, 1952 | USGS |
| 1938 | 1"=500' | Flight Date: May 06, 1938 | USDA |
| 1928 | 1"=500' | Flight Date: January 01, 1928 | USGS |

**When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.**


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INQUIRY #: 4723693.9
YEAR: 2012
= 500'
N
EDR


INQUIRY #: 4723693.9
YEAR: 2010
= 500'
N
EDR


INQUIRY #: 4723693.9
YEAR: 2009
= 500'
N
EDR


INQUIRY #: 4723693.9
YEAR: 2005
= 500'
N
EDR


INQUIRY #: 4723693.9
YEAR: 2002
= 500'
N
EDR


INQUIRY #: 4723693.9
YEAR: 1994
= 500'
N
EDR


INQUIRY #: 4723693.9
YEAR: 1990
= 500'
N
EDR


INQUIRY #: 4723693.9
YEAR: 1981
= 500'
N
EDR


INQUIRY #: 4723693.9
YEAR: 1977
= 500'
N
EDR



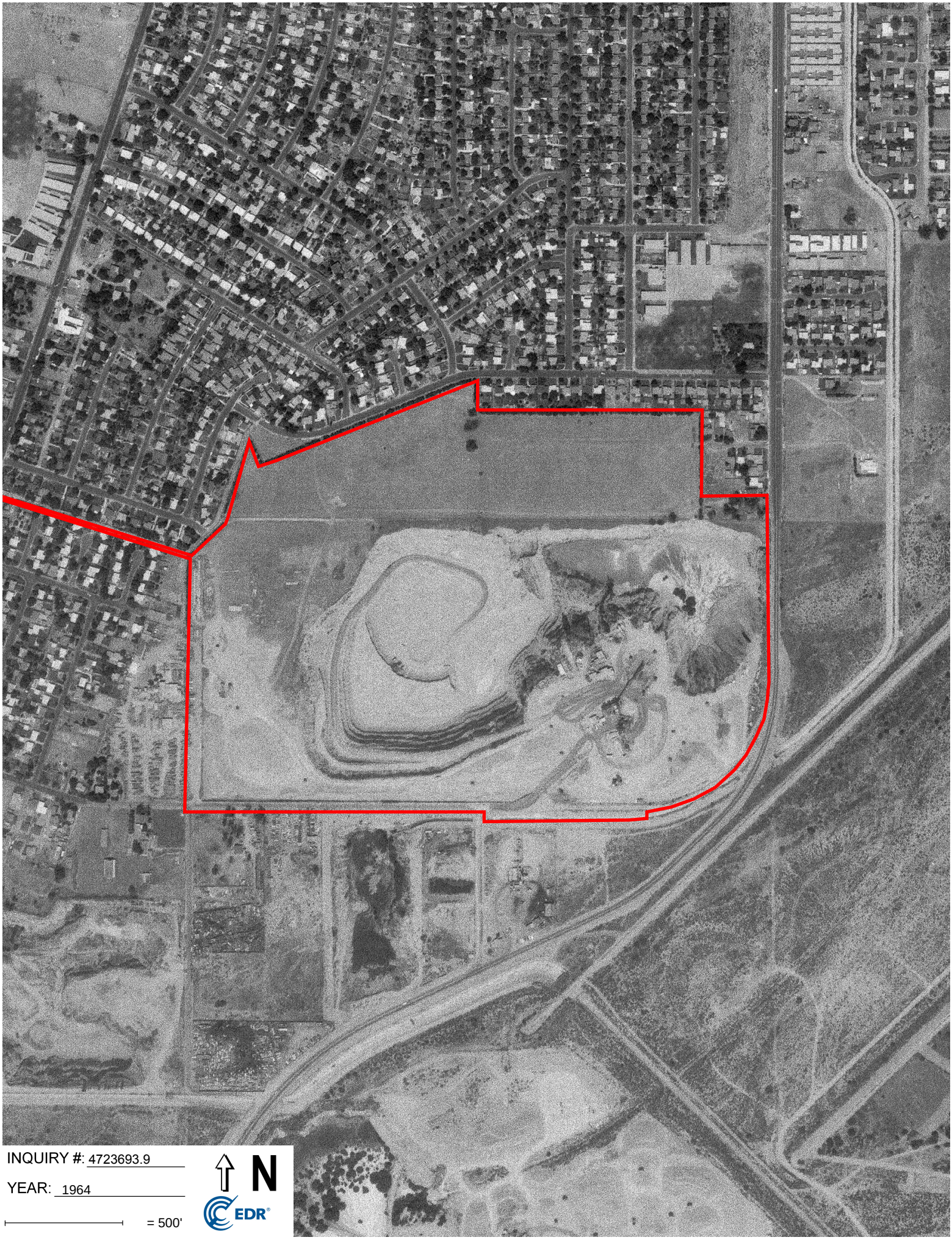
INQUIRY #: 4723693.9

YEAR: 1972

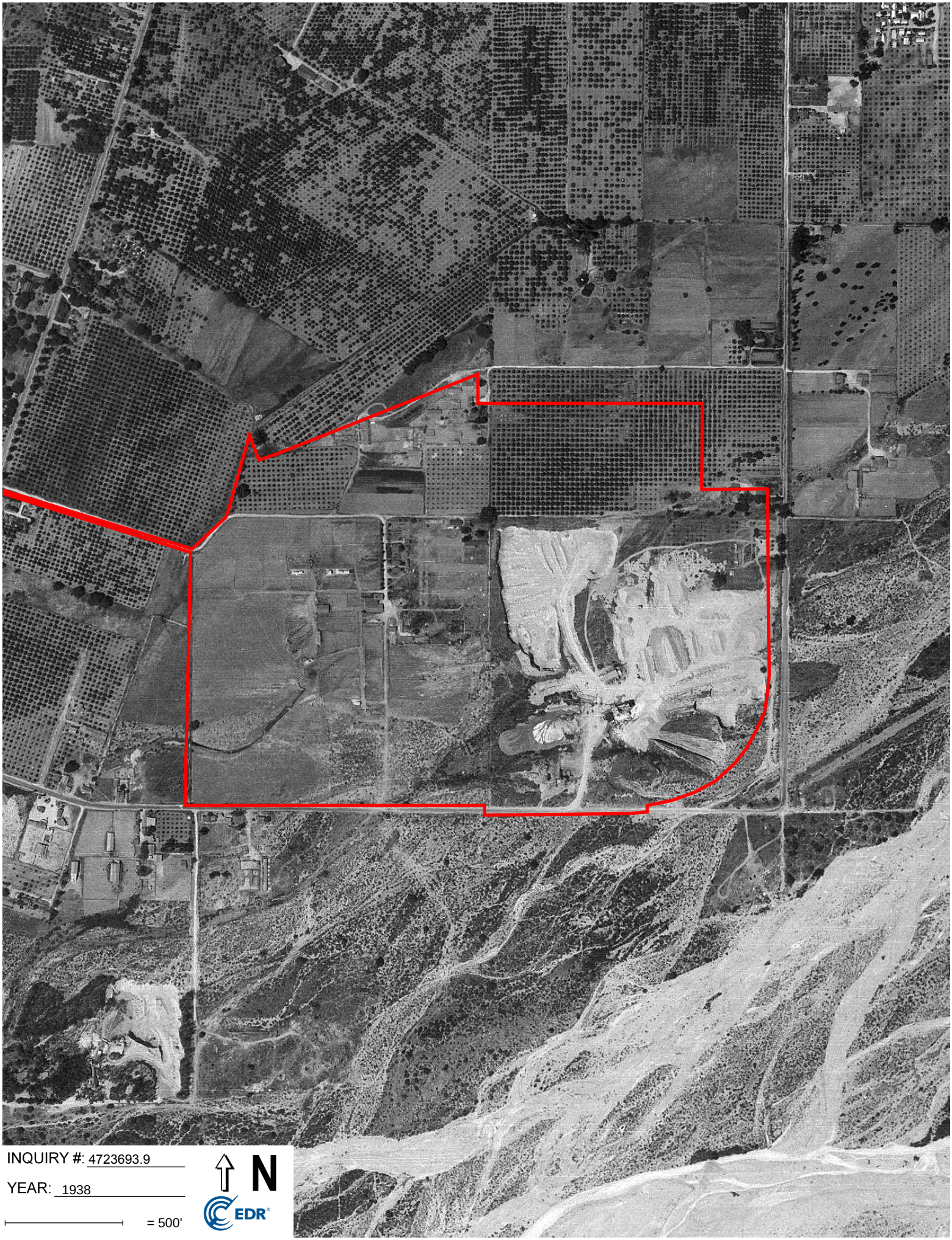
= 500'

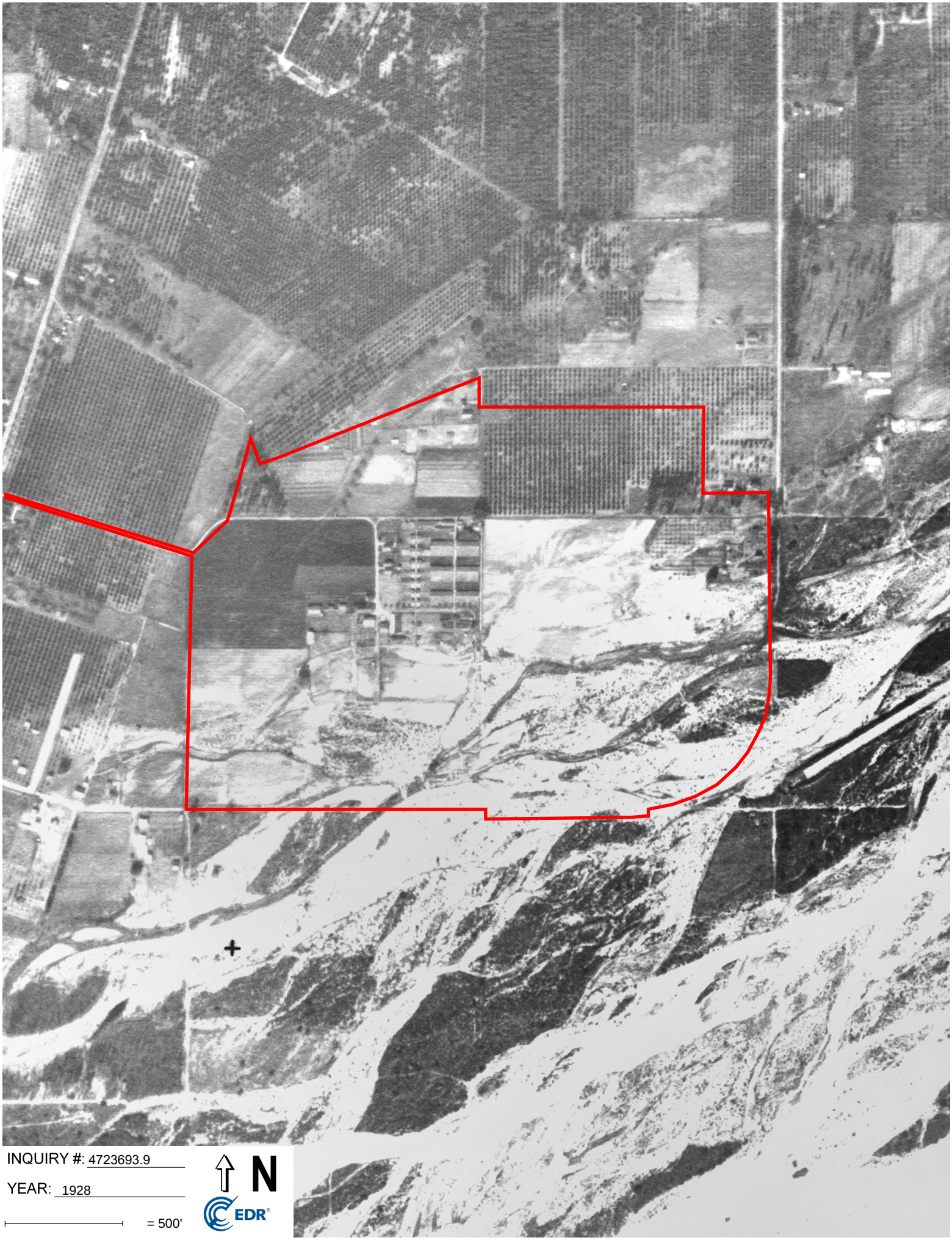
N

EDR


INQUIRY #: 4723693.9
YEAR: 1964
= 500'
N
EDR


INQUIRY #: 4723693.9
YEAR: 1952
= 500'
N
EDR


INQUIRY #: 4723693.9
YEAR: 1938
= 500'
N
EDR



INQUIRY #: 4723693.9

YEAR: 1928

= 500'

N

EDR

# Appendix H

# Sanborn Maps

LACDPW - Irwindale Quarry

1137 Meridian Street

Irwindale, CA 91706

Inquiry Number: 4723693.3

September 09, 2016

# Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

# Certified Sanborn® Map Report

09/09/16

**Site Name:**

LACDPW - Irwindale Quarry
1137 Meridian Street
Irwindale, CA 91706
EDR Inquiry # 4723693.3

**Client Name:**

Leighton Consulting
17781 Cowan
Irvine, CA 92614
Contact: Meredith Church

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Leighton Consulting were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

## *Certified Sanborn Results:*

**Certification #** AC53-4442-A260

**PO #** 603287.052

**Project** 603287.052

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: AC53-4442-A260

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

*The Sanborn Library LLC Since 1866™*

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# Appendix I

# Topographic Maps

LACDPW - Irwindale Quarry

1137 Meridian Street

Irwindale, CA 91706

Inquiry Number: 4723693.4

September 09, 2016

# EDR Historical Topo Map Report

## with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

# EDR Historical Topo Map Report

09/09/16

**Site Name:**

LACDPW - Irwindale Quarry
1137 Meridian Street
Irwindale, CA 91706
EDR Inquiry # 4723693.4

**Client Name:**

Leighton Consulting
17781 Cowan
Irvine, CA 92614
Contact: Meredith Church

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Leighton Consulting were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

***Search Results:***

**P.O.#** 603287.052
**Project:** 603287.052

***Coordinates:***

| | |
|---|---|
| **Latitude:** | 34.123241 34° 7' 24" North |
| **Longitude:** | -117.982023 -117° 58' 55" West |
| **UTM Zone:** | Zone 11 North |
| **UTM X Meters:** | 409441.82 |
| **UTM Y Meters:** | 3776256.21 |
| **Elevation:** | 245.31' above sea level |

**Maps Provided:**

| | |
|---|---|
| 2012 | 1923, 1925 |
| 1981 | 1900, 1904 |
| 1972 | 1898 |
| 1966 | 1896, 1897 |
| 1953 | 1894 |
| 1939, 1941 | |
| 1933 | |
| 1926, 1927, 1928 | |

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## *Topo Sheet Key*

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

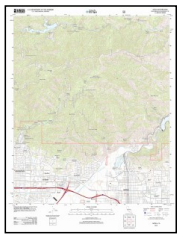
### 2012 Source Sheets



El Monte
2012
7.5-minute, 24000



Mount Wilson
2012
7.5-minute, 24000

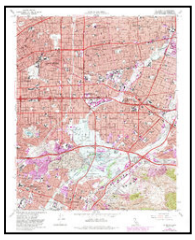


Azusa
2012
7.5-minute, 24000



Baldwin Park
2012
7.5-minute, 24000

### 1981 Source Sheets



El Monte
1981
7.5-minute, 24000
Photo Revised 1981
Aerial Photo Revised 1978

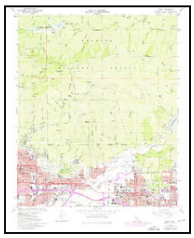


Baldwin Park
1981
7.5-minute, 24000
Photo Revised 1981
Aerial Photo Revised 1978

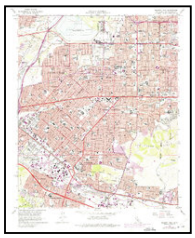
### 1972 Source Sheets



Mt. Wilson
1972
7.5-minute, 24000
Photo Revised 1972
Aerial Photo Revised 1972



Azusa
1972
7.5-minute, 24000
Photo Revised 1972
Aerial Photo Revised 1972

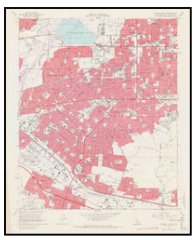


Baldwin Park
1972
7.5-minute, 24000
Photo Revised 1972
Aerial Photo Revised 1972



El Monte
1972
7.5-minute, 24000
Photo Revised 1972
Aerial Photo Revised 1972

### 1966 Source Sheets



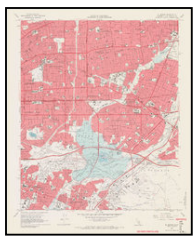
Baldwin Park
1966
7.5-minute, 24000
Aerial Photo Revised 1964



Azusa
1966
7.5-minute, 24000
Aerial Photo Revised 1964



Mt. Wilson
1966
7.5-minute, 24000
Aerial Photo Revised 1964



El Monte
1966
7.5-minute, 24000
Aerial Photo Revised 1964

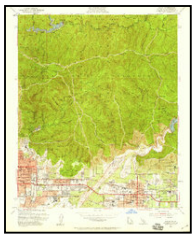
## *Topo Sheet Key*

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### 1953 Source Sheets



Baldwin Park
1953
7.5-minute, 24000
Aerial Photo Revised 1952



Azusa
1953
7.5-minute, 24000
Aerial Photo Revised 1952



Mt. Wilson
1953
7.5-minute, 24000
Aerial Photo Revised 1952



El Monte
1953
7.5-minute, 24000
Aerial Photo Revised 1952

### 1939, 1941 Source Sheets



Azusa
1939
7.5-minute, 24000



Sierra Madre
1941
7.5-minute, 24000

### 1933 Source Sheets



Sierra Madre
1933
7.5-minute, 24000



Azusa
1933
7.5-minute, 24000

### 1926, 1927, 1928 Source Sheets



El Monte
1926
7.5-minute, 24000



Puente
1927
7.5-minute, 24000



Azusa
1928
7.5-minute, 24000



Sierra Madre
1928
7.5-minute, 24000

## *Topo Sheet Key*

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### 1923, 1925 Source Sheets



El Monte
1923
7.5-minute, 24000

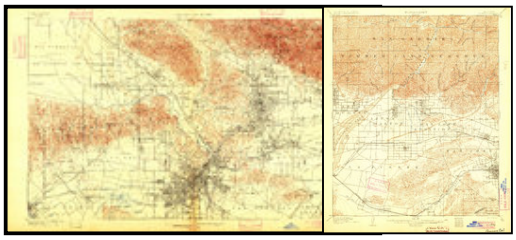


Azusa
1925
7.5-minute, 24000

### 1900, 1904 Source Sheets



Pasadena
1900
15-minute, 62500



Los Angeles
1900
15-minute, 62500

Pomona
1904
15-minute, 62500

### 1898 Source Sheets



Pomona
1898
15-minute, 62500

### 1896, 1897 Source Sheets



Pasadena
1896
15-minute, 62500



Pomona
1897
15-minute, 62500

## *Topo Sheet Key*

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### 1894 Source Sheets



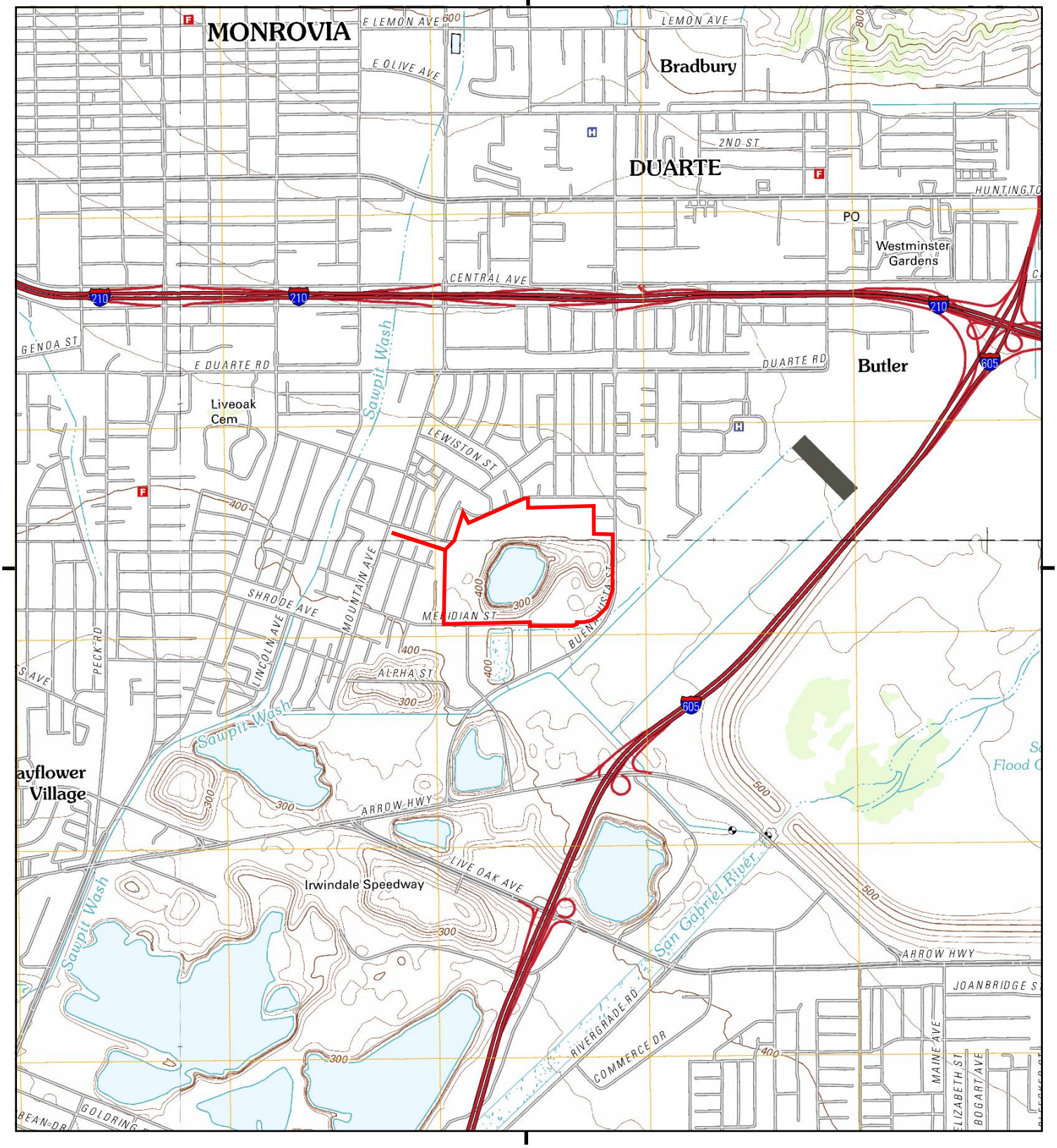
Pomona
1894
15-minute, 62500



Los Angeles
1894
15-minute, 62500

# Historical Topo Map

2012




This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

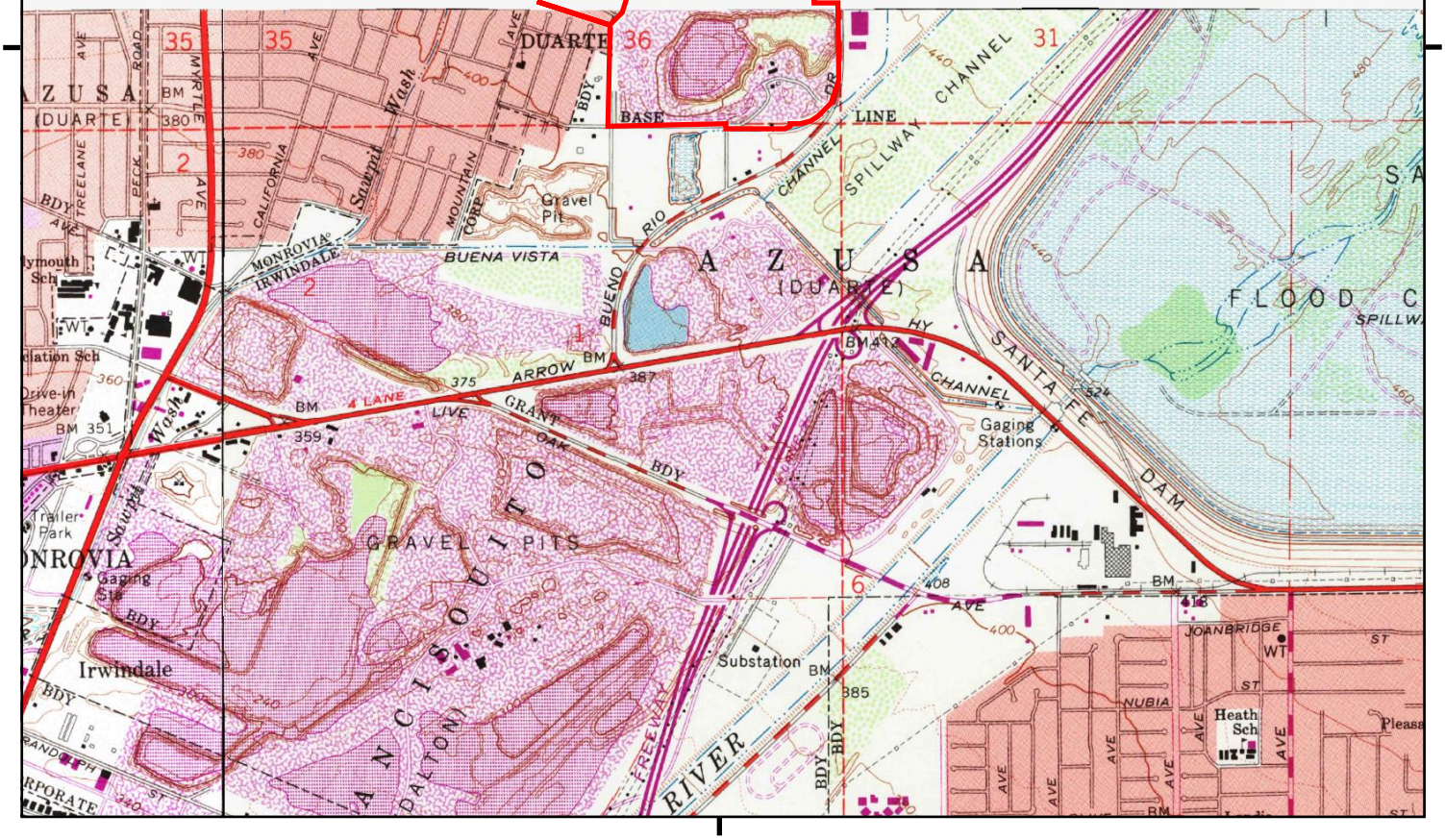
NW N NE
W E
SW S SE

TP, Baldwin Park, 2012, 7.5-minute
NE, Azusa, 2012, 7.5-minute
SW, El Monte, 2012, 7.5-minute
NW, Mount Wilson, 2012, 7.5-minute

SITE NAME: LACDPW - Irwindale Quarry
ADDRESS: 1137 Meridian Street
Irwindale, CA 91706
CLIENT: Leighton Consulting

N

UNMAPPED




This report includes information from the following map sheet(s).

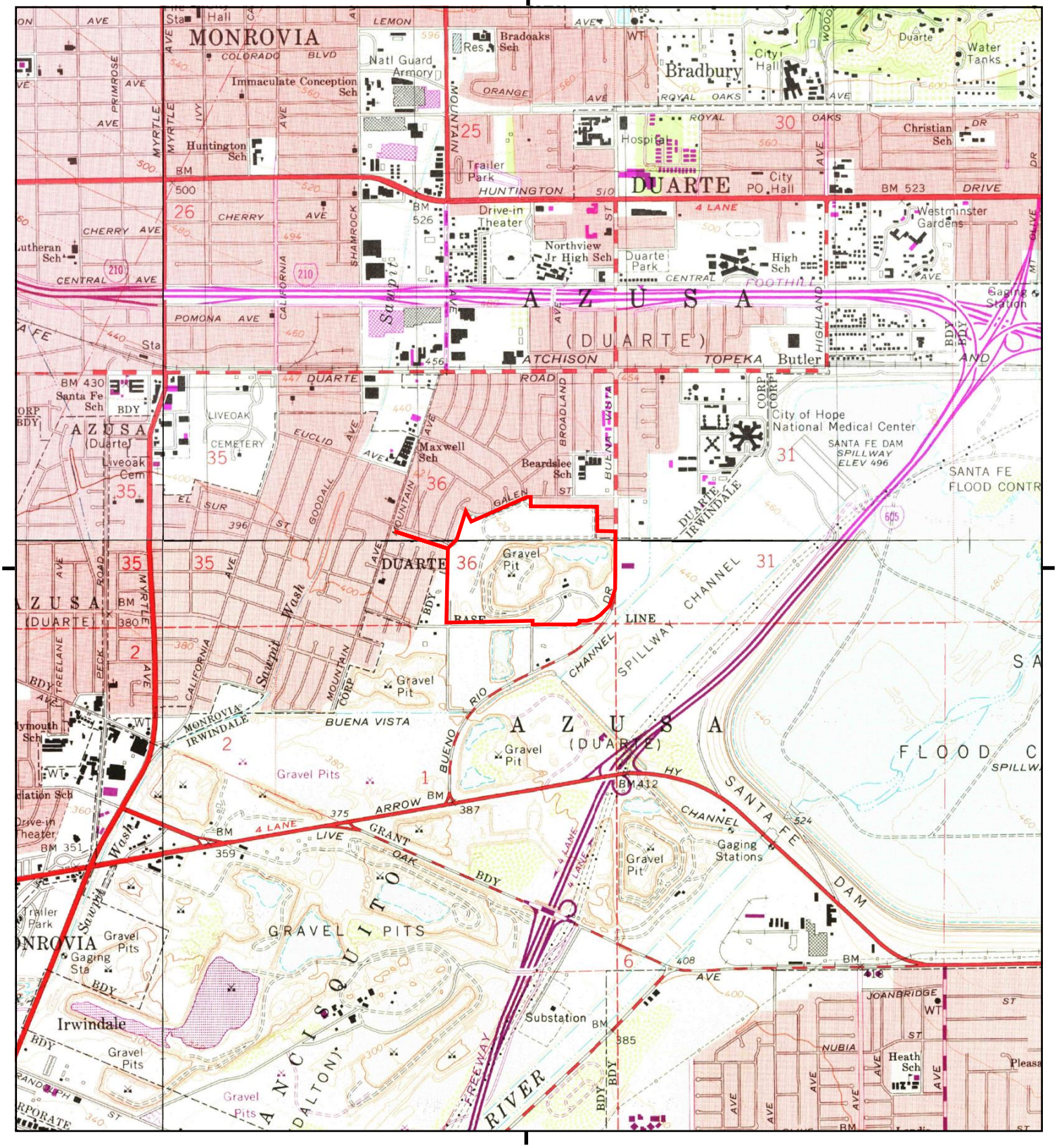
0 Miles 0.25 0.5 1 1.5

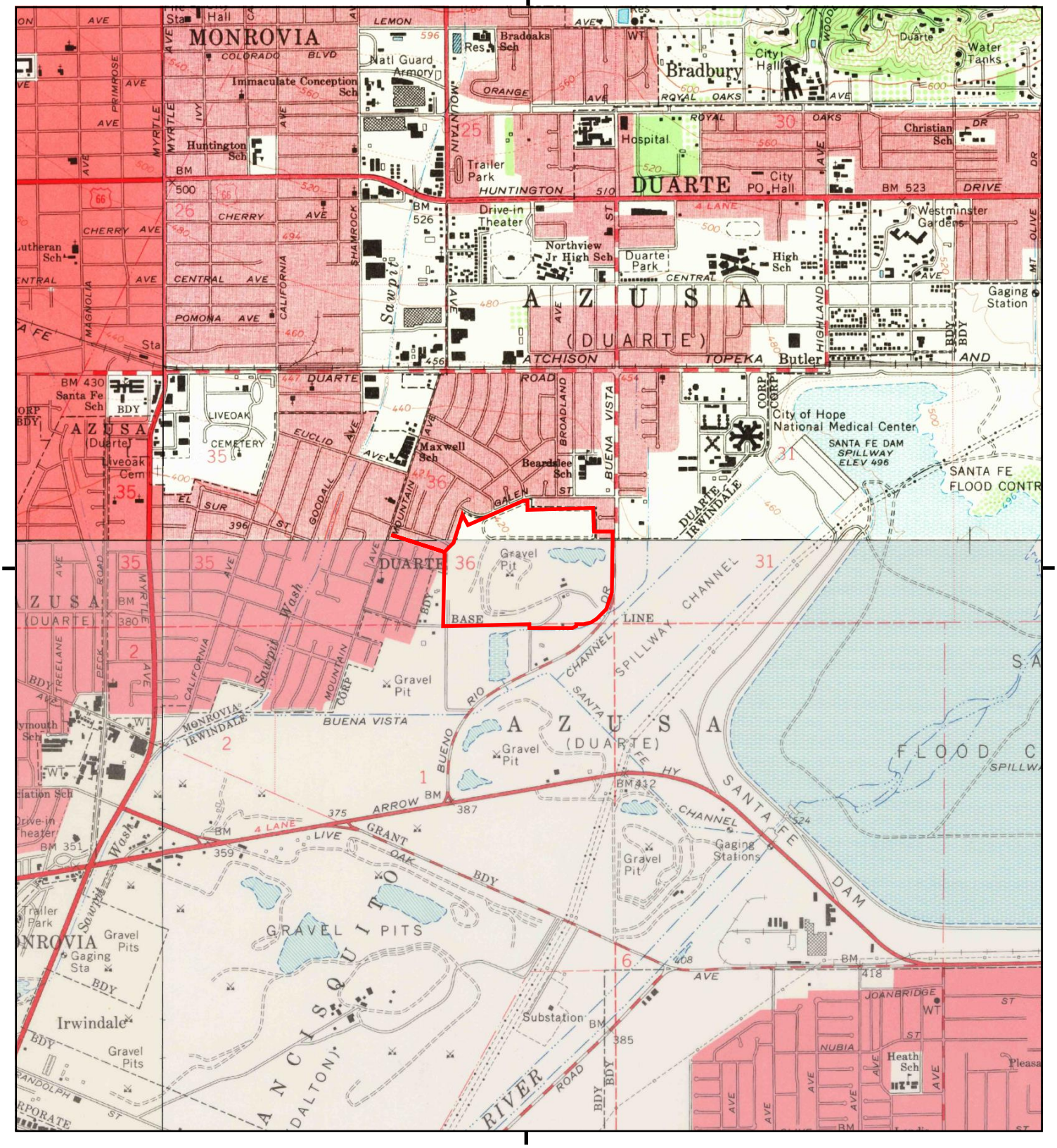
NW N NE
W E
SW S SE

TP, Baldwin Park, 1981, 7.5-minute
SW, El Monte, 1981, 7.5-minute

SITE NAME: LACDPW - Irwindale Quarry
ADDRESS: 1137 Meridian Street
Irwindale, CA 91706
CLIENT: Leighton Consulting

N


MONROVIA
Bradbury
DUARTE
AZUSA
(DUARTE)
Gravel Pit
Gravel Pits
GRAVEL PITS
Irwindale
Gaging Sta
Gaging Stations
Substation
Trailer Park
Drive-in Theater
Hospital
City Hall
City PO Hall
Natl Guard Armory
Immaculate Conception Sch
Huntington Sch
Bradoaks Sch
Northview Jr High Sch
High Sch
Duarte Park
Maxwell Sch
Beardslee Sch
Heath Sch
Christian Sch
Lutheran Sch
Santa Fe Sch
Liveoak Cem
Water Tanks
Westminster Gardens
City of Hope National Medical Center
SANTA FE DAM SPILLWAY ELEV 496
SANTA FE FLOOD CONTR
Gaging Station
Sawpit Wash
Arroyo Seco
Santa Fe Dam
Santa Fe Channel
Spillway Channel
Rio Hondo
Buena Vista
Monrovia Irwindale
Duarte Irwindale
Foothill Freeway
River
Joanbridge
Nubia
Pleasant
Lemon Ave
Colorado Blvd
Huntington Drive
Duarte Road
Pomona Ave
Central Ave
Cherry Ave
Myrtle Ave
Mountain Ave
Buena Vista
Arrow Hy
Live Oak
Grant
Atchison Topeka Butler
Broadland
Goodall
Euclid Ave
El Sur St
Galen
Base Line
Primrose Ave
Ivy Ave
Shamrock
California
Royal Oaks Ave
Woodlyn
Olive
Highland
Corp
Trailer Park
Gravel Pits
Gaging Sta
Irwindale
Gravel Pits
Gravel Pits
Gravel Pits
Gravel Pit
Gravel Pit
Gravel Pit




This report includes information from the following map sheet(s).

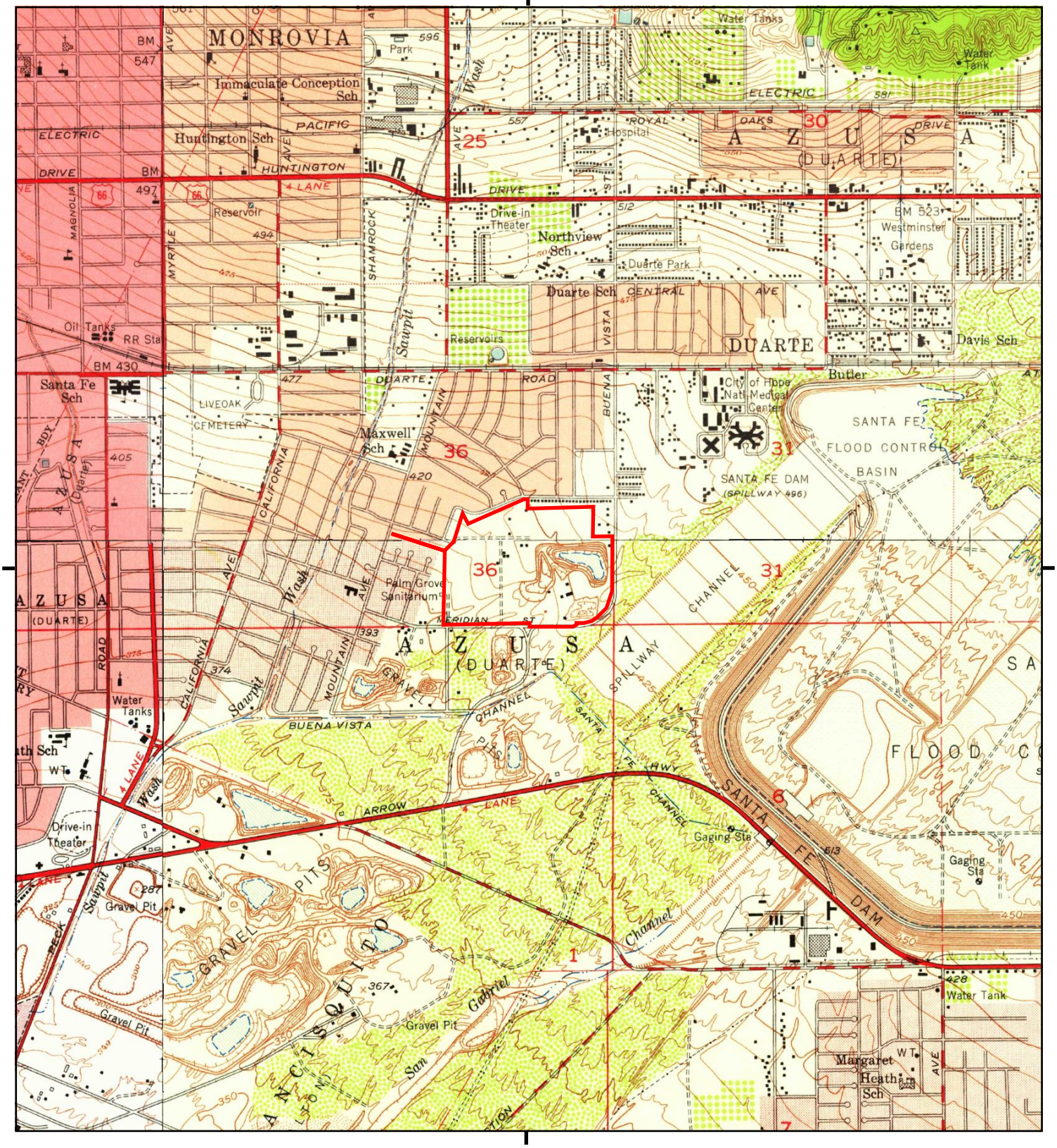
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Baldwin Park, 1966, 7.5-minute
NE, Azusa, 1966, 7.5-minute
SW, El Monte, 1966, 7.5-minute
NW, Mt. Wilson, 1966, 7.5-minute

SITE NAME: LACDPW - Irwindale Quarry
ADDRESS: 1137 Meridian Street
Irwindale, CA 91706
CLIENT: Leighton Consulting

N




This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

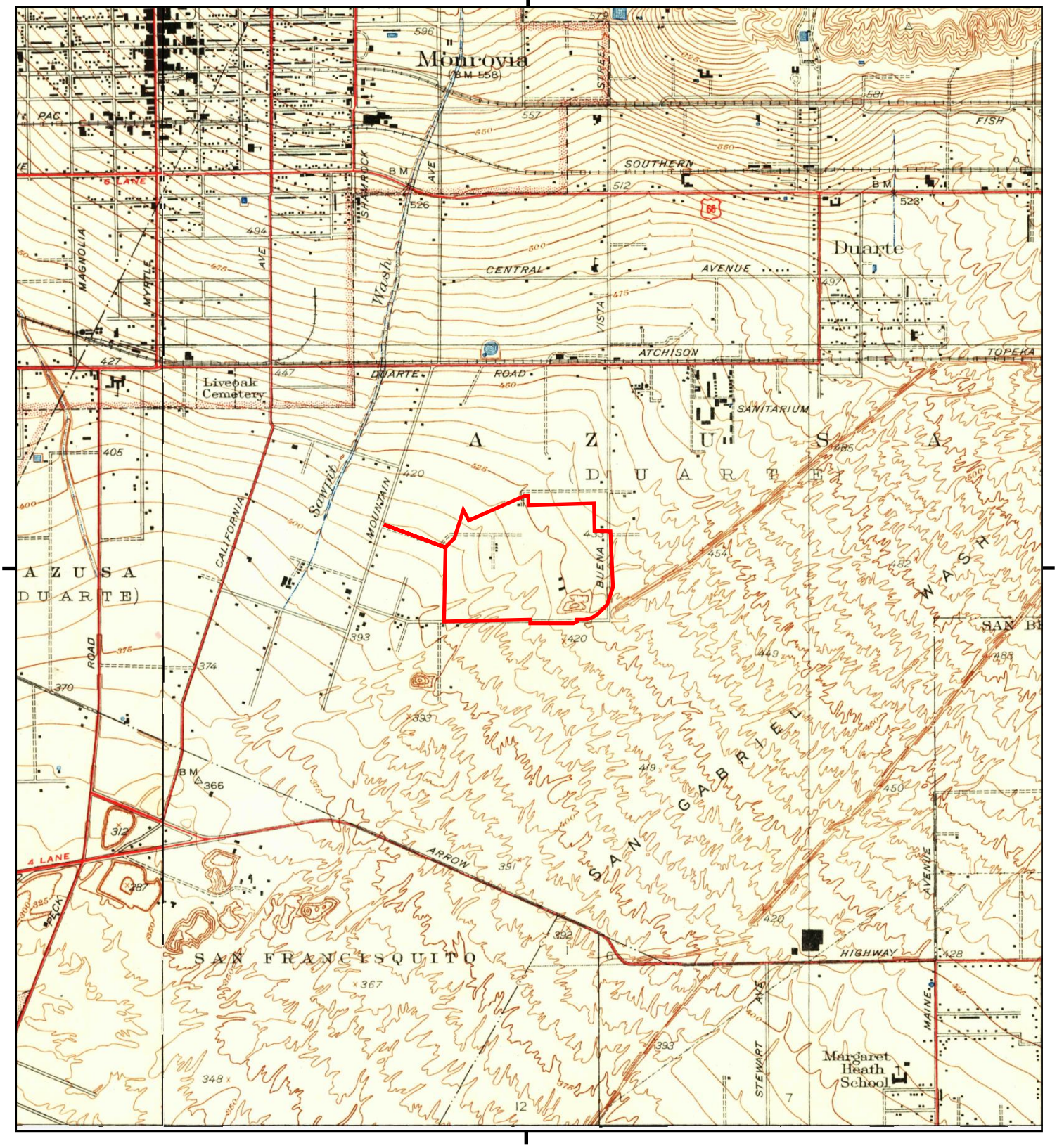
TP, Baldwin Park, 1953, 7.5-minute
NE, Azusa, 1953, 7.5-minute
SW, El Monte, 1953, 7.5-minute
NW, Mt. Wilson, 1953, 7.5-minute

SITE NAME: LACDPW - Irwindale Quarry
ADDRESS: 1137 Meridian Street
Irwindale, CA 91706
CLIENT: Leighton Consulting

N

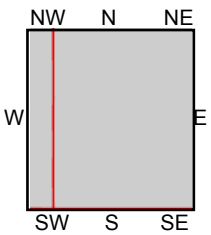
# Historical Topo Map

1939, 1941




This report includes information from the following map sheet(s).

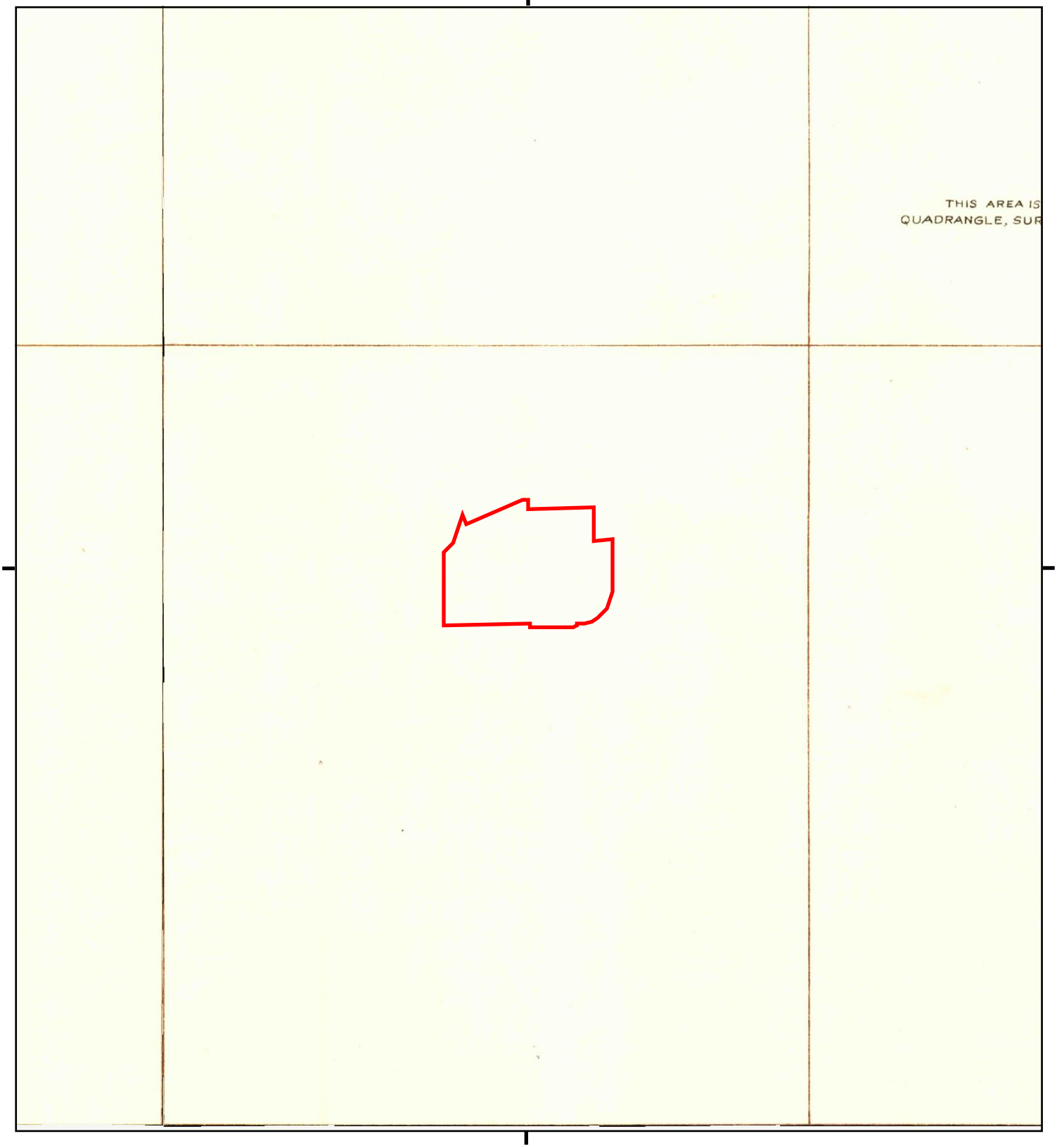
0 Miles 0.25 0.5 1 1.5




TP, Azusa, 1939, 7.5-minute
NW, Sierra Madre, 1941, 7.5-minute

SITE NAME: LACDPW - Irwindale Quarry
ADDRESS: 1137 Meridian Street
Irwindale, CA 91706
CLIENT: Leighton Consulting

N




This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

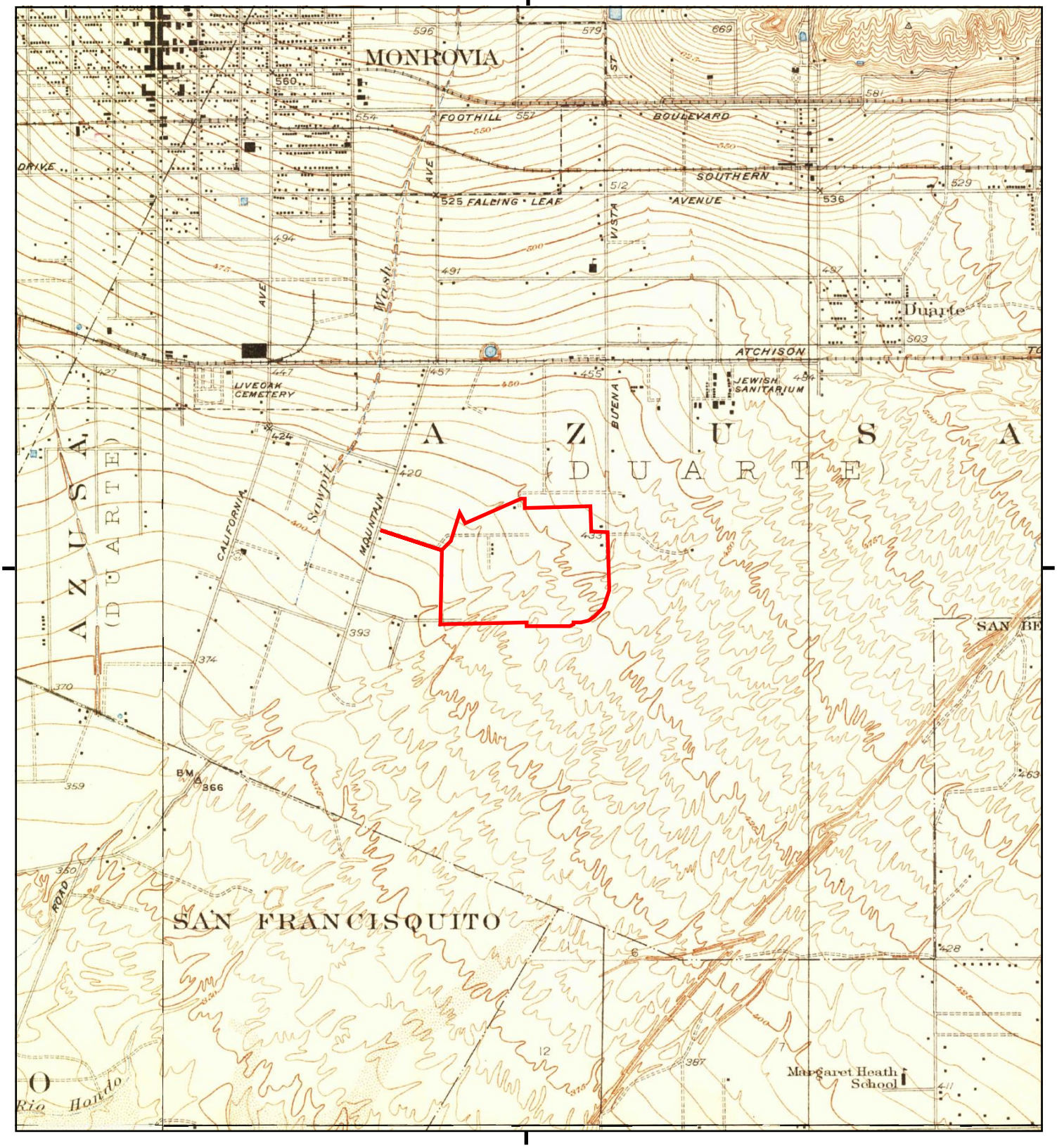
TP, Azusa, 1933, 7.5-minute
NW, Sierra Madre, 1933, 7.5-minute

SITE NAME: LACDPW - Irwindale Quarry
ADDRESS: 1137 Meridian Street
Irwindale, CA 91706
CLIENT: Leighton Consulting

N

# Historical Topo Map

1926, 1927, 1928




This report includes information from the following map sheet(s).

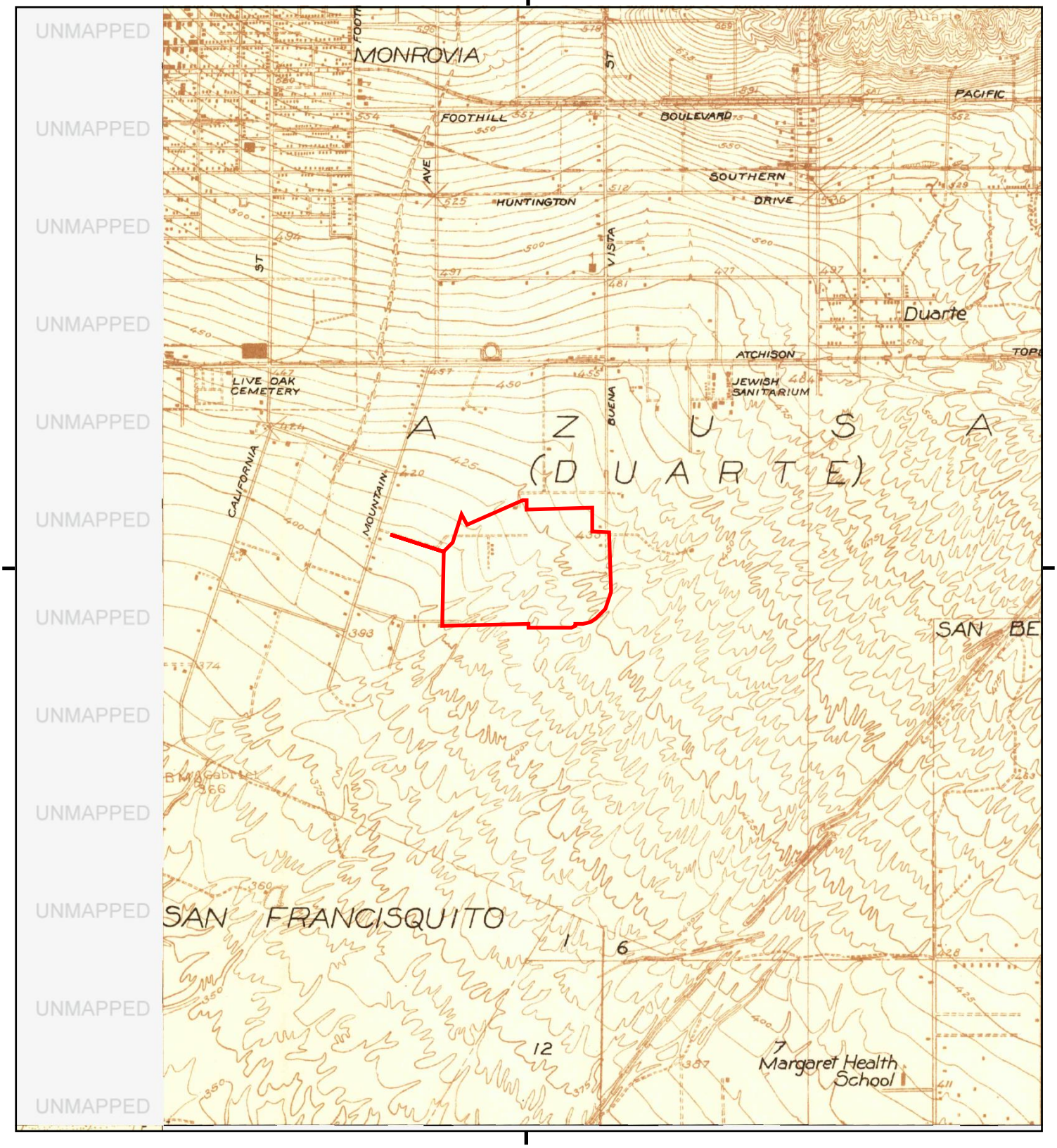
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Azusa, 1928, 7.5-minute
S, Puente, 1927, 7.5-minute
SW, El Monte, 1926, 7.5-minute
NW, Sierra Madre, 1928, 7.5-minute

SITE NAME: LACDPW - Irwindale Quarry
ADDRESS: 1137 Meridian Street
Irwindale, CA 91706
CLIENT: Leighton Consulting

N




This report includes information from the following map sheet(s).

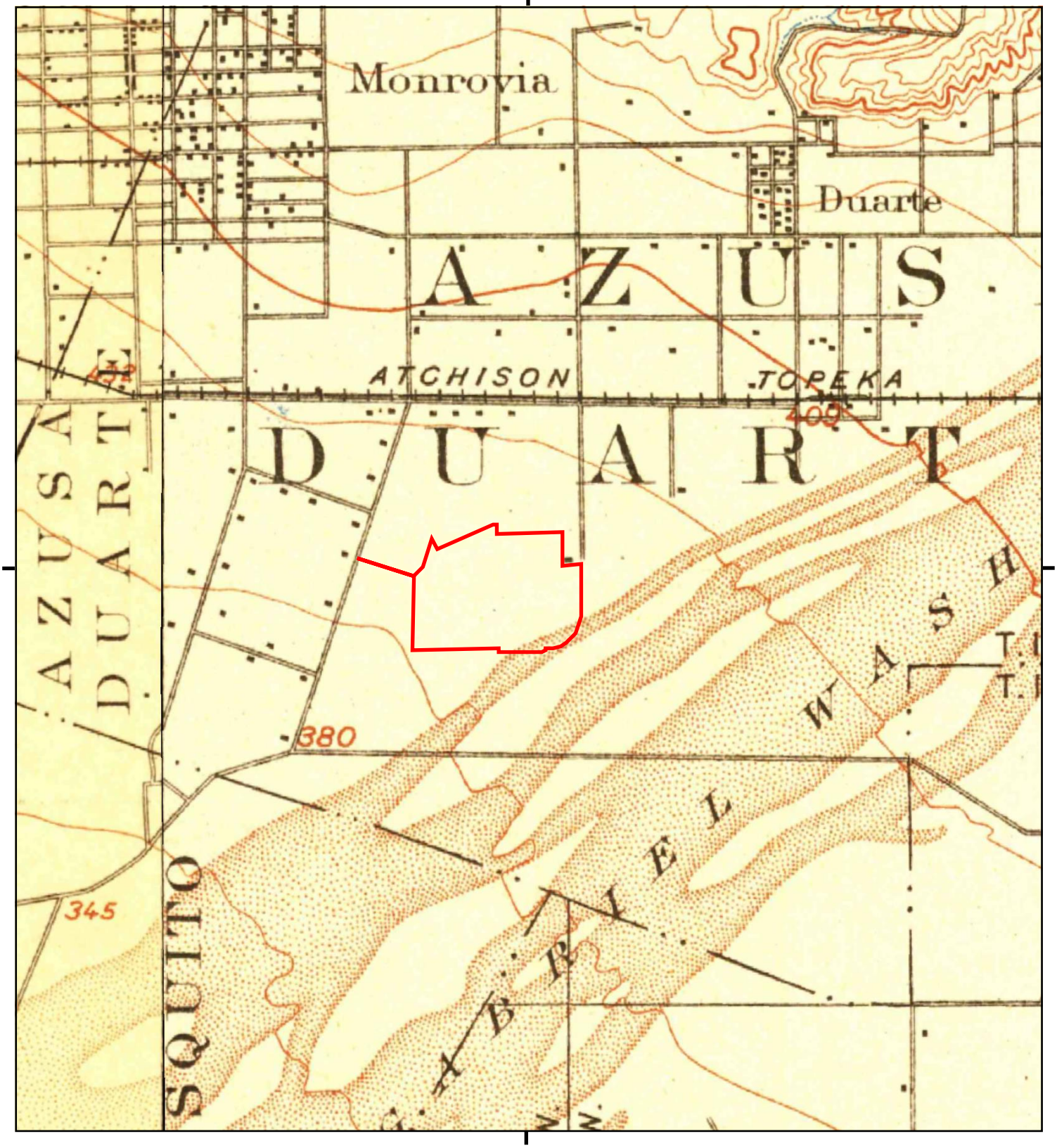
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Azusa, 1925, 7.5-minute
SW, El Monte, 1923, 7.5-minute

SITE NAME: LACDPW - Irwindale Quarry
ADDRESS: 1137 Meridian Street
Irwindale, CA 91706
CLIENT: Leighton Consulting

N




This report includes information from the following map sheet(s).

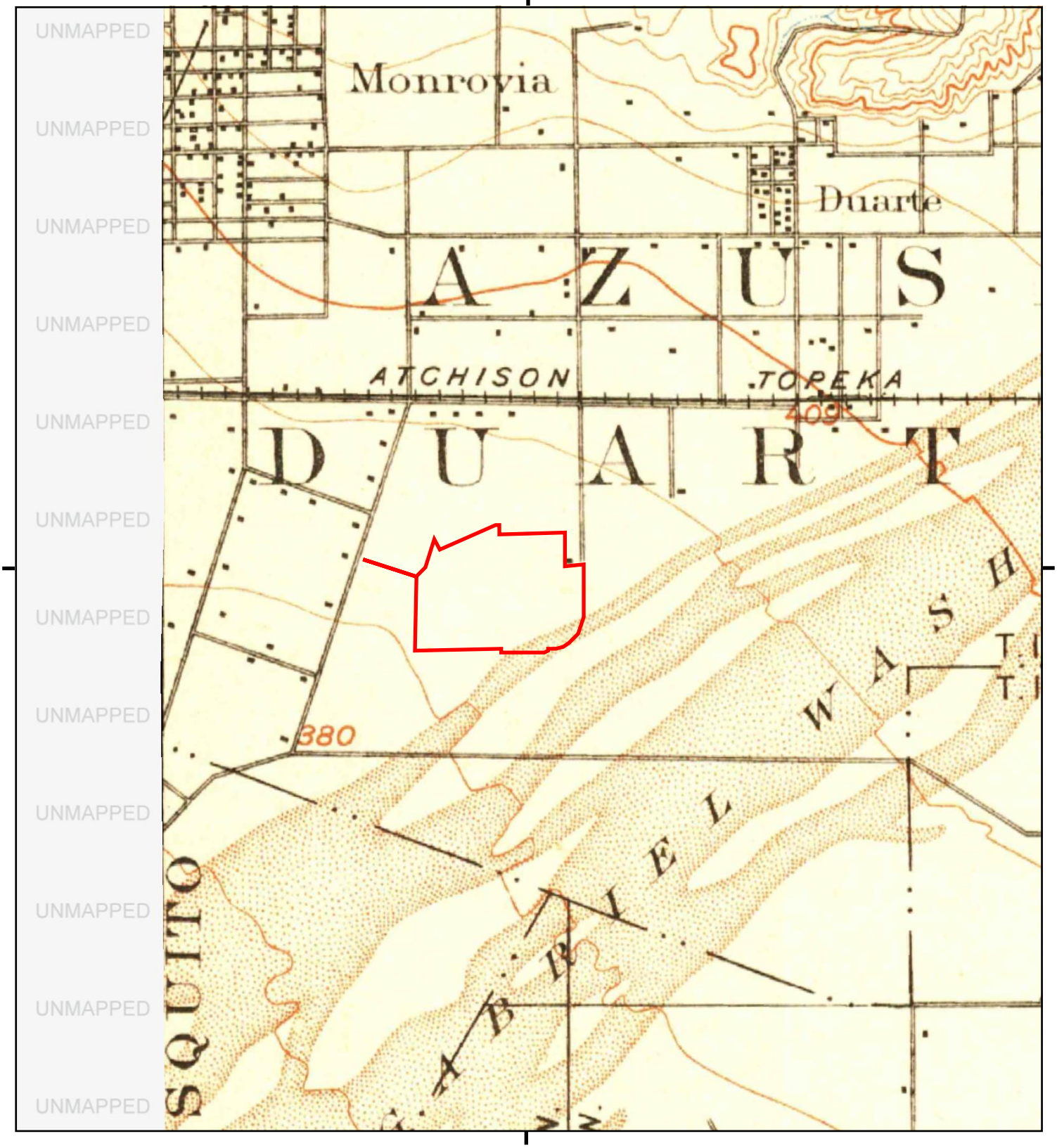
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Pomona, 1904, 15-minute
W, Pasadena, 1900, 15-minute
W, Los Angeles, 1900, 15-minute

SITE NAME: LACDPW - Irwindale Quarry
ADDRESS: 1137 Meridian Street
Irwindale, CA 91706
CLIENT: Leighton Consulting

N




This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

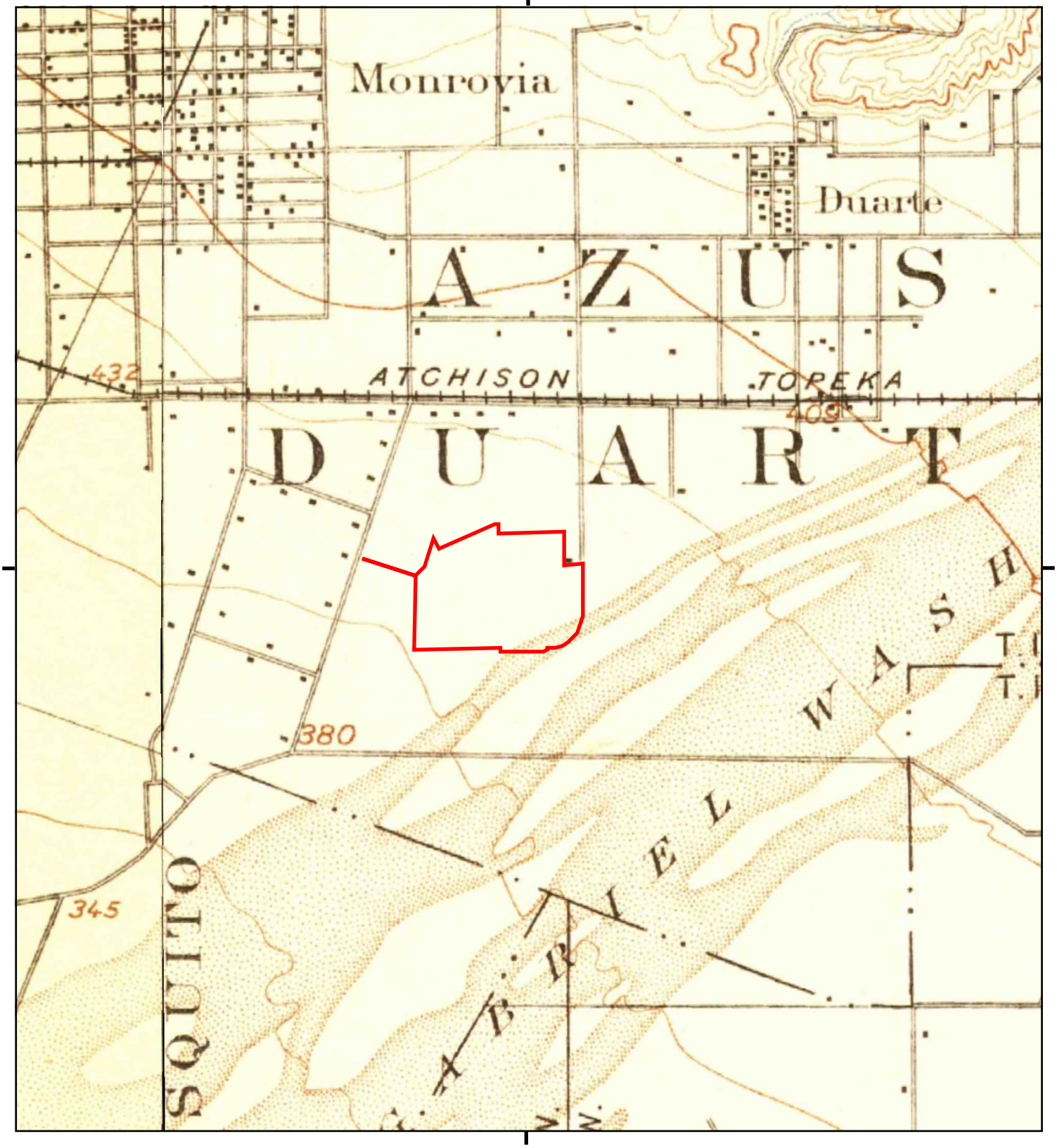
TP, Pomona, 1898, 15-minute

SITE NAME: LACDPW - Irwindale Quarry
ADDRESS: 1137 Meridian Street
Irwindale, CA 91706
CLIENT: Leighton Consulting

N

# Historical Topo Map

1896, 1897




This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

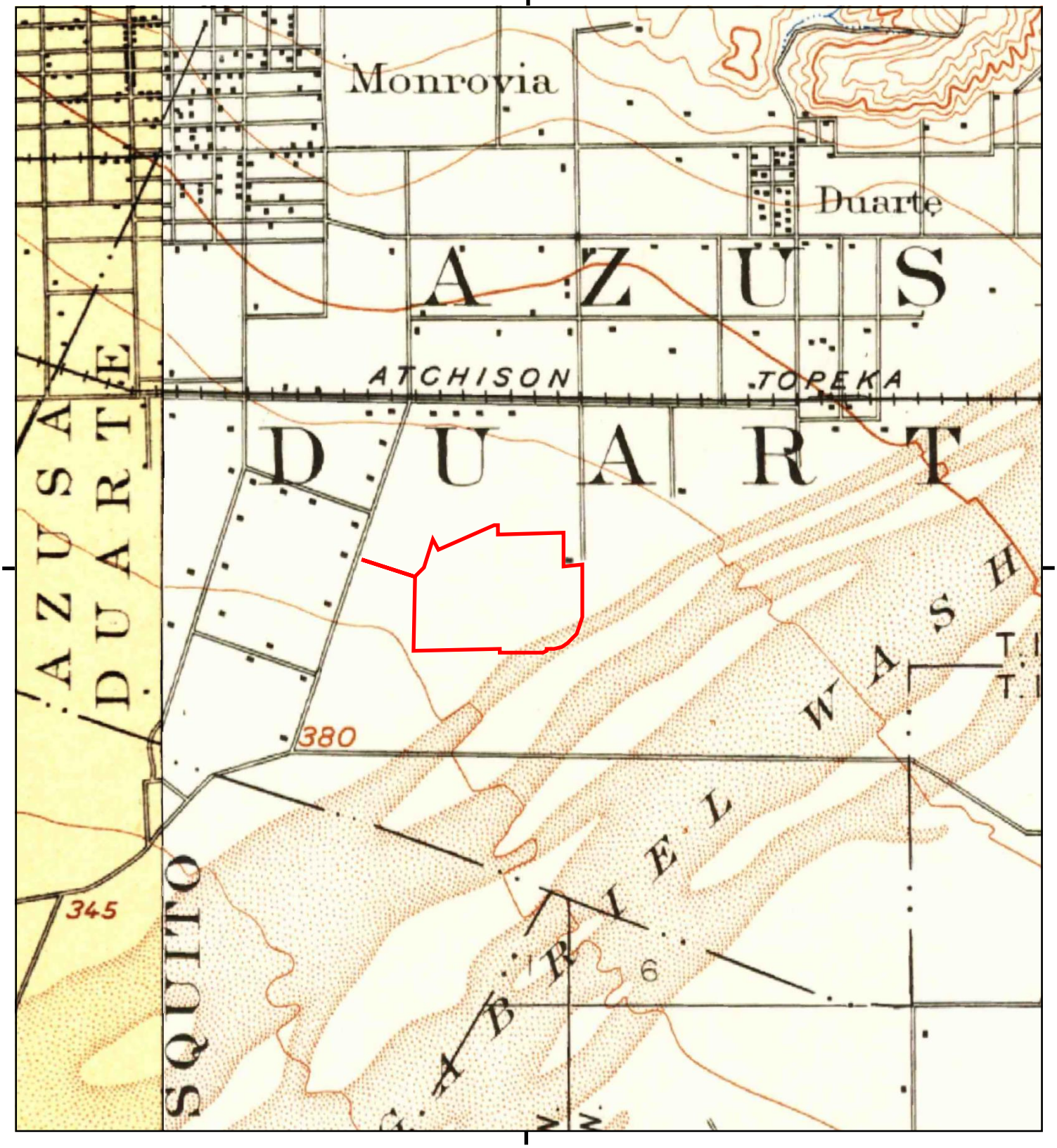
TP, Pomona, 1897, 15-minute
W, Pasadena, 1896, 15-minute

SITE NAME: LACDPW - Irwindale Quarry
ADDRESS: 1137 Meridian Street
Irwindale, CA 91706
CLIENT: Leighton Consulting

N

# Historical Topo Map

1894




This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Pomona, 1894, 15-minute
W, Los Angeles, 1894, 15-minute

SITE NAME: LACDPW - Irwindale Quarry
ADDRESS: 1137 Meridian Street
Irwindale, CA 91706
CLIENT: Leighton Consulting

N

# Appendix J

# City Directory Abstract

**LACDPW - Irwindale Quarry**
1137 Meridian Street
Irwindale, CA 91706

Inquiry Number: 4723693.5
September 20, 2016

# The EDR-City Directory Image Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

# TABLE OF CONTENTS

## SECTION

**Executive Summary**

**Findings**

**City Directory Images**

***Thank you for your business.***
Please contact EDR at 1-800-352-0050
with any questions or comments.

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# EXECUTIVE SUMMARY

## DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

## RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

| Year | Target Street | Cross Street | Source |
|---|---|---|---|
| 2013 | ☑ | ☑ | Cole Information Services |
| 2008 | ☑ | ☑ | Cole Information Services |
| 2003 | ☑ | ☑ | Cole Information Services |
| 1999 | ☑ | ☑ | Cole Information Services |
| 1995 | ☑ | ☐ | Cole Information Services |
| 1992 | ☑ | ☐ | Cole Information Services |
| 1985 | ☑ | ☑ | Haines Criss-Cross Directory |
| 1980 | ☑ | ☑ | Haines Criss-Cross Directory |
| 1975 | ☑ | ☑ | Haines Criss-Cross Directory |

## RECORD SOURCES

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# FINDINGS

## TARGET PROPERTY STREET

1137 Meridian Street
Irwindale, CA 91706

| *Year* | *CD Image* | *Source* |
|---|---|---|
| **MERIDAIN ST** | | |
| 1985 | pg A35 | Haines Criss-Cross Directory |
| 1980 | pg A38 | Haines Criss-Cross Directory |
| 1975 | pg A41 | Haines Criss-Cross Directory |
| **MERIDIAN ST** | | |
| 2013 | pg A8 | Cole Information Services |
| 2008 | pg A16 | Cole Information Services |
| 2003 | pg A23 | Cole Information Services |
| 1999 | pg A30 | Cole Information Services |
| 1995 | pg A31 | Cole Information Services |
| 1992 | pg A32 | Cole Information Services |

# FINDINGS

## CROSS STREETS

| *Year* | *CD Image* | *Source* | |
|---|---|---|---|
| **BATEMAN AVE** | | | |
| 2013 | pg. A1 | Cole Information Services | |
| 2008 | pg. A9 | Cole Information Services | |
| 2003 | pg. A17 | Cole Information Services | |
| 1999 | - | Cole Information Services | Target and Adjoining not listed in Source |
| 1995 | - | Cole Information Services | Target and Adjoining not listed in Source |
| 1992 | - | Cole Information Services | Target and Adjoining not listed in Source |
| 1985 | pg. A33 | Haines Criss-Cross Directory | |
| 1980 | pg. A36 | Haines Criss-Cross Directory | |
| 1975 | pg. A39 | Haines Criss-Cross Directory | |
| **BUENA VISTA ST** | | | |
| 2013 | pg. A2 | Cole Information Services | |
| 2008 | pg. A10 | Cole Information Services | |
| 2003 | pg. A18 | Cole Information Services | |
| 1999 | pg. A24 | Cole Information Services | |
| 1995 | - | Cole Information Services | Target and Adjoining not listed in Source |
| 1992 | - | Cole Information Services | Target and Adjoining not listed in Source |
| 1985 | pg. A34 | Haines Criss-Cross Directory | |
| 1980 | pg. A37 | Haines Criss-Cross Directory | |
| 1975 | pg. A40 | Haines Criss-Cross Directory | |

# City Directory Images

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Cole Information Services |

# BATEMAN AVE 2013

| | |
|---|---|
| 2390 | INTEGRATED MECHANICAL SYSTEMS |
| 2391 | ARION PRODUCT SOLUTIONS |
| 2392 | PACIFIC NATIONAL GROUP |
| | PACIFIC SYSTEMS |
| 2393 | ARION INTERNATIONAL INC |
| | C2T CORPORATION |
| | CYNERGY GROUP LLC |
| 2396 | THE PROCESSORS |
| 2397 | ESPORTIA INTERNATIONAL |
| 2398 | ABC HARDWARE INC |
| | J T HARDWARE |

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Cole Information Services |

# BUENA VISTA ST 2013

| | |
|---|---|
| 802 | BIOPATH LAB HOLDINGS |
| | COUNTRY VILLA MONTE VISTA |
| 803 | BERTHA BUFORD |
| 819 | COSMETIC SURGERY CENTER AT SANTA TER |
| | DUARTE CONVENT |
| | MEINHART MICHAEL MD |
| 831 | JOSSALYN EMSLIE |
| 914 | CARLOS CALDERON |
| | ELOY RIVERA |
| | KENNETH AUBERT |
| | MARTIN MOLINA |
| | NANCY ALFONSO |
| | SOPHRONIA GLOVER |
| 924 | DANNYS ACUPUNTURE CLINIC |
| | DUARTE FAMILY CHIROPRACTIC |
| | ELVINE CHIROPRACTIC |
| | FLOYD RETA MD |
| | FOOTHILLS PREGNANCY RESOURCE CENTER |
| | JERI EVANS NUTRITION INC |
| | RETA FLOYD |
| 931 | ALFONSO FERDINAND MD |
| | AMERICAN FAMILY MEDICAL PROVIDERS IN |
| | ARCADE MEDICAL GROUP |
| | BACHOURA LEON MD INC |
| | BAGGOT PADDY JIM |
| | BAUMGARTEN MORRIS MD |
| | CUENTO ALICIA P MD INC |
| | GAW JOHNNY MD |
| | HEALTHCARE PARTNERS MEDICAL GROUP |
| | IRENE LAO |
| | KOLDHEKAR VAIJAYANTI S MD INC |
| | KUSON TIM MD |
| | LAO IRENE O MD |
| | MARIMINA PHARMEUTICALS INC |
| | MATHIOULAKIS STAN MD |
| | MLJ HOLDING CORP |
| | PADDY BAGGOT |
| | ROYAL OAKS HOSPICE |
| | SAENZ ROY L DR |
| | SHAH INDU S MD FACP FACIP |
| | SLEEP CARE CENTERS |
| | TADROS GEORGETTE MD |
| | THOMPSON DENIS N MD |
| 932 | SCHOOL OF LITTLE SCHOLAR |
| 940 | CARLOS FLORES |
| 944 | ALEXANDER ABRAMYAN |
| 948 | PATTIE CHOI |
| 952 | STEVEN BOWERS |
| 956 | HEATHER KINCART |
| 960 | OCCUPANT UNKNOWN |

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Cole Information Services |

# BUENA VISTA ST 2013 (Cont'd)

964 THOMAS PITTMAN
968 JOHN WARRINGTON
972 ZOHRAB YEDALIAN
976 DOLLY DELGADO
ZENON ACUNA
980 WINSTON IMPERIAL
984 BRENDA FRABLE
988 KEPING WEI
992 NICK CUENCK
1014 BHASKER GUPTA
CHARLENE GARCIA
FRANCISCO SUAREZ
HAYDE HELMICH
JAN USON
JIN YAN
MARLENE ROMANO
MELVIN MANZANARES
NOEL GARCIA
NYDIA VILLANUEVA
TOM SILVERMAN
TONI WOLFE
1217 CHILD GUIDANCE CLINIC
COVENANT HEALTHCARE OF CA
DALWANI DR
1227 APPLEBAUM JEROME G LAW OFFICE
BUENA VISTA CHIROPRACTIC
ORTHOPLIANCE GROUP
PATEL NILIMA M DDS
1235 DUARTE OPTOMETRY
1301 CITY OF DUARTE
COUNTY OF LOS ANGELES
LOS ANGELES COUNTY OF LIBRARY PUBLIC
1400 SPRINT
1431 LOCKSMITH
THE OLD SPAGHETTI FACTORY
1434 PERFORMANCE NISSAN
1602 JUAN FRANCO
1607 KYUNG KIM
1608 JOSE GARCIA
1611 JYOTI GUPTA
1613 CECELIA MITCHELL
1614 THOMAS PENDERGRASS
1618 OCCUPANT UNKNOWN
1621 ISABEL LOPEZ
1624 OMAR JAUREGUI
1629 PAULINE GARCIA
1630 PAUL STILL
1633 LUIS AGUILAR
1636 DANA BRUNTON
1640 EMILIO MARTINEZ

# BUENA VISTA ST 2013 (Cont'd)

| | |
| --- | --- |
| 1641 | ALEJANDRO RIOS |
| 1643 | MARGIE URIBE |
| 1644 | LEOPOLDO FONBUENA |
| 1701 | RAFAEL DIAZ |
| 1705 | VENTURA ALVAREZ |
| 1721 | MARTAIN STOLLE |
| | MARTY STOLLES POOL SERVICE |
| 1727 | FIESTA PARADE FLOATS |
| 1802 | ROSE JUAREZ |
| 1804 | ON GUARD LOCKSMITH |
| | ORIGINAL TOMMYS HAMBURGERS |
| 1825 | GEORGE JACILDO |
| | SOLEDAD DELGADO |
| | XUAN PAN |
| 1831 | MARIA MORINICO |
| | MATILDA HERNANDEZ |
| 1832 | DAVID METCALF |
| | HERBAER JOHNSON |
| | MANUEL GARCIA |
| | RIGO PENA |
| 1834 | JAMES KNIGHT |
| | TEARA PENDLETON |
| 1836 | DAVID RILEY |
| | ERNESTO DUARTE |
| | MARK MONDIA |
| | RAUL IRAHETA |
| 1837 | MARSHALL MADISON |
| 1840 | ALMA FUENTES |
| | KEITHLEEN PANGANIBAN |
| | LETRICE MAY |
| | SHEILA WOODS |
| 1842 | CHRISTIAN ARCHILA |
| | GLADYS DELAROCHA |
| | GLORIA FELIX |
| 1843 | MARIA LIRA |
| 1846 | LELAND BIAS |
| | NICOLE GREENE |
| 1848 | ALEJANDRA MUNOZ |
| | DANIELA PRADA |
| | DIANA CASTILLO |
| | LUZ ZUBGY |
| 1850 | BLANCA PENA |
| | LENA JOHNSON |
| | TYRONE GREGORY |
| 1855 | MARIA CAPILI |
| 1863 | BETTY REED |
| | FANNY VASSIA |
| 1869 | CHUN LU |
| | LUCY ARIZMENDI |
| | ROSA DELRIO |

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Cole Information Services |

# BUENA VISTA ST 2013 (Cont'd)

| | |
|---|---|
| 1877 | PUJUN TAMNG |
| 1885 | SEVERA MAGNO |
| | SONGMIAN LI |
| 1893 | ANTONIO BERUMEN |
| | LAURICE CHIDIAC |
| | WILLIAM LEVETT |
| | ZHAOLIAN KONG |
| 1901 | DUARTE PARK APARTMENTS |
| | FRANCISCO ACOSTA |
| | MARIA SOLIS |
| | WILMA ZAMBRANO |
| 1907 | JOSE MUNOZ |
| 1911 | ANA GARCIA |
| | ISAGANI VILLANEVA |
| | MAEBELLE ODANIEL |
| | MARTA ESTRADA |
| | MEIYUN JIN |
| 1917 | GABRIELE PASCHKOWSKI |
| | JERRY CHANG |
| | JOSE MUNOZ |
| | MARIA BERUMEN |
| 1921 | BENITA BENITEZ |
| | MEI SUN |
| | OLGA MARIN |
| 1927 | ELIZABETH RODRIGUEZ |
| | GUANG XIONG |
| | MARCUS BATTICE |
| | ROSA DOMINGUEZ |
| 1933 | FENGZHEN TIAN |
| | TANGHAI WANG |
| | VALHA HUNNECUTT |
| 1937 | CHIN LIANG |
| | ROSE HOPE |
| 1941 | HUI XU |
| 1945 | JOHN LOPEZ |
| | REFUGIO ECHEVERRIA |
| 1946 | NANDITA GANGULY |
| 1948 | FAREED HASSEN |
| 1950 | OCCUPANT UNKNOWN |
| 1952 | DARIUS BROWN |
| 1953 | DOLORES GEHR |
| 1954 | DAN BELL |
| 1956 | SHUKRI HABIBI |
| 1958 | OCCUPANT UNKNOWN |
| 1959 | MELBA LINDSEY |
| | ROY MOORE |
| 1960 | DOUGLAS VIVERO |
| 1962 | ROSE FLORES |
| 1964 | STEPHEN WALKER |
| 1966 | PAUL ROURMAN |

# BUENA VISTA ST 2013 (Cont'd)

| | |
| --- | --- |
| 1967 | ESTHER JOHNSON |
| | JAMES CREELMAN |
| 1968 | RICARDO ZAMORA |
| 1970 | CHUHYU KUO |
| 1971 | EDWARD HARRIS |
| | MARIA OLIVAS |
| | PABLO CIRINO |
| 1972 | WHITNEY BUCKNER |
| 1974 | MICHAEL STONEHOCKER |
| 1977 | M BIVIAN |
| | XUEJIN ZHO |
| 1978 | SILVANA PUCCI |
| 1980 | LINDA COX |
| 1982 | DONNY GRAY |
| 1983 | CONRADO MARTINEZ |
| | PETRA VALENZUELA |
| | RODRIGO HERNANDEZ |
| 1984 | SHERRI BOSLEY |
| 1986 | RICARDO AGUILAR |
| 1988 | JOSE ANGUIANO |
| 1989 | HENRY GREEN |
| | HONGQIN SUN |
| | KRISTY VERGARA |
| | REMEDIOS REMO |
| 1990 | RI LI |
| 1992 | MARIA SISON |
| 1993 | ROSE CIRRITO |
| 1994 | BAIYING SHI |
| 1996 | KIRSTEN NIELSEN |
| 1998 | OCCUPANT UNKNOWN |
| | SAM DENTON |
| 1999 | CONCHITA BIOJON |
| | LORIE LAMPERT |
| 2000 | GUS FELIX |
| | KENNETH MORRIS |
| | LONNITA WILSON |
| 2002 | ARMANDO CHAPA |
| | DAN KNOLL |
| | ELIZABETH SALAZAR |
| | JUAN PEREZ |
| | MARIA DIAZ |
| 2004 | BEATRIZ GALLARDO |
| | SHANNON WILLIAMS |
| 2006 | ADAM RAMIREZ |
| | GAYANE AHVERDYAN |
| | NATALIA ASHIGOVA |
| | NIKOLAY ASHIGOV |
| 2012 | LOURDES LOPEZ |
| 2014 | ALAN REYES |
| | CLEMENTINA TLASECA |

## BUENA VISTA ST 2013 (Cont'd)

| | |
| --- | --- |
| 2014 | DAVID HARNDEN |
| | DORA MARTELL |
| | FRANCISCO GONZALEZ |
| | HERBERT LEON |
| | JOSE MOZ |
| | JUSTIN ESCOBAR |
| | LUIS RAMIREZ |
| | MARIA RODRIGUEZ |
| | SANDRA HERRERA |
| 2123 | SERGIO OLIVER |
| 2125 | JUANITA MANZO |
| 2137 | CARLOS CAMPAS |
| 2143 | ISIDRO MARTINEZ |
| 2147 | ROSARIO ACOSTA |
| 2155 | INEE CENDANA |
| 2240 | RBC BEARINGS INC |
| | SOUTHWEST PRODUCTS |
| 2250 | AIRGAS |
| 2381 | CHINA LEATHER COLLECTION |
| 2385 | WINSTAR TEXTILE INC |
| 2387 | CRAFTY INNOVATIONS INC |
| 2391 | J & E MEDIA |
| 2600 | BLUE DIAMOND MATERIALS |
| 2620 | NATIONAL READY MIXED CONCRETE CO |
| | UNITED HAULING CORP |

| Target Street | Cross Street | Source |
|---|---|---|
| ✓ | - | Cole Information Services |

# MERIDIAN ST 2013

| | |
|---|---|
| 714 | JUANA MAGDALENO |
| 716 | JESUS ORTEGA |
| 726 | VICTOR DOMINGUEZ |
| 730 | CARLOS CRUZ |
| 740 | ROBERTO VELAZQUEZ |
| 811 | JIMMY QUINTANILLA |
| 815 | ORLIN MUNNS |
| 829 | STILES JAS O INC |
| 833 | DAHON |
| 835 | JETCO |
| 839 | S I T ENTERPRISES |
| | SMITH INDUSTRIAL TIRES |
| 845 | GENE FLUIDICS |
| 847 | QUIET VALLEY BUILDING CO |
| 848 | KISH CONSTRUCTION & ROOFING |
| 851 | ENDODENT INC |
| 853 | AEROCRAFT FASTENERS INC |
| 857 | KOBO WORLD INC |
| 859 | FLANDERS CO |

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Cole Information Services |

# BATEMAN AVE 2008

| | |
|---|---|
| 2391 | ARION INTERNATIONAL INC |
| 2392 | MODULEX INC |
| | PACIFIC NATIONAL |
| | PACIFIC SYSTEMS INTERIORS |
| | RUSSARCH |
| 2393 | C2T MEDICAL |
| 2396 | THE PROCESSORS |
| | THE PROCESSORS MAILING INC |
| 2397 | ESPORTIA INTERNATIONAL INC |
| | GROUP L LTD INC |
| | KIDS IN MOTION INC |
| 2398 | A B C HARDWARE INC |
| | J T HARDWARE |
| 2399 | DELAND DESIGNS |

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Cole Information Services |

# BUENA VISTA ST 2008

802 CAL SOUTHERN PRESBT HOMES
COUNTRY VILLA MONTE VISTA
818 SANTA TERESITA MEDICAL CENTER
819 CARMELITE SISTERS MOST SACRED
DUARTE RADIOLOGY MEDICAL GROUP
MILDRED WHITE
914 CATHERINE THOMAS
CHRISTOPHER HANDY
DAVID PONTIKES
DEREK TAFUA
ELIA FLORES
JAMES BRENNAN
JEAN BARRIOS
JEANNETTE LOGHRY
MARTHA DEGUILLERMO
MARTIN MOLINA
NANCY ALFONSO
924 BODY TECH THERAPY INC
CENTER FOR ACUPUNCTURE &
DHOLAKIYA & DELWANI DDS
DUARTE FAMILY CHIROPRACTIC
FOOTHILLS PREGNANCY RESOURCE CENTER
JERI EVANS NUTRITION
MAGGIE PEZESHKIAN
PEZESHKIAN MAGGIE DC
RETA D FLOYD MD
RETA FLOYD
SUZANNE LEE
931 ALICIA CUENTO MD INC
ANDERS MALVIN D MD
ANTONE MEDICAL CENTER
AUDIO LOGICS
BAGGOT PADDY JIM MD
BAUMGARTEN MORRIS
CANTWELL MEDICAL PHARMACY
DR LOUKAS OFFICE CORP
EDWARD WAGEEH
FERDINAND ALFONSO MD
FOOT HILL PRIMARY CARE
GILBERT WALTON
GLENN K TAKEI MD
HEALTHCARE PARTNERS
INDRAVADAN SHAH MD
IRENE LAO
IRENE O LAO MD
JOHNNY S GAW MD
KIM LAUREN S MD
LEON BACHOURA MD
NAGWA AZER
NAGWA L AZER MD

# BUENA VISTA ST 2008 (Cont'd)

| | |
| --- | --- |
| 931 | OCULAR SURGERY MEDICAL ASSOCIATES |
| | PADDY BAGGOT |
| | ROYAL OAKS HOSPICE |
| | SAENZ ROY L MD |
| | W EDWARDS LOUKA MD INC |
| 932 | SCHOOL OF LITTLE SCHOLARSHIP |
| 940 | CARLOS FLORES |
| 944 | SASHA WALDEMAR |
| 948 | RACHANIPORN SALGADO |
| 952 | OCCUPANT UNKNOWN |
| 956 | HEATHER KINCART |
| 960 | BRANDON RADER |
| 964 | THOMAS PITTMAN |
| 968 | M POTTER |
| 972 | SUSAN REED |
| 976 | ZENON ACUNA |
| 980 | RAUL GARCIA |
| 984 | BRENDA FRABLE |
| 988 | OCCUPANT UNKNOWN |
| 992 | FRANCIS CUENCA |
| 1014 | CRISTOBAL NAHUI |
| | JIN YAN |
| | LINDA MELENDREZ |
| | MARGARITA NEGRETE |
| | VANESSA HERNANDEZ |
| | XIAJUN SHEN |
| 1217 | APPLIED BEHAVIOR CONSULTANTS |
| | DUARTE FAMILY DENTISTRY |
| 1227 | BUENA VISTA CHIROPRACTIC |
| | NILIMA PATEL DDS |
| | ORTHOPLIANCE GROUP |
| | PHONECARD CONNECTION |
| 1235 | DIANE HERNANDEZ OD |
| | DUARTE OPTOMETRY |
| 1301 | CITY OF DUARTE |
| 1319 | ROSITA DELFIN |
| | TONYS REFRIGERATION & AC |
| 1431 | O S F INTERNATIONAL INC |
| | THE OLD SPAGHETTI FACTORY |
| 1434 | PERFORMANCE NISSAN |
| 1602 | ROSE JUAREZ |
| 1607 | ERLINDA GOROSPE |
| | THE HOOTERS SPORTS GRILL REST |
| 1611 | OCCUPANT UNKNOWN |
| 1613 | DAVID TU |
| 1614 | OCCUPANT UNKNOWN |
| 1618 | LEONARD DURSO |
| 1621 | MARIA LOPEZ |
| 1624 | OMAR JAUREGUI |
| 1629 | PAULINE GARCIA |

# BUENA VISTA ST 2008 (Cont'd)

| | |
| --- | --- |
| 1630 | PAUL STILL |
| 1633 | LUIS AGUILAR |
| 1636 | KARLYN BRUNTON |
| 1640 | LINDA OLSON |
| 1641 | ALEJANDRO RIOS |
| 1643 | VICTORIA RIOS |
| 1644 | JONATHAN FONBUENA |
| 1701 | OCCUPANT UNKNOWN |
| 1705 | VENTURA ALVAREZ |
| 1721 | MARTAIN STOLLE |
| 1727 | FIESTA PARADE FLOATS |
| 1817 | EULALIA RENTERIA |
| 1825 | KATHRYN PETERSON |
| | RENCUN HUO |
| | SOLEDAD DELGADO |
| | XUAN PAN |
| 1831 | LUTHER HARPER |
| | MATILDA HERNANDEZ |
| 1832 | DIANE BRERETON |
| | ROCHELLE WINGO |
| | VINCENT SALAZAR |
| 1834 | BRONZE DUKE TRUCKING |
| | LEONID DERBARMDIKER |
| | TEARA PENDLETON |
| 1836 | AURORA MONDIA |
| | MITCHELL HILL |
| | RUBEN ESPALIN |
| 1837 | A NUNO |
| | MABEL MORINICO |
| 1840 | ALFREDO CASILLAS |
| | L MAY |
| 1842 | GLORIA BARRERA |
| | GLORIA FELIX |
| | KAREN BIAS |
| | LATISHA ARVIZU |
| | MARIA ARCHILA |
| | TO LE |
| 1843 | LILLIIAN LINDT |
| | MARIA LIRA |
| 1846 | LISA BLANCHARD |
| | LISA WHITESIDE |
| | VERONICA RUANO |
| 1848 | GLORIA DIAZ |
| | RUBY BOLTOS |
| | WANDA TORRES |
| 1850 | LENA JOHNSON |
| | TYRONE GREGORY |
| 1855 | FERNANDO MORALES |
| 1863 | BETTY REED |
| 1869 | JOON CHO |

# BUENA VISTA ST 2008 (Cont'd)

| | |
| --- | --- |
| 1877 | DIAN MORRIS |
| | SEVERA MAGNO |
| 1893 | LAURICE CHIDIAC |
| | MARDELL KORNITZ |
| | WILLIAM LEVETT |
| 1901 | WILL ZAMBRANA |
| 1907 | ALICE MORA |
| | JOSE MUNOZ |
| | LILLIAN GIANOULIS |
| 1917 | JERRY CHANG |
| | M HANEY |
| 1921 | BENITA BENITEZ |
| | BENITA CHAVEZ |
| | ESTHER ROBERTS |
| 1927 | ELLEN GULLY |
| | JANET YOUNG |
| | MARIA BAK |
| | SUMITAR HUSSON |
| 1933 | ALICE CZARNECKI |
| | FRED MCKINNIS |
| | MARSHALL MADISON |
| | P WANG |
| 1937 | ABUNDIO BARRAGAN |
| | BERNABE ORTIZ |
| | ROSE HOPE |
| 1941 | HUI XU |
| | SAMMIE HOOKER |
| 1945 | REFUGIO ECHEVERRIA |
| 1946 | NANDITA GANGULY |
| 1948 | OCCUPANT UNKNOWN |
| 1950 | MARCO SANCHEZ |
| 1952 | DARIUS BROWN |
| 1953 | VIOLET HALL |
| 1954 | BONITA STEWART |
| 1956 | SHUKRI HABIBI |
| 1958 | OCCUPANT UNKNOWN |
| 1960 | DOUGLAS VIVERO |
| 1962 | ROSE FLORES |
| 1964 | JESSIE WALKER |
| 1966 | PAUL ROURMAN |
| 1967 | ESTHER JOHNSON |
| 1968 | RICARDO V ZAMORA |
| | RICARDO ZAMORA |
| 1970 | CHUH KUO |
| 1971 | EDWARD HARRIS |
| | ENTERPRISES DEVELOPMENT CO LLC |
| 1972 | MICHAEL FESSLER |
| 1976 | JUAN COLIN |
| 1977 | DAVID VALADEZ |
| | REMEDIOS REMO |

# BUENA VISTA ST 2008 (Cont'd)

| | |
| --- | --- |
| 1978 | PHYLLIS STONEHOCKER |
| 1980 | LINDA COX |
| 1982 | DONNY GRAY |
| 1983 | ANNA KITO |
| 1984 | SHERRI BOSLEY |
| 1986 | RICARDO AGUILAR |
| 1988 | JOSE ANGUIANO |
| 1989 | HENRY GREEN |
| 1990 | ANDREW PAEZ |
| 1992 | JESUS TORRES |
| | JOJO JOSE |
| | MARIA SISON |
| | SILVIA MATA |
| 1993 | BRIAN TURNER |
| | MARY ROBINSON |
| | ROSE CIRRITO |
| | YING HUA |
| 1996 | KIRSTEN NIELSEN |
| 1998 | DAE HAHN |
| | OCCUPANT UNKNOWN |
| | SAM DENTON |
| 1999 | CONCHITA BIOJON |
| 2000 | KENNETH MORRIS |
| | L WILSON |
| 2002 | RACHELLE TALAVERA |
| | ROCIO VASQUEZ |
| 2004 | KERRY BONOMO |
| | RUTH HERNANDEZ |
| 2006 | GAYANE AHVERDYAN |
| 2014 | ANDREA FREY |
| | ARACELI ZAMORA |
| | BLANCA ZARAGOZA |
| | DANIEL DOMINGUEZ |
| | FERNANDO MARTINEZ |
| | HERBERT LEON |
| | HILDA FRANCO |
| | JAIME ANGEL |
| | JOSE PEREYRA |
| | JUAN TORRES |
| | LUIS RAMIREZ |
| | MANUEL HERNANDEZ |
| | MARIA AGUILAR |
| | MARIA RODRIGUEZ |
| | MARTINEZ CHAVEZ |
| | REYNA ZEPEDA |
| | RODOLFO VALENZUELA |
| | VALENZUELA DIAZ |
| | WILLIAM RAMIREZ |
| 2123 | SERGIO OLIVER |
| 2125 | JUANITA MANZO |

# BUENA VISTA ST 2008 (Cont'd)

| | |
| --- | --- |
| 2137 | OCCUPANT UNKNOWN |
| 2143 | BELEN HORTA |
| 2147 | ROSARIO ACOSTA |
| 2155 | OCCUPANT UNKNOWN |
| 2250 | AIRGAS WEST INC |
| 2495 | SIMS HUGO NEU CO LLC |
| 2600 | BLUE DIAMOND MATERIALS |
| | SULLY MILLER |
| | SULLY MILLER CONSTRACTING |
| 2620 | UNITED HAULING CORP |

| Target Street | Cross Street | Source |
|---|---|---|
| ✓ | - | Cole Information Services |

# MERIDIAN ST 2008

| | |
|---|---|
| 716 | PETER GRANA |
| 730 | TRI EM CONSTRUCTION |
| 740 | ROBERTO VELASQUEZ |
| 811 | JIMMY QUINTANILLA |
| 815 | ORLIN MUNNS |
| 829 | J O STILES INC |
| 833 | DAHON CALIFORNIA INC |
| 835 | PADYWELL CORP |
| | TRILOTON INC |
| 837 | ARMENIAN RECORDS |
| | ART UNDER FOOT |
| 839 | S I T ENTERPRISES |
| | SMITH INDUSTRIAL TIRES INC |
| 841 | COLLECTABLES DIECAST INC |
| 845 | MERCURY TILE CO |
| 847 | ALPHA SURPLUS INC |
| 848 | KISH CONSTRUCTION & ROOFING |
| 851 | ENDODENT INC |
| 853 | WILLIAM H FLETCHER & ASSOCIATES INC |
| 855 | GILS DISTRIBUTING SERVICE INC |
| | RACECAR FACTORY |
| 857 | KOBO WORLD INC |
| 861 | DURAMED HOMECARE SERVICES INC |

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Cole Information Services |

## BATEMAN AVE 2003

| | |
|---|---|
| 2392 | OCCUPANT UNKNOWN |
| 2397 | ESPORTIA INTERNATIONAL INC |
| | GROUP E LTD |
| | KIDS IN MOTION |
| | OCCUPANT UNKNOWN |
| 2398 | ST ARGOS CO |
| 2399 | DALAND DESIGN |

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Cole Information Services |

# BUENA VISTA ST 2003

802 BUENA VISTA MANOR
EMILY BREE
OTTO E DECAMP
819 COSMETIC SURGERY CTR AT SANTA
HAYDEN CHILD CARE CTR
HELEN HUNDLEY
JANE NEILSON
MARY DUFFY
MEINHART MICHAEL MD
SANTA TERESITA HOSPITAL
SODEXHO AMERICA LLC
ST ANNES OUTREACH
THE MANOR AT SANTA TRST HSPTL
914 DANIEL DELGADO
JAMES BRENNAN
JEAN BARRIOS
924 ALTERNATIVE & CMPLMNTRY HLTH
CHILDREN FIRST PEDIATRIC GROUP
DHOLAKIYA & DALWANI
DUARTE FAMILY DENTISTRY
GERARDO RICHARD DC
JERI EVANS COLON HYDRTHRPY AT
JERI EVANS NUTRITION & COLON
LYON LEGACY
RETA FLOYD
931 ADVANCED PAIN INSTITUTE
ADVANCED PAIN INSTTT AT SANTA
ANDERS MALVIN D MD
BACHOURA LEON MD INC
BAUMGARTEN MORRIS MD
CAL SOUTHERN CRDIOLG
CANTWELL MEDICAL PHARMACY
CHAKRABORTI JYOTI MD MRCP
CHARLES SETH
CUENTO ALICIA P MD INC
DENIS N THOMPSON
DUARTE WOMENS MEDICAL CTR
FERDINAND ALFONSO
FERDINAND ALFONSO MD
GAW JOHNNY MD
GEORGETTE TADROS
GLENN TAKEI
HUNTINGTON MED GROUP DUARTE
I MICHAEL MNHRT M D INC
I MINEHART
INCARE HOME HEALTH
INDU S SHAH MD
INDU SHAH
IRENE LAO
IRENE O LAO MD

# BUENA VISTA ST 2003 (Cont'd)

| | |
| --- | --- |
| 931 | JOHN A GIDDINGS MD INC |
| | JOHNNY S GAW MD |
| | LAO IRENE O MD |
| | MARILYN GIDDINGS |
| | MINEHART I MICHAEL MD |
| | OHIKHUARE MAXWELL MD INC |
| | ROY L SAENZ MD |
| | ROY SAENZ |
| | SO CA SURGERY MDCL GROUP INC |
| | SUVANNEE VIDHYAPUM |
| | TADROS GEORGETTE MD |
| | TAKEI GLENN K MD INC |
| | VIDHYAPUM SUVANNEE MD INC |
| 932 | OCCUPANT UNKNOWN |
| | SCHOOL OF LITTLE SCHOLAR |
| 940 | MICHAEL LAI |
| 948 | BRIAN OSTLER |
| 952 | CYNTHIA FRENCH |
| 956 | ERLINDA PARRENO |
| 960 | SAM SY |
| 964 | THOMAS PITTMAN |
| 968 | DARREN BYRD |
| 972 | SUSAN REED |
| 976 | MARIA ACUNA |
| 980 | DWIGHT MILLER |
| 984 | BRENDA FRABLE |
| 988 | PAMELA SAYLES |
| 992 | JASON MOTA |
| 1014 | ALICIA BOSWELL |
| | JANET PALMER |
| | SAMEH ROKES |
| | TASHA WILLIAMS |
| | VINTON HUFFEY |
| 1227 | BUENA VISTA CHIROPRACTIC |
| | MADHUKAR PATEL |
| | PATEL NILIMA M |
| | SADANAGA ALFRED N DC |
| 1235 | WILLIAM NORGARD |
| 1301 | LOS ANGELES COUNTY |
| 1319 | MA CORTEZ |
| | ROSITA DELFIN |
| 1431 | OCCUPANT UNKNOWN |
| 1602 | HENRY JUAREZ |
| 1607 | ROLANDO MORALES |
| 1608 | FELIX HERNANDEZ |
| 1611 | JYOTI GUPTA |
| 1613 | CECELIA GARCIA |
| 1614 | CHUCK MORAN |
| 1618 | LEONARD DURSO |
| 1621 | KATRINA RUIZ |

# BUENA VISTA ST 2003 (Cont'd)

| | |
| --- | --- |
| 1621 | MARIA LOPEZ |
| 1624 | ADRIAN HERNANDEZ |
| 1629 | PAULINE GARCIA |
| 1630 | PAUL STILL |
| 1633 | LUIS AGUILAR |
| 1636 | KARLYN BRUNTON |
| 1640 | LINDA OLSON |
| 1641 | ALEJANDRO RIOS |
| | JAVIER DIAZ |
| 1644 | PILAR FONBUENA |
| 1701 | RAFAEL DIAZ |
| 1705 | MOHAMED UNWALA |
| 1721 | MARTAIN STOLLE |
| 1804 | OCCUPANT UNKNOWN |
| 1825 | PHILIP SINGER |
| | SOLEDAD DELGADO |
| 1831 | ANNA KITO |
| | LUTHER HARPER |
| | MELVIN EDWARDS |
| | N ZABALA |
| 1834 | LEONID DERBARMDIKER |
| | SERGIO SANDOVAL |
| 1836 | ROSALIA GUZMAN |
| 1837 | A NUNO |
| | BARBARA CUDDY |
| | MARIA MORINICO |
| 1840 | KIRSTEN WARD |
| | WARREN ROWAN |
| 1843 | EMILY SOUQUETT |
| | LILLIIAN LINDT |
| 1846 | MARIA ARCHILA |
| 1848 | GLORIA DIAZ |
| | RAUDEL LUEVANO |
| | RUBY MILLER |
| 1850 | DOUGLAS LEHMAN |
| 1863 | MARY BOSCARINO |
| 1869 | JOON CHO |
| 1877 | A MORRIS |
| | SEVERA MAGNO |
| 1893 | FLORENCE WEIGEL |
| | WILLIAM LEVETT |
| 1901 | DUARTE PARK APARTMENTS |
| | LONNIE YOUNG |
| | MARIA LIRA |
| | WILMA SANTIAGO |
| 1907 | ALICE MORA |
| | MARDELL KORNITZ |
| | OLGA MARIN |
| 1917 | LEON WOLF |
| | MARGARET HANEY |

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Cole Information Services |

# BUENA VISTA ST 2003 (Cont'd)

| | |
|---|---|
| 1917 | TED OBRENSKI |
| 1921 | A PRATHER |
| | ESTHER ROBERTS |
| 1927 | MARIA BAK |
| 1933 | A CZARNECKI |
| | ANITA WILLS |
| | ARLENE MCKINNIS |
| 1937 | BERNABE ORTIZ |
| 1941 | SAMMIE HOOKER |
| 1946 | NANDITA GANGULY |
| 1948 | ELIZABETH WOODSIDE |
| 1950 | ANNABEL GRIFFIN |
| 1952 | CHARLES BURKE |
| | OCCUPANT UNKNOWN |
| 1953 | CARMEN CHARDON |
| 1954 | BONITA STEWART |
| 1956 | SHUKRI HABIBI |
| 1958 | OCCUPANT UNKNOWN |
| 1959 | EULALIA RENTERIA |
| 1960 | STEVEN BROWN |
| 1962 | ROSE FLORES |
| 1964 | JESSIE WALKER |
| 1966 | PAUL ROURMAN |
| 1967 | DAVID GOLD |
| 1968 | RICARDO ZAMORA |
| 1969 | JESSIE WALKER |
| 1970 | OCCUPANT UNKNOWN |
| 1971 | ALICE LUMLEY |
| | EDWARD HARRIS |
| | JAMES CREELMAN |
| 1972 | MICHAEL FESSLER |
| 1974 | MICHAEL STONEHOCKER |
| 1976 | BRENDA ENGE |
| 1977 | REMEDIOS REMO |
| 1978 | PHYLLIS STONEHOCKER |
| 1980 | OCCUPANT UNKNOWN |
| 1982 | OCCUPANT UNKNOWN |
| 1983 | JEAN GREENE |
| 1984 | SHERRI BOSLEY |
| 1986 | RICARDO AGUILAR |
| 1988 | JOSE ANGUIANO |
| 1989 | HENRY GREEN |
| | MATILDA HERNANDEZ |
| 1992 | ANA WILLIMANN |
| | MATTHEW DAVINO |
| 1993 | FERNANDO MORALES |
| | R CIRRITO |
| 1994 | WILLIAM GARCIA |
| 1996 | KIRSTEN NIELSEN |
| | OCCUPANT UNKNOWN |

# BUENA VISTA ST 2003 (Cont'd)

| | |
| --- | --- |
| 1998 | DAE HAHN |
| | OCCUPANT UNKNOWN |
| | SAM DENTON |
| 2000 | GUADALUPE CAJERO |
| | KENNETH MORRIS |
| 2004 | PEDRO GALLEG |
| 2006 | GAYANE AHVERDYAN |
| | R HRECHDAKIAN |
| 2014 | BLANCA ZARAGOZA |
| | ENRIQUE LUNA |
| | GUILLERMO CORTEZ |
| | LUIS RAMIREZ |
| | MARIA FREILE |
| | PEDRO MARTINEZ |
| | REFUGIO ROMO |
| | SOCORRO ALONZO |
| | SYLVIA CASTRO |
| | YADIRA VAZQUEZ |
| | ZENIADA MARTINEZ |
| 2123 | SERGIO OLIVER |
| 2125 | JUANITA MANZO |
| 2137 | GRACE CAMPAS |
| 2143 | JOSE TALAMANTES |
| 2147 | ROSARIO ACOSTA |
| | SHIELA MORENO |
| 2155 | OCCUPANT UNKNOWN |
| 2240 | GARY HORANY |
| | SOUTHWEST PRODUCTS CO |
| 2250 | AIRGAS |
| | MERIT HOSEY |
| 2620 | NATIONAL READY MIXED CONCRETE CO |

| Target Street | Cross Street | Source |
|---|---|---|
| ✓ | - | Cole Information Services |

# MERIDIAN ST 2003

| | |
|---|---|
| 714 | IDALIA VELASQUEZ |
| 716 | JEFFERY PEREZ |
| 726 | TINA KENNY |
| 730 | WALTER AQUINO |
| 740 | ROBERTO VELASQUEZ |
| 811 | JIMMY QUINTANILLA |
| 815 | ORLIN MUNNS |
| 829 | JO STILES INC |
| | SUSAN STILES |
| | TRAN ENTERPRISES |
| 831 | DONALD HILL |
| | PHOENIX WEST STABLE PRODUCTS |
| 833 | DAHON |
| | DAHON CALIFORNIA INC |
| | OCCUPANT UNKNOWN |
| 835 | KELLER ENGRAVING CO |
| | OCCUPANT UNKNOWN |
| | PROTON INTERNATIONAL |
| 837 | BRETT MAURER |
| | HIGHLAND ROOFING CO |
| 839 | SIT ENTERPRISES |
| | SMITH INDUSTRIAL TIRES INC |
| 841 | OCCUPANT UNKNOWN |
| 845 | MERCURY TILE CO |
| | OCCUPANT UNKNOWN |
| | R & J SALES CORP |
| 847 | CASTRO TRANSFER CO |
| 848 | A & S ROOFING OF PASADENA |
| | ELIO PAGANO |
| | KISH CONSTRUCTION & ROOFING |
| 851 | ENDODENT INC |
| 853 | WILLIAM H FLETCHER & ASSOCS INC |
| 855 | DYNAMIC AIR TECHNOLOGY |
| | MICHAEL GIL |
| 857 | KOBO WORLD INC |
| | OCCUPANT UNKNOWN |
| 859 | FARMER BROTHERS COFFEE CO |
| 861 | DURAMED HOMECARE SERVICES INC |
| | MVP HYDRAULICS EQUIPMENT INC |
| | WILLIA SY |

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Cole Information Services |

# BUENA VISTA ST 1999

| | |
|---|---|
| 802 | BUENA VISTA MANOR |
| 819 | HAYDEN CHILD CARE CENTER |
| | MEINHART MICHAEL MD |
| | SANTA TERESITA HOSPITAL |
| | SANTA TERESITA PAIN CLINIC |
| 914 | DAVID PONTIKES |
| | DEREK TAFUA |
| | JAMES BRENNAN |
| | JEAN BARRIOS |
| | JEANNETTE LOGHRY |
| | MARTIN MOLINA |
| | NANCY ALFONSO |
| | PEGGY ROBINSON |
| | SERGIO CABRERA |
| 924 | ALTERNATIVE & COMPLEMENTARY HEALTH CENTER |
| | BUENA VISTA MEDICAL LABORATORY |
| | DHOLAKIYA & DALWANI DDS |
| | DUARTE FAMILY DENTISTRY |
| | FLOYD RETA MD |
| | RETA FLOYD |
| | SUZANNE LEE |
| 931 | ADVANCED PAIN INSTITUTE AT SANTA TERESITA HOSPITAL |
| | ALBERT MALEK |
| | ALFONSO FERDINAND MD |
| | ANDERS MALVIN D MD |
| | BACHOURA LEON MD INCORPORATED |
| | BARTON VICTOR H MD |
| | BAUMGARTEN MORRIS MD |
| | CANTWELL MEDICAL PHARMACY |
| | CUENTO ALICIA P MD INCORPORATED |
| | DUARTE WOMENS MEDICAL CENTER |
| | EYE ASSOCIATES THE |
| | GAIL SUVANNEE VIDHYAPUM MD |
| | GAW JOHNNY MD SANTA TERESITA MEDICAL CENTER |
| | GIDDINGS JOHN A MD |
| | HATHOUT MAHER MD |
| | HUNTINGTON MEDICAL GROUP OF DUARTE |
| | IRENE LAO |
| | JOVI CACNIO |
| | KUSON TIM MD |
| | LAO IRENE O MD |
| | MINEHART I MICHAEL MD |
| | NAGWA AZER |
| | NEIGHBORHOOD OFFICES |
| | OHIKHUARE MAXWELL MD INCORPORATED |
| | PADDY BAGGOT |
| | SAENZ ROY L MD |
| | SANTA TERESITA HOSPITAL NUTRITIONIST |
| | SANTA TERESITA PAIN CLINIC |
| | SETH MEDICAL GROUP INCORPORATED |

# BUENA VISTA ST 1999 (Cont'd)

| | |
| --- | --- |
| 931 | SHAH INDU S MD |
| | SMITH MONT A MD |
| | SOUTHERN CALIFORNIA CARDIOLOGY CONSULTANTS |
| | TADROS GEORGETTE MD |
| | TAKEI GLENN K MD INCORPORATED |
| | THE OPHTHALMIC MEDICAL ASSOCIATES |
| | THOMPSON DENIS N MD |
| | TIM KUSON |
| 932 | SCHOOL OF LITTLE SCHOLAR |
| 940 | CARLOS FLORES |
| 944 | OCCUPANT UNKNOWN |
| | SASHA WALDEMAR |
| 948 | CHARLES KIM |
| 952 | OCCUPANT UNKNOWN |
| 956 | HEATHER KINCART |
| 960 | COURTNEY BURBRIDGE |
| | OCCUPANT UNKNOWN |
| 964 | OCCUPANT UNKNOWN |
| | THOMAS PITTMAN |
| 968 | M POTTER |
| 972 | OCCUPANT UNKNOWN |
| | SUSAN REED |
| 976 | DOLLY DELGADO |
| | ZENON ACUNA |
| 980 | OCCUPANT UNKNOWN |
| 984 | BRENDA FRABLE |
| | OCCUPANT UNKNOWN |
| 988 | KA HO |
| 992 | FRANCIS CUENCA |
| | OCCUPANT UNKNOWN |
| 1014 | HAYDE HELMICH |
| | LINDA MELENDREZ |
| | MATTIE JACKSON |
| | VANESSA HERNANDEZ |
| | VINTON HUFFEY |
| 1217 | CHILD GUIDANCE CLINIC |
| | PACIFIC CLINICS EAST DAY TREATMENT |
| | PACIFIC CLINICS EAST GUIDANCE CLINIC |
| 1227 | AMIGOS DENTAL CARE |
| | BENNALACK MARK DC |
| | BUENA VISTA CHIROPRACTIC |
| | HOY DAVID G DC |
| | OCCUPANT UNKNOWN |
| | PATEL NILIMA M DDS |
| | SADANAGA ALFRED N DC |
| | WINEGART EDWARD J DDS |
| 1235 | OCCUPANT UNKNOWN |
| | VANGUARD INSTITUTE |
| 1301 | DUARTE CITY OF LIBRARY |
| | LOS ANGELES COUNTY OF LIBRARY PUBLIC |

| | |
| --- | --- |
| 1319 | CORNELIO RUIZ |
| | JOSE MARTINTZ |
| | MICHAEL HAGENBUCH |
| | ROSITA DELFIN |
| 1329 | VIKKI ROSE |
| 1431 | OLD SPAGHETTI FACTORY THE |
| | SPAGHETTIFACTORY THE OLD |
| 1434 | DUARTE PERFORMANCE NISSAN |
| | PERFORMANCE NISSAN |
| 1607 | ERLINDA GOROSPE |
| 1608 | MICHELLE ALCALA |
| | OCCUPANT UNKNOWN |
| 1611 | MADAN GUPTA |
| 1613 | OCCUPANT UNKNOWN |
| 1618 | LEONARD DURSO |
| 1621 | MARIA LOPEZ |
| 1624 | OMAR JAUREGUI |
| 1629 | PAULINE GARCIA |
| 1630 | PAUL STILL |
| 1633 | LUIS AGUILAR |
| | OCCUPANT UNKNOWN |
| 1636 | KARLYN BRUNTON |
| 1641 | JAVIER DIAZ |
| | OCCUPANT UNKNOWN |
| 1643 | JORGE DIAZ |
| 1701 | RAFAEL DIAZ |
| 1705 | OCCUPANT UNKNOWN |
| | VENTURA ALVAREZ |
| 1721 | MARTAIN STOLLE |
| 1727 | FIESTA PARADE FLOATS |
| | GLASTEEL INDUSTRIAL LAMINATES |
| 1802 | ROSE JUAREZ |
| 1817 | EULALIA RENTERIA |
| | FENGZHEN TIAN |
| 1825 | KATHRYN PETERSON |
| | LUTHER HARPER |
| | RENCUN HUO |
| | SOLEDAD DELGADO |
| | XUAN PAN |
| 1831 | DONALD HARDNICK |
| | LUTHER HARPER |
| 1832 | MICHELLE JOHNSON |
| | VINCENT SALAZAR |
| 1834 | TEARA PENDLETON |
| 1836 | ARNISHA RILEY |
| | AURORA MONDIA |
| | CAROLYN STEPHENSON |
| | GLEN MORALIS |
| 1837 | ANA NUNO |
| | MABEL MORINICO |

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Cole Information Services |

## BUENA VISTA ST 1999 (Cont'd)

1840 ALFREDO CASILLAS
TONI NORRIS
1842 GLORIA FELIX
KAREN BIAS
LATISHA ARVIZU
MARIA ARCHILA
1843 H ROSE
MARIA LIRA
1846 GUADALUPE CASTELLANOS
L BLANCHARD
NORMA HERNANDEZ
RICHARD WHITESIDE
1848 GLORIA DIAZ
IRENE MAGANA
NICK FRANKO
WANDA TORRES
1849 VIRGINIA SCHMAHL
1850 EVERETT MAYFIELD
LENA JOHNSON
TYRONE GREGORY
1863 BETTY REED
1869 JOON CHO
1877 DIAN MORRIS
ERNESTO MAGNO
1885 KENNETH STAMPS
1893 LAURICE CHIDIAC
WILLIAM LEVETT
1901 DUARTE PARK APARTMENTS
WILMA ZAMBRANO
1902 ALTADENA DRIVE THRU
1907 ALICE MORA
JOSE MUNOZ
1911 GUOJIAN ZHANG
J KOSTOS
MAEBELLE ODANIEL
1917 JERRY CHANG
M HANEY
1918 NEWPORT FARMS
1921 BENITEZ CHAVEZ
ESTHER ROBERTS
MARIA ARIZMENDI
1927 ELLEN GULLY
JANET YOUNG
MARIA BAK
ROSA DOMINGUEZ
1928 OCCUPANT UNKNOWN
1933 DENESE LEATH
T WANG
VALHA HUNNECUTT
1937 ABUNDIO BARRAGAN

# BUENA VISTA ST 1999 (Cont'd)

| | |
| --- | --- |
| 1937 | ROSE HOPE |
| 1941 | HUI XU |
| | SAMMIE HOOKER |
| 1945 | REFUGIO ECHEVERRIA |
| 1946 | NANDITA GANGULY |
| 1948 | OCCUPANT UNKNOWN |
| 1950 | OCCUPANT UNKNOWN |
| 1952 | DARIUS BROWN |
| 1953 | MARY COOK |
| | VIOLET HALL |
| 1956 | S HABIBI |
| | SHUKRI HABIBI |
| 1958 | OCCUPANT UNKNOWN |
| 1959 | ROY MOORE |
| 1960 | DOUGLAS VIVERO |
| 1962 | OCCUPANT UNKNOWN |
| | ROSE FLORES |
| 1964 | JESSIE WALKER |
| 1966 | KAMARA WALLACE |
| | OCCUPANT UNKNOWN |
| 1967 | ESTHER JOHNSON |
| 1968 | RICARDO ZAMORA |
| 1970 | CHUH KUO |
| | OCCUPANT UNKNOWN |
| 1971 | EDWARD HARRIS |
| 1972 | JOHN MEGOWAN |
| 1976 | JUAN COLIN |
| | OCCUPANT UNKNOWN |
| 1977 | REMEDIOS REMO |
| 1978 | PHYLLIS STONEHOCKER |
| 1980 | LINDA COX |
| | OCCUPANT UNKNOWN |
| 1982 | DONNY GRAY |
| | OCCUPANT UNKNOWN |
| 1983 | ANNA KITO |
| 1984 | SHERRI BOSLEY |
| 1986 | RICARDO AGUILAR |
| 1988 | JOSE ANGUIANO |
| | OCCUPANT UNKNOWN |
| 1989 | CINDY VERGARA |
| 1992 | IRENE QUINONES |
| | JOJO JOSE |
| | MARIA SISON |
| 1993 | ROSE CIRRITO |
| | YING HUA |
| 1996 | KIRSTEN NIELSEN |
| 1998 | DAE HAHN |
| | DEON ELIZALDE |
| | SAM DENTON |
| 1999 | CONCHITA BIOJON |

| | |
| --- | --- |
| 2000 | DAE HAHN |
| | GUS FELIX |
| | KENNETH MORRIS |
| | L WILSON |
| | ROSENDA CAJERO |
| 2002 | GERARDO TALAVERA |
| | ROCIO VASQUEZ |
| 2006 | GAYANE AHVERDYAN |
| 2014 | ARACELI ZAMORA |
| | CALDERON-GUERRERO VICTOR |
| | DANIEL DOMINGUEZ |
| | EVANGELINA ESPINOZA |
| | HERBERT LEON |
| | HILDA FRANCO |
| | JOSE AGUILAR |
| | JOSE MOZ |
| | JUAN TORRES |
| | L CAMPOS |
| | LUIS RAMIREZ |
| | MANUEL HERNANDEZ |
| | MARIA RODRIGUEZ |
| | MARTINEZ CHAVEZ |
| | RODOLFO VALENZUELA |
| | TEODORA CASTRELLON |
| | VALENZUELA DIAZ |
| | VICTOR CALDERON-GUERRE |
| | YADIRA VAZQUEZ |
| 2123 | SERGIO OLIVER |
| 2125 | JUANITA MANZO |
| 2147 | ROSARIO ACOSTA |
| 2240 | SOUTHWEST PRODUCTS COMPANY AIRCRFT EQUIP |

| Target Street | Cross Street | Source |
|---|---|---|
| ✓ | - | Cole Information Services |

# MERIDIAN ST 1999

| | |
|---|---|
| 714 | IDALIA VELASQUEZ |
| 716 | PETER GRANA |
| 726 | VICTOR DOMINGUEZ |
| 730 | TRI EM COMPANY |
| 740 | ROBERTO VELASQUEZ |
| 811 | JIMMY QUINTANILLA |
| 815 | ORLIN MUNNS |
| 841 | PEACHY KIDS |
| 848 | A & S ROOFING OF PASADENA |
| | ALLEN EXTERMINATORS INCORPORATED |
| | IRWINDALE AUTO MUSEUM |
| | WESTERN EMPIRE TERMITE & PEST CONTROL |
| 855 | ARCADIA ADDRESSING COMPANY |
| | GREAT WESTERN DISTRIBUTING SERVICE |
| 861 | NICHOLAS PRECISION ENGINEERING INCORPORATED |

| Target Street | Cross Street | Source |
|---|---|---|
| ✓ | - | Cole Information Services |

# MERIDIAN ST 1995

| | |
|---|---|
| 730 | MARTINEZ, EDWARD |
| | TRI EM CO |
| 740 | LOPEZ, MICHAEL |
| 815 | GUERRERO, ANNIE |
| 829 | ENAS CASSETTE WORLD |
| 833 | SOLRAC ENTERPRISES |
| 841 | AVA IMPORT EXPORT INC |
| 848 | IRWINDALE AUTO MUSEUM |
| 853 | WILLIAM H FLETCHER & ASSOC INC |
| 857 | KOBO WORLD INC |
| 859 | FARMER BROTHERS COFFEE CO |

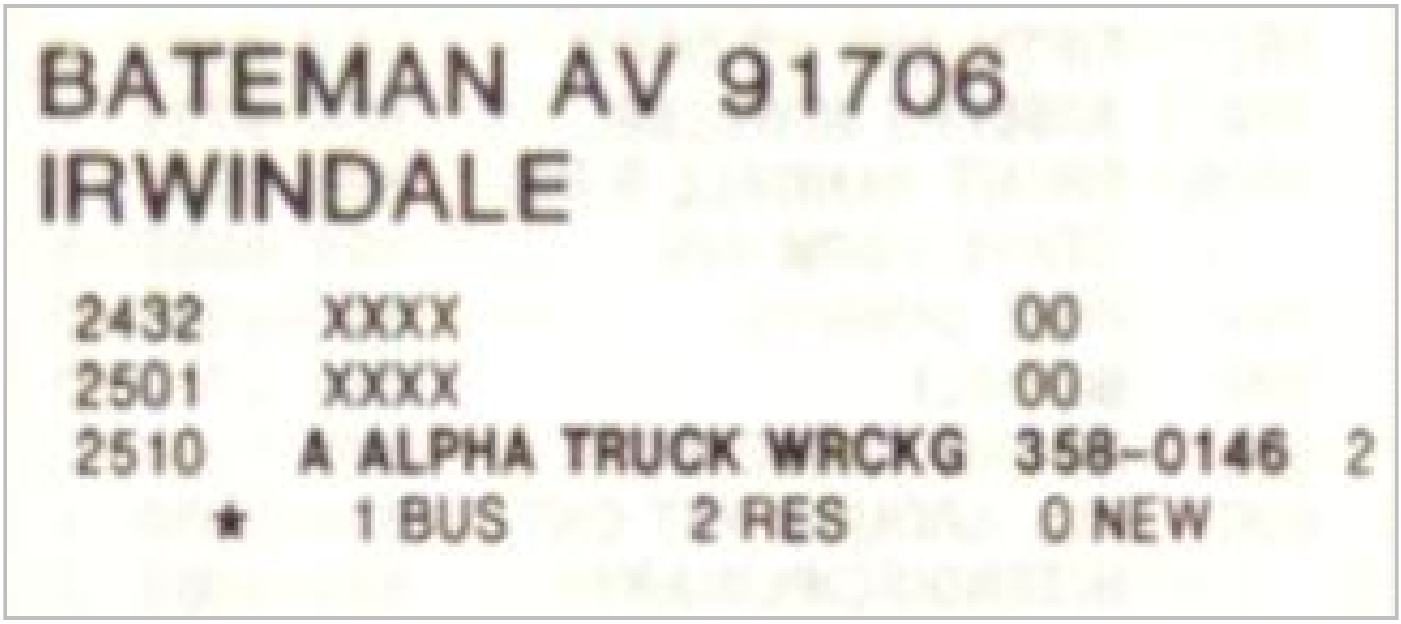
| Target Street | Cross Street | Source |
|---|---|---|
| ✓ | - | Cole Information Services |

# MERIDIAN ST 1992

730 MARTINEZ, EDWARD
TRI EM CO
815 GUERRERO, ANNIE
829 ENAS CASSETTE WORLD
831 CA WINDOWS
833 SOLRAC ENTERPRISES
835 PRO PRINTING INC
837 RICHLENE INC
839 SMITH INDSTRL TIRES
841 AVA IMPORT EXPORT
848 IRWINDALE AUTO MSM
MR GS 1 2 3 TOWING
851 ENDODENT INC
853 WILLIAM H F&ASSOCS
855 ARCADIA ADDRESSING
GREAT WSTRN DSTRBTG
857 KOBO WORLD INC
859 FARMER BROS COFFEE
861 NICHOLAS PRCSN ENGR

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Haines Criss-Cross Directory |

## BATEMAN AVE 1985



BATEMAN AV 91706
IRWINDALE

| | | | |
|---|---|---|---|
| 2432 | XXXX | 00 | |
| 2501 | XXXX | 00 | |
| 2510 | A ALPHA TRUCK WRCKG | 358-0146 | 2 |

* 1 BUS 2 RES 0 NEW

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Haines Criss-Cross Directory |

## BUENA VISTA ST 1985

| | | | |
|---|---|---|---|
| 2002 | WHALEN JOHN F | 359-0549 | 4 |
| 2003 | XXXX | 00 | |
| 2004 | DENNEY DAVID P | 357-6621 | +5 |
| | HEARN MARGARET | 358-1967 | 4 |
| | MOORE JEWELL S | 359-6803 | 1 |
| 2006 | WHALEN CECIL | 359-6356 | |
| 2014 | APARTMENTS | | |
| | BARCENAS TONY | 357-8174 | 4 |
| | BWAA DEVENDRA | 303-3252 | +5 |
| | CAMMANS RANDY | 357-1304 | 3 |
| | SINGH MOHINDERPAL | 357-2801 | +5 |
| | WOODLEE KARLEEN | 358-8675 | +5 |
| 2014 | | | |
| 2155 | SIMMONS J B | 358-2360 | 9 |
| 2240 | SOUTHWST PRODUCTS | 358-0181 | 9 |
| 2250 | XXXX | 00 | |
| 2455 | ALDON CHEMICAL CORP | 303-3711 | |
| | ALDON CONCRETE PROD | 303-3711 | 4 |
| 2495 | IRWINDALE IRON&MTL | 359-5815 | |
| 2575 | THOMAS AUTO WRCKRS | 359-8148 | |
| 2600 | VERNON ASPHALT MTRL | 357-2601 | 6 |
| 2620 | UNITD READY MIX CO | 303-7755 | 4 |
| * | 56 BUS 189 RES | 35 NEW | |

| Target Street | Cross Street | Source |
|---|---|---|
| ✓ | - | Haines Criss-Cross Directory |

**MERIDAIN ST 1985**

# MERIDIAN 91010 DUARTE

| | | | |
|---|---|---|---|
| 714 | XXXX | 00 | |
| 716 | ROGERS HELEN A | 358-1953 | 9 |
| 726 | XXXX | 00 | |
| 730 | MARTINEZ RUBEN | 359-2814 | |
| 740 | LOPEZ MIKE | 359-5860 | 8 |
| 756 | NULL LAWRENCE | 359-8766 | 7 |
| 756½ | RIOS ROSA | 359-6554 | +5 |
| 758 | SILVA RAMON | 303-1329 | 4 |
| 760 | ZAMORA DEBORAH | 357-9522 | 2 |
| 804 | MOUSE | 358-3469 | 9 |
| 808 | XXXX | 00 | |
| 811 | XXXX | 00 | |
| 814 | XXXX | 00 | |
| 815 | XXXX | 00 | |
| 846 | CARLSTON GREENHOUSE | 303-3515 | 4 |
| 848 | A L L JAP AUTO PRTS | 303-2641 | |
| | ALL JAPNSE AUTO PRT | 303-7744 | 4 |
| | ALL VW&PORSCHE PRTS | 303-2641 | |
| | F A S T INC | 357-3361 | |
| | FAST INC | 357-3361 | |
| | FOREIGN AUTO SLVGE | 357-3361 | |
| A | DELAHUERTA AUTO | 358-7316 | |
| 936 | MOBILE PIPE WRAPPNG | 359-8946 | |
| 990 | FORD RESTORABLES | 358-3012 | 1 |
| 1137 | PANKOW BUILDERS INC | 358-9717 | +5 |
| * | 11 BUS 14 RES | 2 NEW | |

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Haines Criss-Cross Directory |

## BATEMAN AVE 1980

BATEMAN AV 91010
DUARTE

NO LISTINGS

BATEMAN AV 91706
IRWINDALE

| | | | |
|---|---|---|---|
| 2432 | A ABAR AUTO WRECKNG | 446-0532 | 2 |
| 2460 | JOHNSON G M | 359-4414 | 9 |
| 2501 | ALPHA INDUSTRIES | 359-2184 | 9 |
| 2510 | A ALPHA TRCK WRCKNG | 358-0145 | +0 |

★ 3 BUS 1 RES 1 NEW

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Haines Criss-Cross Directory |

## BUENA VISTA ST 1980

| | | | |
|---|---|---|---|
| 2123 | BURGOS MARIA | 359-5769 | +0 |
| 2125 | XXXX | 00 | |
| 2137 | CAMPAS CARLOS | 359-2871 | |
| 2143 | XXXX | 00 | |
| 2147 | HOMKAEW C | 357-3403 | +0 |
| 2155 | BRADY JAS F | 357-1577 | +0 |
| | SIMMONS J B | 358-2360 | 9 |
| 2240 | SOUTHWEST PRODUCTS | 358-0181 | 9 |
| 2250 | AIRCO WELDING PRDS | 358-6411 | 8 |
| | MILLER BROWN WELDNG | 358-0101 | 8 |
| * | 32 BUS 214 RES 80 NEW | | |

## BUENA VISTA 91706
## IRWINDALE

| | | | |
|---|---|---|---|
| 2495 | IRWINDALE IRON&MTL | 359-5815 | 5 |
| 2575 | THOMAS AUTO WRECKER | 359-8148 | 5 |
| 2600 | VERNON ASPHALT MTRL | 357-2601 | 6 |
| * | 3 BUS 0 RES 0 NEW | | |

| Target Street | Cross Street | Source |
|---|---|---|
| ✓ | - | Haines Criss-Cross Directory |

**MERIDAIN ST 1980**

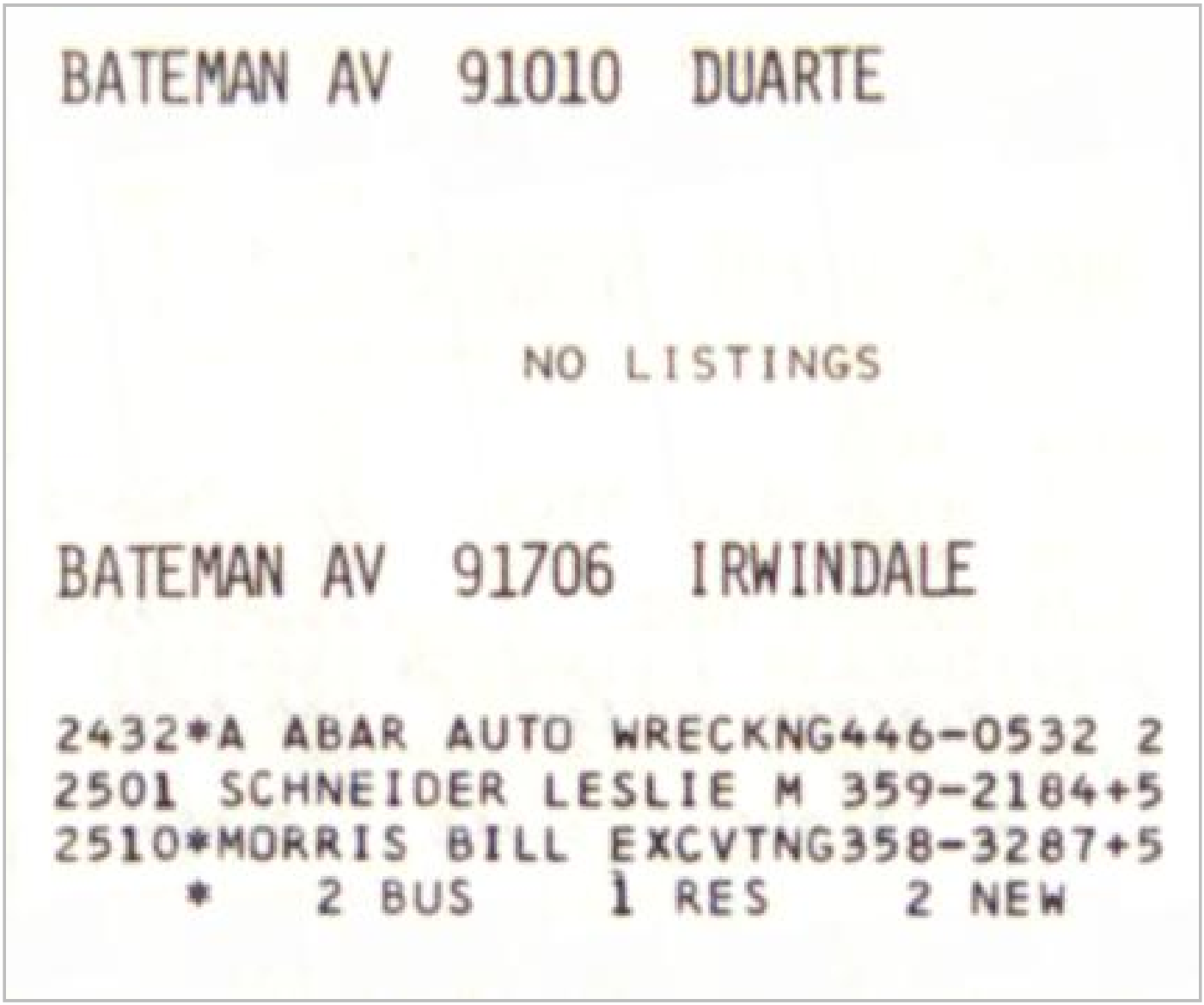


MERIDIAN 91010 DUARTE

| | | | |
|---|---|---|---|
| 714 | ALANIZ BERTHA | 358-6692 | 7 |
| 716 | ROGERS HELEN A | 358-1953 | 9 |
| 726 | XXXX | 00 | |
| 730 | MARTINEZ RUBEN | 359-2814 | |
| 740 | LOPEZ MIKE | 359-5860 | 8 |
| 756 | NULL LAWRENCE | 359-8766 | 7 |
| 758 | STERT STEVE | 359-7732 | 8 |
| 758½ | PEAT JOHN W | 359-7995 | 9 |
| 804 | MOUSE | 358-3469 | 9 |
| 808 | SILVA JOSE | 357-6615 | +0 |
| 811 | XXXX | 00 | |
| 814 | XXXX | 00 | |
| 829 | XXXX | 00 | |
| 848 | F A S T INC | 357-3361 | 7 |
| | FAST INC | 357-3361 | 4 |
| | FOREIGN AUTO SLVGE | 357-3361 | 4 |
| A | DELAHUERTA USED ATO | 358-7316 | 5 |
| 936 | MOBILE PIPE WRAPPNG | 359-8946 | |
| 990 | H&G ATO AUTO PARTS | 358-8917 | 9 |
| * | 7 BUS 12 RES | 1 NEW | |

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Haines Criss-Cross Directory |

## BATEMAN AVE 1975



BATEMAN AV 91010 DUARTE

NO LISTINGS

BATEMAN AV 91706 IRWINDALE

2432*A ABAR AUTO WRECKNG446-0532 2
2501 SCHNEIDER LESLIE M 359-2184+5
2510*MORRIS BILL EXCVTNG358-3287+5
* 2 BUS 1 RES 2 NEW

| Target Street | Cross Street | Source |
|---|---|---|
| - | ✓ | Haines Criss-Cross Directory |

## BUENA VISTA ST 1975



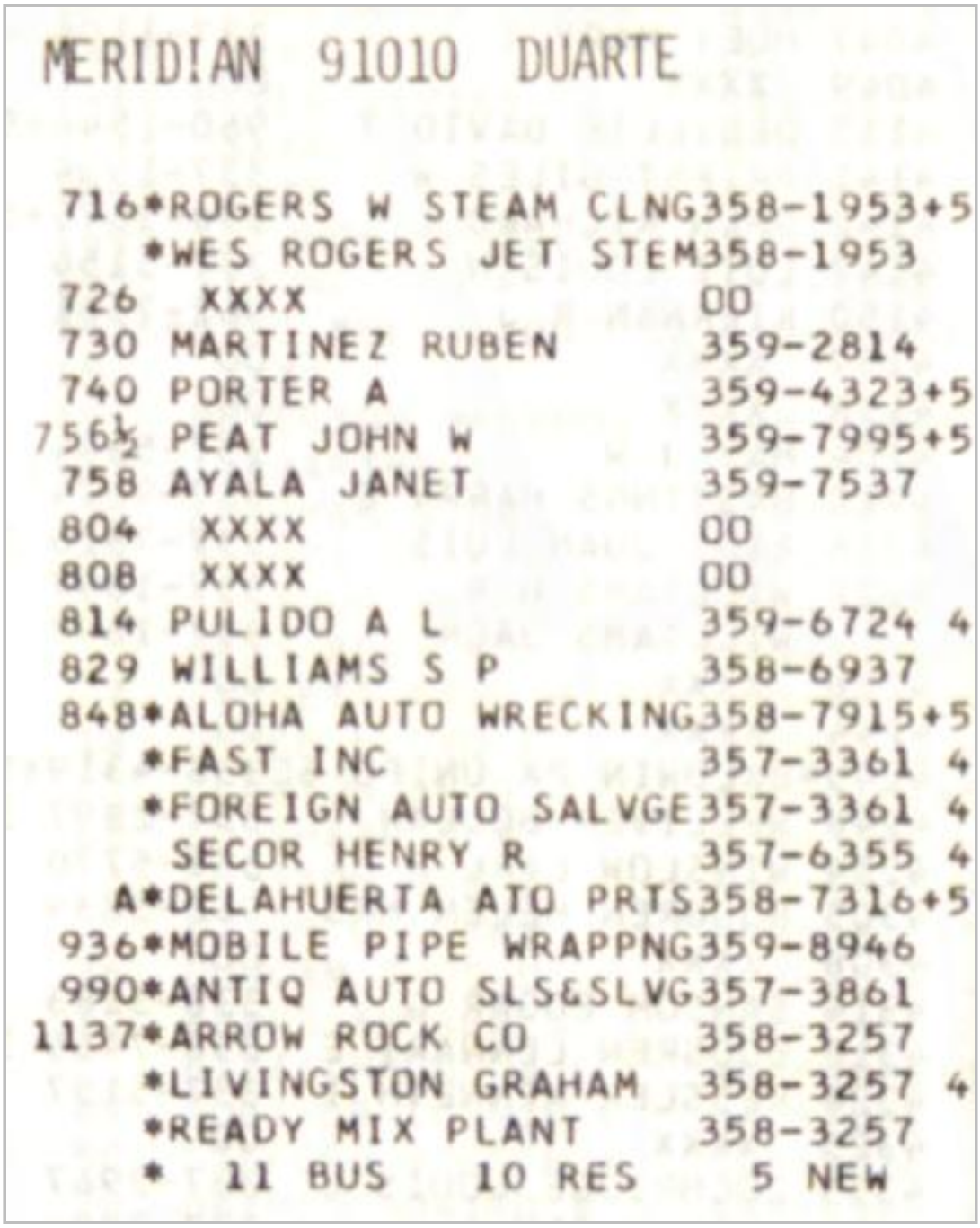
2053 SMITH W E 358-5877
2123 XXXX OO
2125 TRUJILLO LORETTA 357-4043
2137 CAMPAS CARLOS 359-2871
2143 SIMMONS J B 358-2360 3
2147 XXXX OO
* 25 BUS 209 RES 65 NEW

BUENA VISTA 91706 IRWINDALE

2250*BROWN WELDING SPLY 358-0101 3
2495*IRWINDALE IRON&MTL 359-5815+5
2575*THOMAS AUTO WRECKRS 359-8148+5
* 3 BUS 0 RES 2 NEW

| Target Street | Cross Street | Source |
|---|---|---|
| ✓ | - | Haines Criss-Cross Directory |

## MERIDAIN ST 1975



MERIDIAN 91010 DUARTE

716 *ROGERS W STEAM CLNG 358-1953+5
*WES ROGERS JET STEM 358-1953
726 XXXX OO
730 MARTINEZ RUBEN 359-2814
740 PORTER A 359-4323+5
756½ PEAT JOHN W 359-7995+5
758 AYALA JANET 359-7537
804 XXXX OO
808 XXXX OO
814 PULIDO A L 359-6724 4
829 WILLIAMS S P 358-6937
848 *ALOHA AUTO WRECKING 358-7915+5
*FAST INC 357-3361 4
*FOREIGN AUTO SALVGE 357-3361 4
SECOR HENRY R 357-6355 4
A *DELAHUERTA ATO PRTS 358-7316+5
936 *MOBILE PIPE WRAPPNG 359-8946
990 *ANTIQ AUTO SLS&SLVG 357-3861
1137 *ARROW ROCK CO 358-3257
*LIVINGSTON GRAHAM 358-3257 4
*READY MIX PLANT 358-3257
* 11 BUS 10 RES 5 NEW

# Appendix K

# ASFE Geoenvironmental Report

# Important Information about This

# Geoenvironmental Report

Geoenvironmental studies are commissioned to gain information about environmental conditions on and beneath the surface of a site. The more comprehensive the study, the more reliable the assessment is likely to be. But remember: Any such assessment is to a greater or lesser extent based on professional opinions about conditions that cannot be seen or tested. Accordingly, no matter how many data are developed, risks created by unanticipated conditions will always remain. *Have realistic expectations.* Work with your geoenvironmental consultant to manage known and unknown risks. Part of that process should already have been accomplished, through the risk allocation provisions you and your geoenvironmental professional discussed and included in your contract's general terms and conditions. This document is intended to explain some of the concepts that may be included in your agreement, and to pass along information and suggestions to help you manage your risk.

## Beware of Change; Keep Your Geoenvironmental Professional Advised

The design of a geoenvironmental study considers a variety of factors that are subject to change. Changes can undermine the applicability of a report's findings, conclusions, and recommendations. *Advise your geoenvironmental professional about any changes you become aware of.* Geoenvironmental professionals cannot accept responsibility or liability for problems that occur because a report fails to consider conditions that did not exist when the study was designed. Ask your geoenvironmental professional about the types of changes you should be particularly alert to. Some of the most common include:

- modification of the proposed development or ownership group,
- sale or other property transfer,
- replacement of or additions to the financing entity,
- amendment of existing regulations or introduction of new ones, or
- changes in the use or condition of adjacent property.

Should you become aware of any change, *do not rely on a geoenvironmental report.* Advise your geoenvironmental professional immediately; follow the professional's advice.

## Recognize the Impact of Time

A geoenvironmental professional's findings, recommendations, and conclusions cannot remain valid indefinitely. The more time that passes, the more likely it is that important latent changes will occur. *Do not rely on a geoenvironmental report if too much time has elapsed since it was completed.* Ask your environmental professional to define "too much time." In the case of Phase I Environmental Site Assessments (ESAs), for example, more than 180 days after submission is generally considered "too much."

## Prepare To Deal with Unanticipated Conditions

The findings, recommendations, and conclusions of a Phase I ESA report typically are based on a review of historical information, interviews, a site "walkover," and other forms of noninvasive research. When site subsurface conditions are not sampled in any way, the risk of unanticipated conditions is higher than it would otherwise be.

While borings, installation of monitoring wells, and similar invasive test methods can help reduce the risk of unanticipated conditions, *do not overvalue the effectiveness of testing.* Testing provides information about actual conditions only at the precise locations where samples are taken, and only when they are taken. Your geoenvironmental

professional has applied that specific information to develop a general opinion about environmental conditions. *Actual conditions in areas not sampled may differ (sometimes sharply) from those predicted in a report.* For example, a site may contain an unregistered underground storage tank that shows no surface trace of its existence. *Even conditions in areas that were tested can change*, sometimes suddenly, due to any number of events, not the least of which include occurrences at adjacent sites. Recognize, too, that *even some conditions in tested areas may go undiscovered,* because the tests or analytical methods used were designed to detect only those conditions assumed to exist.

Manage your risks by retaining your geoenvironmental professional to work with you as the project proceeds. Establish a contingency fund or other means to enable your geoenvironmental professional to respond rapidly, in order to limit the impact of unforeseen conditions. And to help prevent any misunderstanding, identify those empowered to authorize changes and the administrative procedures that should be followed.

## Do Not Permit Any Other Party To Rely on the Report

Geoenvironmental professionals design their studies and prepare their reports to meet the specific needs of the clients who retain them, in light of the risk management methods that the client and geoenvironmental professional agree to, and the statutory, regulatory, or other requirements that apply. The study designed for a developer may differ sharply from one designed for a lender, insurer, public agency...or even another developer. *Unless the report specifically states otherwise, it was developed for you and only you.* Do not unilaterally permit any other party to rely on it. The report and the study underlying it may not be adequate for another party's needs, and you could be held liable for shortcomings your geoenvironmental professional was powerless to prevent or anticipate. Inform your geoenvironmental professional when you know or expect that someone else—a third-party—will want to use or rely on the report. *Do not permit third-party use or reliance until you first confer with the geoenvironmental professional who prepared the report.* Additional testing, analysis, or study may be required and, in any event, appropriate terms and conditions should be agreed to so both you and your geoenvironmental professional are protected from third-party risks. *Any party who relies on a geoenvironmental report without the express written permission of the professional who prepared it and the client for whom it was prepared may be solely liable for any problems that arise.*

## Avoid Misinterpretation of the Report

Design professionals and other parties may want to rely on the report in developing plans and specifications. They need to be advised, in writing, that their needs may not have been considered when the study's scope was developed, and, even if their needs were considered, they might misinterpret geoenvironmental findings, conclusions, and recommendations. *Commission your geoenvironmental professional to explain pertinent elements of the report to others who are permitted to rely on it, and to review any plans, specifications or other instruments of professional service that incorporate any of the report's findings, conclusions, or recommendations.* Your geoenvironmental professional has the best understanding of the issues involved, including the fundamental assumptions that underpinned the study's scope.

## Give Contractors Access to the Report

Reduce the risk of delays, claims, and disputes by giving contractors access to the full report, *providing that it is accompanied by a letter of transmittal that can protect you* by making it unquestionably clear that: 1) the study was not conducted and the report was not prepared for purposes of bid development, and 2) the findings, conclusions, and recommendations included in the report are based on a variety of opinions, inferences, and assumptions and are subject to interpretation. Use the letter to also advise contractors to consult with your geoenvironmental professional to obtain clarifications, interpretations, and guidance (a fee may be required for this service), and that—in any event—they should conduct additional studies to obtain the specific type and extent of information each prefers for preparing a bid or cost estimate. Providing access to the full report, with the appropriate caveats, helps prevent formation of adversarial attitudes and claims of concealed or differing conditions. If a contractor elects to ignore the warnings and advice in the letter of transmittal, it would do so at its own risk. Your geoenvironmental professional should be able to help you prepare an effective letter.

## Do Not Separate Documentation from the Report

Geoenvironmental reports often include supplemental documentation, such as maps and copies of regulatory files, permits, registrations, citations, and correspondence with regulatory agencies. If subsurface explorations were performed, the report may contain final boring logs and copies of laboratory data. If remediation activities occurred on site, the report may include: copies of daily field reports; waste manifests; and information about the disturbance of subsurface materials, the type and thickness of any fill placed on site, and fill placement practices, among other types of documentation. *Do not separate supplemental documentation from the report. Do not, and do not permit any other party to redraw or modify any of the supplemental documentation for incorporation into other professionals' instruments of service.*

## Understand the Role of Standards

Unless they are incorporated into statutes or regulations, standard practices and standard guides developed by the American Society for Testing and Materials (ASTM) and other recognized standards-developing organizations (SDOs) are little more than aspirational methods agreed to by a consensus of a committee. The committees that develop standards may not comprise those best-qualified to establish methods and, no matter what, no standard method can possibly consider the infinite client- and project-specific variables that fly in the face of the theoretical "standard conditions" to which standard practices and standard guides apply. In fact, these variables can be so pronounced that geoenvironmental professionals who comply with every directive of an ASTM or other standard procedure could run afoul of local custom and practice, thus violating the standard of care. Accordingly, when geoenvironmental professionals indicate in their reports that they have performed a service "in general compliance" with one standard or another, it means they have applied professional judgement in creating and implementing a scope of service designed for the specific client and project involved, and which follows some of the general precepts laid out in the referenced standard. To the extent that a report indicates "general compliance" with a standard, you may wish to speak with your geoenvironmental professional to learn more about what was and was not done. *Do not assume a given standard was followed to the letter.* Research indicates that that seldom is the case.

## Realize That Recommendations May Not Be Final

The technical recommendations included in a geoenvironmental report are based on assumptions about actual conditions, and so are preliminary or tentative. Final recommendations can be prepared only by observing actual conditions as they are exposed. For that reason, you should retain the geoenvironmental professional of record to observe construction and/or remediation activities on site, to permit rapid response to unanticipated conditions. *The geoenvironmental professional who prepared the report cannot assume responsibility or liability for the report's recommendations if that professional is not retained to observe relevant site operations.*

## Understand That Geotechnical Issues Have Not Been Addressed

Unless geotechnical engineering was specifically included in the scope of professional service, a report is not likely to relate any findings, conclusions, or recommendations about the suitability of subsurface materials for construction purposes, especially when site remediation has been accomplished through the removal, replacement, encapsulation, or chemical treatment of on-site soils. The equipment, techniques, and testing used by geotechnical engineers differ markedly from those used by geoenvironmental professionals; their education, training, and experience are also significantly different. If you plan to build on the subject site, but have not yet had a geotechnical engineering study conducted, your geoenvironmental professional should be able to provide guidance about the next steps you should take. The same firm may provide the services you need.

## Read Responsibility Provisions Closely

Geoenvironmental studies cannot be exact; they are based on professional judgement and opinion. Nonetheless, some clients, contractors, and others assume geoenvironmental reports are or certainly should be unerringly precise. Such assumptions have created unrealistic expectations that have led to wholly unwarranted claims and disputes. To help prevent such problems, geoenvironmental professionals have developed a number of report provisions and contract terms that explain who is responsible for what, and how risks are to be allocated. Some people mistake these for "exculpatory clauses," that is, provisions whose purpose is to transfer one party's rightful responsibilities and liabilities to someone else. Read the responsibility provisions included in a report and in the contract you and your geoenvironmental professional agreed to. *Responsibility provisions are not "boilerplate."* They are important.

## Rely on Your Geoenvironmental Professional for Additional Assistance

Membership in the Geoprofessional Business Association exposes geoenvironmental professionals to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a geoenvironmental project. Confer with your GBA-member geoenvironmental professional for more information.

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