



# LAND USE SERVICES DEPARTMENT

## PLANNING COMMISSION STAFF REPORT

**HEARING DATE: July 2, 2015**  
Project Description

**AGENDA ITEM # 2**  
Vicinity Map

**APN:** 0234-101-21  
**Applicant:** CRP Oakmont Redwood Avenue, LLC  
**Community:** Fontana  
**Location:** 9988 Redwood Avenue, Fontana, CA  
**Project No:** P201500064  
**Staff:** Jim Morrissey, Contract Planner  
**Applicant Rep:** John Atwell  
**Proposal:** To construct one industrial building to be used as a high-cube warehouse/distribution facility of approximately 214,300 square feet on 9.85 acres.



80 Hearing Notices Sent On: June 4, 2015

Report Prepared By: Jim Morrissey, Contract Planner

**SITE INFORMATION**

**Parcel Size:** 9.85 ACRES  
**Terrain:** Generally flat  
**Vegetation:** An existing nursery business that utilizes a building for the growing of plants, with associated on-site parking. Some perimeter landscaping exists.

**SURROUNDING LAND DESCRIPTION:**

AREA	EXISTING LAND USE	LAND USE ZONING DISTRICT
Site	Nursery	SD-Com (Special Development Land Use District, Commercial)
North	Industrial	SD-Com (Special Development Land Use District, Commercial)
South	Single Family and Industrial	SD-Com (Special Development Land Use District, Commercial)
East	Single Family	RS (Single Residential District)
West	Single Family Residential and Industrial	SD-Com (Special Development Land Use District, Commercial)

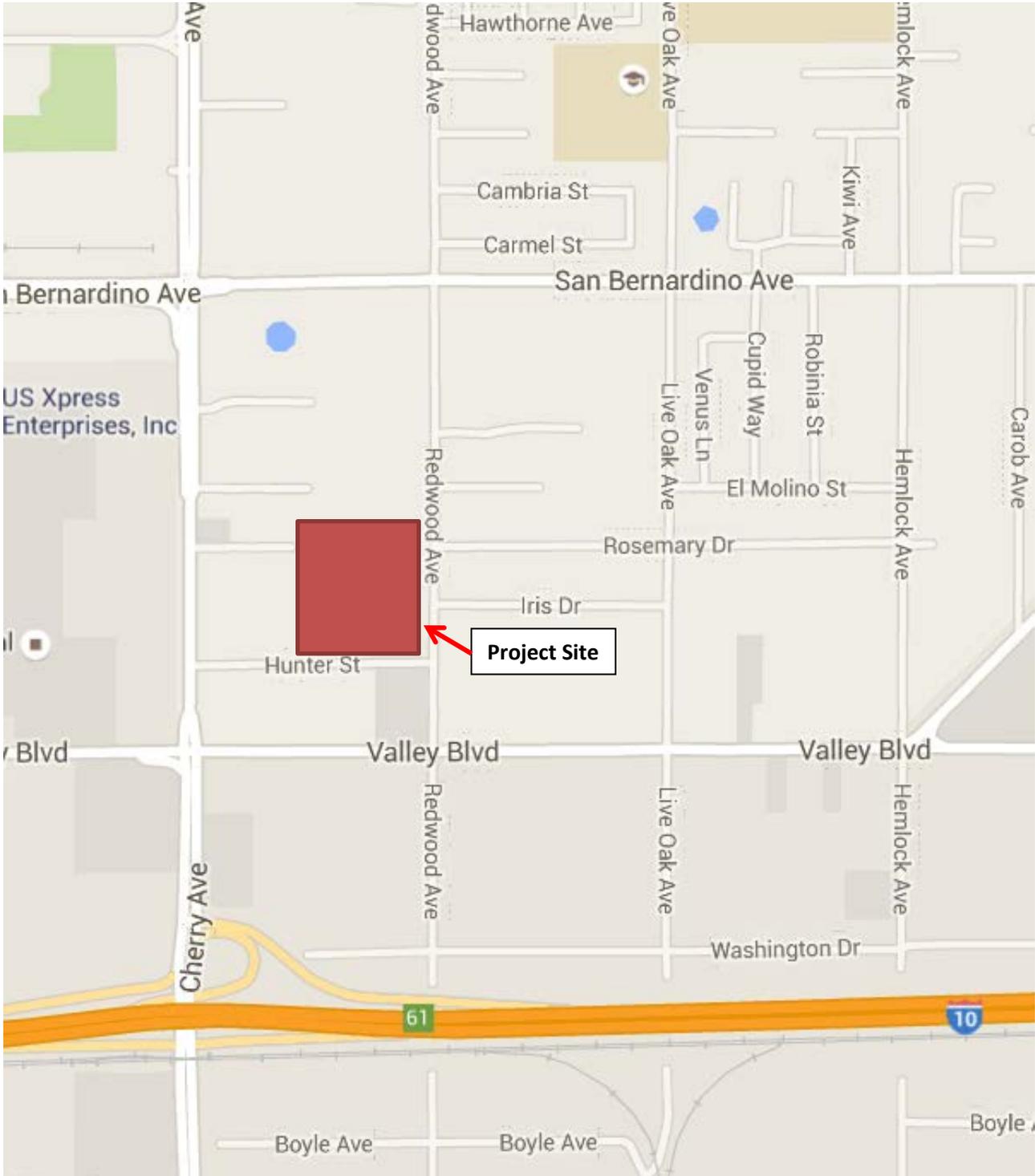
	<b>AGENCY</b>	<b>COMMENT</b>
City Sphere of Influence:	Fontana	Submitted Letter (Attached)
Water Service:	Fontana Water Company	Water Availability Letter (Attached)
Sewer Service:	City of Fontana	Sewer Availability Letter (Attached)

**STAFF RECOMMENDATION:** That the Planning Commission **APPROVE** the Conditional Use Permit for the construction of a 214,300 square foot high cube industrial warehouse on 9.85 acres.

In accordance with Section 86.08.010 of the Development Code, the action taken by the Planning Commission may be appealed to the Board of Supervisors within ten (10) calendar days after the Planning Commission hearing.

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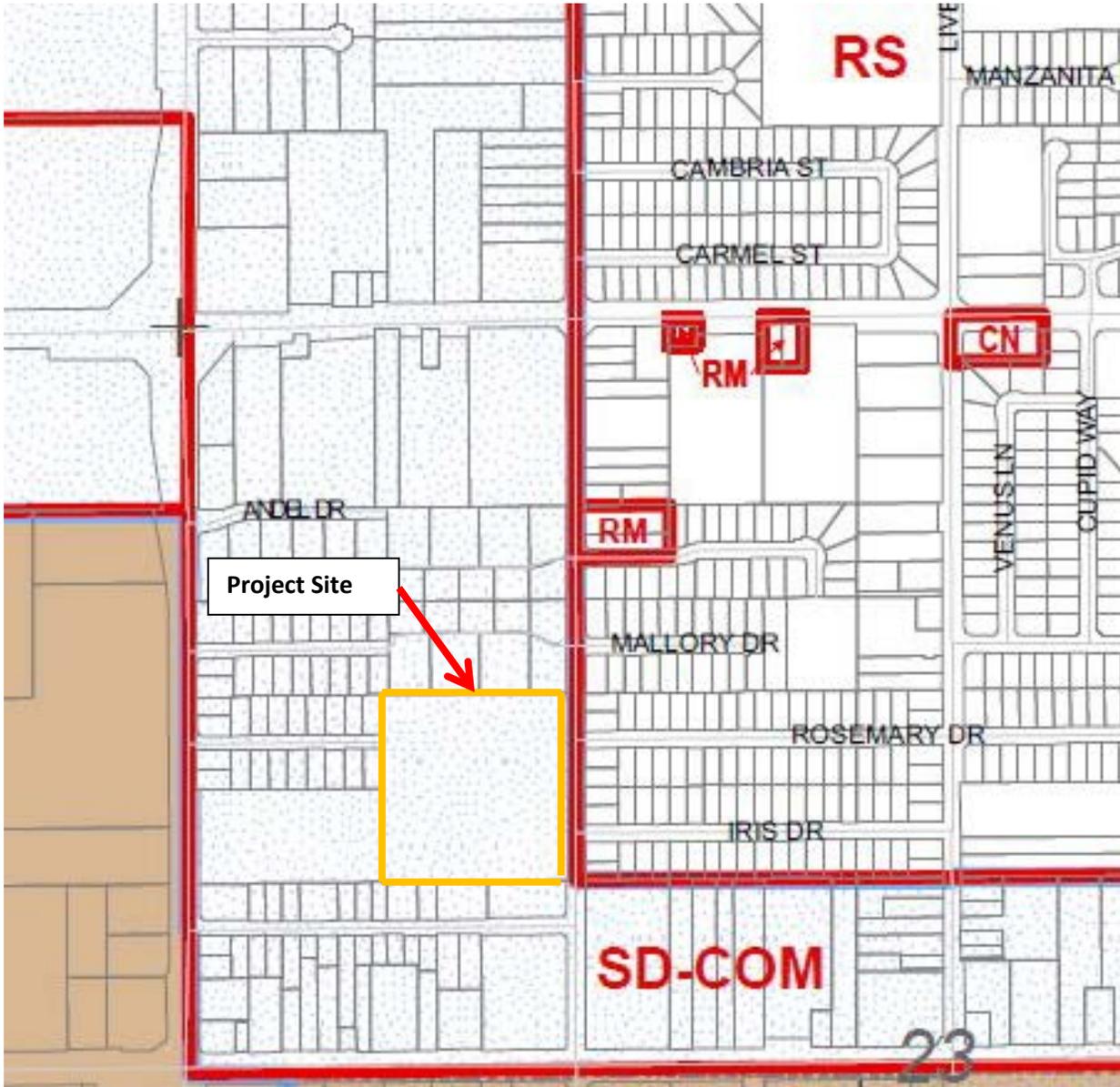
## VICINITY MAP



Aerial of Project Area



## OFFICIAL LAND USE DISTRICT MAP







## SITE PHOTOS



1. Looking at project site, generally in a northwesterly direction, from Redwood Avenue.



2. Looking north along Redwood Avenue from a point near the southerly end of the project site.



3. Looking south along Redwood Avenue, with the northerly portion of the subject property generally located near the closest telephone pole.



4. Looking north on Redwood Avenue at properties located on the easterly side of Redwood Avenue across from the Project site.



5. Looking south along Redwood Avenue, from a point near southerly property line.



6. Looking north along Redwood Avenue, north of the project site boundary.



7. Looking east toward the project site along Rosemary Drive.



8. Looking east along El Molina Street. This street is just northwest of project site and last home on the right is diagonally across from the project site.

## **PROJECT DESCRIPTION AND BACKGROUND:**

**Project:** The subject proposed (P201500064) (Project) is a Conditional Use Permit (CUP) for a 214,300 square foot warehouse/high-cube facility on 9.89 acres that will replace an existing nursery operation. According to the *Phase I Environmental Site Assessment* completed for the property, the initial section of the present-day greenhouse was constructed in 1977, with the final phase completed in 2005. The site has been used by Kallisto Greenhouses since 1976 as a commercial potted plant nursery.

**Location and Access:** The Project is located in unincorporated Fontana. Major roadway access within the area is provided from Interstate 10 via Cherry Avenue to the west and from Valley Boulevard and San Bernardino Avenue located to the south and north, respectively. Site access is provided by Redwood Avenue along the easterly Project boundary. Redwood Avenue is an improved two (2) lane roadway, with sidewalk adjoining the Project site.

**Environmental Setting:** The Project site and the adjoining properties are developed. The Project site is located within an area with various land uses. There are single family residences along the east side of Redwood Avenue, to the south along Hunter Street, and along several cul-de-sac roadways that terminate at or near the westerly side of the Project site (Rosemary Drive and El Molino Street). Commercial/industrial uses, primarily automotive related, exist along Cherry Avenue, with a small industrial park adjoining the Project site to the north.

## **ANALYSIS:**

**Consistency with General Plan and Zoning Regulations:** The Project is located within a Special Purpose Land Use Zoning District, specifically identified as SD-Com. The emphasis of this Special District is commercial development. Special Development within this General Plan category is intended to achieve the following:

- Allow a combination of residential, commercial, and/or manufacturing activities that maximizes the utilization of natural as well as man-made resources.
- Identify areas suitable for large-scale planned developments and to allow cluster-type development to provide more open space.
- Allow joint planning efforts, such as Specific Plans, Area Plans, etc., among adjacent land owners and jurisdictions.

Industrial warehouse distribution projects, such as the one proposed, are permitted in the SD District, subject to approval of a Conditional Use Permit (CUP). The proposed Project has been evaluated for its potential effects on the Project site and its surroundings, resulting in a list of conditions used to ensure a logical and orderly development, compatible with its surroundings. Included are improvement and design requirements. Newly authorized uses must also comply with all applicable land use plans, policies, and regulations of the County and other government agencies.

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Development Code Compliance: The proposed Project complies with the requirements of the San Bernardino County Development Code, as noted below in Table No. 1.

**Table No. 1  
Development Code Evaluation**

<b>Building Area</b>	Office S.F.	15,000	
	Warehouse S.F.	199,300	
<b>Parking Required</b>	Office	1/250 s.f.	60 Stalls
	Warehousing	1/1000 s.f.	40
	Warehouse > 40,000 s.f.	1/4,000 s.f.	40
	Disabled Parking	101 - 150	5
	<i>Total Required Parking</i>		<i>140</i>
<b>Parking Provided</b>	Standard Spaces		124
	Clean Air Spaces/Carpool Spaces	1 carpool space = 2 parking	11 provided (22 equivalent)
	Disabled Parking		5
	<i>Parking Provided</i>		<i>140 actual spaces</i>
<b>Truck Trailer Parking</b>	(Trailer (12' x 50'))		29 stalls
<b>Landscaping</b>	Required 15 %	Provided: 64,350 s.f. 15.0 %	
<b>Setbacks</b>		<b>Required</b>	<b>Provided</b>
	Front	10	25'
	Side Yards	10'	144' and 87'
	Rear Yard	10'	66'
<b>Building Height</b>		50 Feet	41 Feet
<b>Floor Area Ratio</b>	Maximum FAR .5:1	Project FAR .50	

Site Design: The proposed high-cube warehouse does not have an identified user. In order to provide the future user with optional building designs the proposed building has identified the potential placement of up to three (3) office areas in the northeast, northwest, and southeast corners, each with 5,000 sq. ft. of area. The purpose of the dispersed office areas is to permit the building to be divided between separate users, thereby allowing the greatest flexibility for potential users.

The proposed Project provides for auto access along the northerly portion of the Project site and truck access and truck bays along the southerly portion. Residential areas to the east and northwest will be screened from the trucking operation due to the orientation of the building and screening provided by both walls and landscaping.

Based upon comments from the City of Fontana, the Project design was modified to eliminate auto parking near the southerly driveway so that it would not conflict with trucks entering and exiting the site. Some of the City of Fontana comments, such as the approval of a Water Quality Management Plan (WQMP), screening of roof-mounted equipment, providing modifications in the building face through color and varying wall planes and roof lines, screening of trailer parking, and 15 percent landscaping have been provided.

Parking space stripping, site paving, and trash enclosure design shall be provided consistent with County design standards.

Building Elevations: The proposed Project is fairly typical of warehouse designs, with slight variations in building height, wall planes, and colors that create the visual and physical image of variable building features that avoid or eliminate flat wall surfaces. The principle colors are variations of gray and off-white, with some red highlights. The office portions of the design also include glazed windows and aluminum canopies.

City of Fontana Comments: The proposed Project is within the Fontana Sphere of Influence. The City has commented on the Project, noting it is not consistent with the City's pre-zoned M-1 Light Industrial District. Warehousing is identified as a Permitted Use (not subject to a discretionary action) within the City's M-2 District. The type of uses permitted or conditionally permitted within the M-1 District include automotive and truck service and repair, automobile service stations, boat service and repair, machine shop and machinery repair, and recycling facilities.

The City included design recommendations for use if the County "processes the application". Based upon those comments the Project design was modified to eliminate auto parking near the southerly driveway so that it would not conflict with trucks entering and exiting the site. Most of the remaining comments, such as the approval of a Water Quality Management Plan (WQMP), screening of roof-mounted equipment, providing modifications in the building face through color and varying wall places and roof lines, screening of trailer parking, and 15 percent landscaping have been provided. Additional City comments related to parking space stripins site paving, and trash enclosure design would be provided anyway, consistent with County design standards.

The proposed Project is consistent with the County General Plan pursuant to the attached Findings (Exhibit A). The proposed Project also meets applicable requirements of the County Development Code, which have been incorporated into the attached Conditions of Approval (Exhibit B).

Summary of Environmental Assessment: California Environmental Quality Act (CEQA). In compliance with the CEQA, an Initial Study (IS) has been completed for the proposed project. The IS concludes that the Project will not have a significant adverse impact on the environment with the implementation of all the Conditions of Approval and environmental mitigation measures (Exhibit C). On May 17, 2015, the Notice of Availability/Notice of Intent to adopt a Mitigated Negative Declaration was printed in the Sun newspaper that initiated a 20-day comment period, which concluded on June 5, 2015. No comments have been received.

Air Quality and Noise: The Project provides for truck access near the southerly property line and automobile access near the northerly property line. The truck entry drive is across from two (2) single family homes located on Redwood Avenue. The balance of the land along Redwood Avenue, extending to Valley Boulevard, is commercial/industrial with trucking and repair operations. The *Traffic Study* projected five (5) truck trips entering and

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exiting the site during the morning and evening peak hours. The *Air Quality and Climate Change Assessment* evaluated the potential cancer risk from the PProject site and found the Project would result in an incremental increase of cancer at a ratio of four (4) persons within one million, which is less than the 10 in one million threshold established by the South Coast Air Quality Management District.

Traffic Distribution: The Project *Traffic Study*, projected that all of the truck trips will exit the site and turn right or south onto Redwood Avenue and drive to Valley Boulevard, which is approximately 600 feet south of the Project site. At Valley Boulevard all auto and truck trips will disperse east or west. The reverse is projected to occur for inbound truck traffic, with only 5 percent of the truck trips coming to the Project site from San Bernardino Street to the north. Auto trip distribution is generally similar to the truck traffic with 70 percent of the trips projected to exit and drive south to use either Hunter Street or Valley Boulevard. According to the applicant's representative, the site is viable for warehousing due to the completion of the Cherry Avenue/Interstate 10 interchange. The Traffic Study confirms this through the distribution of trucks from (90%) and to (95%) Cherry Avenue.

A *Noise Study* was also prepared for the Project to determine the potential Project impact upon surrounding properties. The noise evaluation found the existing roadway noise levels along Redwood Avenue near the existing single family homes range from 61.4 dBA to 63.7 dBA. Noise levels for homes along the westerly Project boundary are between approximately 50 and 55 dBA. The projected roadway noise due to the Project would result in only a minor increase in the existing noise levels ranging from 0.1 to 0.4 dBA, with the highest level affecting the single family residence at the northeast corner of Mallory Drive, approximately 220 feet north of the Project site, and the commercial/industrial use at the northwest corner of Redwood Avenue and Valley Boulevard.

Drainage/Hydrology: The proposed Project drainage system will utilize an underground storm drain system to collect and convey on-site runoff to several above ground infiltration basins located at the southwesterly and southeasterly portions of the Project site and an underground infiltration system underlying the trailer truck parking area. A Preliminary Water Quality Management Plan has been approved by the Land Development Division Drainage Section, and a Final Plan will be approved pursuant to the Conditions of Approval.

Greenhouse Gasses: The County's Greenhouse Gas Emissions Reduction Plan (GHG Plan) was adopted on December 6, 2011, and became effective on January 6, 2012. The GHG Plan establishes a GHG reduction target for the year 2020 that is 15 percent below 2007 emissions. The GHG Plan is consistent with AB 32 and sets the County on a path to achieve more substantial long-term reductions in the post-2020 period. Achieving this level of emissions will ensure that the contribution to greenhouse gas emissions from activities covered by the GHG Plan will not be cumulatively considerable.

Implementation of the County's GHG Plan is achieved through the Development Review Process by applying appropriate reduction requirements to reduce GHG emissions. All new development is required to quantify the Project's GHG emissions and adopt feasible mitigation to reduce Project emissions below a level of significance. A review threshold of

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3,000 metric tons of carbon dioxide equivalent (MTCO<sub>2e</sub>) per year is used to identify projects that may require reduction measures. For projects exceeding 3,000 MTCO<sub>2e</sub> per year of GHG emissions, the developer may use the GHG Plan Screening Tables as a tool to assist with calculating GHG reduction measures and the determination of a significance finding. Projects that garner 100 or more points through the Screening Table review do not require quantification of project-specific GHG emissions. The proposed Project has garnered 106 points on the Screening Tables through the application of energy efficient building standards, energy efficient lighting fixtures and appliances, and energy efficient plumbing fixtures. The Project also includes car/vanpool programs, is located within ¼ mile of a transit stop, and has anti-idling requirements. Combined with water efficient irrigation/landscaping, recycling measures, and both debris and waste diversion programs, the Project is considered to be consistent with the GHG Plan and is therefore determined to have a less than significant individual and cumulative impact for GHG emissions. The GHG reduction measures proposed by the developer through the Screening Tables Review Process have been included as Conditions of Approval for the Project.

**RECOMENDATION:**

- A. **ADOPT** the Mitigated Negative Declaration.
  
- B. **APPROVE** the Conditional Use Permit for the construction of a 214,300 square-foot industrial building to be used as a “High Cube” warehouse distribution facility, which includes a maximum of 15,000 square feet of office on 9.85 acres, based on the findings contained in the Staff Report and subject to the Conditions of Approval.
  
- C. **FILE** the Notice of Determination.

**ATTACHMENTS:**

- Exhibit A: Findings
- Exhibit B: Conditions of Approval
- Exhibit C: Draft Initial Study/Mitigated Negative Declaration
- Exhibit D: Special Studies
  - Traffic Study
  - Phase I Environmental Site Assessment
  - Noise Study
  - Air Quality and Climate Change Assessment
- Exhibit E Agency Letters

**EXHIBIT A:  
FINDINGS**

Conditional Use Permit for the construction of a 214,300 square foot industrial/warehouse building with 15,000 square feet of office on a 9.85 acre lot (Project).

1. The site for the proposed use is adequate in terms of shape and size to accommodate the proposed use and all landscaping, loading areas, open spaces, parking areas, ingress/egress driveways, and other required features pertaining to the application, because the lot size is adequate to accommodate the proposed facility and is consistent with the size and design requirements of the SD-Com zoning designation. All setbacks meet or exceed County requirements and the building design has been oriented to permit truck traffic to avoid most of the residential housing in the area.
2. The site for the proposed use has adequate access, which means that the site design incorporates appropriate street and highway characteristics to serve the proposed use, because proposed conditions of approval will provide street right of way design to fully widen Redwood Avenue to adopted standards and the Project design provides multiple access drives into and out of the Project site on Redwood Avenue.
3. The proposed use will not have a substantial adverse effect on abutting property or the allowed use of the abutting property, which means that the use will not generate excessive noise, traffic, vibration, or other disturbance, because the applicant will provide a perimeter wall along most of the southerly property line and a portion of the westerly property line to reduce noise levels from the truck loading operation and the use must be operated consistent with County standards. The proposed use will not have adverse effects upon other abutting properties based upon an air quality and risk assessment and noise evaluation. In addition, the use will not interfere with the present or future ability to use solar energy systems.
4. The proposed use and manner of development are consistent with the goals, maps, policies, and standards of the General Plan and any applicable community or specific plan, because the proposed Project is a conditionally permitted use and the design requirements of the SD-Com Land Use District have been met. The Project specifically implements the following goals:

General Plan goal LU 4: The unincorporated communities within the County will be sufficiently served by industrial uses.

- Goal Implementation: The proposed Project provides commercial/industrial development within an existing area adjacent to other commercial and industrial related uses. The proposed Project will replace an existing nursery and is approximately 0.6 miles travel distance from a newly improved freeway interchange.

General Plan Goal LU 9: Development will be in a continuous manner as much as possible to minimize environmental impacts, minimize public infrastructure and service costs, and further countywide economic development goals.

- Goal Implementation: The proposed Project is adjacent to an existing industrial park to the north, truck and auto repair to the west, and truck sales to the southeast.

General Plan Policy LU 9.1: Encourage infill development in unincorporated areas and sphere of influence (SOI) areas.

- Goal Implementation: The proposed Project is within a mixed-use area that includes a variety of residential, commercial, and industrial uses. Due to its proximity to Interstate 10 Freeway and surrounding circulation system, the proposed Project would be compatible with existing and potential development.

5. There is supporting infrastructure, existing or available, consistent with the intensity of development, to accommodate the proposed development without significantly lowering service levels, because utilities exist to adjacent to the Project site to provide service, the Fontana Water Company has reviewed the Project design and has the ability to provide water services, and the City of Fontana will be responsible for conveying sewer to the Inland Empire Utilities Agency for treatment, which has adequate capacity to meet projected demand.
6. The lawful conditions stated in the approval are deemed reasonable and necessary to protect the public health, safety, and general welfare, because the Project has been reviewed by County departments and appropriate conditions of approval have been recommended to meet health and safety requirements, and an Initial Study has been prepared to evaluate potential environmental issues and appropriate mitigation measures have been recommended and incorporated into the conditions of approval to address potentially significant issues.
7. The design of the site has considered the potential for the use of solar energy systems and passive or natural heating and cooling opportunities, because the design of the building and setbacks from other proposed and existing buildings will not conflict with the ability to install or operate of such systems.
8. The Project will not have a significant impact on the environment. An Initial Study (IS) was prepared in compliance with the California Environmental Quality Act (CEQA) and a Negative Declaration (ND) has been reviewed and considered prior to approval of the Project. The IS/ND reflects the independent judgement of the County of San Bernardino.

# **EXHIBIT B**

## **Conditions of Approval**

# CONDITIONS OF APPROVAL

**CONDITIONAL USE PERMIT**  
**CRP Oakmont Redwood Avenue, LLC.**  
**c/o Oakmont Industrial Group**

## GENERAL REQUIREMENTS

Conditions of Operation and Procedures

[Not subject to Condition Compliance Release Form (CCRF) signatures]

### **LAND USE SERVICES – Planning Division (909) 387-8311**

1. Project Description. This Conditional Use Permit (CUP) is approved to construct and operate a 214,300 (maximum) square-foot industrial building that includes three (3) separate office areas of 5,000 square feet each to be used as a “High Cube warehouse distribution facility” (Project) on 9.89 acres in compliance with the San Bernardino County Code (SBCC), California Building Codes (CBC), the California Fire Code (CFC), the following Conditions of Approval, the approved site plan, and all other required and approved reports and displays (e.g. elevations). Parking approved for this project is based upon the above land use description and Conditional Use Permit analysis. The developer shall provide a copy of the approved conditions and site plan to every current and future tenant, lessee, and property owner to facilitate compliance with these conditions of approval and continuous use requirements for the Project site with APN: 0234-101-21 and Project No. P201500064.
2. Project Location. The Project site is located at 9988 Redwood Avenue, generally located north of Hunter Street, south of Mallory Drive, on the west side of Redwood Avenue in the unincorporated area of Fontana.
3. High Cube Warehouse – “High Cube” Warehouses is defined by the National Association of Industrial and Office Properties as follows: A Warehouse/Distribution Center used primarily for the storage and/or consolidation of manufactured goods prior to their distribution to retail locations or other warehouses. These facilities are commonly constructed utilizing tilt-up technique, with a typical ceiling height of at least 24 feet. “High Cube” Warehouse/Distribution Centers are generally greater than 100,000 sq. ft. in size with a land coverage ratio of approximately 50% and a dock-high loading ratio of approximately 1 dock per 5,000-10,000 sq. ft. of warehouse storage. They are characterized by a small employment count due to a high level of automation, which reduces air quality and traffic impacts.
4. Indemnification. In compliance with the SBCC § 81.01.070, the applicant shall agree, to defend, indemnify, and hold harmless the County or its “indemnitees” (herein collectively the County’s elected officials, appointed officials (including Planning Commissioners), Zoning Administrator, agents, officers, employees, volunteers, advisory agencies or committees, appeal boards or legislative body)

from any claim, action, or proceeding against the County or its indemnitees to attack, set aside, void, or annul an approval of the County by an indemnitee concerning a map or permit or any other action relating to or arising out of County approval, including the acts, errors or omissions of any person and for any costs or expenses incurred by the indemnitees on account of any claim, except where such indemnification is prohibited by law. In the alternative, the applicant may agree to relinquish such approval.

Any condition of approval imposed in compliance with the County Development Code or County General Plan shall include a requirement that the County acts reasonably to promptly notify the applicant of any claim, action, or proceeding and that the County cooperates fully in the defense. The applicant shall reimburse the County and its indemnitees for all expenses resulting from such actions, including any court costs and attorney fees, which the County or its indemnitees may be required by a court to pay as a result of such action. The County may, at its sole discretion, participate at its own expense in the defense of any such action, but such participation shall not relieve the applicant of their obligations under this condition to reimburse the County or its indemnitees for all such expenses.

This indemnification provision shall apply regardless of the existence or degree of fault of indemnitees. The applicant's indemnification obligation applies to the indemnitees' "passive" negligence but does not apply to the indemnitees' "sole" or "active" negligence or "willful misconduct" within the meaning of Civil Code Section 2782.

5. Revisions. Any proposed change to the approved use/activity on the site (e.g. from warehouse to manufacturing); or any increase in the developed area of the site or any expansion or modification to the approved facilities, including changes to structures building locations, elevations, signs, parking allocation, landscaping, lighting, allowable number of occupants (clients and/or employees); or a proposed change in the conditions of approval, including operational restrictions from those shown either on the approved site plan and/or in the conditions of approval shall require that an additional land use application (e.g., Revisions to an Approved Action) be submitted to the County Planning for review and approval.
6. Continuous Effect/Revocation. All of the conditions of this project are continuously in effect throughout the operative life of the project for the use approved. Failure of the property owner, tenant, applicant, developer or any operator (herein "developer") to comply with any or all of the conditions at any time may result in a public hearing and revocation of the approved land use, provided adequate notice, time and opportunity is provided to the property owner or other party to correct the non-complying situation

7. Expiration. This project permit approval shall expire and become void if it is not “exercised” within three (3) years of the effective date of this approval, unless an extension of time is approved. The permit is deemed “exercised” when either:
- a) The permittee has commenced actual construction or alteration under a validly issued building permit, or
  - b) The permittee has substantially commenced the approved land use or activity on the project site, for those portions of the project not requiring a building permit. (SBCC §86.06.060)

Occupancy of completed structures and operation of the approved and exercised land use remains valid continuously for the life of the project and the approval runs with the land, unless one of the following occurs:

- a) Construction permits for all or part of the project are not issued or the construction permits expire before the structure is completed and the final inspection is approved.
- b) The land use is determined by the County to be abandoned or non-conforming.
- c) The land use is determined by the County to be not operating in compliance with these conditions of approval, the County Code, or other applicable laws, ordinances or regulations. In these cases, the land use may be subject to revocation hearing and possible termination.

**PLEASE NOTE:** This will be the **ONLY** notice give of the approval expiration date. The “developer” is responsible to initiate any Extension of Time application.

8. Extension of Time. Extension of time to the expiration date (listed above or as otherwise extended) may be granted in increments each not to exceed an additional three (3) years beyond the current application date. An application to request consideration of an extension of time may be filed with the appropriate fees no less than thirty (30) days before the expiration date. Extensions of time may be granted based on a review of the application, which includes a justification of the delay in construction and a plan of action for completion. The granting of such an extension request is a discretionary action that may be subject to additional or revised conditions of approval or site plan modifications. (SBCC §86.06.060)
9. Development Impact Fees. Additional fees may be required prior to issuance of development permits. Fees shall be paid as specified in adopted fee ordinance.
10. Project Account. The Job Costing System (JCS) account number is P201500064. This is an actual cost project with a deposit account to which hourly charges are assessed by various county agency staff (e.g. Land Use Services, Public Work and County Counsel). Upon notice, the “developer” shall

deposit additional funds to maintain or return the account to a positive balance. The “developer” is responsible for all expenses charged to this account. Processing of the project shall cease if it is determined that the account has a negative balance and that an additional deposit has not been made in a timely manner. A minimum balance of \$1,000.00 shall be in the project account at the time of the project approval and the initiation of the Condition Compliance Review. Sufficient funds shall remain in the account to cover all estimated charges that may be made during each compliance review. All fees required for processing shall be paid in full prior to final inspection, occupancy and/or operation of each approved use in each approved structure or land use activity area.

11. Condition Compliance. In order to obtain construction permits for grading, or any new building, final inspection, the developer shall process a Condition Compliance Review Form for the development through County Planning in accordance with the directions stated in the Approval Letter. County Planning shall release their holds on each phase of development by providing to County Building and Safety the following:
  - Grading Permit – a copy of the signed CCRF for grading/land disturbance and two (2) “red” stamped and signed approved copies of the grading plans.
  - Building Permits – a copy of the signed CCRF for building permits and three (3) “red” stamped and signed approved copies of the final approved site plan.
  - Final Occupancy – a copy of the signed CCRF for tenant occupancy of each respective building, after an on-site compliance inspection by County Planning.
  
12. Additional Permits. The property owner, developer, and land use operator are all responsible to ascertain and comply with all laws, ordinances, regulations and any other requirements of Federal, State, County and Local agencies as are applicable to the development and operation of the approved land use and project site. These include:
  - a) FEDERAL: None
  - b) STATE: Regional Water Quality Control Board (RWQCB) – Santa Ana Region
  - c) COUNTY: Land Use Services-Planning, Building and Safety, Land Development, Code Enforcement; County Fire-Community Safety, Hazardous Materials; Public Health-Environmental Health Services (DEHS), Public Works-Traffic, Surveyor, Solid Waste Management
  - d) LOCAL: Fontana Water Company.
  
13. Continuous Maintenance. The property owner and “developer” shall continually maintain the property so that it is visually attractive and not dangerous to the health, safety and general welfare of both on-site uses (e.g. employees) and surrounding properties. The “developer” shall ensure that all facets of the

development are regularly inspected, maintained and that any defects are timely repaired. Among the elements to be maintained, include but are not limited to:

- a) Annual maintenance and repair. The developer shall conduct inspections for all structures, fencing/walls, walks, parking lots, driveways, and signs to assure proper structural, electrical and mechanical safety and a properly operating irrigation system.
- b) Graffiti and debris. The developer shall be remove graffiti and debris immediately with weekly maintenance.
- c) Landscaping. The developer shall maintain landscaping in a continual healthy thriving manner at proper height for required screening. Drought-resistance; fire retardant vegetation shall be used where practicable. Where landscaped areas are irrigated it shall be done in a manner designed to conserve water, minimizing aerial spraying.
- d) Dust control. The developer shall maintain dust control measures on any undeveloped areas where landscaping has not been provided.
- e) Erosion control. Measures shall be maintained to reduce water run-off, siltation, and promote slope stability.
- f) Architectural controls. Shall be enforced by the property owner to maintain compatibility of theme, material, unfaded colors, building mass, size and height.
- g) External Storage. The developer shall maintain external storage, loading, recycling and trash storage areas in a neat and orderly manner, and fully screened from public view. Outside storage shall not exceed the height of the screening walls.
- h) Metal Storage Containers. The developer shall NOT place metal storage containers in loading areas or other areas unless specifically approved by this or subsequent land use approvals.
- i) Signage. The developer shall maintain all on-site signs, including posted area signs (e.g. "No Trespassing") in a clean readable condition at all times. The developer shall remove all graffiti and repair vandalism on a regular basis. Signs on the site shall be of the size and general location as shown on the approved site plan or subsequently a County-approved sign plan.
- j) Lighting. The developer shall maintain any lighting so that they operate properly for safety purposes and do not project onto adjoining properties or roadways. Lighting shall adhere to applicable glare and night light rules.
- k) Parking and on-site circulation. The developer shall maintain all parking and on-site circulation requirements, including surfaces, all markings and traffic/directional signs shall be maintained in an unfaded condition as identified on the approved site plan. Any modification to parking and access layout requires the Planning Division's review and approval. The markings and signs shall be clearly defined, un-faded and legible; these include parking spaces, disabled space and access path of travel, directional designations and signs, stop signs, pedestrian crossing, speed humps, and "No Parking", "carpool", and "Fire Lane" designations.

- l) Fire Lanes. The developer shall clearly define and maintain in good condition at all times all markings required by the Fire Department, including “No Parking” designations and “Fire Lane” designations.
14. Performance Standards. The approved land uses shall operate in compliance with the general performance standards listed in the County Development Code Chapter 83.01, regarding air quality, electrical disturbance, fire hazards (storage of flammable or other hazardous materials), heat, noise, vibration, and the disposal of liquid waste.
15. Lighting. The glare from any luminous source, including on-site lighting shall not exceed one-half (0.5) foot-candle at property line. All lighting shall be limited to that necessary for maintenance activities and security purposes. This is to allow minimum obstruction of night sky remote area views. No light shall project onto adjacent roadway in a manner that interferes with on-coming traffic. All signs proposed by this project shall only be lit by steady, stationary, shielded light directed at the sign, by light inside the sign, by direct stationary neon lighting or in the case of an approved electronic message center sign alternating no more than once every five seconds.
16. Clear Sight Triangle. Adequate visibility for vehicular and pedestrian traffic shall be provided at clear sight triangles at all 90 degree angle intersections of public rights-of-way and private driveways. All signs, structure, and landscaping located within any clear sight triangle shall comply with the height and location requirement specified by County Development Code (SBCC§ 83.02.030) or as otherwise required by County Traffic.
17. Water Conservation. Structures shall incorporate interior and exterior water conservation measures (low-flow plumbing, water efficient landscaping, drip irrigation, minimization of turf areas, etc.) as required by the SBCC.
18. Construction Hours. Construction will be limited to the hours between 7:00 AM and 7:00 PM, Monday through Saturday in accordance with the SBCC standards. No construction activities are permitted outside of these hours or on Sundays and Federal holidays.
19. Signs. All existing signs must be removed before new signs can be installed. All signs must comply with and be permitted in accordance with SBCC §83.13, Sign Regulations.
20. Underground Utilities. There shall be no new above ground power or communication lines extended to the site. All new utilities shall be placed underground in a manner, which avoids disturbing any existing/natural vegetation

or the site appearance. Existing utilities around the site perimeter shall also be placed underground, where possible in coordination with the utility provider.

21. Operational Security. Implementation of operational security measures for commercial and industrial uses is highly recommended to include video surveillance and security patrols during non-business hours. The installation of exterior security lighting for all public areas in compliance with any night sky regulations is encouraged. This will assist in crime prevention and detection.
22. Access. The access point to the facility shall remain unobstructed at all times, except a driveway access gate which may be closed after normal working hours.
23. Operational Noise. *The County shall verify that the following notes shall be cited on the CUP Site Plan that:  
The building occupant shall place all stationary noise generating equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site.*
24. Air Quality/Operational Mitigation. *The “developer” shall implement the following air quality mitigation measures, during operation of the approved land use: All on-site equipment and vehicles (off-road/ on-road), shall comply with the following:
  - a. *County Diesel Exhaust Control Measures [SBCC §83.01.040 (c)]b Signs shall be posted requiring all vehicle drivers and equipment operators to turn off engines when not in use.*
  - b. *All engines shall not idle more than five minutes in any one-hour period on the project site. This includes all equipment and vehicles.*
  - c. *Engines shall be maintained in good working order to reduce emissions.*
  - d. *Ultra low-sulfur diesel fuel shall be utilized.*
  - e. *Electric, CNG and gasoline-powered equipment shall be substituted for diesel-powered equipment, where feasible.*
  - f. *On-site electrical power connections shall be made available, where feasible.*
  - g. *All transportation refrigeration units (TRU's) shall be provided electric connections, when parked on-site.**[Mitigation Measure III-2] General/Operational Requirements/Planning**

### **LAND USE SERVICES – Code Enforcement Division (909) 387-8311**

25. Enforcement. If any County agency is required to enforce compliance with the conditions of approval, the property owner and “developer” shall be charged for such enforcement activities in accordance with the County Code Schedule of Fees. Failure to comply with these conditions of approval or the approved site plan design required for this project approval shall be enforceable against the property owner and “developer” (by both criminal and civil procedures) as provided by the San Bernardino County Code, Title 8 - Development Code; Division 6 - Administration, Chapter 86.09 - Enforcement.

26. Weed Abatement. The developer shall comply with San Bernardino County weed abatement regulations [SBCC§ 23.0301-23.0319] and periodically clear the site of all non-complying vegetation. This includes removal of all Russian thistle (tumbleweeds).

**PUBLIC HEALTH – Environmental Health Services (DEHS) (800) 442-2283**

27. Noise Level. Noise level shall be maintained at or below County Standards, Development Code §83.01.080. For information, contact DEHS at 1-800-442-2283.
28. Refuse Storage/Removal. All refuse generated at the premises shall at all times be stored in approved containers and shall be placed in a manner so that environmental public health nuisances are minimized. All refuse not containing garbage shall be removed from the premises at least 1 time per week, or as often as necessary to minimize public health nuisances. Refuse containing garbage shall be removed from the premises at least 2 times per week, or as often as necessary to minimize public health nuisances, by a permitted hauler to an approved solid waste facility in conformance with San Bernardino County Code Chapter 8, Section 33.0830 et. seq. For information, please call DEHS/LEA at: 1-800-442-2283.

**COUNTY FIRE – Community Safety (909) 386-8400**

29. Fire Jurisdiction. The above referenced project is under the jurisdiction of the San Bernardino County Fire Department herein (“Fire Department”). Prior to any construction occurring on any parcel, the developer shall contact the Fire Department for verification of current fire protection requirements. All new construction shall comply with the current Uniform Fire Code requirements and all applicable statutes, codes, ordinances and standards of the Fire Department.

**LAND USE SERVICES - Land Development Division– Drainage (909) 387-8311**

30. Tributary Drainage. Adequate provisions should be made to intercept and conduct the tributary off site - on site drainage flows around and through the site in a manner, which will not adversely affect adjacent or downstream properties at the time the site is developed.
31. Natural Drainage. The natural drainage courses traversing the site shall not be occupied or obstructed.

32. Additional Drainage Requirements. In addition to drainage requirements stated herein, other "on-site" and/or "off-site" improvements may be required which cannot be determined from tentative plans at this time and would have to be reviewed after more complete improvement plans and profiles have been submitted to this office.
33. Continuous BMP Maintenance. The property owner/"developer" is required to provide periodic and continuous maintenance of all Best Management Practices (BMP) devices/facilities listed in the County approved Water Quality Management Plan (WQMP) for the project. This includes but is not limited to, filter material replacement and sediment removal, as required to assure peak performance of all BMPs. Furthermore, such maintenance activity will require compliance with all Local, State, or Federal laws and regulations, including those pertaining to confined space and waste disposal methods in effect at the time such maintenance occurs.
34. BMP Enforcement. In the event the property owner/"developer" (including any successors or assigns) fails to accomplish the necessary BMP maintenance within five (5) days of being given written notice by County Public Works, then the County shall cause any required maintenance to be done. The entire cost and expense of the required maintenance shall be charged to the property owner and/or "developer", including administrative costs, attorney's fees and interest thereon at the rate authorized by the County Code from the date of the original notice to the date the expense is paid in full.

#### **PUBLIC WORKS - Traffic Division (909) 387-8186**

35. Access. The project vehicles shall not back out into the public roadway.
36. Left Turn Movements. The left-turn movements will be restricted at the southern project driveway along Redwood Avenue.

#### **PUBLIC WORKS - Solid Waste Management (909) 387-8701**

37. Recycling Storage Capacity. The developer shall provide equal space and storage bins for both refuse and recycling materials. This requirement is to assist the County in compliance with the recycling requirements of AB 2176.
38. Mandatory Trash Service. This project falls within a Uniform Handling Service area. If uniform handling is implemented in all or part of a particular franchise area, all owners of a dwelling or a commercial or industrial unit within the uniform handling area who are required to have uniform handling service shall, upon notice thereof, be required to accept uniform handling service from the grantee holding a franchise agreement and pay the rate of such services. This

requirement is a stipulation of County Code Title 4, Division 6, Chapter 5, Section 46.0501.

39. Mandatory Commercial Recycling. Beginning July 1, 2012 all businesses defined to include a commercial or public entity that generates 4 or more cubic yards of commercial solid waste a week or is a multi-family residential dwelling of 5 units or more to arrange for recycling services. The County is required to monitor business recycling and will require the businesses to provide recycling information. This requirement is to assist the County in compliance with AB 341.

### **PRIOR TO ISSUANCE OF DEMOLITION PERMITS THE FOLLOWING SHALL BE COMPLETED**

#### **LAND USE SERVICES - Building and Safety Division (909) 387- 8311**

40. Demolition Permit: Obtain a demolition permit for any building/s or structures to be demolished. Underground structures must be broken in, back-filled and inspected before covering.

#### **PUBLIC WORKS - Solid Waste Management (909) 387-8701**

41. Construction and Demolition Waste Management Plan (CDWMP) Part 1. The developer shall prepare, submit, and obtain approval from Solid Waste Management Division (SWMD) of a CDWMP Part 1 for each phase of the project. The CWMP shall list the types and weights or volumes of solid waste materials expected to be generated from grading and construction. The CDWMP shall include options to divert from landfill disposal materials for reuse or recycling by a minimum of 50% of total weight or volume. Forms can be found on our website at: [www.sbcounty.gov/dpw/solidwaste](http://www.sbcounty.gov/dpw/solidwaste). An approved CDWMP Part 1 is required before a demolition permit can be issued.

Upon completion of construction, the developer shall complete SWMD's CDWMP Part 2 and shall provide documentation of diversion of materials including but not limited to receipts, invoices or letters showing material type(s) and weights or volume from diversion facilities or certification reuse of materials on site. An approved Part 2 of the CDWMP is required prior to issuance of building permits.

**PRIOR TO ISSUANCE OF GRADING PERMITS OR  
ANY LAND DISTURBING ACTIVITY  
THE FOLLOWING SHALL BE COMPLETED**

**LAND USE SERVICES - Building and Safety Division (909) 387- 8311**

42. Retaining Wall Plans: Submit plans and obtain separate building permits for any required walls or retaining walls.
43. Geology Report. A geology report shall be submitted to the Building and Safety Division for review and approval by the County Geologist and fees paid for the review prior to final project approval.
44. Geotechnical (Soil) Report. A geotechnical (soil) report shall be submitted to the Building and Safety Division for review and approval prior to issuance of grading permits.
45. Grading Plans. Grading plans shall be submitted to Building and Safety for review and approval prior to grading/land disturbance of more than 50 Cu Yards.
46. Erosion & Sediment Control Plan: An erosion and sediment control plan and permit shall be submitted to and approved by the Building Official prior to any land disturbance.
47. Erosion Control Installation: Erosion control devices must be installed at all perimeter openings and slopes. No sediment is to leave the job site.
48. NPDES. An NPDES permit - Notice of Intent (NOI) - is required on all grading of one (1) acre or more prior to issuance of a grading/construction permit. Contact your Regional Water Quality Control Board for specifics [www.swrcb.ca.gov](http://www.swrcb.ca.gov)
49. Regional Board Permit Letter. CONSTRUCTION projects involving one or more acres must be accompanied by a copy of the Regional Board permit letter with the WDID #. Construction activity includes clearing, grading, or excavation that results in the disturbance of at least one (1) acre of land total.

**LAND USE SERVICES - Planning Division (909) 387- 8311**

50. Dust Control Plan. *The “developer” shall prepare, submit for review and obtain approval from County Planning of both a Dust Control Plan (DCP) consistent with SCAQMD guidelines and a signed letter agreeing to include in any construction contracts/ subcontracts a requirement that project contractors adhere to the requirements of the DCP. The DCP shall include the following requirements:*

- a. *Exposed soil shall be kept continually moist to reduce fugitive dust during all grading and construction activities, through application of water sprayed a minimum of two times each day.*
  - b. *During high wind conditions (i.e., wind speeds exceeding 25 mph), areas with disturbed soil shall be watered hourly and activities on unpaved surfaces shall cease until wind speeds no longer exceed 25 mph.*
  - c. *Storage piles that are to be left in place for more than three working days shall be sprayed with a non-toxic soil binder, covered with plastic or revegetated.*
  - d. *Storm water control systems shall be installed to prevent off-site mud deposition.*
  - e. *All trucks hauling dirt away from the site shall be covered.*
  - f. *Construction vehicle tires shall be washed, prior to leaving the project site.*
  - g. *Rumble plates shall be installed at construction exits from dirt driveways.*
  - h. *Paved access driveways and streets shall be washed and swept daily when there are visible signs of dirt track-out.*
  - i. *Street sweeping shall be conducted daily when visible soil accumulations occur along site access roadways to remove dirt dropped or tracked-out by construction vehicles.*
  - j. *Site access driveways and adjacent streets shall be washed daily, if there are visible signs of any dirt track-out at the conclusion of any workday and after street sweeping.*
- [Mitigation Measure III-3] Grading Permits/Planning*

51. Construction Noise. *The “developer” shall submit and obtain approval from County Planning of a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements to reduce noise impacts during construction by implementing the following measures and submitting documentation of compliance: The developer/construction contractors shall do the following:*
- a. *During the project site excavation and grading, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with the manufactures standards.*
  - b. *The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site.*
  - c. *The construction contractor shall limit all construction-related activities that would result in high noise levels between the hours of 7:00 a.m. and 6:00 p.m., Monday through Saturday excluding holidays.*
  - d. *The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise sensitive receptors nearest the project site during all project construction.*

- e. *The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment. To the extent feasible, haul routes shall not pass sensitive land uses or residential dwellings.*
- f. *Prior to issuance of grading permits, the Applicant shall submit a mitigation plan prepared by a qualified engineer or other acoustical expert for review and approval by the Planning Division that identifies noise control measures that achieve a minimum 20 dBA reduction in construction related noise levels at the residential uses to the west, south, and east of the project site. The mitigation plan may include use of vibratory pile drivers or other pile driving noise controls, sound curtains, engineered equipment controls, or other methods. Noise control requirements shall be noted on project construction drawings and verified by the Building Department during standard inspection procedures.  
[Mitigation Measure XII-1] - Prior to Grading Permit/Planning*

52. *Air Quality Construction Mitigation.* *The “developer” shall submit for review and obtain approval from County Planning of a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements to reduce vehicle and equipment emissions and other impacts to air quality by implementing the following measures and submitting documentation of compliance: The developer/construction contractors shall do the following:*

- a. *Provide documentation prior to beginning construction demonstrating that the project will comply with all SCAQMD regulations including 402, 403, 431.1, 431.2, 1113 and 1403.*
- b. *Each contractor shall certify to the developer prior to construction-use that all equipment engines are properly maintained and have been tuned-up within last 6 months.*
- c. *Each contractor shall minimize the use of diesel-powered vehicles and equipment through the use of electric, gasoline or CNG-powered equipment. All diesel engines shall have aqueous diesel filters and diesel particulate filters.*
- d. *All gasoline-powered equipment shall have catalytic converters.*
- e. *Provide onsite electrical power to encourage use of electric tools.*
- f. *Minimize concurrent use of equipment through equipment phasing.*
- g. *Provide traffic control during construction to reduce wait times.*
- h. *Provide on-site food service for construction workers to reduce offsite trips.*
- i. *Implement the County approved Dust Control Plan (DCP)*
- j. *Suspend use of all construction equipment operations during second stage smog alerts.*

*NOTE: For daily forecast, call (800) 367-4710 (San Bernardino and Riverside counties).*

*[Mitigation Measure III-4] Grading Permits/Planning*

53. *Excavation.* *If human remains are encountered on the property, the San Bernardino County Coroner’s Office Must be contacted within 24 hours of the find, and all work halted until a clearance is given by that office and any other*

involved agencies. Contact the County Corner at 175 South Lena Road, San Bernardino, CA 92415-0037 or (909) 387-2543.

54. Cultural Resources. The developer/property owner shall submit a letter to County Planning agreeing to adhere to the following requirements and shall include a note on the grading plans and in all construction contracts/subcontracts a provision that the project contractors shall also adhere to the following requirements:

In the event archaeological, paleontological and/or historical resources, including pottery, middens or human remains, are uncovered during earthmoving activities, all work in that area shall cease immediately and a qualified archaeologist shall be retained to access the findings, and if necessary provide appropriate disposition of the resources. Earthmoving shall be diverted temporarily around the deposits until they have been evaluated, recorded, excavated, and/or recovered as necessary. Earthmoving shall be allowed to proceed on the site when the archaeologist, in consultation with the appropriate Native American Tribe(s) and the County of San Bernardino Museum, determines the resources are recovered to their satisfaction.

If possible human remains are encountered during any earthmoving activities, all work shall stop in the area in which the find(s) are present, and the San Bernardino County Coroner must be notified. State law dictates that the Native American Heritage Commission (NAHC) shall be notified in the event that remains are determined to be human and of Native American decent, in accordance with California Public Resources Code Section 5097.98.

#### **LAND USES SERVICES - Land Development Division– Drainage (909) 387-8311**

55. Drainage Improvements. A Registered Civil Engineer shall investigate and design adequate drainage improvements to intercept and conduct the off-site and on-site drainage flows around and through the site in a manner, which will not adversely affect adjacent or downstream properties. Submit drainage study for review and obtain approval. A \$520 deposit for drainage review will be collected upon submittal to the Land Development Division.
56. Topo Map. A topographic map shall be provided to facilitate the design and review of necessary drainage facilities.
57. Grading Plans. Grading plans shall be submitted for review and approval obtained. A \$520 deposit for grading plan review will be collected upon submittal to the Land Development Division.
58. San Sevaine Fee. The project site is located within the San Sevaine Drainage Fee area and is subject to a fee of \$4,405 per net developed acre that is to be paid prior to issuance of any grading or building permit. (SBC Ord., No. 3358)

Total net developed acreage is 9.89 acres and the fee shall be \$43,565.45.

59. WQMP. A completed Water Quality Management Plan (WQMP) shall be submitted for review and approval obtained. A \$2,500 deposit for WQMP review will be collected upon submittal to the Land Development Division. The report shall adhere to the current requirements established by the Santa Ana Watershed Region. Copies of the WQMP guidance and template can be found at: <http://www.sbcounty.gov/dpw/land/npdes.asp>
60. WQMP Inspection Fee. The developer shall provide \$3,600 deposit to Land Development Division for inspection of the approved WQMP.

### **COUNTY FIRE – Community Safety (909) 386-8465**

61. Water System. Prior to any land disturbance, the water systems shall be designed to meet the required fire flow for this development and shall be approved by the Fire Department. The required fire flow shall be determined by using appendix IIIA of the Uniform Fire Code.

### **PRIOR TO ISSUANCE OF BUILDING PERMITS THE FOLLOWING SHALL BE COMPLETED**

### **LAND USE SERVICES – Building and Safety Division (909) 387-8311**

62. Construction Plans. Any building, sign, or structure to be constructed or located on site will require professionally prepared plans based on the most current County and California Building Codes, submitted for review and approval by the Building and Safety Division.

### **LAND USE SERVICES – Planning Division (909) 387-8311**

63. Building Elevations. The developer shall obtain approval from County Planning for the exterior elevations on all four sides of the proposed building. The elevations shall demonstrate horizontal and vertical elements (e.g. trim design, architectural elements, windows, etc.). All sides of the building, except loading dock areas shall have landscape planters adjacent to the building walls. The use of trellises, arbors, planters and atriums is encouraged. All new proposed structures and their related elements shall be painted, treated, or otherwise finished to blend in to the surrounding existing architectural theme. Screening materials shall blend into adjacent architectural elements. All roof mounted

mechanical equipment shall be screened from view and shall be painted to match the roof color.

64. Underground Utilities. All new on-site utility lines (66KV or less) located on or around the perimeter of the site, shall be placed underground. The developer will work cooperatively with the County and appropriate utility agencies to underground these facilities.
65. AQ - Coating Restriction Plan. *The developer shall submit for review and obtain approval from County Planning of a Coating Restriction Plan (CRP), consistent with SCAQMD guidelines and a signed letter agreeing to include in any construction contracts/subcontracts a condition that the contractors adhere to the requirements of the CRP. The CRP measures shall be following implemented to the satisfaction of County Building and Safety:*
- a) *Interior architectural coatings with Reactive Organic Compounds (ROC) shall not have content greater than zero g/l.*
  - b) *Exterior architectural coatings with Reactive Organic Compounds (ROC) shall not have a content greater than 125 g/l.*
  - c) *Architectural coating volume shall not exceed the significance threshold for ROC, which is 75 lbs./day and the combined daily ROC volume of architectural coatings and asphalt paving shall not exceed the significance threshold for ROC of 75 lbs. per day.*
  - d) *High-Volume, Low Pressure (HVLP) spray guns shall be used to apply coatings.*
  - e) *Precoated/natural colored building materials, water-based or low volatile organic compound (VOC) coatings shall be used, if practical.*
  - f) *Comply with SCAQMD Rule 1113 on the use or architectural coatings.*
- [Mitigation Measure III-1] Building Permits/Planning*
66. Regional Transportation Facilities Fee. *This project falls within the Regional Transportation Development Mitigation Plan. The applicable fee shall be paid by a cashier's check to the Department of Public Works Business Office prior to issuance of a building permit.*  
*[Mitigation Measure XVI-1] Building Permits/Public Works*
67. Landscape and Irrigation Plan. The developer shall submit and obtain approval of three sets of a Landscape Documentation Package, prepared by a Certified Landscape Professional in compliance with SBCC Chapter 83.10, Landscape Standards, and in compliance with the State Model Water Efficient Landscape Ordinance, as well as the East Valley Area Plan requirements. At a minimum, landscaping shall be in the required setbacks along the street frontages, adjacent to the structures, and within the parking areas. Planting plans shall utilize indigenous plant material, when possible, to minimize water consumption.

68. Signs. The applicant must submit separate sign plans for review and approval in compliance with Chapter 83.13, Sign Regulations, of the County Development Code for any signs proposed.
69. Screen Rooftop: All roof top mechanical equipment is to be screened from ground vistas.
70. Energy Efficiency for Commercial Development (GHG Reduction Measure R2E7). The developer shall provide and document that the design of the proposed structure exceeds the current Title 24 energy efficiency requirements as indicated below:
- Insulation – Modest Enhanced Insulation (5% > Title 24) (8 points)
  - Windows – Enhanced Window Insulation (15%>Title 24) (8 points)
  - Doors – Modestly Enhanced Insulation (5%>Title 24) (4 points)
  - Air Infiltration – Reduced Building Envelope Leakage (15%>Title 24) (8 points)
  - Heating/Cooling Distribution System – Modest Distribution Losses (5%>Title 24) (4 points)
  - Space Heating/Cooling Equipment – Efficiency HVAC (5% > Title 24) (4 points)
  - Water Heaters – High Efficiency Water Heaters (Conventional water heater that is 15% > Title 24) (8 points)
  - Daylighting – All rooms daylighted to at least 1,000 lumens (7 points)
  - Artificial Lighting – Very High Efficiency Lights (LED, etc. 20% > Title 24) (8 points)
  - Appliances – High Efficiency Energy Star Appliances (15% > Title 24) (8 points)
  - Building Placement – North/South alignment of building or other building placement such that the orientation of the buildings optimizes conditions for natural heating, cooling, and lighting. (4 points)
71. Water Use Reduction Goal - Per Capita Water Use Reduction Goal (GHG Reduction Measure R2WC-1). The project shall include the following irrigation/landscaping and potable water reduction measures that exceed the current Title 24 energy efficiency requirements as indicated below:
- Water Efficient Landscaping – Eliminate turf from landscaping (3 points).
  - Water Efficient Irrigation Systems – Smart irrigation control systems combined with drip irrigation (demonstrate 20% reduced water use (5 points).
  - Recycled Water – Graywater (purple pipe) irrigation system on site (5 points)
  - Showers – EPA High Efficiency Showerheads (15%> Title 24)
  - Toilets – EPA High Efficiency toilets and Waterless Urinals (15% > Title 24)+Commercial Bldg (6 points)
  - Faucets - EPA High Efficiency faucets (15%> Title 24) (3 points).

72. Vehicle Idling Restrictions (GHG Reduction Measure R2T1). All commercial vehicles are restricted to 5-minutes or less per trip on site and at loading docks (required of all commercial projects) (1 point)
73. Employment Based Trip and VMT Reduction Policy (GHG Reduction Measure R2T2). The project shall include the following employee trip reduction policies:
- Car/Vanpool – Employee car/vanpool program with preferred parking (2 points)
  - Employee Bicycle/Pedestrian Programs – Local transit within ¼ mile. (1 point)
  - Shuttle/Transit - Existing local transit is within ¼ mile (1 point)
74. Construction and Demolition Debris Diversion Program (GHG Reduction Measure R2W5). The project will recycle 20% of debris.
75. Outdoor Lighting Plan. Three copies of the proposed professionally prepared outdoor lighting plan, in accordance with SBCC §83.07 Glare and Outdoor Lighting, shall be submitted for plan review with appropriate fees. Approval of this shall be obtained with permits, prior to any lighting installation.

**PUBLIC HEALTH – Environmental Health Services (DEHS) (800) 442-2283**

76. Water Purveyor. Water purveyor shall be Fontana Water Company.
77. Water Letter. Applicant shall procure a verification letter from the water agency with jurisdiction. This letter shall state whether or not water connection and service shall be made available to the project by the water agency. The letter shall reference the Assessor's Parcel Number 0234-101-21. For projects with current active water connections, a copy of water bill with project address may suffice. For information, contact the Water Section at 1-800-442-2283.
78. Sewer. Method of sewage disposal shall be City of Fontana.
79. Wastewater Verification. Applicant shall procure a verification letter from the sewer agency with jurisdiction. This letter shall state whether or not sewer connection and service shall be made available to the project by the sewer agency. The letter shall reference the Assessor's Parcel Number 0234-101-21.

**LAND USE SERVICES – Land Development Division – Roads (909) 387-8311**

80. Road Dedication. The developer shall submit for review and obtain approval from the Land Use Services Department the following dedications. These shall

be submitted to the Land Use Services Department, located at 385 N. Arrowhead Ave., San Bernardino CA 92415-0187. Phone: (909) 387-8311.

**Redwood Avenue (Collector Street – 66’)**

- Road Dedication. A 3 foot grant of easement is required to provide a half-width right-of-way of 33’.
  - Sidewalks. Design sidewalks per County Standard 109 Type “C”.
  - Driveway Approach. Design driveway approach per San Bernardino County Standard 129B, and located per San Bernardino County Standard 130.
81. Road Standards and Design. All required street improvements shall comply with latest San Bernardino County Road Planning and Design Standards and the San Bernardino County Standard Plans. Road sections shall be designed to Valley Road Standards of San Bernardino County, and to the policies and requirements of the County Department of Public Works and in accordance with the General Plan, Circulation Element.
82. Encroachment Permits. Prior to installation of road and drainage improvements, a permit is required from County Public Works, Transportation Operations Division, Permit Section, (909) 387-8046, as well as other agencies prior to work within their jurisdiction. Submittal shall include a materials report and pavement section design in support of the section shown on the plans. Applicant shall conduct classification counts and compute a Traffic Index (TI) Value in support of the pavement section design.
83. Transitional Improvements. Right-of-way and improvements (including off-site) to transition traffic and drainage flows from proposed to existing, shall be required as necessary.

**PUBLIC WORKS - Solid Waste Management (909) 386-8701**

84. Construction and Demolition Waste Management Plan (CDWMP) Part 1. The developer shall prepare, submit, and obtain approval from Solid Waste Management Division (SWMD) of a CDWMP Part 1 for each phase of the project. The CDWMP shall list the types and weights or volumes of solid waste materials expected to be generated from grading and construction. The CDWMP shall include options to divert from landfill disposal materials for reuse or recycling by a minimum of 50% of total weight or volume. Forms can be found on our website at: [www.sbcounty.gov/dpw/solidwaste](http://www.sbcounty.gov/dpw/solidwaste). An approved CDWMP Part 1 is required before a demolition permit can be issued.

Upon completion of construction, the developer shall complete SWMD’s CDWMP Part 2 and shall provide documentation of diversion of materials including but not

limited to receipts, invoices or letters showing material type(s) and weights or volume from diversion facilities or certification of reuse of materials on site. An approved Part 2 of the CDWMP is required prior to issuance of occupancy.

### **PUBLIC WORKS – Traffic Division**

85. The project falls within the Regional Transportation Facilities Mitigation for the Fontana Subarea. This fee shall be paid by a cashier's check to the Department of Public Works Business Office. The Plan fees shall be computed in accordance with the Plan fees in effect as of the date that building plans are submitted and the building permit is applied for. These fees are subject to change periodically. Currently, the fee is \$1.55 a square foot for High Cube use. The building is 214,300 square feet per the latest site plan dated February 9, 2015. Therefore the total fee is estimated at \$332,165 (214,300 sq. ft. x \$1.55 per sq. ft.). The current Regional Transportation Fee Plan can be found at the following website:

[http://www.sbcounty.gov/dpw/transportaiton/tranportation\\_planning.asp](http://www.sbcounty.gov/dpw/transportaiton/tranportation_planning.asp)

### **COUNTY FIRE – Community Safety (909) 386-8400**

86. Construction Permits. Fire Condition Letters shall automatically expire and become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. Suspension or abandonment shall mean that no inspection by the Department has occurred with 180 days of any previous inspection. After a construction permit or Fire Condition Letter, becomes invalid and before such previously approved work recommences, a new permit shall be first obtained and the fee to recommence work shall be one-half the fee for the new permit for such work, provided no changes have been made or will be made in the original construction document for such work, and provided further that such suspension or abandonment has not exceeded one year. A request to extend the Fire Condition Letter or Permit may be made in writing PRIOR TO the expiration date justifying the reason that the Fire Condition Letter should be extended.

87. Access. The development shall have a minimum of 2 points of vehicular access. These are fire/emergency equipment access and for evacuation routes. Standard 902.2.1

- Single-Story Road Access Width. All buildings shall have access provided by approved roads, alleys, and private drive with a minimum twenty-six (26) foot unobstructed width and vertically to fourteen (14) feet six (6) inches in height. Other recognized standards may be more restrictive by requiring wider access provisions.

- Multi-Story Road Access Width. Building three (3) stories in height or more shall have a minimum access of thirty (30) feet unobstructed width and vertically to fourteen (14) feet six (6) inches in height. [F41]
88. Primary Access Paved. Prior to building permits being issued to any new structure, the primary access road shall be paved or an all weather surface and shall be installed as specified in the General Requirement conditions (Fire #F-9), including width, vertical clearance and turnouts, if required. [F89]
  89. Building Plans. Not less than three (3) complete sets of Building Plans shall be submitted to the Fire Department for review and approval. [F42]
  90. Fire Fees. The required fire fees shall be paid to the San Bernardino County Fire Department/community Safety Division (909) 386-8400. This fee may be in addition to fire fees that are paid to the appropriate City.
  91. Combustible Protection. Prior to combustibles, being placed on the project site an approved paved road with curb and gutter and fire hydrants with an acceptable fire flow shall be installed. The topcoat of asphalt does not have to be installed until final inspection and occupancy. [F44]
  92. Water System Large Commercial. A water system approved and inspected by the Fire Department is required. The system shall be operational, prior to any combustibles being stored on the site. The applicant is required to provide a minimum of one new six (6) inch fire hydrant assembly with one (1) two and one half (2 ½) inch and two (2) four (4) inch outlet. All fire hydrants shall be space no more than three hundred (300) feet apart (as measured along vehicular travel-ways) and no more than one hundred fifty (150) feet from any portion of a structure. [F54A]
  93. Turnaround. An approved turnaround shall be provided at the end of each roadway one hundred and fifty (150) feet or more in length. Cul-de-sac length shall not exceed six hundred (600) feet; all roadways shall not exceed a 12% grade and have a minimum of forty five (45) foot radius for all turns. In the FS1, FS2, or FS-3 Fire Safety Overlay District areas, there are additional requirements. Standard 902.2.1 [F43]
  94. Fire Sprinkler-NFPA #13. An automatic fire sprinkler system complying with NFPA Pamphlet #13 and the Fire Department standards is required. The applicant shall hire a Fire Department approved fire sprinkler contractor. The fire sprinkler contractor shall submit three (3) sets of detailed plans to the Fire Department for review and approval. The plans (minimum 1/8" scale) shall include hydraulic calculations and manufactures specification sheets. The contractor shall submit plans showing type of storage and use with the applicable protection system. The required fees shall be paid at the time of plan submittal. [F59]

95. Roof Certification: A letter from a licensed structural (or truss) engineer shall be submitted with an original wet stamp at the time of fire sprinkler plan review, verifying the roof is capable of accepting the point loads imposed on the building by the fire sprinkler system design. [F59A]
96. Building Access. Where building access is required by Table 3206.2, fire apparatus access roads in accordance with Section 503 shall be provided within 150 feet (45 720 mm) of all portion of the exterior walls of buildings used for high-piled storage.
97. Number of Doors Required. A minimum of one access door shall be provided in each 100 lineal feet (30 480 mm), or fraction thereof, of the exterior walls that face required fire apparatus access roads. The required access doors shall be distributed such that the lineal distance between adjacent doors does not exceed 100 feet (30 480 mm).
98. Fire Alarm. An automatic monitoring fire alarm system complying with the California Fire Code, NFPA and all applicable codes is required for 100 heads or more. The applicant shall hire a Fire Department approved fire alarm contractor. The fire alarm contractor shall submit three (3) sets of detailed plans to the Fire Department for review and approval. The required fees shall be paid at the time of plan submittal. Standard 1007.1.1FA. [F62]
99. High-Piled Storage. The applicant shall submit an application for high-piled storage (internal storage over twelve (12) feet in height), three (3) sets of detailed plans and a commodity analysis report to the Fire Department for review and approval. The applicant shall submit the approved plan to Building and Safety for review with building plans. If the occupancy classification is designated as S-2, commodities to be stored will be limited to products of light hazard classification only. The required fees shall be paid at the time of plan submittal. [F66]
100. Street Sign. This project is required to have an approved street sign (temporary or permanent). The street sign shall be installed on the nearest street corner to the project. Installation of the temporary sign shall be prior accomplished prior to any combustible material being placed on the construction site. Prior to final inspection and occupancy of the first structure, the permanent street sign shall be installed. Standard 901.4.4 [F72]
101. Woodworking Operations. An automatic sprinkler system shall be provided throughout all Group F-I occupancy fire areas that contain woodworking operations in excess of 2,500 square feet in area (232 m<sup>2</sup>) which generate finely divided combustible waste or which use finely divided combustible materials. [SFM] A fire wall of less than 4-hour fire resistance rating without openings, or any fire wall with openings, shall not be used to establish separate fire areas.

Discharge and where every room where care is provided has at least one exterior exit door.

102. Class I standpipe system. A Class I standpipe system is required. A Fire Department approved fire sprinkler contractor shall submit three (3) sets of hydraulic calculations and detailed plans to the Fire Department for review and approval, showing type of storage and use with the applicable protection system. Commercial and industrial buildings in excess of two hundred thousand (200,000) square feet with an interior area less than four hundred (400) feet in width, shall be equipped with a Class I standpipe system, located at every other access door maximum of three hundred (300) feet spacing. Buildings with an interior area greater than four hundred (400) feet in width shall be equipped with a Class I standpipe system located at every access door maximum of one hundred (100) foot spacing. Standpipe connections shall be configured to reach any portion of interior space within two hundred (200) feet in any direction of travel. This system shall be calculated to provide two hundred and fifty (250) gpm @ 100 psi per hose outlet from an adjacent fire sprinkler riser with two hand lines flowing. The two most hydraulically remote outlets are to be included in the design for a total flow of 500 gpm minimum per system. A Fire Department approved fire sprinkler contractor shall submit four (4) sets of hydraulic calculations and detailed plans, showing type of storage and use with the applicable protection system. The required fees shall be paid at the time of plan submittal. Standard 8102.9.2 [F70]

**PRIOR TO FINAL INSPECTION OR OCCUPANCY  
THE FOLLOWING SHALL BE COMPLETED**

**LAND USE SERVICES – Building and Safety Division (909) 387-4226**

103. Condition Compliance Release Form Sign-off. Prior to occupancy all Department/Division requirements and sign-off's shall be completed.

**LAND USE SERVICES - Planning Division (909) 387-8311**

104. Landscape Certificate of Completion: All landscaping, dust control measures, all walls/fences, pedestrian walkways, irrigation systems, etc. as delineated on the approved landscape plan and/or site plan shall be installed. The developer shall submit the Landscape Certificate of Completion verification as required in SBCC Section 83.10.100. Supplemental verification should include photographs of the site and installed landscaping.
105. On-site Improvements: Parking, on-site circulation requirements, and all on-site improvements shall be installed per approved site plan.

106. Building Elevations. The building construction shall be completed in conformance with the approved architectural elevations to the satisfaction of County Planning.
107. Disabled Access: Disabled access parking spaces shall be clearly marked as disabled spaces and said markings shall be maintained in good condition at all times.
108. GHG – Installation. The developer shall submit for review and obtain approval from County Planning evidence that all GHG reduction measures have been installed, implemented and that specified performance objectives are being met.
109. Fees Paid: Prior to final inspection by the Building and Safety Division and/or issuance of a Certificate of Conditional Use by the Planning Division, all fees required under actual cost job number P201500064 shall be paid in full.
110. Wheel Stops. All back-in truck trailer parking spaces shall have a wheel stop or other physical barrier twelve feet from any wall, fence or building to prevent damage. All other vehicle spaces shall have wheel stops or curbs installed when adjacent to fences, walls or buildings; these shall be three feet (3') away from such facilities.
111. Air Quality/Installation. *The developer shall submit for review and obtain approval from County Planning of evidence that all air quality mitigation measures have been installed, implemented properly and that specified performance objectives are being met to the satisfaction of County Planning and County Building and Safety. These installations/ procedures include the following:*
  - a. *Dust Control Plan (DCP)*
  - b. *Coating Restriction Plan (CRP)**[Mitigation Measure III-5] Final Inspection/Planning*
112. Vibration Mitigation. *In the event that roadway improvements are necessary, the Applicant shall ensure that vibration associated with the use of a vibratory roller will not exceed the vibration damage potential for older residential structure of 0.30 PPV and the vibration annoyance potential of 0.04 PPV (distinctly perceptible) established by Caltrans. Supplemental analysis shall be performed and submitted for the review and approval of the Planning Division prior to the start of construction activities.*  
*[Mitigation Measure XII-2] Occupancy Permits/Planning*

**LAND USE SERVICES - Land Development Division– Drainage (909) 387-8311**

113. Drainage Improvements. All required drainage improvements shall be completed by the applicant. The private registered engineer shall inspect and certify the improvements have been completed according to the approved plans. Certification letter shall be submitted to Land Development.
114. WQMP Improvements. All required WQMP improvements shall be completed by the applicant, inspected and approved by County Public Works. An electronic file of the final and approved WQMP shall be submitted to Land Development Division, Drainage Section.

**LAND USE SERVICES - Land Development Division– Roads (909) 387-8311**

115. Road Improvements. All required on-site and off-site improvements shall be completed by the applicant, inspected and approved by County Public Works.
116. Open Roads/Cash Deposit. Existing County roads, which will require reconstruction, shall remain open for traffic at all times, with adequate detours, during actual construction. A cash deposit shall be made to cover the cost of grading and paving prior to issuance of road encroachment permit. Upon completion of the road and drainage improvement to the satisfaction of the Department of Public Works, the cash deposit may be refunded
117. Structural Section Testing. A thorough evaluation of the structural road section, to include parkway improvements, from a qualified materials engineer, shall be submitted to County Public Works.
118. Parkway Planting. Trees, irrigation systems, and landscaping required to be installed on public right-of-way shall be approved by the County Public Works and Current Planning and shall be maintained by the adjacent property owner or other County-approved entity.

**PUBLIC WORKS – Solid Waste Management (909) 387-8701**

119. C&D Plan – Part 2. The developer shall complete SWMD's CDWMP Part 2 for construction and demolition. This summary shall provide documentation of diversion of materials including but not limited to receipts, invoices or letters from diversion facilities or certification of reuse of materials on site. The CDWMP Part 2 shall provide evidence to the satisfaction of SWMD that demonstrates that the project has diverted from landfill disposal, material for reuse or recycling by a minimum of 50% of total weight or volume of all construction waste.

**COUNTY FIRE – Community Safety (909) 386-8400**

120. Hydrant Marking. Blue reflective pavement markers indicating fire hydrant locations shall be installed as specified by the Fire Department. In areas where snow removal occurs or non-paved roads exist, the blue reflective hydrant marker shall be posted on an approved post along the side of the road, no more than three (3) feet from the hydrant and at least six (6) feet high above the adjacent road. Standard 901.4.3. [F80]
121. Commercial. Large facility Addressing. Commercial and industrial developments in excess of 100,000 square feet shall have the street address installed on the building with numbers that are a minimum twelve (12) inches in height and with a one and one half (1 ½) inch stroke. The street address shall be visible from the street. During the hours of darkness, the numbers shall be electrically illuminated (internal or external). Where the building is two hundred (200) feet or more from the roadway, additional non-illuminated contrasting six (6) inch numbers shall be displayed at the property access entrances. Standard 901.4.4 [F83]
122. Key Box. An approved Fire Department key box is required. The key box shall be provided with a tamper switch and shall be monitored by a Fire Department approved central monitoring service. In commercial, industrial and multi-family complexes, all swing gates shall have an approved fire department Knox Lock. Standard 902.4 [F86]
123. Override Switch. Where an automatic electric security gate is used, an approved Fire Department override switch (Know ®) is required. Standard 902.4 [F86]
124. Fire Extinguishers. Hand portable fire extinguishers are required. The location, type and cabinet design shall be approved by the Fire Department. [F88]
125. Occupancy. It shall be unlawful to occupy any portion of a building or structure until the required fire detection, alarm and suppression systems have been tested and approved.

**COUNTY FIRE - Hazardous Materials Division (909) 386-8401**

126. Release of Hazardous Materials. Prior to occupancy, operator shall submit disclosure information using the California Environmental Reporting System (CERS) for emergency release or threatened release of hazardous materials and wastes or apply for exemption from hazardous materials laws and regulations. Contact the Office of the Fire Marshal, Hazardous Materials Division at (909) 386-8401.

127. Handlers Permit. Prior to occupancy, developer shall be required to apply for one or more of the following: a Hazardous Materials Handler Permit, a Hazardous Waste Generator Permit, an Aboveground Storage Tank Permit, and/or an Underground Storage Tank permit. For information call Office of the Fire Marshal, Hazardous Materials Division at (909) 386-8401.

**PRIOR TO TENANT OCCUPANCY  
THE FOLLOWING SHALL BE COMPLETED**

**LAND USE SERVICES - Building and Safety Division (909) 387-8311**

128. Tenant Occupancy. Any building without specified tenants and/or land use may receive final inspection for construction purposes ONLY. Buildings that do not have specific occupants or use classification defined at the time of final inspection will receive only a "final construction" approval. When individual "tenants" and/or "land uses" are identified, or a change of "use" and/or "tenant" is proposed, depending on occupancy impacts, the "developer" shall submit for review with appropriate fees and obtain approval of a Tenant Review. The County Building Official may determine in this process that additional land use review and approval is required by County Planning. A construction plan review for Tenant Improvements may be processed simultaneously with the Tenant Review. Only after a construction permit has been issued, all work/installations completed, and a final inspection is signed will an "Occupancy Permit" be granted to individual tenants.

**LAND USE SERVICES - Planning Division (909) 387-8311**

129. Notification. The developer shall provide a copy of these conditions of approval and a copy of the approved plot map to any future property owner, lessee, operator, and/or tenant to notify each interested party of the land use approval and conditions of operation, maintenance, the approved land use and any restrictions/requirements that have been imposed.
130. 75% Solid Waste Diversion Program (GHG Reduction Measure R2W6). The project will provide commercial/industrial recycling programs that fulfills an on-site goal of 75% diversion of solid waste.

**END OF CONDITIONS**

# **EXHIBIT C**

## **Draft Initial Study/Mitigated Negative Declaration**

# SAN BERNARDINO COUNTY INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

This form and the descriptive information in the application package constitute the contents of Initial Study pursuant to County Guidelines under Ordinance 3040 and Section 15063 of the State CEQA Guidelines.

**PROJECT LABEL:**

<b>APN:</b>	0234-101-21
<b>APPLICANT:</b>	CRP Oakmont Redwood Avenue, LLC
<b>COMMUNITY:</b>	San Bernardino County
<b>LOCATION:</b>	North of Hunter Street, west side of Redwood Street, south of San Bernardino Avenue, east of Cherry Avenue
<b>PROJECT NO:</b>	P201500064
<b>STAFF:</b>	Jim Morrissey
<b>REP(S):</b>	MIG   Hogle-Ireland Inc. (Christopher Brown)
<b>PROPOSAL:</b>	To construct one industrial building to be used as a high-cube warehouse / distribution facility of approximately 214,300 square feet on 9.89 acres.

**USGS Quad:** Fontana  
**T, R, Section:** T1S R6W Sec. 23 NW ¼

**Specific Plan:** None

**OLUD:** SD-COM

**Overlays:** None

**PROJECT CONTACT INFORMATION:**

**Lead agency:** San Bernardino County  
Land Use Services Department - Current Planning Division  
385 North Arrowhead Avenue, First Floor  
San Bernardino, CA 92415-0182

**Contact person:** Jim Morrissey, Contract Planner  
**Phone No:** 909-387-4434  
**E-mail:** Jim.Morrissey@lus.sbcounty.gov

**Project Sponsor:** CRP Oakmont Redwood Avenue, LLC  
Attn: John Atwell  
3520 Piedmont Road, Suite 100  
Atlanta, Georgia 30305

**Consultant:** MIG | Hogle-Ireland, Inc.  
Attn: Christopher Brown  
1500 Iowa Avenue, Suite 110, Riverside, CA 92507  
951-787-9222

**Fax No:** 909-387-3249

**PROJECT DESCRIPTION:**

The proposed project is the construction and operation of a 214,300-square-foot high-cube warehouse. The proposed building area includes three (3) separate 5,000 square foot office space areas in three (3) corners of the project, 27 dock doors, 30 truck trailer parking stalls, and 137 passenger vehicle parking stalls. Landscaping is proposed at 64,360 square feet (15 percent of the project site area). At this time no tenant has been identified for the proposed building. The project will be constructed as a concrete tilt-up building not to exceed 41 feet in height. The primary building color will be medium grey with an off-white trim at the roofline and a dark grey base, providing horizontal variation in color accented by horizontal reveals. Vertical articulation is provided in the form of variations in the roof parapets and vertical "towers" located at the central portions of the east, west, and north elevations that will be painted dark grey. The northwest, northeast, and southeast corners of the building include similar vertical articulation accented by aluminum canopies and light blue window glazing. Conceptual landscaping includes Chinese Pistache, Crape Myrtle, Mesquite, and Chitalpa accent trees. Turf will not be planted to promote water conservation coupled with the installation of smart irrigation control systems.

The project is located on the west side of Redwood Avenue, north of Hunter Street, east of Cherry Avenue, and south of San Bernardino Avenue. The project site is located in an unincorporated San Bernardino County, in the sphere of influence of the City of Fontana, within the Second Supervisorial District.

As defined by San Bernardino County, warehouse/distribution facilities are used primarily for the storage and/or consolidation of manufactured goods prior to their distribution to retail locations or other users. These facilities are commonly constructed utilizing a concrete tilt-up technique, with a typical ceiling height of at least 24 feet. The San Bernardino Association of Governments defines high –cube warehouse/distribution centers as generally greater than 100,000 sq. ft. with a land coverage ratio of approximately 50 percent and a dock-high loading ratio of approximately 1:5,000 to 10,000 sq. ft.

**ENVIRONMENTAL/EXISTING SITE CONDITIONS:**

The project site is currently developed with a commercial greenhouse and nursery that specializes in indoor plants. A light industrial park is located north of the project site. Single-family residential units are located east of the project site. Single-family residential units and an automobile sales business are located south of the project site. A tire service business and single-family residential units are located west of the project site. The project site and surrounding area topography is flat. No native vegetation or riparian features are located on the project site or in the surrounding area. The project site is not located within a hazard overlay. The project site is not located within a geologic hazard overlay.

AREA	EXISTING LAND USE	OFFICIAL LAND USE DISTRICT
SITE	Greenhouse/Nursery	SD-COM (Special Development - Commercial)
North	Light Industrial	SD-COM (Special Development - Commercial)
South	Auto Sales Single-Family Residential	SD-COM (Special Development - Commercial)
East	Single-Family Residential	RS (Residential Single)
West	Tire Services Single-Family Residential	SD-COM (Special Development - Commercial)

Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

Federal: None

State of California: None

County of San Bernardino: Land Use Services- Planning Division, Building & Safety Division, Land Development Division, and Code Enforcement Division; Environmental Health Services; Public Works, and; Fire.

Local: Fontana Water Company.

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## EVALUATION FORMAT

This initial study is prepared in compliance with the California Environmental Quality Act (CEQA) Guidelines. This format of the study is presented as follows. The project is evaluated based upon its effect on seventeen (17) major categories of environmental factors. Each factor is reviewed by responding to a series of questions regarding the impact of the project on each element of the overall factor. The Initial Study Checklist provides a formatted analysis that provides a determination of the effect of the project on the factor and its elements. The effect of the project is categorized into one of the following four categories of possible determinations:

Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant	No Impact
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Substantiation is then provided to justify each determination. One of the four following conclusions is then provided as a summary of the analysis for each of the major environmental factors.

1. **No Impact.** Therefore, no impacts are identified or anticipated and no mitigation measures are required.
2. **Less Than Significant Impact.** Therefore, no significant adverse impacts are identified or anticipated and no mitigation measures are required.
3. **Less Than Significant Impact with Mitigation.** Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as a condition of project approval to reduce these impacts to a level below significant. The required mitigation measures are: (List mitigation measures)
4. **Potentially Significant Impact.** Significant adverse impacts have been identified or anticipated. An Environmental Impact Report (EIR) is required to evaluate these impacts, which are: (List the impacts requiring analysis within the EIR).

At the end of the analysis the required mitigation measures are restated and categorized as being either self- monitoring or as requiring a Mitigation Monitoring and Reporting Program.

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

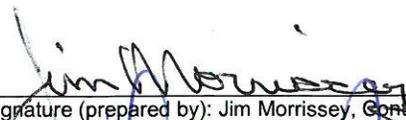
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Aesthetics               | <input type="checkbox"/> Agriculture & Forestry Resources | <input type="checkbox"/> Air Quality                        |
| <input type="checkbox"/> Biological Resources     | <input type="checkbox"/> Cultural Resources               | <input type="checkbox"/> Geology /Soils                     |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials    | <input type="checkbox"/> Hydrology / Water Quality          |
| <input type="checkbox"/> Land Use/ Planning       | <input type="checkbox"/> Mineral Resources                | <input type="checkbox"/> Noise                              |
| <input type="checkbox"/> Population / Housing     | <input type="checkbox"/> Public Services                  | <input type="checkbox"/> Recreation                         |
| <input type="checkbox"/> Transportation/Traffic   | <input type="checkbox"/> Utilities / Service Systems      | <input type="checkbox"/> Mandatory Findings of Significance |

**DETERMINATION:**

On the basis of this initial evaluation, the following finding is made

- The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact 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.
- 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 or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

  
Signature (prepared by): Jim Morrissey, Contact Planner

5/13/15  
Date

  
Signature: Dave Prusch, Supervising Planner

5/13/15  
Date

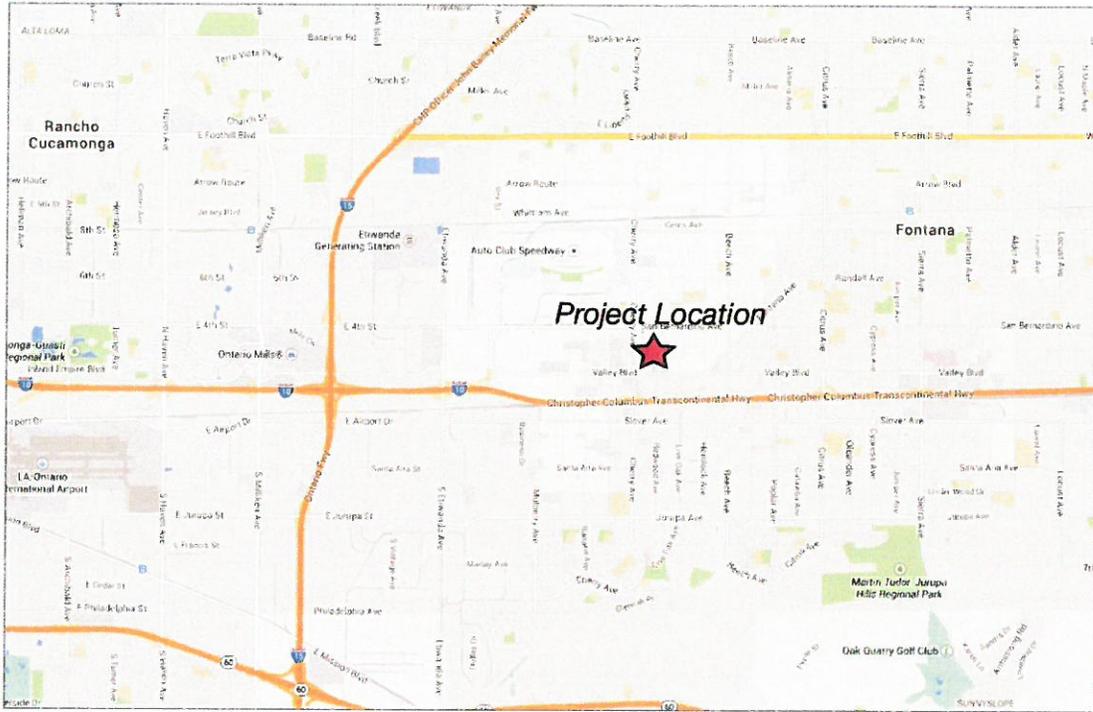
**APPENDICES**

**A.** Air Quality and Climate Change Assessment.

**B.** Noise Study

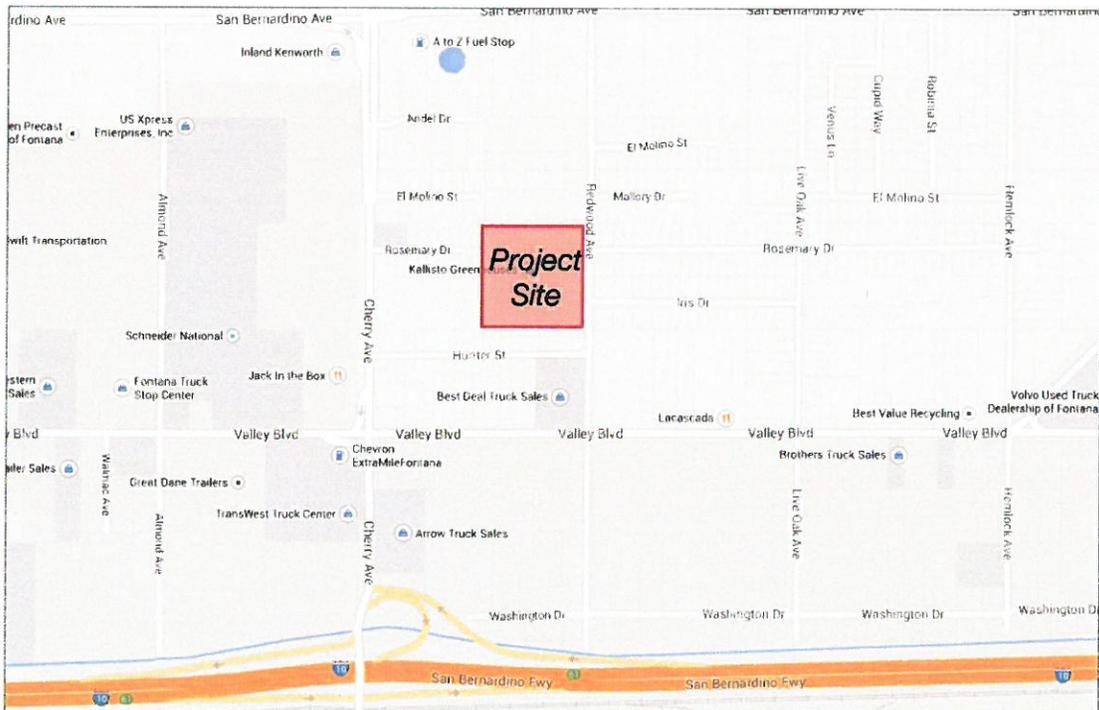
**C.** Phase I Environmental Site Assessment

**D.** Traffic Impact Analysis



Source: Google Maps 2014

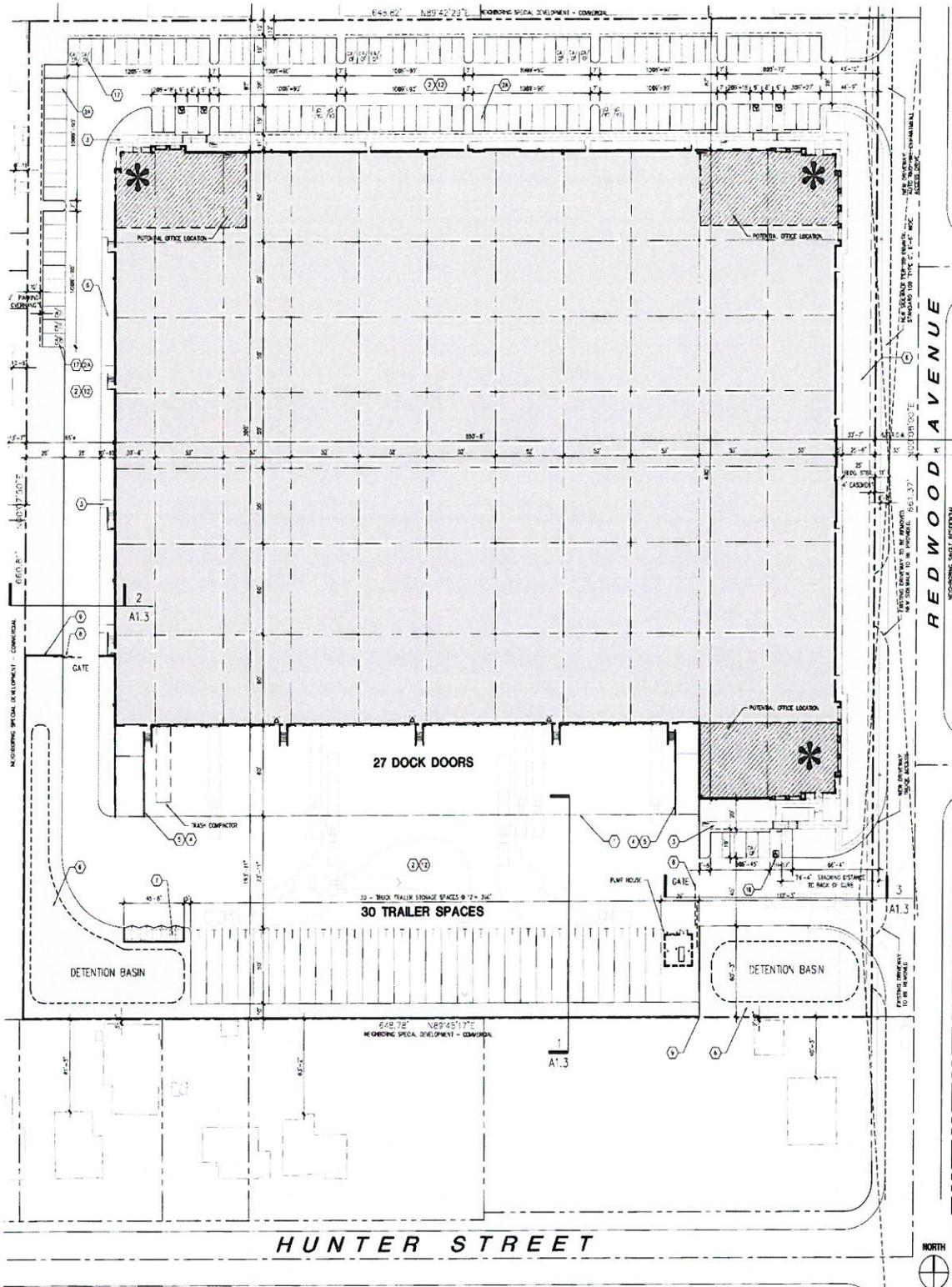
Regional



Source: Google Maps 2014

Vicinity





Address	6502 Redwood Avenue			
APN	0254-014-01			
Site Area	87	Acres		
Street Side Area	482,732	Sq Ft		
Street Elevation	21.85%	ft		
Site Area	420,868	Sq Ft		
Building Area	6,802	Sq Ft		
Site Area / Building	288.36			
Site Area / Building	214,300			
Site Area / Building	112,150			
Final Building Area	214,300			
Allowable FAR	50.0%	214,444		
Provided FAR	50.0%	214,444		
Parking Required				
Land Use	Parking Ratio	Required	Provided	Park. Ratio
Warehouse	1:500	300	30	
Warehouse	1:400	400	40	
40,000 sq ft	1:400	100	10	
40,000 sq ft	1:400	100	10	
Total Parking Required		500	50	100%
Parking Ratio				
Per 1,000 sq ft	1	1		
Disabled Access	4	2		
Clear Area	11	14		
Standard Parking Spaces	86	119		
Total Parking Spaces	102	133		
Landscaping and Signage Area	Required	Provided	Percent	
Landscaping	10.0%	66,200	18.0%	
Signage	5%	21,488	5.0%	
Final Parking Area	30.0%	67,788	20.0%	
Allowable Coverage (%)	Required	Provided		
Warehouse	214,300	214,300	100%	
Impervious Cover & Yard	122,200	119,600	97.9%	
Site Area	5,618	5,618	100%	
Final Impervious Area	302,118	302,118	100%	
(*) Minimum percentage of the total lot area that may be covered by structures and impervious surfaces.				
Required Solid Waste and Recycling Storage	Required	Provided		
75,000 - 100,000 cu yd	384	384	100%	
100,000 cu yd	480	480	100%	
48 cu yd solid waste	219	219	100%	
60 cu yd recyclables	279	279	100%	
Final Required Solid Waste Storage	902	902	100%	
Land Use Zoning District	S21 - Special Development Commercial (After Repeal)			
Setbacks	Front	35'		
Side - Front Side	25'			
Side - Side	10'			
Side - Rear	10'			
Height Limit	50'			

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
<b>I. AESTHETICS - Would the project</b>				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**SUBSTANTIATION** (Check  if project is located within the view-shed of any Scenic Route listed in the General Plan):

- I a) **No Impact.** The proposed project is not located within a designated State or local Scenic Corridor and will not have a substantial adverse effect on a scenic vista, as there are none identified within the vicinity of the project site. No impact will occur.
- I b) **No Impact.** The project will not substantially damage scenic resources, including, but not limited to, rock outcroppings and historic buildings within a state scenic highway, because the site is not adjacent to a state scenic highway and there are no rock outcroppings, historic buildings, or other scenic features on the project site. No impacts will occur.
- I c) **Less Than Significant Impact.** The proposed project will not substantially degrade the existing visual character or quality of the site and its surroundings. The surrounding area is characterized by industrial and residential development with no specific design criteria or pattern. Landscaping will include 15 percent of the project site. The proposed concrete tilt-up building is characterized by contemporary architecture consistent with the light industrial park to the north and will not conflict with the mix of architecture in the project vicinity. The project will result in an update to the visual character of the project site. Considering these factors, the project will not result in the degradation of the visual quality of the project site or area. Impacts will be less than significant.
- I d) **Less Than Significant Impact.** Proposed lighting will be designed in accordance with the design standards of the County Development Code. Adherence to these standards will ensure that the project will not create a new source of substantial light or glare by requiring lighting to be shielded or hooded and to prohibit light from spilling onto adjacent properties. Impacts will be less than significant with implementation of existing regulations.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
<b>II. AGRICULTURE AND FORESTRY RESOURCES -</b>				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and 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 of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104 (g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**SUBSTANTIATION** (Check  if project is located in the Important Farmlands Overlay):

- II a) **No Impact.** The project site is identified as *Urban and Built Up* land on the latest (2010) Farmland Mapping and Monitoring Program (FMMP) map for San Bernardino County, Sheet 2 of 2; therefore, development of the project site will not result in the loss or conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use. No impact will occur.
- II b) **No Impact.** The subject property is not designated or zoned for agricultural use and is not covered under a Williamson Act land conservation contract. No impact will occur.
- II c) **No Impact.** The site is not zoned as forest land or timberland by San Bernardino County or the State of California Conservation Department. The area is comprised of urbanized land. No impact will occur.

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- II d) **No Impact.** There is no forest or timberland located on the project site. No impact will occur.
- II e) **Less Than Significant Impact.** The project site is currently developed with an operational greenhouse and nursery. This does not constitute a permanent agricultural use dependent on on-site soils or other site specific conditions. Although the project will result in the loss or relocation of an existing agricultural related operation, no Farmland Mapping Categories will be affected. No other agricultural uses or forest use are located in the vicinity that could be impacted by the project. Impacts will be less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
<b>III. AIR QUALITY</b> - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 emissions, which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUBSTANTIATION** *The following summaries are based in part on the project Air Quality and Climate Assessment prepared by MIG | Hogle-Ireland in February 2015.*

III a) **Less Than Significant Impact.** The Air Quality Management Plan (AQMP) for the South Coast Air Basin (SCAB) sets forth a comprehensive program that will lead the SCAB into compliance with all Federal and State air quality standards. AQMP control measures and related emission reduction estimates are based upon emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. Accordingly, conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plan and/or population projections.

An air quality analysis for the project was prepared by MIG | Hogle-Ireland in February 2015 and updated in December 2014. The air quality analysis was prepared to evaluate whether the expected criteria air pollutant emissions generated from the project would cause significant impacts to air resources in the project area. Short-term construction-related and long-term operational emissions of criteria pollutants and toxic air contaminants were modeled and analyzed for the proposed project. See Section b) below. Cumulative impacts were analyzed using the South Coast Air Quality Management District (SCAQMD)

Air Quality Handbook. The results of the air quality study find that the thresholds established by SCAQMD for volume and receptor-specific criteria pollutant emissions and toxic air contaminants, based upon the stated average trip assumptions, will not be exceeded.

III b) **Less Than Significant Impact With Mitigation Incorporated.** Short-term criteria pollutant emissions will occur during site preparation, grading, building construction, paving, and painting activities. Emissions will occur from use of equipment, worker, vendor, and hauling trips, and disturbance of onsite soils (fugitive dust). To determine if construction of the proposed warehouse could result in a significant air quality impact, the California Emissions Estimator Model (CalEEMod) has been utilized. Default CalEEMod construction programming data was utilized in the model. Based on the results of the model, maximum daily emissions from the construction of the warehouse will result in excessive emissions of volatile organic chemicals (identified as reactive organic gases) associated with interior and exterior coating activities. Using the default assumption of 250 grams per liter (g/l) VOC content for interior and exterior coatings, daily VOC emissions would reach 356.01 lbs/day during summer and winter.

To mitigate for excessive VOC emissions from coating activities, the model includes use of a minimum zero g/l VOC content for interior coatings and 125 g/l VOC content for exterior surfaces. Use of low-VOC coatings during construction activities will reduce VOC emissions to 44.9 lbs/day in winter and winter, less than the threshold established by SCAQMD. The requirement for use of low-VOC coatings has been included as Mitigation Measures III-1. The results of the CalEEMod outputs with mitigation incorporated are summarized in Table 1 (Maximum Daily Construction Emissions). Standard County mitigation measures have also been included to further reduce construction-related emissions. Impacts will be less than significant with mitigation incorporated.

**Table 1**  
**Maximum Daily Construction Emissions (lbs/day)**

Source	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<i>Summer</i>						
2016	6.54	80.83	60.68	0.14	32.66	7.44
2017	44.91	32.88	35.47	0.07	4.37	2.43
<i>Winter</i>						
2016	6.66	82.11	64.20	0.14	32.66	7.44
2017	44.91	33.10	36.01	0.07	4.37	2.44
Threshold	75	100	550	150	150	55
Substantial?	No	No	No	No	No	No

Mitigation Measures:

*III-1 AQ-Coating Restriction Plan. The developer shall submit for review and obtain approval from County Planning of a Coating Restriction Plan (CRP), consistent with SCAQMD guidelines and a signed letter agreeing to include in any construction contracts/subcontracts a condition that the contractors adhere to the requirements of the CRP. The CRP measures shall be following implemented to the satisfaction of*

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*County Building and Safety:*

- a. *Interior architectural coatings with Reactive Organic Compounds (ROC) shall not have content greater than zero g/l.*
- b. *Exterior architectural coatings with Reactive Organic Compounds (ROC) shall not have content greater than 125 g/l.*
- c. *Architectural coating volume shall not exceed the significance threshold for ROC, which is 75 lbs. /day and the combined daily ROC volume of architectural coatings and asphalt paving shall not exceed the significance threshold for ROC of 75 lbs. per day.*
- d. *High-Volume, Low Pressure (HVLP) spray guns shall be used to apply coatings.*
- e. *Precoated/natural colored building materials, water-based or low volatile organic compound (VOC) coatings shall be used, if practical.*
- f. *Comply with SCAQMD Rule 1113 on the use or architectural coatings.*

*[Mitigation Measure III-1] Building Permits/Planning*

*III-2 AQ-Operational Mitigation. The “developer” shall implement the following air quality mitigation measures, during operation of the approved land use: All on-site equipment and vehicles (off-road/ on-road), shall comply with the following:*

- a. *County Diesel Exhaust Control Measures [SBCC §83.01.040 (c)]b Signs shall be posted requiring all vehicle drivers and equipment operators to turn off engines when not in use.*
- b. *All engines shall not idle more than five minutes in any one-hour period on the project site. This includes all equipment and vehicles.*
- c. *Engines shall be maintained in good working order to reduce emissions.*
- d. *Ultra low-sulfur diesel fuel shall be utilized.*
- e. *Electric, CNG and gasoline-powered equipment shall be substituted for diesel-powered equipment, where feasible.*
- f. *On-site electrical power connections shall be made available, where feasible.*
- g. *All transportation refrigeration units (TRU's) shall be provided electric connections, when parked on-site.*

*[Mitigation Measure III-2] General Requirements/Planning*

*III-3 AQ-Dust Control Plan. The “developer” shall prepare, submit for review and obtain approval from County Planning of both a Dust Control Plan (DCP) consistent with SCAQMD guidelines and a signed letter agreeing to include in any construction contracts/ subcontracts a requirement that project contractors adhere to the requirements of the DCP. The DCP shall include the following requirements:*

- a. *Exposed soil shall be kept continually moist to reduce fugitive dust during all grading and construction activities, through application of water sprayed a minimum of two times each day.*
- b. *During high wind conditions (i.e., wind speeds exceeding 25 mph), areas with disturbed soil shall be watered hourly and activities on unpaved surfaces shall cease until wind speeds no longer exceed 25 mph.*
- c. *Storage piles that are to be left in place for more than three working days shall be sprayed with a non-toxic soil binder, covered with plastic or revegetated.*
- d. *Storm water control systems shall be installed to prevent off-site mud deposition.*
- e. *All trucks hauling dirt away from the site shall be covered.*
- f. *Construction vehicle tires shall be washed, prior to leaving the project site.*

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- g. Rumble plates shall be installed at construction exits from dirt driveways.
  - h. Paved access driveways and streets shall be washed and swept daily when there are visible signs of dirt track-out.
  - i. Street sweeping shall be conducted daily when visible soil accumulations occur along site access roadways to remove dirt dropped or tracked-out by construction vehicles.
  - j. Site access driveways and adjacent streets shall be washed daily, if there are visible signs of any dirt track-out at the conclusion of any workday and after street sweeping.

*[Mitigation Measure III-3] Grading Permits/Planning*

*III-4 AQ-Construction Mitigation. The “developer” shall submit for review and obtain approval from County Planning of a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements to reduce vehicle and equipment emissions and other impacts to air quality by implementing the following measures and submitting documentation of compliance: The developer/construction contractors shall do the following:*

- a. Provide documentation prior to beginning construction demonstrating that the project will comply with all SCAQMD regulations including 402, 403, 431.1, 431.2, 1113 and 1403.
- b. Each contractor shall certify to the developer prior to construction-use that all equipment engines are properly maintained and have been tuned-up within last 6 months.
- c. Each contractor shall minimize the use of diesel-powered vehicles and equipment through the use of electric, gasoline or CNG-powered equipment. All diesel engines shall have aqueous diesel filters and diesel particulate filters.
- d. All gasoline-powered equipment shall have catalytic converters.
- e. Provide onsite electrical power to encourage use of electric tools.
- f. Minimize concurrent use of equipment through equipment phasing.
- g. Provide traffic control during construction to reduce wait times.
- h. Provide on-site food service for construction workers to reduce offsite trips.
- i. Implement the County approved Dust Control Plan (DCP)
- j. Suspend use of all construction equipment operations during second stage smog alerts.

*NOTE: For daily forecast, call (800) 367-4710 (San Bernardino and Riverside counties).*

*[Mitigation Measure III-4] Grading Permits/Planning*

*III-5 AQ-Installation. The developer shall submit for review and obtain approval from County Planning of evidence that all air quality mitigation measures have been installed, implemented properly and that specified performance objectives are being met to the satisfaction of County Planning and County Building and Safety. These installations/procedures include the following:*

- a. Dust Control Plan (DCP)
- b. Coating Restriction Plan (CRP)

*[Mitigation Measure III-5] Final Inspection/Planning*

Long-term criteria air pollutant emissions will result from the operation of the proposed warehouse. Long-term emissions are categorized as area source emissions, energy demand emissions, and operational emissions. Operational emissions will result from automobile, truck, and other vehicle sources associated with daily trips to and from the warehouse. Area source emissions are the combination of many small emission sources that include use of outdoor landscape maintenance equipment, use of consumer products such as cleaning products, and periodic repainting of the proposed warehouse. Energy demand emissions result from use of electricity and natural gas. Based on the results of the CalEEMod model, maximum daily operational emissions associated with the proposed warehouse will not exceed the thresholds established by SCAQMD as summarized in Table 2 (Operational Daily Emissions (lbs/day)). Impacts will be less than significant.

**Table 2**  
**Operational Daily Emissions (lbs/day)**

Source	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sup>10</sup>	PM <sup>2.5</sup>
Summer	12.52	20.36	25.51	0.09	4.92	1.56
Winter	12.60	21.10	27.46	0.09	4.93	1.57
Threshold	55	55	550	150	150	55
Substantial?	No	No	No	No	No	No

III c) **Less Than Significant Impact.** Cumulative short-term, construction-related emissions from the project will not contribute considerably to any potential cumulative air quality impact because short-term project emissions will be less than significant with mitigation incorporated, as identified in Mitigation Measure III-1 above, and other concurrent construction projects in the region will be required to implement standard air quality regulations and mitigation pursuant to State CEQA requirements, just as this project has. The SCAQMD CEQA Air Quality Handbook identifies methodologies for analyzing long-term cumulative air quality impacts for criteria pollutants for which the Basin is nonattainment. These methodologies identify three performance standards that can be used to determine if long-term emissions will result in cumulative impacts. Essentially, these methodologies assess growth associated with a land use project and are evaluated for consistency with regional projections. These methodologies are outdated, and are no longer recommended by SCAQMD. As discussed in Section III.a, the proposed project is consistent with current land use designations and is consistent with the growth assumptions in the AQMP, which have incorporated the County's current General Plan. Therefore, the proposed project will not contribute to any potential cumulative air quality impacts, based on the CEQA projection method.

III d) **Less Than Significant Impact.** The proposed project is a high-cube warehouse that will generate diesel particulate matter (DPM) emissions from truck trips entering and exiting the site. DPM has been identified as a Toxic Air Contaminant (TAC) by the Air Resources Board (ARB).

A carbon monoxide (CO) hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. CO hotspots have the potential to violate state and federal CO standards at intersections, even if the broader Basin is in attainment for federal and state levels. The Sacramento Metropolitan Air

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Quality Management District (SMAQMD) developed a screening threshold (supported by SCAQMD) that states that any project involving an intersection experiencing 31,600 vehicles per hour or more will require detailed analysis.<sup>1</sup> The project will not involve an intersection experiencing this level of traffic; therefore, the project passes the screening analysis and will not result in a CO hotspot. Impacts will be less than significant.

As part of SCAQMD's environmental justice program, attention has recently been focusing more on the localized effects of air quality. Although the region may be in attainment for a particular criteria pollutant, localized emissions from construction activities coupled with ambient pollutant levels can cause localized increases in criteria pollutant that exceed national and/or State air quality standards.

Construction-related criteria pollutant emissions and potentially significant localized impacts were evaluated pursuant to the SCAQMD Final Localized Significance Thresholds Methodology. This methodology provides screening tables for one through five acre project scenarios, depending on the amount of site disturbance during a day. As the project site consists of more than five acres, the SCREEN3 modeling software was utilized to calculate localized pollutant concentrations for construction activity. SCREEN3 uses dispersion screening techniques to estimate impacts of point, area, and volume stationary sources. For purposes of this analysis, receptors were located at residential uses to the north and east of the proposed project. Localized NO<sub>x</sub> and CO emissions are combined with background concentrations to determine if the construction of the proposed project would cause NO<sub>x</sub> or CO to exceed established thresholds. Per SCAQMD methodology, incremental PM<sub>10</sub> and PM<sub>2.5</sub> impacts from construction are derived based on the change in concentration threshold of 10.4 µ/m<sup>3</sup> as nearly the entire district exceeds PM<sub>10</sub> and PM<sub>2.5</sub> standards.

Applicable localized thresholds are as follows:

- State 8-hour CO standard of 20.0 ppm
- State 1-hour NO<sub>2</sub> standard of 0.18 ppm
- SCAQMD 24-hour construction PM<sub>10</sub> LST of 10.4 µ/m<sup>3</sup>
- SCAQMD 24-hour construction PM<sub>2.5</sub> LST of 10.4 µ/m<sup>3</sup>

For construction, an area source encompassing approximately 40,000 square meters was modeled. The urban option of the model was selected and receptor height was set at 2.0 meters consistent with SCAQMD methodology. For PM<sub>10</sub> and PM<sub>2.5</sub> a source release height of one meter was utilized consistent with SCAQMD methodology. Additionally, for emissions of NO<sub>x</sub> and CO released during construction activities, a source release height of five meters was utilized to approximate the height of equipment exhausts. Based on the results of the model provided in the project air quality study, emissions for NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> will not exceed localized thresholds. Impacts will be less than significant.

- III e) **No Impact.** According to the CEQA Air Quality Handbook, land uses associated with odor complaints include agricultural operations, wastewater treatment plants, landfills, and certain industrial operations (such as manufacturing uses that produce chemicals, paper, etc.). The proposed warehouse does not produce odors that would affect a substantial number of people. No impact will occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
<b>IV. BIOLOGICAL RESOURCES - Would the project:</b>				
a) Have substantial adverse effects, 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 California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect 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 US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc...) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUBSTANTIATION :**

IV a) **No Impact.** The project site is currently developed with an existing, enclosed greenhouse and nursery. The project site does not have native vegetation and is characterized by ornamental landscaping. Due to the current business operation, no habitat is known to be present that could support any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. The California Department of Fish and Wildlife Natural Diversity Database search did not identify any occurrences of special

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animals, plants, or natural communities on the project site. No impact will occur.

- IV b) **No Impact.** The project site contains no surface water bodies and no riparian habitat or other sensitive natural community is present. There are no regional conservation plans for the project site. No impact will occur.
- IV c) **No Impact.** No surface water bodies exist on the project site and no wetlands as defined by Section 404 of the Clean Water Act are located on the site. The project is not anticipated to impact any protected wetlands.
- IV d) **No Impact** This project will not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites, because there are no such corridors due to the intensive urban nature of the area. There are no permanent waterbodies on site that could serve as a waypoint in the Pacific Flyway for migratory birds. No impact will occur.
- IV e) **No Impact.** This project will not conflict with local policies or ordinances protecting native trees because the regulated plants identified within the Development Code for the Desert, Mountain, Valley, and Riparian areas are not applicable due to the lack of: Native trees on-site; three or more palm trees planted in a linear arrangement or; riparian trees within the Valley area. San Bernardino County does not have any adopted tree preservation ordinance, but does provide specific procedures for removal of native trees or palm trees. No impact will occur.
- IV f) **No Impact** This project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan, because no such plan has been adopted in the area of the project site. The County of San Bernardino has not adopted a Habitat Conservation Plan for the region. Likewise, there is no local, regional or state habitat conservation plan that governs the project site or vicinity. No impact will occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
<b>V. CULTURAL RESOURCES - Would the project</b>				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**SUBSTANTIATION** (Check if the project is located in the Cultural  or Paleontologic  Resources overlays or cite results of cultural resource review):

V a) **No Impact.** The project site is currently developed with a greenhouse and nursery. The initial construction of the existing nursery started in 1976 and was completed in 2005, based upon information in the *Phase I Environmental Site Assessment* referenced in this document. The greenhouse is not listed as a historic resource and does not exhibit any characteristics that could lead to its potential listing, such as design by an important architect or if it was known as a site upon which an important event occurred in the history of California. No impact will occur as a result of its demolition to accommodate the proposed project.

V b) **Less Than Significant Impact.** This project will not cause a substantial adverse change in the significance of an archaeological resource, because no resources have been identified on the site. The County General Plan EIR does not indicate the discovery of archaeological resources on the site. The project site is fully developed; therefore, surface soils have previously been disturbed and any archaeological resources within a shallow depth have been discovered or destroyed. Further, should archaeological resources of significance be unearthed during grading or excavation activities, the project would be subject to the County's condition of approval regarding cultural resources that requires the developer to contact the appropriate County Museum or Information Center for determination of an appropriate course of action in handling the discovery, such as isolation of the resource site, recovery of the item, and appropriate curation and documentation. Impacts to archaeological resources will be less than significant with implementation of standard conditions.

V c) **Less Than Significant Impact.** The project site is currently developed; therefore, any near-surface paleontological resources that may have underlain the project site would have been previously recovered or destroyed during previous construction activities. The

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proposed project includes no subsurface structures that would require grading beyond existing, disturbed surficial soils. Little to no further excavation of the site is proposed that would disturb the underlying soil that has potential for containing paleontological resources. This project is not anticipated to directly or indirectly destroy a unique paleontological resource, site, or unique geologic feature because the site and surrounding area consists of alluvial deposits of the Pliocene to Holocene era.<sup>2</sup> Sediments from this more recent era of geologic activity do not typically contain fossil or other paleontological resources. While later aged sediments may exist beneath the surface deposits on the project site, the minimal amount of grading proposed for the project is not anticipated to disturb any potential paleontological resources that may exist beneath the surface. To further reduce the potential for impacts, the project will be subject to a condition that requires the developer to contact the appropriate County Museum or Information Center for a determination of the appropriate course of action if any discoveries are made during project construction. Impacts will be less than significant.

- V d) **Less Than Significant Impact.** This project is not likely to disturb any human remains including those interred outside of formal cemeteries, because no such burial grounds are known to exist on the project site and the project site has been previously developed; however, should any human remains be discovered during construction of this project, the stipulations set forth in Section 21083.1 of the California Public Resources Code are required to be followed. All construction or excavation shall cease in the immediate area of the find(s) until the County Coroner, by law, has determined if the remains are human and/or archaeological in character. If the remains are human and archaeological, the landowner shall consult with a qualified archaeologist and a representative of the applicable Native American tribe. Impacts will be less than significant with implementation of existing regulations.

	Potentially Significant Impact	Less than Significant with Mitigation Incomp.	Less than Significant	No Impact
<b>VI. GEOLOGY AND SOILS - Would the project:</b>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 181-B of the California Building Code (2001) creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>SUBSTANTIATION</b> (Check <input type="checkbox"/> if project is located in the Geologic Hazards Overlay District):				

*The following summaries are based in part on the National Resources Conservation Service Soil Survey.*

ai) **No Impact.** The project will not expose people or structures to potential substantial

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adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, because the project site lies outside of any Alquist-Priolo Special Studies Zone. The project site is not located within a County fault hazard overlay or on any known fault. No impact will occur.

aii) **Less Than Significant Impact.** The project will not expose people or structures to potentially substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. Although the entirety of the County is subject to strong ground shaking, the project will be reviewed and approved by County Building and Safety with appropriate seismic standards implemented. Adherence to standards and requirements contained in the building code for the design of the proposed structures will ensure that structures do not collapse during strong ground shaking. Impacts will be less than significant with implementation of existing regulations.

aiii) **No Impact.** The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. The County Geologic Hazard Map indicates that the site has low susceptibility to liquefaction. Furthermore, liquefaction impacts are considered low due to the groundwater depth of over 150 feet, based upon information contained in the *Phase I Environmental Site Assessment*. No impact will occur.

aiv) **No Impact.** The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides, because the project site and surrounding area is relatively flat. No impact will occur.

VI b) **Less Than Significant Impact.** The project will not result in substantial soil erosion or the loss of topsoil, because the site will be built, paved, and landscaped. Erosion control plans will be required to be submitted, approved, and implemented. Measures to reduce and control erosion of soil during construction are required by SCAQMD through its Rule 403 for control of fugitive dust, the Santa Ana Regional Water Quality Control Board (RWQCB) under administration of the State's General Construction Permit, and the County of San Bernardino Public Works Department through its Storm Water Management Program. Implementation of requirements under SCAQMD Rule 403 for control of fugitive dust will reduce or eliminate the potential for soil erosion due to wind. Implementation of Best Management Practices (BMPs) that would be included in the applicant's required Storm Water Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP) would reduce soil erosion due to storm water or water associated with construction. Impacts will be less than significant.

VI c) **Less Than Significant Impact.** The project is not located on a geologic unit or soil identified as being unstable or having the potential to result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse because the Natural Resources Conservation Service (NRCS) Soil Survey data does not identify any development restrictions associated with the potential for ground failure. Standard grading and building code requirements will ensure any impacts related to ground failure will be less than significant.

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- VI d) **No Impact.** The project site is not located in an area that has been identified by the NRCS Soil Survey data as having the potential for expansive soils. No impact will occur.
- VI e) **No Impact.** The project will be served by an existing sewer system; therefore, no impacts related to soil conditions and septic tanks could occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorpor.	Less than Significant	No Impact
<b>VII. GREENHOUSE GAS EMISSIONS - Would the project:</b>				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of greenhouse gases.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**SUBSTANTIATION** *The following summaries are based in part on the project Air Quality and Climate Change Assessment prepared by MIG | Hogle-Ireland in February 2015.*

VII a) **Less Than Significant Impact.** The County’s Greenhouse Gas Emissions Reduction Plan (GHG Plan) was adopted on December 6, 2011 and became effective on January 6, 2012. The GHG Plan establishes a GHG emissions reduction target for the year 2020 that is 15 percent below 2007 emissions. The plan is consistent with AB 32 and sets the County on a path to achieve more substantial long-term reductions in the post-2020 period. Achieving this level of emissions will ensure that the contribution to greenhouse gas emissions from activities covered by the GHG Plan will not be cumulatively considerable.

In 2007, the California State Legislature adopted Senate Bill 97 (SB97) requiring that the CEQA Guidelines be amended to include provisions addressing the effects and mitigation of GHG emissions. New CEQA Guidelines have been adopted that require: inclusion of a GHG analyses in CEQA documents; quantification of GHG emissions; a determination of significance for GHG emissions; and, adoption of feasible mitigation to address significant impacts. The CEQA Guidelines [Cal. Code of Regulations Section 15083.5 (b)] also provide that the environmental analysis of specific projects may be tiered from a programmatic GHG plan that substantially lessens the cumulative effect of GHG emissions. If a public agency adopts such a programmatic GHG Plan, the environmental review of subsequent projects may be streamlined. A project’s incremental contribution of GHG emissions will not be considered cumulatively significant if the project is consistent with the adopted GHG plan.

Implementation of the County’s GHG Plan is achieved through the Development Review Process by applying appropriate reduction requirements to projects, which reduce GHG emissions. All new development is required to quantify the project’s GHG emissions and adopt feasible mitigation to reduce project emissions below a level of significance. A review threshold of 3,000 metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>e) per year is used to identify and mitigate project emissions. Based on a CalEEMod statistical analysis, warehouse projects that exceed 53,000 square feet typically generate more than 3,000 MTCO<sub>2</sub>e. For projects exceeding 3,000 MTCO<sub>2</sub>e per year of GHG emissions, the developer may use the GHG Plan Screening Tables as a tool to assist with calculating GHG reduction measures and the determination of a significance finding. Projects that

garner 100 or more points in the Screening Tables do not require quantification of project-specific GHG emissions. The point system was devised to ensure project compliance with the reduction measures in the GHG Plan such that the GHG emissions from new development, when considered together with those from existing development, will allow the County to meet its 2020 target and support longer-term reductions in GHG emissions beyond 2020. Consistent with the CEQA Guidelines, such projects are consistent with the Plan and therefore will be determined to have a less than significant individual and cumulative impact for GHG emissions.

The proposed project garnered 106 points on the Screening Tables through the application of Energy Efficient Reduction measures, Renewable Fuel/Low Emissions Vehicles Measures, Construction Debris Diversion Measures, Efficient Irrigation and Landscaping systems and use of recycled water, and Per Capita Water use Reductions, and as a result, the project is considered to be consistent with the GHG Plan and is therefore determined to have a less than significant individual and cumulative impact for GHG emissions. The GHG reduction measures proposed by the developer through the Screening Tables Review Process have been included in the project design or will be included as Conditions of Approval for the project.

**Table 4**  
**Screening Table for Implementation of GHG Reduction Measures**

Feature	Descriptions	Assigned Point Values	Project Points
<b>Reduction Measure R2E7: Energy Efficiency for Commercial Development</b>			
<b>Building Envelope</b>			
Insulation	Title 24 standard (required) Modestly Enhanced Insulation (5%>Title 24) Enhanced Insulation (15%>Title 24) Greatly Enhanced Insulation (20%>Title 24)	0 points 4 points 8 points 12 points	8
Windows	Title 24 standard (required) Modestly Enhanced Window Insulation (5%>Title 24) Enhanced Window Insulation (15%>Title 24) Greatly Enhanced Window Insulation (20%>Title 24)	0 points 4 points 8 points 12 points	8
Doors	Title 24 standard (required) Modestly enhanced Insulation (5%>Title 24) Enhanced Insulation (15%>Title 24) Greatly Enhanced Insulation (20%>Title 24)	0 points 4 points 8 points 12 points	4
Air Infiltration	Minimizing leaks in the building envelope is as important as the insulation properties of the building. Insulation does not work effectively if there is excess air leakage.  Title 24 standard (required) Modest Building Envelope Leakage (5%>Title 24) Reduced Building Envelope Leakage (15%>Title 24) Minimum Building Envelope Leakage (20%>Title 24)	0 points 4 points 8 points 12 points	8
Thermal Storage of Building	Thermal storage is a design characteristic that helps keep a constant temperature in the building. Common thermal storage devices include strategically placed water filled columns, water		--

	<p>storage tanks, and thick masonry walls.</p> <p>Thermal storage designed to reduce heating/cooling by 5°F within the building</p> <p>Thermal storage to reduce heating/cooling by 10 °F within the building</p> <p>Note: Engineering details must be provided to substantiate the efficiency of the thermal storage device.</p>	<p>6 points</p> <p>12 points</p>	
<b>Indoor Space Efficiencies</b>			
Heating/Cooling Distribution System	<p>Title 24 (required)</p> <p>Modest Distribution Losses (5%&gt;Title 24)</p> <p>Reduced Distribution Losses (15%&gt;Title 24)</p> <p>Greatly Reduced Distribution Losses (15%&gt;Title 24)</p>	<p>0 points</p> <p>4 points</p> <p>8 points</p> <p>12 points</p>	4
Space Heating/Cooling Equipment	<p>Title 24 standard (required)</p> <p>Efficiency HVAC (5%&gt;Title 24)</p> <p>High Efficiency HBAC (15%&gt;Title 24)</p> <p>Very High Efficiency HBAC (20%&gt;Title 24)</p>	<p>0 points</p> <p>4 points</p> <p>8 points</p> <p>12 points</p>	4
<b>Building Envelope</b>			
Commercial Heat Recovery Systems	Heat recovery strategies employed with commercial laundry, cooking equipment, and other commercial heat sources for reuse in HVAC air intake or other appropriate heat recovery technology. Point values for these types of systems will be determined based upon design and engineering data documenting energy savings.	TBD	--
Water Heaters	<p>Title 24 standard (required)</p> <p>Efficiency Water heater (Energy Star Conventional that is 5%&gt;Title 24)</p> <p>High Efficiency Water Heater (Conventional water heater that is 15%&gt;Title 24)</p> <p>High Efficiency Water Heater (Conventional water heater that is 20%&gt;Title 24)</p> <p>Solar Water Heating System (commercial only-this reduction feature also implements R2E10)</p>	<p>0 points</p> <p>4 points</p> <p>8 points</p> <p>12 points</p> <p>14 points</p>	8
Daylighting	<p>Daylighting is the ability of each room within the building to provide outside light during the day reducing the need for artificial lighting during daylight hours.</p> <p>All peripheral rooms within building have at least one window or skylight</p> <p>All rooms within building have daylight (through use of windows, solar tubes, skylights, etc.) such that each room has at least 800 lumens of light during a sunny day</p> <p>All rooms daylighted to a least 1,000 lumens.</p>	<p>1 point</p> <p>5 points</p> <p>7 points</p>	7
Artificial Lighting	<p>Title 24 standard (required)</p> <p>Efficient Lights (5%&gt;Title 24)</p> <p>High Efficiency Lights (LED, etc. 15%&gt;Title 24)</p> <p>Very High Efficiency Lights (LED, etc. 20%&gt;Title 24)</p>	<p>0 points</p> <p>4 points</p> <p>6 points</p> <p>8 points</p>	8
Appliances	<p>Title 24 standard (required)</p> <p>Efficient Appliances (5%&gt;Title 24)</p> <p>High Efficiency Energy Star Appliances (15%&gt;Title 24)</p> <p>Very High Efficiency Appliances (20%&gt;Title 24)</p>	<p>0 points</p> <p>4 points</p> <p>8 points</p> <p>12 points</p>	8
<b>Miscellaneous Commercial Building Efficiencies</b>			

Building Placement	North/South alignment of building or other placement such that the orientation of the buildings optimizes conditions for natural heating, cooling, and lighting	4 points	--
Other	This allows innovation by the applicant to provide design features that increases the energy efficiency of the project not provided in the table. Note that engineering data will be required documenting the energy efficiency of innovative designs and point values given based upon the proven efficiency beyond Title 24 Energy Efficiency Standards.	TBD	--
Existing Commercial Building Retrofits	<p>The applicant may wish to provide energy efficiency retrofit projects to existing residential dwelling units to further the point value of their project. Retrofitting existing commercial buildings within the unincorporated County is a key reduction measure that is needed to reach the reduction goal. The potential for an applicant to take advantage of this program will be decided on a case by case basis and must have the approval of the San Bernardino County Land Use Services Department. The decision to allow applicants the ability to participate in this program will be evaluated based upon, but not limited to the following:</p> <p>Will the energy efficiency retrofit project benefit low income or disadvantaged communities?</p> <p>Does the energy efficiency retrofit project fit within the overall assumptions in Reduction Measure R2E4?</p> <p>Does the energy efficiency retrofit project provide co-benefits important to the County?</p> <p>Point value will be determined based upon engineering and design criteria of the energy efficiency retrofit project.</p>	TBD	--
Photovoltaic	<p>Solar Photovoltaic panels installed on commercial buildings or in collective arrangements within a commercial development such that the total power provided augments:</p> <p>Solar Read Roofs (study roof and electric hookups)</p> <p>10 percent of the power needs of the project          20 percent of the power needs of the project          30 percent of the power needs of the project          40 percent of the power needs of the project          50 percent of the power needs of the project          60 percent of the power needs of the project          70 percent of the power needs of the project          80 percent of the power needs of the project          90 percent of the power needs of the project          100 percent of the power needs of the project</p>	<p>2 points          7 points          13 points          19 points          25 points          31 points          37 points          43 points          49 points          55 points          60 points</p>	--
Wind turbines	Some areas of the County lend themselves to wind turbine applications. Analysis of the areas capability to support wind turbines should be evaluated prior to choosing this feature. Wind turbines as part of the commercial development such that the total power provided augments:		--

	10 percent of the power needs of the project 20 percent of the power needs of the project 30 percent of the power needs of the project 40 percent of the power needs of the project 50 percent of the power needs of the project 60 percent of the power needs of the project 70 percent of the power needs of the project 80 percent of the power needs of the project 90 percent of the power needs of the project 100 percent of the power needs of the project	7 points 13 points 19 points 25 points 31 points 37 points 43 points 49 points 55 points 60 points	
Off-site renewable energy project	The applicant may submit a proposal to supply an off-site renewable energy project such as renewable energy retrofits of existing residential that will help Implement R2E1, existing commercial/industrial that will help Implement R2E2, or the Warehouse Renewable Energy incentive Program (R2E4). These off-site renewable energy retrofit project proposals will be determined on a case by case basis accompanied by a detailed plan documenting the quantity of renewable energy the proposal will generate. Point values will be based upon the energy generated by the proposal.	TBD	--
Other Renewable Energy Generation	The applicant may have innovative designs or unique site circumstances (such as geothermal) that allow the project to generate electricity from renewable energy not provided in the table. The ability to supply other renewable energy and the point values allowed will be decided based upon engineering data documenting the ability to generate electricity.	TBD	--
<b>Reduction Measures R2E7: Warehouse Renewable Energy Incentive Program</b>			
Warehouse Photovoltaic	This measure is for warehouse projects and involves partnership with Southern California Edison and California Public Utilities Commissions to develop an incentive program for solar installation on new and retrofit existing warehouses. A mandatory minimum solar requirement for new warehouse space. Solar Photovoltaic panels installed on warehouses or in collective arrangements within a logistics/warehouse complex such that the total power provided augments:  Solar Ready Roof (sturdy roof and electric hookups) 10 percent of the power needs of the project 20 percent of the power needs of the project 30 percent of the power needs of the project 40 percent of the power needs of the project 50 percent of the power needs of the project 60 percent of the power needs of the project 70 percent of the power needs of the project 80 percent of the power needs of the project 90 percent of the power needs of the project 100 percent of the power needs of the project	2 points 4 points 5 points 7 points 9 points 11 points 13 points 15 points 17 points 19 points 21 points	--
<b>Reduction Measure R2WC-1: Per Capita Water Use Reduction Goal</b>			
<b>Irrigation and Landscaping</b>			
Water Efficient Landscaping	Limit conventional turf to <20% of each lot (required) Eliminate conventional turf from landscaping Eliminate turf and only provide drought tolerant	0 points 3 points 4 points	3

	plants xeriscaping that requires no irrigation	6 points	
Water Efficient Irrigation Systems	Drip irrigation Smart irrigation control systems combined with drip irrigation (demonstrate 20 reduced water use)	1 point 5 points	5
Recycled Water	Greywater (purple pipe) irrigation system on site	5 points	5
Storm water Reuse systems	Innovative on-site stormwater collection, filtration and reuse systems are being developed that provide supplemental irrigation water and provide vector control. These systems can greatly reduce the irrigation needs of a project. Point values for these types of systems will be determined based upon the design and engineering data documenting the water savings	TBD	--
<b>Potable Water</b>			
Showers	Title 24 standard (required) EPA High Efficiency Showerheads (15%>Title 24)	0 points 3 points	3
Toilets	Title 24 standard (required) EPA High Efficiency Toilets/Urinals (15%>Title 24) Waterless Urinals (note that commercial buildings having both waterless urinals and high efficiency toilets will have a combined point value of 6 points)	0 points 3 points 3 points	3
Faucets	Title 24 standard (required) EPA High Efficiency faucets (15%>Title 24)	0 points 3 points	3
Commercial Dishwashers	Title 24 standard (required) EPA High Efficiency dishwasher (20% water savings)	0 points 4 points	--
Commercial Laundry Washers	Title 24 standard (required) EPA High Efficiency Laundry (15% water savings) EPA High Efficiency laundry equipment that captures and reuses rinse water (30% water savings)	0 points 3 points 6 points	--
Commercial Water Operations Program	Establish an operational program to reduce water loss from pools, water features, etc., by covering pools, adjusting fountain operational hours, and using water treatment to reduce draw down and replacement of water. Point values for these types of plans will be determined based upon design and engineering data documenting the water savings	TBD	--
<b>Reduction Measure R2T1: Anti-Idling Enforcement</b>			
Commercial Vehicle Idling Restrictions	All commercial vehicles are restricted to 5-minutes or less per trip on site and at loading docks (required of all commercial projects)	1 point	1
<b>Reduction Measure R2T2: Employment Based Trip and VMT Reduction Policy</b>			
Compressed Work Week	Reduce the number of days per week that employees need to be on site will reduce the number of vehicle trips associated with commercial/industrial development. Compressed work week such that full time employees are on site:  5 days per week 4 days per week on site 3 days per week on site	0 points 4 points 8 points	--
Car/Vanpools	Car/vanpool program Car/vanpool program with preferred parking Car/vanpool with guaranteed ride home program Subsidized employee incentive car/vanpool program	1 point 2 points 3 points 5 points 6 points	2

	Combination of all the above		
Employee Bicycle/Pedestrian Programs	Complete sidewalk to residential within ½ mile Complete bike path to residential within 3 miles Bike lockers and secure racks Showers and changing facilities Subsidized employee walk/bike program Note combine all applicable points for total value	1 point 1 point 1 point 2 points 3 points	2
Shuttle/Transit Programs	Local transit within ¼ mile Light rail transit within ½ mile Shuttle service to light rail transit station Guaranteed ride home program Subsidized Transit passes Note combine all applicable points for total value	1 point 3 points 5 points 1 point 2 points	1
CRT	Employer based commute trip reduction (CRT). CRTs apply to commercial, offices, or industrial projects that include a reduction of vehicle trip or VMT goal using a variety of employee commutes trip reduction methods. The point value will be determined based upon a TIA that demonstrates the trip/VMT reduction. Suggested point ranges: Incentive based CRT programs (1-8 points) Mandatory CRT programs (5-20 points)	TBD	--
Other Trip Reductions	Other trip or VMT reduction measures not listed above with TIA and/or other traffic data supporting the trip and/or VMT for the project	TBD	--
<b>Reduction Measure R2T4: Signal Synchronization and Intelligent Traffic Systems</b>			
Signal Improvements	Signal Synchronization-1 point per signal Traffic signals connected to ITS	1 point/signal 3 points/signal	--
<b>Reduction Measure R2T5: Renewable Fuel/Low Emissions Vehicle</b>			
Electric Vehicle Recharging	Provide circuit and capacity in garages/parking areas for installation of electric vehicle charging stations. Install electric vehicle charging stations in garages /parking areas	2 points/area 8 points/station	--
<b>Reduction Measure R2T6: Vehicle Trip Reduction Measures</b>			
Mixed Use	Mixes of land uses that complement one another in a way that reduces the need for vehicle trips can greatly reduce GG emissions. The point value of mixed use projects will be determined based upon traffic studies that demonstrate trip reductions and/or reductions in vehicle miles traveled	TBD	--
Local Retail Near Residential (commercial only projects)	Having residential developments within walking and biking distance of local retail helps to reduce vehicle trips and/or vehicle miles traveled.  The point value of residential projects in close proximity to local retail will be determined based upon traffic studies that demonstrate trip reductions and/or reduction in vehicle miles traveled	TBD	--
<b>Reduction Measure R2W5: construction and demolition debris diversion program</b>			
Recycling of Construction/ Demolition Debris	Recycle 2% of debris (required) Recycle 5% of debris Recycle 8% of debris Recycle 10% of debris Recycle 12% of debris Recycle 15% of debris Recycle 20% of debris	0 point 1 point 2 points 3 points 4 points 5 points 6 points	6
<b>Reduction Measure R2W6: 75 Percent Solid Waste Diversion Program</b>			

Recycling	<p>County initiated recycling program diverting 75% of waste requires coordination with commercial development to realize this goal. The following recycling features will help the County fulfill this goal:</p> <p>Provide separated recycling bins within each commercial building/floor and provide large external recycling collection bins at central location for collection truck pick-up</p> <p>Provide commercial/industrial recycling programs that fulfills an on-site goal of 75% diversion of solid waste</p>	2 points	5
		5 points	
<b>Total Points Earned by Commercial/Industrial Project:</b>			<b>106</b>

VII b) The proposed project is not anticipated to conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. In January of 2012, the County of San Bernardino adopted a Greenhouse Gas Emissions Reduction Plan (GHG Plan). The proposed project is consistent with the GHG Plan in that 100 or more points were garnered through the Screening Table Analysis as described in Section a) above.

VIII. HAZARDS AND HAZARDOUS MATERIALS - Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
a) Create a significant hazard to the public or the Environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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**SUBSTANTIATION** *This section was prepared in part on the information provided in the project Phase I Environmental Site Assessment prepared by Blackstone Consulting in January 2015.*

- VIII a) **Less Than Significant Impact.** During construction, there would be a minor level of transport, use, and disposal of hazardous materials and wastes that are typical of construction projects. This would include fuels and lubricants for construction machinery, coating materials, etc. All hazardous materials are required to be utilized and transported in accordance with their labeling pursuant to federal and state law. Routine construction control measures and best management practices for hazardous materials storage, application, waste disposal, accident prevention and clean-up will be sufficient to reduce potential impacts to a less than significant level.

Warehouse operations do not require use of a substantial amount of hazardous materials in the storage of products for distribution to retail facilities. Should hazardous materials be used on-site, use and storage will be subject to permit and inspection by the Hazardous Materials Division of the County Fire Department. Sections 2729 through 2732 of the California Code of Regulations (CCR) provide requirements for the reporting, inventory, and release response plans for hazardous materials. These requirements establish procedures and minimum standards for hazardous material plans, inventory reporting and submittal requirements, emergency planning/response, and training. In addition, all regulated substance handlers are required to register with local fire or emergency response departments per the California Accidental Release Prevention Program. Locally, this is overseen by the San Bernardino County Fire Department Hazardous Materials Division. The division reviews and approves an Emergency/Contingency Plan for regulated facilities.

The plan outlines precautions and procedures necessary to protect the facility from accidental release of hazardous materials, and provides emergency remediation to minimize effects should an accidental spill occur. Annual updates and review of the plan are required to ensure compliance and adequacy. The San Bernardino County Fire Department Hazardous Materials Division administers the California Accidental Release Prevention (CalARP) Program in the area. The CalARP Program was established to prevent accidental release of substances that pose the greatest risk of immediate harm to the public and the environment.<sup>3</sup> The Program requires facilities to proactively prevent and prepare for chemical accidents. The proposed facility will be subject to Program requirements for regulated substances including preparation of a risk management plan (RMP) to include an off-site consequence analysis, compliance audit, certified program elements, and a seismic assessment. Existing risk management and response requirements will ensure potential risks associated with accidental releases of hazardous materials are minimized.

Widely used hazardous materials common at any warehouse land use include paints and other solvents, cleaners, automobile fluids, and pesticides. The remnants of these and other products are disposed of as household hazardous waste (HHW) that includes used motor oil, dead batteries, electronic wastes, and other wastes that are prohibited or discouraged from being disposed of at local landfills. Use of common household hazardous materials and their disposal does not present a substantial health risk to the neighborhood. Impacts associated with the routine transport, use of hazardous materials or wastes will be less than

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significant.

- VIII b) **Less Than Significant Impact.** The project proponent will adhere to California Division of Occupational Safety and Health (Cal/OSHA) standards for Asbestos Standards in Construction (8 CCR Section 1529). All materials for construction will be used within regulation of state and federal law. The project Phase I Environmental Site Assessment (ESA) did not identify any *recognized environmental conditions* on the project site.

The project will not 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 because use of hazardous materials is subject to permit and inspection by the Hazardous Materials Division of the County Fire Department.

Because the initial portions of the on-site greenhouse and nursery was constructed in the 1970s, demolition of the structure may pose a hazard with regard to asbestos containing materials (ACM) and lead-based paints. ACM were used on a widespread basis in building construction prior to and into the 1980s. Asbestos generally does not pose a threat when it remains intact. When asbestos is disturbed and becomes airborne, such as during demolition activities, significant impacts to human health could occur. Construction workers completing demolition activities, as well as surrounding uses, have the potential to be exposed to airborne asbestos emissions due to the potential presence of ACM.

SCAQMD Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities) requires work practices that limit asbestos emissions from building demolition and renovation activities, including the removal and disturbance of ACM.<sup>4</sup> This rule is generally designed to protect uses and persons adjacent to demolition or renovation activity from exposure to asbestos emissions. Rule 1403 requires surveys of any facility being demolished or renovated for the presence of all friable and Class I and Class II non-friable ACM. Rule 1403 also establishes notification procedures, removal procedures, handling operations, and warning label requirements, including HEPA filtration, the *glovebag* method, wetting, and some methods of dry removal that must be implemented when disturbing appreciable amounts of ACM (more than 100 square feet of surface area).

Exposure of construction workers to lead-based paint during demolition activities is also of concern, similar to exposure to asbestos. Exposure of surrounding land uses to lead from demolition activities is generally not a concern because demolition activities do not result in appreciable emissions of lead.<sup>5</sup> The primary emitters of lead are industrial processes. Any lead-based paint utilized on the exterior and interior of the existing structures would generally remain inside the structure or close to the exterior of the building. Improper disposal of lead-based paint could contaminate soil and subsurface groundwater in and under landfills not properly equipped to handle hazardous levels of this material. If lead-based paint exists, 8 CCR Section 1532.1 (California Construction Safety Orders for Lead) is applicable to the demolition of all existing structures requiring exposure assessment and compliance measures to keep worker exposure below action levels. The project is also subject to Title 22 requirements for the disposal of solid waste contaminated with excessive levels of lead. Impacts will be less than significant with implementation of existing regulations.

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- VIII c) **No Impact.** The project site is not located within 0.25 miles of any school. The nearest school is Live Oak Elementary School located approximately 0.42 miles northeast of the project site. No impact will occur.
- VIII d) **No Impact.** The project site is not included on the list of hazardous materials sites pursuant to Government Code No. 65962.5 that is compiled of the following lists:
- List of Hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code.<sup>6</sup>
  - Hazardous Waste and Substances sites from Department of Toxic Substances Control (DTSC) EnviroStor Database.<sup>7</sup>
  - Leaking Underground Storage Tanks Sites by County.<sup>8</sup>
  - Solid Waste Disposal sites identified by Water board with Waste constituents above hazardous waste levels outside the Waste management unit.<sup>9</sup>
  - List of “active” CDO and CAO from the Water Board
- No Impact will occur.
- VIII e) **No Impact.** The project site is not located within an Airport Safety Review Area as designated by the San Bernardino County Land Use Plan Hazard Overlay. No impact will occur.
- VIII f) **No Impact.** The project site is not within the vicinity or approach/departure flight path of a private airstrip. No impact will occur.
- VIII g) **Less Than Significant Impact.** The project will not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The interior drive lanes will be a minimum width of 28 feet, greater than the 26 feet required by the California Fire Code. The project will not result in any alteration to road design or capacity that would affect implementation of evacuation procedures nor result in any substantial increase in natural or man-made hazards that would increase the potential for evacuation. In addition, the project will include adequate emergency access via Redwood Avenue. Impacts will be less than significant.
- VIII h) **No Impact.** The project will not expose people or structures to a significant risk of loss, injury or death involving wildland fires, because the site is not adjacent to dense brush or other features typically associated with wildfires and is not located in a fire hazard zone. No impact will occur.

IX. HYDROLOGY AND WATER QUALITY - Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 (e.g., 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structure that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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flooding as a result of the failure of a levee or dam?

j) Inundation by seiche, tsunami, or mudflow?

### SUBSTANTIATION

- IX a) **Less Than Significant Impact.** The project will not violate any water quality standards or waste discharge requirements, because the project's design will incorporate measures to diminish impacts to water quality to an acceptable level as required by state and federal regulations. The project requires the preparation of a Storm Water Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP) to determine the project's potential impacts on water quality caused by storm event runoff. Since project construction would encompass an area greater than an acre, the project would be subject to a General Construction Permit under the NPDES permit program of the federal Clean Water Act. As required under the General Construction Permit, the project applicant (or contractor) would prepare and implement a SWPPP. The SWPPP requires submittal of a Notice of Intent (NOI) to the Santa Ana RWQCB prior to construction activities. Implementation of the SWPPP would begin with the commencement of construction and continue through the completion of the project. The objectives of a SWPPP are to identify pollutant sources (such as sediment) that may affect the quality of storm water discharge and to implement Best Management Practices (BMPs) to reduce pollutants in storm water. The project applicant and/or its construction contractor would use BMPs as described in the WQMP. These BMPs would be used to prevent the degradation of water quality in the construction area and during operation of the project. The project is not subject to individual wastewater discharge requirements or other water quality standards. Impacts will be less than significant with implementation of existing regulations.
- IX b) **Less Than Significant Impact.** The project will not 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, because the project is served by an existing water purveyor with sufficient capacity in the existing water system to serve the anticipated needs of this project. In addition, the proposed warehouse operation does not require a significant amount of water and would replace an existing nursery operation. The project will continue existing site conditions with impervious surfaces due to paving and building construction. Pursuant to drainage standards, runoff must be reduced to pre-development conditions and therefore the project will not interfere with downstream potential for groundwater recharge. Impacts to groundwater levels will be less than significant.
- IX c) **Less Than Significant Impact.** The project will not substantially alter the existing drainage pattern of the site or area, including 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, because the project does not affect any existing drainage pattern, stream or river and the project is required to submit and implement an erosion control plan with the submittal of final grading plans. Impacts will be less than significant.
- IX d) **Less Than Significant Impact.** Pursuant to NPDES and County drainage requirements, no increase in runoff will be permitted from the project, thus the drainage design of the project will ensure that on- or off-site flooding impacts will not occur. Impacts will be less

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than significant.

- IX e) **No Impact.** Pursuant to NPDES and County drainage requirements, no increase in stormwater runoff will be permitted; therefore, no increase in flows in local or regional storm drains or flood control facilities will occur. No impact will occur.
- IX f) **No Impact.** The project will not otherwise substantially degrade water quality. No impact will occur.
- IX g) **No Impact.** The project will not place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, because the project does not propose any housing. No impact will occur.
- IX h) **No Impact.** The project will not place any structure within a 100-year flood hazard area structures that could impede or redirect flood flows, because the site is not within an identified FEMA designated flood hazard area. No impact will occur.
- IX i) **No Impact.** The project will not 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, because the project site is not within any identified path of a potential inundation flow that might result in the event of a dam or levee failure or that might occur from a river, stream, lake or sheet flow situation. No impact will occur.
- IX j) **No Impact.** The project will not be impacted by inundation by seiche, tsunami, or mudflow, because the project is not adjacent to any body of water or within an area subject to the potential of seiche or tsunami. Based on the responses to Sections VI.a and VI.b of this Initial Study, the project site is not located in an area prone to landslides. No impact will occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorpor.	Less than Significant	No Impact
<b>X. LAND USE AND PLANNING - Would the project:</b>				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUBSTANTIATION**

- X a) **No Impact.** The project will not physically divide an established community, because the project is within an urbanized and fully developed area. The property is currently developed with a building of similar size to the proposed structure. No impact will occur.
- X b) **No Impact.** The project includes no amendment or design feature that would circumvent County policies and standards designed to protect the environment. The project will comply with all land use regulations designed to protect the environment. No impact will occur.
- X c) **No Impact.** The project will not conflict with any applicable habitat conservation plan or natural community conservation plan, because no habitat conservation plan or natural community conservation plan exists within the area surrounding the project site and no habitat conservation lands are required to be purchased as mitigation for the proposed project.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
<b>XI. MINERAL RESOURCES - Would the project:</b>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUBSTANTIATION :**

XI a) **No Impact.** The project site is located within an area where the significance of mineral resources has been undetermined (MRZ-3). Mining would be incompatible with the area's current and future land uses. No mining operations are currently located on site or in the project vicinity. No impact will occur.

XI b) **No Impact.** The County of San Bernardino General Plan does not identify any locally important mineral resources in the area. No impact will occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
<b>XII. NOISE - Would the project result in:</b>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUBSTANTIATION** *The analysis provided in this section is based in part on the Noise Study prepared by MIG | Hogle-Ireland in February 2015.*

XII a) **Less Than Significant Impact.** Current noise levels for most of the surrounding area exceed County standards for residential uses, 60 dBA. The project will not notably change the existing noise levels. As such, projected noise levels would not expose persons to or generate noise levels significantly higher than ambient levels or increase them to such an extent as to be noticeable. Those areas that do not exceed noise ordinance standards would continue to remain below 60 dBA. Operation of the proposed warehouse will not exceed allowable stationary noise levels established by the County at neighboring uses. Therefore, no substantial impacts will occur. The project has been conditioned to comply with the noise standards of the County Development Code. Impacts will be less than significant.

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XII b) **Less Than Significant Impact.** Vibration is the movement of mass over time. It is described in terms of frequency and amplitude and unlike sound; there is no standard way of measuring and reporting amplitude. Vibration can be described in units of velocity (inches per second) or discussed in decibel (dB) units in order to compress the range of numbers required to describe vibration. Vibration impacts to buildings are generally discussed in terms of peak particle velocity (PPV) that describes particle movement over time (in terms of physical displacement of mass). For purposes of this analysis, PPV will be used to describe all vibration for ease of reading and comparison. Vibration can impact people, structures, and sensitive equipment.<sup>10</sup> The primary concern related to vibration and people is the potential to annoy those working and residing in the area. Vibration with high enough amplitudes can damage structures (such as crack plaster or destroy windows). Groundborne vibration can also disrupt the use of sensitive medical and scientific instruments such as electron microscopes. Common sources of vibration within communities include construction activities and railroads.

Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and demolition-related activities. Next to pile driving, grading activity has the greatest potential for vibration impacts if large bulldozers, large trucks, or other heavy equipment are used.

According to the Caltrans vibration manual, large bulldozers, vibratory rollers (used to compact earth), and loaded trucks utilized during grading activities can produce vibration, and depending on the level of vibration, could cause annoyance at uses within the project vicinity or damage structures. Caltrans has developed a screening tool to determine if vibration from construction equipment is substantial enough to impact surrounding uses. The Caltrans vibration manual establishes thresholds for vibration impacts on buildings and humans. Construction activities that use vibratory rollers and bulldozers are repetitive sources of vibration; therefore, the *continuous* threshold is used. Single family residences to the south and east were built in the 1970s to 1990s. Therefore, the *older residential structures* threshold is used. Construction of the project does not require rock blasting, pile driving, or the use of a jack hammer, but will use a vibratory roller, small and large bulldozer, and loaded trucks. Based on the threshold criteria, vibration from use of heavy construction equipment for the proposed project would be below the thresholds to cause damage to nearby structures and result in less than *barely perceptible* vibration at the ten receptors analyzed in the project noise study. Furthermore, construction activities will be limited to the hours of 7:00 AM to 7:00 PM Mondays through Saturdays. With regard to long-term operational impacts, activities associated with the project will not result in any vibration-related impacts to adjacent or on-site properties. Impacts will be less than significant.

XII c) **Less Than Significant Impact.** A substantial increase in ambient noise is an increase that is *barely perceptible* (3 dBA). Operationally, the proposed project will result in periodic landscaping and other occasional noise generating activities. These activities are common in commercial districts and do not represent a substantial increase in periodic noise in consideration that the project site is located in a generally industrialized area and that a commercial greenhouse currently operates on site. Due to the number of residences in the area it is recognized that an increase in existing noise levels could adversely affect their

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environment and quality of life. However, traffic noise levels will not increase more than 3 dBA as a result of the proposed project as detailed in the project noise study. Additionally, the ambient noise measurements at the eastern boundary of the project site are generally consistent with the modeled roadway noise levels with project. Impacts will be less than significant.

- XII d) **Less Than Significant With Mitigation Incorporated.** Construction noise levels were estimated using the FHWA Roadway Construction Noise Model (RCNM). Temporary noise increases will be greatest during the demolition and grading phases. The model indicates that the use of construction equipment such as graders, tractors, dozers, and excavators could expose the single family residence located approximately 355 feet to the west of the center of the project site to a combined noise level of 72.6 dBA  $L_{max}$ . Construction equipment could expose the single family residences located 410 feet, 413 feet, and 470 feet to the east to a combined noise level of 71.3 dBA  $L_{max}$ , 71.2 dBA  $L_{max}$ , and 70.1 dBA  $L_{max}$ , respectively. Although construction noise is exempt pursuant to the municipal code, Mitigation Measure XII-1 has been incorporated to reduce the impact to neighboring uses during construction.

Per Section 83.01.080(g) of the San Bernardino County Development Code, construction activities occurring between the hours of 7:00 AM and 7:00 PM on Mondays through Saturdays are exempt from noise standards. Because noise levels construction are anticipated to exceed the City's standards for stationary noise sources, mitigation measures will be necessary to minimize noise levels at nearby receptors. Mitigation Measure XII-1 will be incorporated to minimize noise associated with general construction activities. Mitigation Measure XII-1 requires preparation of a construction noise reduction plan to reduce temporary noise impacts by minimum of 20 dBA which is a feasible performance standard based on available technology. Engineered controls include retrofitting equipment with improved exhaust and intake muffling, disengaging equipment fans, and installation of sound panels around equipment engines. These types of controls can achieve noise level reductions of approximately 10 dBA.<sup>11 12</sup> Sound curtains and other noise barriers can be used for general construction noise and achieve reductions of up to 20 dBA.<sup>13</sup> Implementation of Mitigation Measure XII-1 will reduce temporary noise impacts by a minimum of 20 dBA, resulting in a maximum construction noise level of 57.3 dBA at the commercial use to the west of the project site. Therefore, with implementation of Mitigation Measure XII-1, construction noise will feasibly be reduced to unsubstantial levels. Impacts will be less than significant with mitigation incorporated.

#### Mitigation Measures

- XII-1 Construction Noise. The "developer" shall submit and obtain approval from County Planning of a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements to reduce noise impacts during construction by implementing the following measures and submitting documentation of compliance: The developer/construction contractors shall do the following:*
- a. During the project site excavation and grading, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with the manufactures standards.*
  - b. The construction contractor shall place all stationary construction equipment so*

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*that emitted noise is directed away from the noise sensitive receptors nearest the project site.*

- c. The construction contractor shall limit all construction-related activities that would result in high noise levels between the hours of 7:00 a.m. and 6:00 p.m., Monday through Saturday excluding holidays.*
- d. The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise sensitive receptors nearest the project site during all project construction.*
- e. The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment. To the extent feasible, haul routes shall not pass sensitive land uses or residential dwellings.*
- f. Prior to issuance of grading permits, the Applicant shall submit a mitigation plan prepared by a qualified engineer or other acoustical expert for review and approval by the Planning Division that identifies noise control measures that achieve a minimum 20 dBA reduction in construction related noise levels at the residential uses to the west, south, and east of the project site. The mitigation plan may include use of vibratory pile drivers or other pile driving noise controls, sound curtains, engineered equipment controls, or other methods. Noise control requirements shall be noted on project construction drawings and verified by the Building Department during standard inspection procedures.*  
*[Mitigation Measure XII-1] - Prior to Grading Permit/Planning*

*XII-2 Operational Noise. The County shall verify that the following notes shall be cited on the CUP Site Plan that:*

- a) The building occupant shall place all stationary noise generating equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site.*

XII e) **No Impact.** The project site is not located within the noise contours of any airport nor is located within the boundary of a County Airport Safety Review Area as designated by the San Bernardino County Land Use Plan Hazard Overlay. No impact will occur.

XII f) **No Impact.** The project is not located within two miles of a private airstrip and therefore will not expose persons to excessive noise levels from aircraft operations from private airstrips.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
<b>XIII. POPULATION AND HOUSING - Would the project:</b>				
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUBSTANTIATION**

- XIII a) **Less Than Significant Impact.** The project will not induce substantial population growth in the area either directly or indirectly. The project will generate new jobs and employment opportunities. The project proposes a new warehouse facility, however, no tenant has been proposed so the number of employees cannot be determined at this time. Based on the Southern California Association of Governments (SCAG) Employment Density Study for San Bernardino County, the project could accommodate up to 180 employees. This may generate a need for housing for new employees; however, adequate housing stock is available to meet the needs of a variety of income levels as specified in the County General Plan Housing Element. The project includes no infrastructure improvements that could entice additional development beyond that proposed as part of the project. Impacts will be less than significant.
- XIII b) **No Impact.** The project site is currently developed with a commercial greenhouse and no housing will be removed to accommodate the project. No impact will occur.
- XIII c) **No Impact.** The project site is currently developed with a commercial greenhouse and no people would be displaced to accommodate the project. No impact will occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
<b>XIV. PUBLIC SERVICES</b>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**SUBSTANTIATION**

XIV a) **Less Than Significant Impact.** The proposed project will not 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, including fire and police protection, schools, parks or other public facilities. The project is located within the existing service areas of applicable service providers and will not require additional facilities to be constructed or services to be extended. Construction of the project will increase property tax revenues and is subject to the County's Regional Transportation Fee Program to provide a funding source to offset any project-related traffic improvements. demand for public services. Impacts will be less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
<b>XV. RECREATION</b>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUBSTANTIATION**

- XV a) **Less Than Significant Impact.** The proposed project will not 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 because the project is a commercial/industrial use and will not generate any new residential units and the impacts to parks generated by the employees of this project will be nominal. Impacts will be less than significant.
- XV b) **No Impact.** This project does not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. No impact will occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
<b>XVI. TRANSPORTATION/TRAFFIC - Would the project:</b>				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**SUBSTANTIATION** *The following summaries are based in part on the project Traffic Study prepared by Kunzman Associates in January 2015.*

XVI a) **Less Than Significant Impact.** The project will result in the addition of 474 total trips per day (in passenger car equivalents [PCE]), 32 PCE occurring during the morning peak hour and 34 PCE occurring during the evening peak hour on roadways in the project vicinity. The project traffic study prepared by Kunzman Associates included traffic projections based on anticipated opening year (2017) conditions. For the *Opening Year (2017) With Ambient and Cumulative and Project Intersection* conditions, all study area intersections are projected to operate within acceptable levels of service. No off-site improvements are required to meet applicable level of service requirements. Impacts will be less than significant.

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- XVI b) **Less Than Significant Impact With Mitigation Incorporated.** The project will not exceed, either individually or cumulatively, a Level of Service (LOS) standard established by the County Congestion Management Agency for designated roads or highways. The project is subject to the Regional Transportation Development Impact Fee (DIF) to offset incremental increases on regional transportation facilities. This fee has been incorporated as mitigation herein. Impacts will be less than significant with mitigation incorporated.

Mitigation Measure:

*XVI-1 Regional Transportation Facilities Fee. This project falls within the Regional Transportation Development Mitigation Plan. The applicable fee shall be paid by a cashier's check to the Department of Public Works Business Office prior to issuance of a building permit.*

*[Mitigation Measure XVI-1] Building Permits/Public Works*

- XVI c) **No Impact.** The project includes no feature that could cause changes in air traffic patterns. No impact will occur.
- XVI d) **Less Than Significant Impact.** The project includes no off-site improvements or roadway construction that could result in hazardous travel conditions. Line of sight distances will be calculated prior to issuance of building/occupancy permits to ensure that landscaping or other design features do not interfere with the line of sight of exiting vehicles. There are no incompatible uses proposed by the project that could impact surrounding land uses. Impacts will be less than significant.
- XVI e) **No Impact.** The project will not result in inadequate emergency access because emergency access is provided via two driveways onto Redwood Avenue with minimum 28-foot drive aisles and full building access to emergency vehicles. No impact will occur.
- XV f) **Less Than Significant Impact.** The project will not conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks). The project is not located adjacent to or near an existing bike path or pedestrian facilities, nor does the County have adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities that apply to the proposed project site. Impacts will be less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorpor.	Less than Significant	No Impact
<b>XVII. UTILITIES AND SERVICE SYSTEMS - Would the project:</b>				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**SUBSTANTIATION**

XVII a) **Less Than Significant Impact.** The proposed project is a warehouse use that generates nominal wastewater from restrooms, kitchens, and potentially employee showers. No industrial wastewater will be discharged from the facility that would require special permitting or treatment facilities. Wastewater discharges will be treated by the Inland Empire Utilities Agency (IEUA) at Regional Water Recycling Plant No. 1 (RP-1). The Santa Ana Regional Water Quality Control Board (RWQCB) issued the latest wastewater discharge requirements (WDRs) for RP-1 in 2009 via Order R8-2009-0021. The facility is authorized to process 44 million gallons of wastewater per day (mgd) and treats an average of 28 mgd, based upon information on the Agency's website. No changes to RP-1 WDRs will be required to serve the project. The project is not subject to individual WDRs. Impacts will be less than significant.

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- XVII b) **Less Than Significant Impact.** The project will not require construction of any new water service mains or sewer to serve the project. Typical water service connection and lateral sewer connection will be required resulting in the need for nominal trenching, pipe installation, and connection appurtenances during grading activities. Impacts will be less than significant.
- XVII c) **No Impact.** Pursuant to NPDES and County Low Impact Development (LID) requirements, no increase in stormwater runoff will be permitted from the project site. Any increases in stormwater runoff will be required to be retained on-site. No impact to local storm drains or flood control facilities will occur.
- XVII d) **Less Than Significant Impact.** The project will be served by the Fontana Water Company (FWC). FWC water supply sources include groundwater, local surface water, and imported surface water. According to the 2010 Urban Water Management Plan (UWMP), FWC will be able to meet service demand of 44,613 acre-feet per year (AFY) in 2020 and 53,741 AFY in 2035. The Fontana Water District has the ability to serve the project from existing water supplies. No new entitlements or supplies will need to be secured to serve the project. Impacts will be less than significant.
- XVII e) **Less Than Significant Impact.** As discussed in Section XVII.a, project wastewater will be treated at IEUA RP-1 in Ontario. The project is estimated to discharge 0.11 mgd of wastewater (80 percent of indoor water demand). This is within the design flow capacity of 44 mgd, with a daily average of 28 mgd. No increase in treatment capacity will be required to serve the project. Impacts will be less than significant.
- XVII f) **Less Than Significant Impact.** The City of Fontana disposed of 137,290 tons of solid waste in 2013 at 15 different facilities with approximately 83 percent being disposed at the Mid-Valley Sanitary Landfill (Mid-Valley SLF). An additional 710 tons was transformed at the Commerce Refuse-To-Energy Facility and an additional 12,054 tons was used as alternative daily cover (ADC). According to the California Department of Resources Recycling and Recovery (CalRecycle) Facility Information Toolbox (FacIT), San Bernardino County will have adequate disposal capacity through 2025. Annual disposal limits between 2017 and 2025 will be permitted at an estimated 7.4 million tons. A maximum of 1.8 million tons will be disposed of annually. Based on the FacIT information, adequate capacity is available to serve the project. Impacts will be less than significant.
- XVII g) **No Impact.** The proposed project will comply with all pertinent federal, state, and local statutes and regulations related to solid waste and includes no policy or design feature that would conflict with implementation of such requirements. No impact will occur.

Potentially Significant Impact	Less than Significant with Mitigation Incorp.	Less than Significant	No Impact
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**XVIII. 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? | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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, the effects of other current projects, and the effects of probable future projects)?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| c) Does the project have environmental effects, which will cause Substantial adverse effects on human beings, either directly Or indirectly?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |

**SUBSTANTIATION**

- XVIII a) **Less Than Significant Impact.** The project does not have the potential to significantly degrade the overall quality of the region’s environment, or 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. There are no rare or endangered species or other species of plants or animals or habitat identified as being significantly and negatively impacted by this project. There are no identified historic or prehistoric resources identified on this site. If any archaeological or paleontological resources are identified during project construction, the project is conditioned to stop and identify appropriate authorities, who would properly record and/or remove any such finds for classification.
- XVIII b) **Less Than Significant With Mitigation Incorporated.** The project does not have impacts that are individually limited, but cumulatively considerable. The projects in the area to which this project would add cumulative impacts have either existing or planned infrastructure that is sufficient for all planned uses. These sites either are occupied or are capable of absorbing such uses without generating any cumulatively significant impacts. In addition, the analysis in this Initial Study Checklist demonstrated that the project is in compliance with all applicable regional plans including but not limited to, water quality control plan, air quality maintenance plan (with mitigation incorporated), and plans or

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regulations for the reduction of greenhouse gas emissions. Compliance with these regional plans serves to reduce impacts on a regional basis so that the project would not produce impacts, when considered with the effects of other past, present, and probable future projects, would be cumulatively considerable.

- XVIII c) **Less Than Significant With Mitigation Incorporated.** The project will not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly, as there are no such impacts identified by the studies conducted for this project or identified by review of other sources or by other agencies.

Increases in air quality emissions, noise, and traffic will be created by the implementation of the project. These potential impacts have been thoroughly evaluated and impacts related to air quality, noise, and traffic were determined to be less than significant with adherence to mandatory requirements and incorporation of mitigation measures.

Implementation of mitigation measures and adherence to mandatory requirements and standard conditions will ensure that impacts from the project are neither individually significant nor cumulatively considerable in terms of any adverse effects upon the region.

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## **XIX. MITIGATION MEASURES**

(Any mitigation measures, which are not 'self-monitoring', shall have a Mitigation Monitoring and Reporting Program prepared and adopted at time of project approval)

**MITIGATION MEASURES:** (Condition compliance will be verified by existing procedure)

*III-1 Coating Restriction Plan. The developer shall submit for review and obtain approval from County Planning of a Coating Restriction Plan (CRP), consistent with SCAQMD guidelines and a signed letter agreeing to include in any construction contracts/subcontracts a condition that the contractors adhere to the requirements of the CRP. The CRP measures shall be following implemented to the satisfaction of County Building and Safety:*

- a. Interior architectural coatings with Reactive Organic Compounds (ROC) shall not have content greater than zero g/l.*
- b. Exterior architectural coatings with Reactive Organic Compounds (ROC) shall not have content greater than 125 g/l.*
- c. Architectural coating volume shall not exceed the significance threshold for ROC, which is 75 lbs. /day and the combined daily ROC volume of architectural coatings and asphalt paving shall not exceed the significance threshold for ROC of 75 lbs. per day.*
- d. High-Volume, Low Pressure (HVLP) spray guns shall be used to apply coatings.*
- e. Precoated/natural colored building materials, water-based or low volatile organic compound (VOC) coatings shall be used, if practical.*
- f. Comply with SCAQMD Rule 1113 on the use of architectural coatings.*

*[Mitigation Measure III-1] Building Permits/Planning*

*III-2 AQ/Operational Mitigation. The "developer" shall implement the following air quality mitigation measures, during operation of the approved land use: All on-site equipment and vehicles (off-road/ on-road), shall comply with the following:*

- a. County Diesel Exhaust Control Measures [SBCC §83.01.040 (c)]b Signs shall be posted requiring all vehicle drivers and equipment operators to turn off engines when not in use.*
- b. All engines shall not idle more than five minutes in any one-hour period on the project site. This includes all equipment and vehicles.*
- c. Engines shall be maintained in good working order to reduce emissions.*
- d. Ultra low-sulfur diesel fuel shall be utilized.*
- e. Electric, CNG and gasoline-powered equipment shall be substituted for diesel-powered equipment, where feasible.*
- f. On-site electrical power connections shall be made available, where feasible.*
- g. All transportation refrigeration units (TRU's) shall be provided electric connections, when parked on-site.*

*[Mitigation Measure III-2] General Requirements/Planning*

*III-3 AQ-Dust Control Plan. The "developer" shall prepare, submit for review and obtain approval from County Planning of both a Dust Control Plan (DCP) consistent with SCAQMD guidelines and a signed letter agreeing to include in any construction contracts/ subcontracts a requirement that project contractors adhere to the requirements of the DCP. The DCP shall include the following requirements:*

- a. Exposed soil shall be kept continually moist to reduce fugitive dust during all grading and construction activities, through application of water sprayed a minimum of two times each day.*

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- b. During high wind conditions (i.e., wind speeds exceeding 25 mph), areas with disturbed soil shall be watered hourly and activities on unpaved surfaces shall cease until wind speeds no longer exceed 25 mph.
  - c. Storage piles that are to be left in place for more than three working days shall be sprayed with a non-toxic soil binder, covered with plastic or revegetated.
  - d. Storm water control systems shall be installed to prevent off-site mud deposition.
  - e. All trucks hauling dirt away from the site shall be covered.
  - f. Construction vehicle tires shall be washed, prior to leaving the project site.
  - g. Rumble plates shall be installed at construction exits from dirt driveways.
  - h. Paved access driveways and streets shall be washed and swept daily when there are visible signs of dirt track-out.
  - i. Street sweeping shall be conducted daily when visible soil accumulations occur along site access roadways to remove dirt dropped or tracked-out by construction vehicles.
  - j. Site access driveways and adjacent streets shall be washed daily, if there are visible signs of any dirt track-out at the conclusion of any workday and after street sweeping.
- [Mitigation Measure III-3] Grading Permits/Planning

III-4 AQ - Construction Mitigation. The "developer" shall submit for review and obtain approval from County Planning of a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements to reduce vehicle and equipment emissions and other impacts to air quality by implementing the following measures and submitting documentation of compliance: The developer/construction contractors shall do the following:

- a. Provide documentation prior to beginning construction demonstrating that the project will comply with all SCAQMD regulations including 402, 403, 431.1, 431.2, 1113 and 1403.
- b. Each contractor shall certify to the developer prior to construction-use that all equipment engines are properly maintained and have been tuned-up within last 6 months.
- c. Each contractor shall minimize the use of diesel-powered vehicles and equipment through the use of electric, gasoline or CNG-powered equipment. All diesel engines shall have aqueous diesel filters and diesel particulate filters.
- d. All gasoline-powered equipment shall have catalytic converters.
- e. Provide onsite electrical power to encourage use of electric tools.
- f. Minimize concurrent use of equipment through equipment phasing.
- g. Provide traffic control during construction to reduce wait times.
- h. Provide on-site food service for construction workers to reduce offsite trips.
- i. Implement the County approved Dust Control Plan (DCP)
- j. Suspend use of all construction equipment operations during second stage smog alerts.

NOTE: For daily forecast, call (800) 367-4710 (San Bernardino and Riverside counties).

[Mitigation Measure III-4] Grading Permits/Planning

III-5 AQ – Installation. The developer shall submit for review and obtain approval from County Planning of evidence that all air quality mitigation measures have been installed, implemented properly and that specified performance objectives are being met to the satisfaction of County Planning and County Building and Safety. These installations/ procedures include the following:

- a. Dust Control Plan (DCP)
- b. Coating Restriction Plan (CRP)

[Mitigation Measure III-5] Final Inspection/Planning

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*XII-1 Construction Noise. The “developer” shall submit and obtain approval from County Planning of a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements to reduce noise impacts during construction by implementing the following measures and submitting documentation of compliance: The developer/construction contractors shall do the following:*

- a. During the project site excavation and grading, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with the manufactures standards.*
- b. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site.*
- c. The construction contractor shall limit all construction-related activities that would result in high noise levels between the hours of 7:00 a.m. and 6:00 p.m., Monday through Saturday excluding holidays.*
- d. The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise sensitive receptors nearest the project site during all project construction.*
- e. The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment. To the extent feasible, haul routes shall not pass sensitive land uses or residential dwellings.*
- f. Prior to issuance of grading permits, the Applicant shall submit a mitigation plan prepared by a qualified engineer or other acoustical expert for review and approval by the Planning Division that identifies noise control measures that achieve a minimum 20 dBA reduction in construction related noise levels at the residential uses to the west, south, and east of the project site. The mitigation plan may include use of vibratory pile drivers or other pile driving noise controls, sound curtains, engineered equipment controls, or other methods. Noise control requirements shall be noted on project construction drawings and verified by the Building Department during standard inspection procedures.*  
*[Mitigation Measure XII-1] - Prior to Grading Permit/Planning*

*XII-2 Operational Noise. The County shall verify that the following notes shall be cited on the CUP Site Plan that:*

- a) The building occupant shall place all stationary noise generating equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site.*

*XII-2 In the event that roadway improvements are necessary, the Applicant shall ensure that vibration associated with the use of a vibratory roller will not exceed the vibration damage potential for older residential structure of 0.30 PPV and the vibration annoyance potential of 0.04 PPV (distinctly perceptible) established by Caltrans. Supplemental analysis shall be performed and submitted for the review and approval of the Planning Division prior to the start of construction activities.*

*[Mitigation Measure XII-2] Occupancy Permits/Planning*

*XVI-1 Regional Transportation Facilities Fee. This project falls within the Regional Transportation Development Mitigation Plan. The applicable fee shall be paid by a cashier's check to the Department of Public Works Business Office prior to issuance of a building permit.*

*[Mitigation Measure XVI-1] Building Permits/Public Works*

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- <sup>4</sup> South Coast Air Quality Management District. Rule 1403: Asbestos Emissions from Demolition/Renovation Activities. Amended October 5, 2007
- <sup>5</sup> California Department of Toxic Substances. *Draft Lead Report*. June 2004
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- <sup>7</sup> California Department of Toxic Substances Control EnviroStor. Hazardous Waste and Substances Site List "Cortese List" <http://www.calepa.ca.gov/sitecleanup/corteselist/> [February 2015]
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# **EXHIBIT D**

## **Special Studies**



**KUNZMAN ASSOCIATES, INC.**

**9988 REDWOOD AVENUE PROJECT**

**TRAFFIC IMPACT ANALYSIS**

**April 24, 2015**



KUNZMAN ASSOCIATES, INC.

**9988 REDWOOD AVENUE PROJECT**

**TRAFFIC IMPACT ANALYSIS**

**April 24, 2015**

Prepared by:

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## **I. Introduction**

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The purpose of this report is to provide an assessment of the traffic impacts resulting from the proposed development of the 9988 Redwood Avenue project, and to identify the traffic mitigation measures necessary to maintain the established Level of Service standard for the elements of the impacted roadway system. The traffic issues related to the proposed land uses and development have been evaluated in the context of the California Environmental Quality Act.

The County of San Bernardino is the lead agency responsible for preparation of the traffic impact analysis, in accordance with the California Environmental Quality Act authorizing legislation. This report analyzes traffic impacts for the anticipated opening date with full occupancy of the development in Year 2017, at which time it will be generating trips at its full potential.

Although this is a technical report, every effort has been made to write the report clearly and concisely. To assist the reader with those terms unique to transportation engineering, a glossary of terms is provided in Appendix A.

### **A. Project Description**

The proposed development is located north of Hunter Street and west of Redwood Avenue in the County of San Bernardino. A vicinity map showing the project location is provided on Figure 1.

The project site is proposed to be developed with 215,000 square feet of high-cube warehouse distribution center. Access will be provided to Redwood Avenue. Figure 2 illustrates the project site plan.

### **B. Study Area**

Regional access to the project site is provided by the I-10 Freeway. Local access is provided by various roadways in the vicinity of the site. The east-west roadways expected to provide local access include Rosemary Drive, Iris Drive, Hunter Street, and Valley Boulevard. The north-south roadway expected to provide local access is Redwood Avenue.

A series of scoping discussions were conducted with the County of San Bernardino to define the desired analysis locations for each future analysis year. In addition, staff from the County of San Bernardino has also been contacted to discuss the project and its associated travel patterns.

No analysis is required further than 5 miles from the project site. The roadway elements that must be analyzed are dependent on both the analysis year [project Opening Year] and project generated traffic volumes. The identification of the study area, and the intersections and highway segments requiring analysis, was based on an estimate of the two-way traffic volumes on the roadway segments near the project site. All arterial segments have been included in the analysis when the anticipated project volume equals or

exceeds 50 two-way trips in the peak hours. The requirement is 100 two-way peak hour trips for freeways.

The project does not contribute trips greater than the freeway threshold volume of 100 two-way peak hour trips. The project does not contribute trips greater than the arterial link threshold volume of 50 two-way trips in the morning and evening peak hours in the adjacent City of Fontana.

### C. **Analysis Methodology**

The analysis of the traffic impacts from the proposed development and the assessment of the required mitigation measures were based on an evaluation of the existing and forecast traffic conditions in the vicinity of the site with and without the project. The following analysis years are considered in this report:

- Existing Conditions (2015)
- Existing Plus Project Conditions<sup>1</sup>
- Opening Year Conditions (2017)

Existing intersection traffic conditions were established through morning and evening peak hour traffic counts obtained by Kunzman Associates, Inc. in January 2015 (see Appendix B). In addition, truck classification counts were conducted at the study area intersections. The existing percent of trucks were used in the conversion of trucks to Passenger Car Equivalent's.

Project traffic volumes for all future projections were estimated using the manual approach. Trip generation has been estimated based on the Institute of Transportation Engineers, Trip Generation, 9th Edition, 2012 and the City of Fontana, Truck Trip Generation Study, August 2003.

The average daily traffic volume forecasts have been determined using the growth increment approach on the San Bernardino Transportation Analysis Model (SBTAM) Traffic Model Year 2008 and Year 2035 average daily traffic volume forecasts (see Appendix C). This difference defines the growth in traffic over the 35 year period. The incremental growth in average daily traffic volume has been factored to reflect the forecast growth between Year 2015 and Year 2035. For this purpose, linear growth between the Year 2008 base condition and the forecast Year 2035 condition was assumed. Since the increment between Year 2015 and Year 2035 is 20 years of the 35 year time frame, a factor of 0.57 (i.e., 20/35) was used.

The Buildout Year (2035) daily roadway segment volume forecasts have been determined using the growth increment approach on the SBTAM Traffic Model Year 2008 and Year 2035 volumes. The growth increment calculation worksheet is shown in Appendix C. Being that

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<sup>1</sup> The existing plus project conditions has been analyzed to comply with the Sunnyvale West Neighborhood Association v. City of Sunnyvale CEQA court case. This scenario assumes the full development of the proposed project and full absorption of the proposed project trips on the circulation system at the present time. This scenario is provided for informational purposes only, and will not be used for impact determinations or mitigation.

the SBTAM model only has traffic volumes for Valley Boulevard and does not have Redwood Avenue, Rosemary Drive, Iris Drive, or Hunter Street within its network, a growth rate was formulated for Opening Year (2017) traffic conditions. The Existing and Opening Year (2017) average daily traffic volumes for Valley Boulevard were used to determine the growth rate. The formula used is:  $\frac{((2017 \text{ ADT} - \text{Existing ADT}) / \text{Existing ADT})}{2 \text{ years}}$ . Using the ADT data as shown In Appendix C, the annual growth rate is 2.14%  $\frac{((19,500 - 18,700) / 18700) / 2}$ .

Opening Year (2017) traffic volumes consist of Existing traffic volumes with an annual ambient growth rate of 2.14% applied over a two year period ( $1.0214^2 = 1.0428$ ).

The County of San Bernardino staff stated that there are no cumulative developments within the study area to be included in this analysis. The City of Fontana provided a list of cumulative development in the study area. Cumulative development has been added to Opening Year (2017) traffic conditions.

Project traffic volumes were then added to the SBTAM Traffic Model traffic volumes. Quality control checks and forecast adjustments were performed as necessary to ensure that all future traffic volume forecasts reflect a minimum of 10% growth over existing traffic volumes for Buildout Year (2035) traffic volumes. The Opening Year (2017) traffic volumes have been interpolated from the Buildout Year (2035) traffic volumes based upon a portion of the future growth increment. The result of this traffic forecasting procedure is a series of traffic volumes suitable for traffic operations analysis.

The technique used to assess the capacity needs of an intersection is known as the Intersection Delay Method (see Appendix C) based on the Highway Capacity Manual – Transportation Research Board Special Report 209. To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection. It should be noted that the signalized intersections are considered deficient (Level of Service F) if the overall intersection critical volume to capacity ratio equals or exceeds 1.0, even if the level of service defined by the delay value is below the defined Level of Service standard. The volume to capacity ratio is defined as the critical volumes divided by the intersection capacity. A volume to capacity ratio greater than 1.0 implies that the traffic volume demand is greater than the capacity of the intersection and as a result traffic may begin to queue during the analyzed peak hour.

The Level of Service analysis for signalized intersections has been performed using optimized signal timing. This analysis has included an assumed lost time of two seconds per phase. Signal timing optimization has considered pedestrian safety and signal coordination requirements. Appropriate time for pedestrian crossings has also been considered in the signalized intersection analysis. The following formula has been used to calculate the pedestrian minimum times for all Highway Capacity Manual runs:

$$[(\text{Curb to curb distance}) / (3.5 \text{ feet/second})] + 7 \text{ seconds.}$$

For existing/existing plus project/Opening Year (2017) traffic conditions, saturation flow rates of 1,800 vehicles per hour of green for through and right turn lanes and 1,700 vehicles

per lane for single left turn lanes, 1,600 vehicles per lane for dual left turn lanes and 1,500 vehicles per lane for triple left turn lanes have been assumed for the capacity analysis.

The peak hour traffic volumes have been adjusted to peak 15 minute volumes for analysis purposes using the existing observed peak 15 minute to peak hour factors for all scenarios analyzed. Where feasible improvements in accordance with the local jurisdiction's General Plan and which result in acceptable operations cannot be identified.

**D. Definition of Deficiency and Significant Impact**

The following definitions of deficiencies and significant impacts have been developed in accordance with the County of San Bernardino requirements.

1. Definition of Deficiency

The definition of an intersection deficiency has been obtained from the County of San Bernardino General Plan. The General Plan states that peak hour intersection operations of Level of Service D or better are generally acceptable. Therefore, any intersection operating at Level of Service E or F will be considered deficient.

The definition of an intersection deficiency has also been obtained from the City of Fontana General Plan. The General Plan states that peak hour intersection operations of Level of Service D or better are generally acceptable. Therefore, any intersection operating at Level of Service E to F will be considered deficient.

2. Definition of Significant Impact

The identification of significant impacts is a requirement of the California Environmental Quality Act. The County of San Bernardino General Plan and Circulation Element have been adopted in accordance with California Environmental Quality Act requirements, and any roadway improvements within the County of San Bernardino that are consistent with these documents are not considered a significant impact, so long as the project contributes its "fair share" funding for improvements.

A traffic impact is considered significant if the project both: i) contributes measurable traffic to and ii) substantially and adversely changes the Level of Service at any off-site location projected to experience deficient operations under foreseeable cumulative conditions, where feasible improvements consistent with the County of San Bernardino General Plan cannot be constructed.

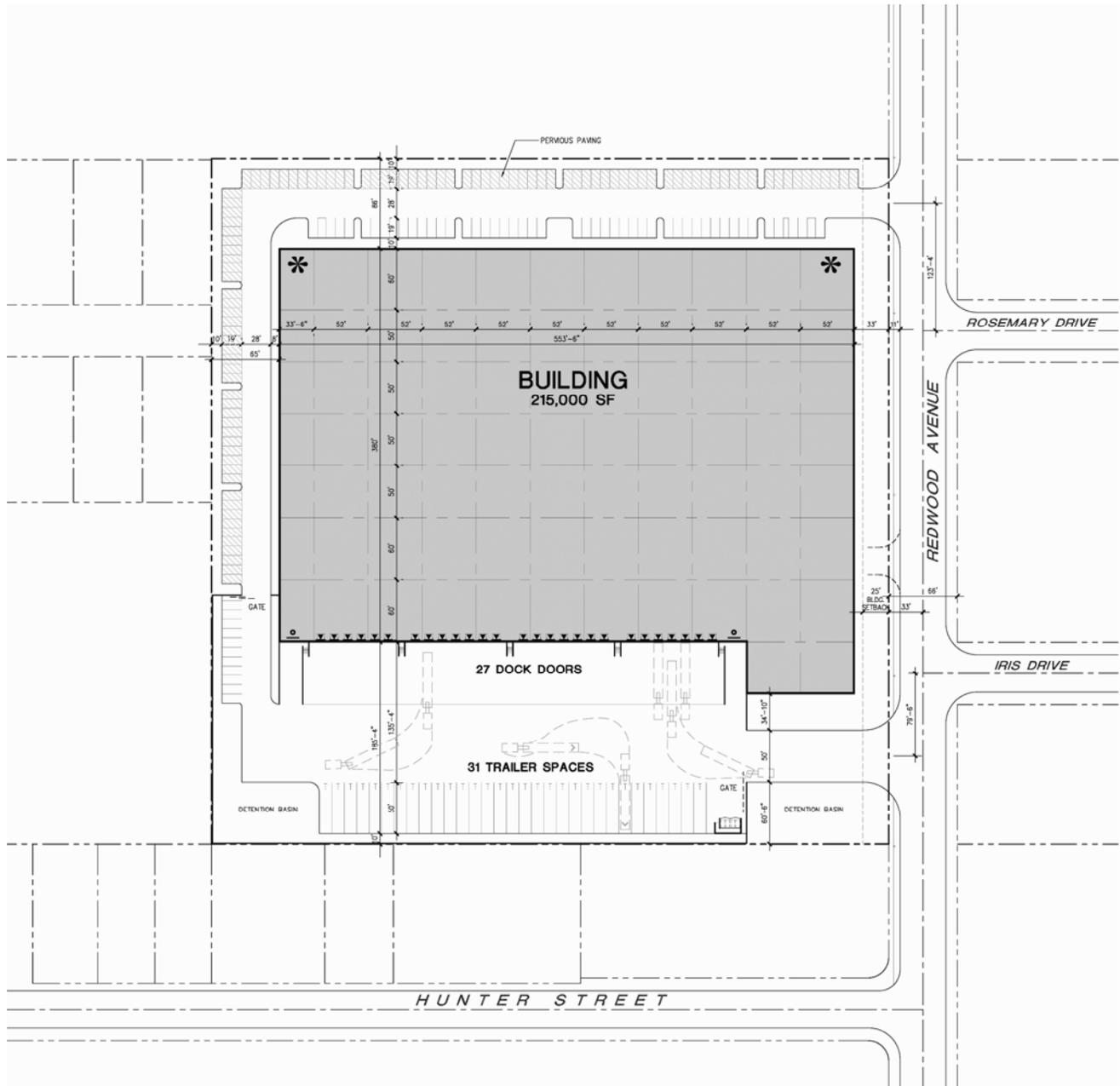
Figure 1  
Project Location Map



**Legend**

① = Intersection Reference Number

Figure 2  
Site Plan



## II. Existing Conditions

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### A. Existing Roadway System

Figure 3 identifies the existing conditions for study area roadways. The number of through lanes for existing roadways and the existing intersection controls are identified.

Regional access to the project site is provided by the I-10 Freeway. Local access is provided by various roadways in the vicinity of the site. The east-west roadways expected to provide local access include Rosemary Drive, Iris Drive, Hunter Street, and Valley Boulevard. The north-south roadway expected to provide local access is Redwood Avenue.

### B. Existing Volumes

Figure 4 depicts the existing average daily traffic volumes. The existing average daily traffic volumes were obtained and factored from peak hour counts (see Appendix B) by Kunzman Associates, Inc. using the following formula for each intersection leg:

$$\text{PM Peak Hour (Approach + Exit Volume)} \times 11.5 = \text{Daily Leg Volume.}$$

This is a conservative estimate and may over estimate the average daily traffic volumes.

Existing intersection traffic conditions were established through morning and evening peak hour traffic counts obtained by Kunzman Associates, Inc. from January 2015 (see Appendix B) and shown on Figures 5 and 6, respectively. Explicit peak hour factors have been calculated using the data collected for this effort as well. The morning and evening peak hour traffic volumes were identified by counting the two-hour periods from 7:00 AM – 9:00 AM and 4:00 PM – 6:00 PM.

In addition, truck classification counts were conducted at the study area intersections. The existing percent of trucks were used in the conversion of trucks to Passenger Car Equivalent's (see Appendix B).

### C. Existing Level of Service

The Existing delay and Level of Service for intersections in the vicinity of the project are shown in Table 1. For Existing traffic conditions, the study area intersections currently operate within acceptable Levels of Service during the peak hours. Existing delay worksheets are provided in Appendix D.

### D. Planned Transportation Improvements and Relationship to General Plan

The County of San Bernardino General Plan Circulation Element is shown on Figure 7. Existing and future roadways are included in the Circulation Element of the General Plan and are graphically depicted on Figure 7. This figure shows the nature and extent of arterial highways that are needed to adequately serve the ultimate development depicted by the

Land Use Element of the General Plan. The County of San Bernardino General Plan roadway cross-sections are shown on Figure 8.

The City of Fontana General Plan Circulation Element is shown on Figure 9. Existing and future roadways are included in the Circulation Element of the General Plan and are graphically depicted on Figure 9. This figure shows the nature and extent of arterial highways that are needed to adequately serve the ultimate development depicted by the Land Use Element of the General Plan. The City of Fontana General Plan roadway cross-sections are shown on Figure 10.

**Table 1**

**Existing Intersection Delay and Level of Service**

Intersection	Jurisdiction	Traffic Control <sup>3</sup>	Intersection Approach Lanes <sup>1</sup>												Peak Hour Delay-LOS <sup>2</sup>		
			Northbound			Southbound			Eastbound			Westbound			Morning	Evening	
			L	T	R	L	T	R	L	T	R	L	T	R			
Redwood Avenue (NS) at:																	
Rosemary Drive (EW) - #2	County of SB	CSS	0	0.5	0.5	0.5	0.5	0	0	0	0	0.5	0	0.5	9.8-A	9.8-A	
Iris Drive (EW) - #3	County of SB	CSS	0	0.5	0.5	0.5	0.5	0	0	0	0	0.5	0	0.5	10.0-B	9.9-A	
Hunter Street (EW) - #5	County of SB	CSS	0.5	0.5	0	0	0.5	0.5	0.5	0	0.5	0	0	0	10.2-B	10.3-B	
Valley Boulevard (EW) - #6	County of SB/City of Fontana	TS	0.5	0.5	d	0.5	0.5	d	1	2	d	1	2	d	18.1-B	18.0-B	

<sup>1</sup> When a right turn lane 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; d = De Facto Right Turn

<sup>2</sup> Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the 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 the individual movement (or movements sharing a single lane) are shown.

<sup>3</sup> CSS = Cross Street Stop; TS = Traffic Signal

Figure 3  
Existing Through Travel Lanes and Intersection Controls



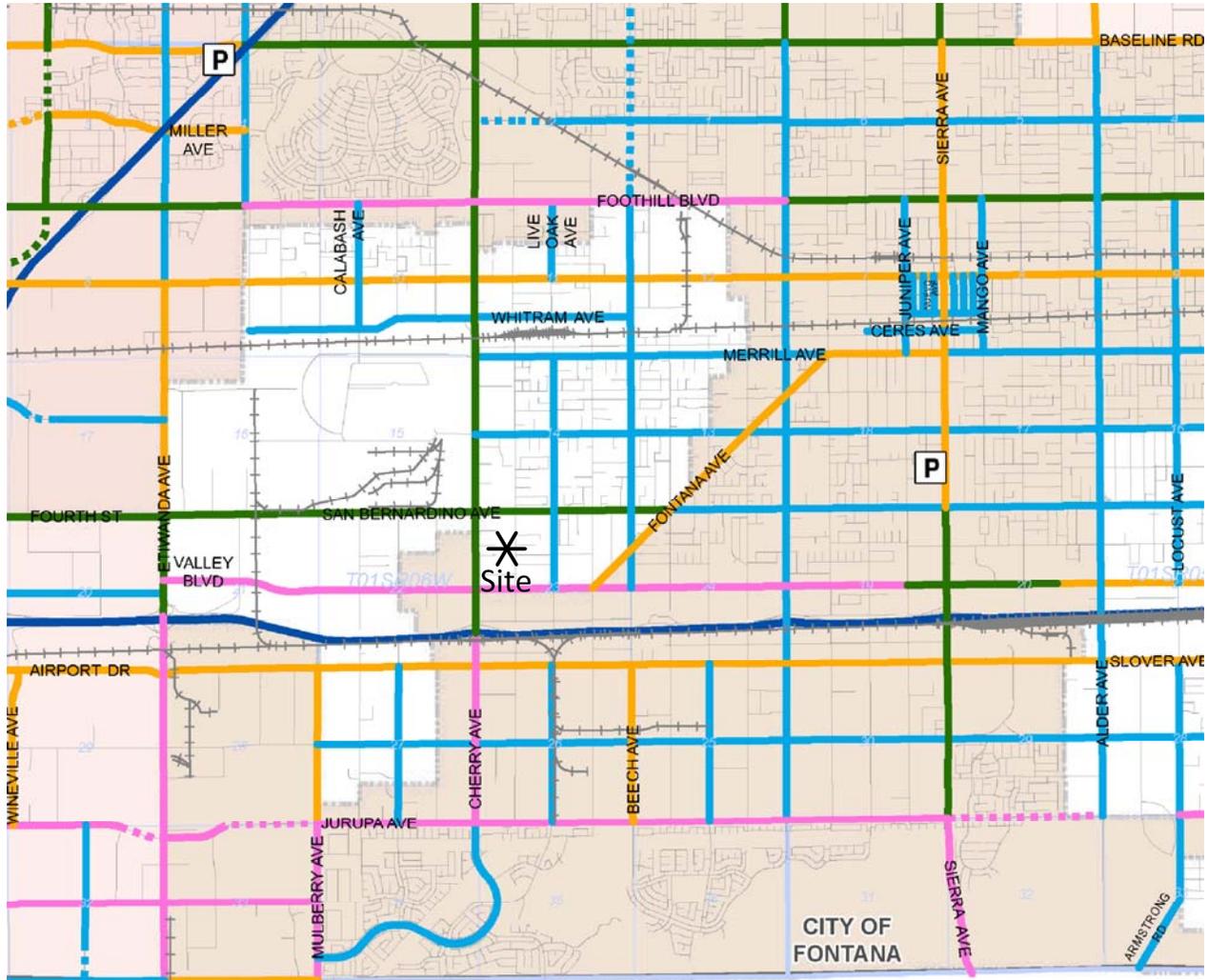
Figure 4  
Existing Average Daily Traffic Volumes







Figure 7  
 County of San Bernardino General Plan Circulation Element



**Legend**

Existing	Proposed	
		Freeway
		Major Divided Highway
		Major Arterial Highway
		Major Highway
		Secondary Highway
		Controlled/Limited Access Collector
		Mountain Major Highway
		Mountain Secondary Highway
		State Highway (Special Standards or Conditions)
		Park & Ride Railroad
		Airport / Airfield



# Figure 8

## County of San Bernardino General Plan Roadway Cross-Sections

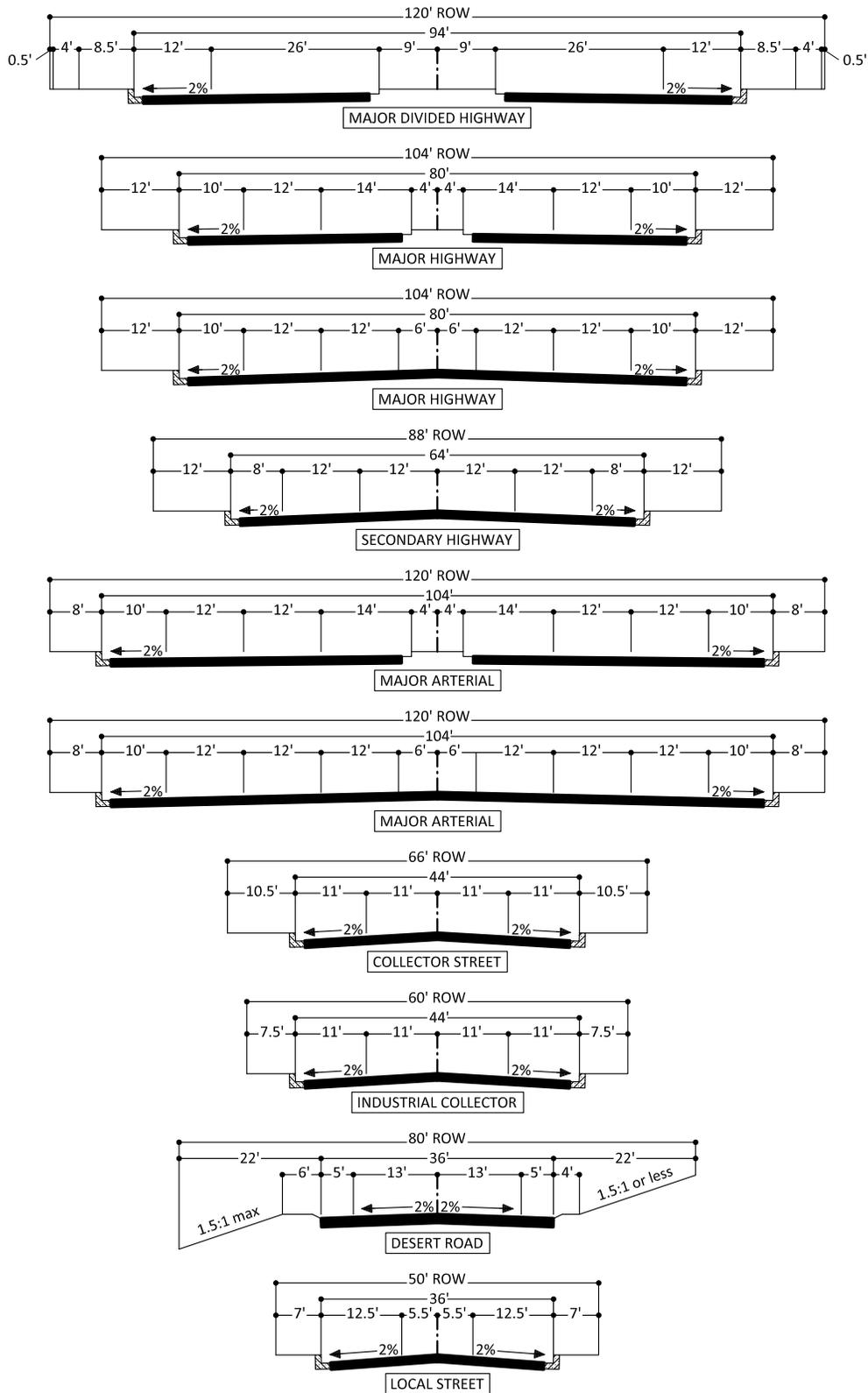




Figure 10  
City of Fontana General Plan Roadway Cross-Sections

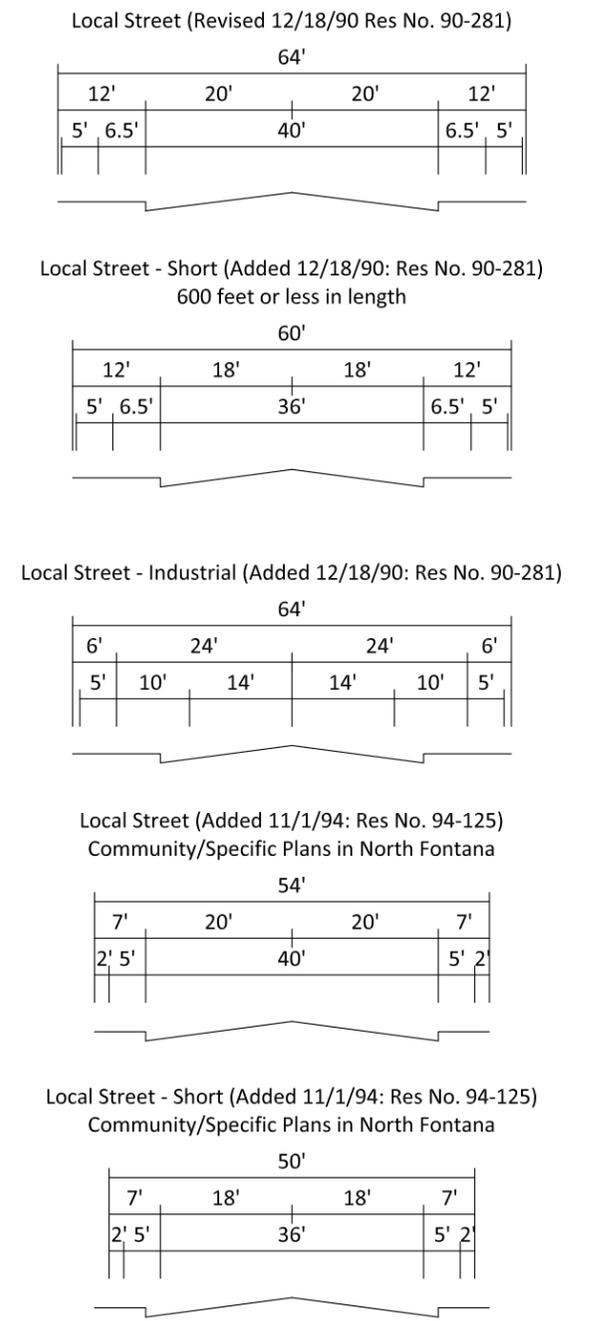
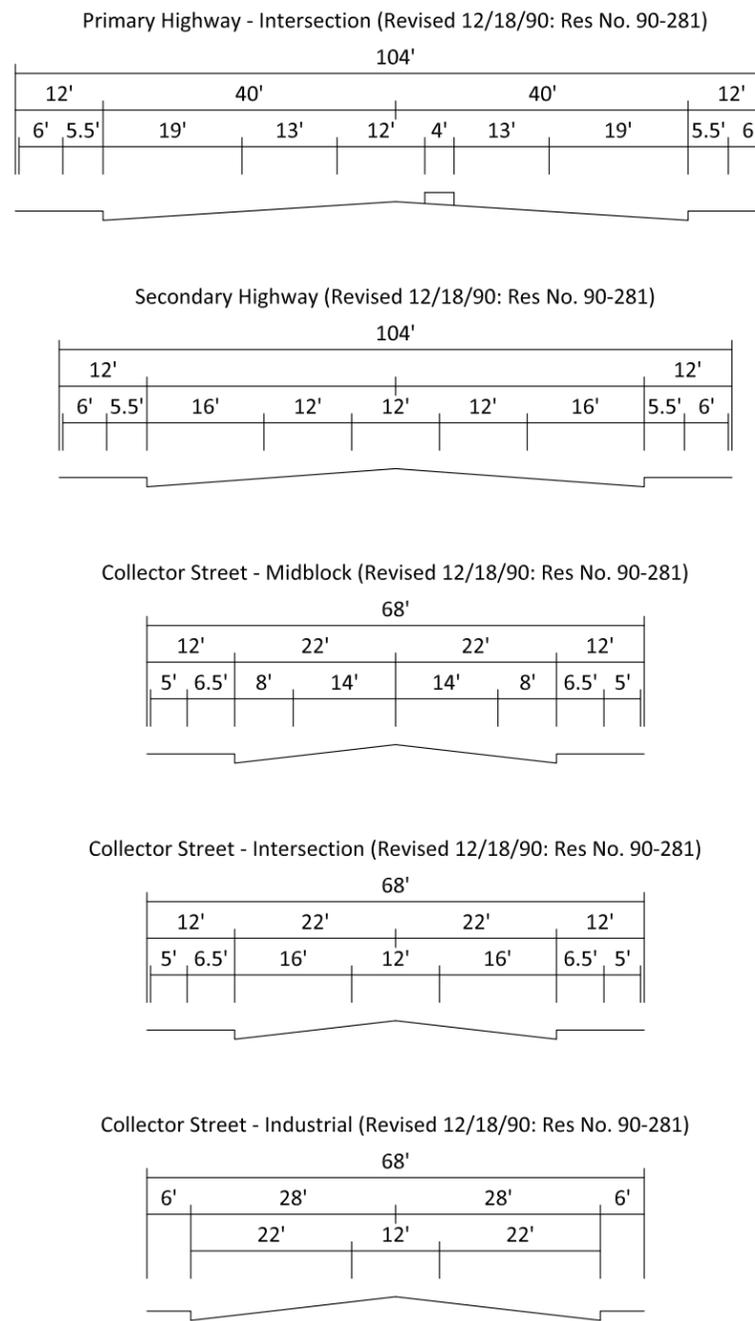
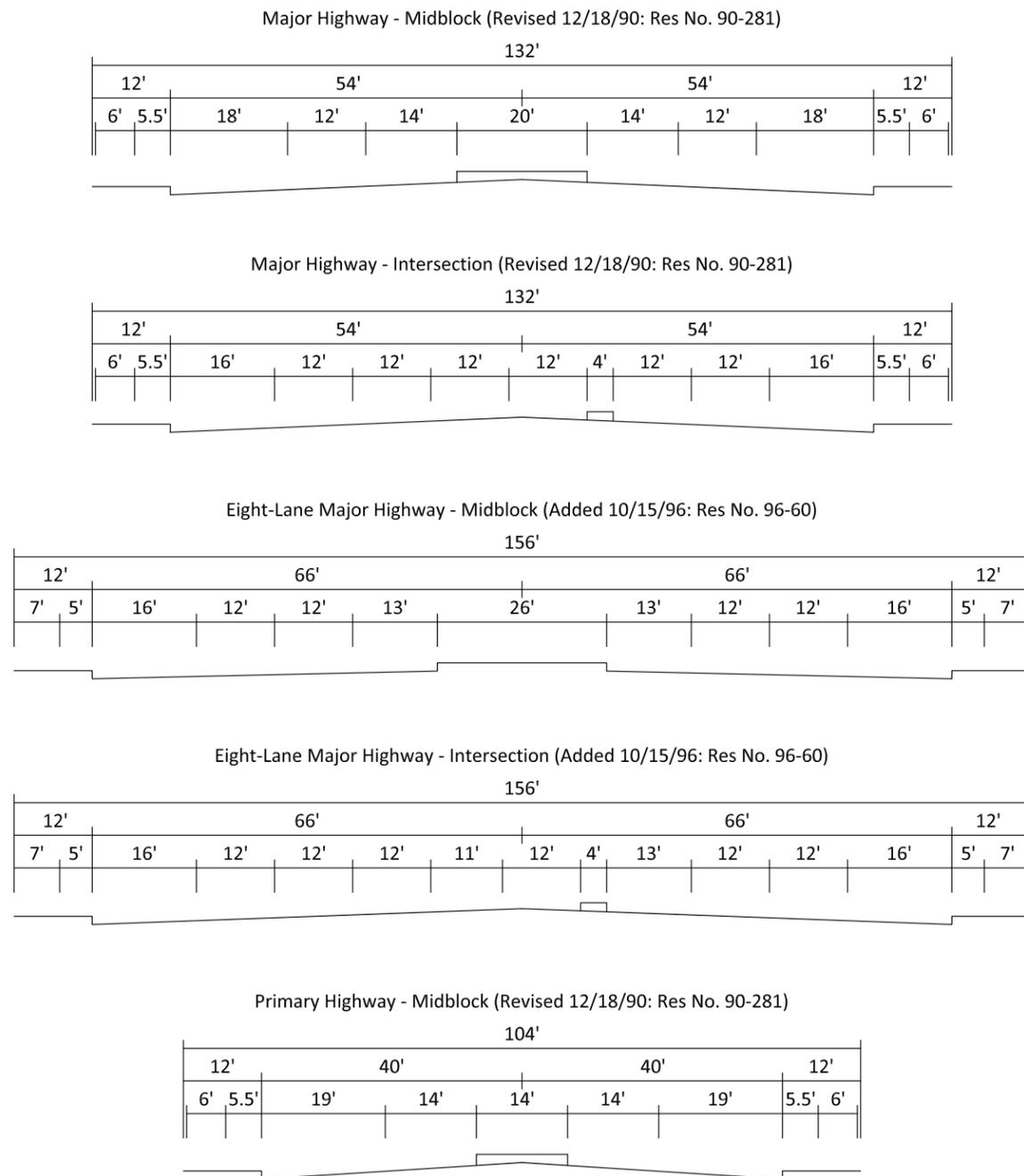


Figure 10  
City of Fontana General Plan Roadway Cross-Sections

### III. Project Trips

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#### A. Project Description

The project site is proposed to be developed with 215,000 square feet of high-cube warehouse distribution center. The project will have access to Redwood Avenue.

#### B. Trip Generation

The trips generated by the project are determined by multiplying an appropriate trip generation rate by the quantity of land use. Trip generation rates are predicated on the assumption that energy costs, the availability of roadway capacity, the availability of vehicles to drive, and life styles remain similar to what are known today. A major change in these variables may affect trip generation rates.

Trip generation rates were determined for daily trips, morning peak hour inbound and outbound trips, and evening peak hour inbound and outbound trips for the proposed land use. By multiplying the trip generation rates by the land use quantity, the traffic volumes are determined. Table 2 shows the project trip generation based upon rates obtained from the Institute of Transportation Engineers, Trip Generation, 9th Edition, and the City of Fontana, Truck Trip Generation Study, August 2003.

As shown in Table 2, the proposed development is projected to generate approximately 474 daily vehicle trips in Passenger Car Equivalent's, 32 of which will occur during the morning peak hour in Passenger Car Equivalent's and 34 of which will occur during the evening peak hour in Passenger Car Equivalent's.

#### C. Trip Distribution

Figures 11 to 13 contain the directional distribution of the project trips for the proposed land use. To determine the trip distributions for the proposed project, peak hour traffic counts of the existing directional distribution of traffic for existing areas in the vicinity of the site and other additional information on future development and traffic impacts in the area were reviewed.

#### D. Trip Assignment

Based on the identified trip generation and distributions, project average daily traffic volumes have been calculated and shown on Figure 14. Morning and evening peak hour intersection turning movement volumes expected from the project are shown on Figures 15 and 16, respectively.

#### E. Trip Contribution Test

No analysis is required further than 5 miles from the project site. The roadway elements that must be analyzed are dependent on both the analysis year [project Opening Year] and

project generated traffic volumes. The identification of the study area, and the intersections and highway segments requiring analysis, was based on an estimate of the two-way traffic volumes on the roadway segments near the project site. All arterial segments have been included in the analysis when the anticipated project volume equals or exceeds 50 two-way trips in the peak hours. The requirement is 100 two-way peak hour trips for freeways. Figure 17 graphically depicts the project trip contribution test volumes on all of the roadway segments adjacent to the potential intersection analysis locations until the project volume contribution has clearly dropped below the 50 trip threshold and 100 trip threshold.

The project does not contribute trips greater than the freeway threshold volume of 100 two-way peak hour trips. The project does not contribute trips greater than the arterial link threshold volume of 50 two-way trips in the morning and evening peak hours in the adjacent City of Fontana.

**Table 2**

**Project Trip Generation<sup>1</sup>**

Descriptor	Quantity	Units <sup>2</sup>	Type of Vehicle					Total
			Passenger Car	2 Axle Truck	3 Axle Truck	4+ Axle Truck	Total Trucks	
Land Use: High Cube	215.000	TSF	79.57%	3.46%	4.64%	12.33%	20.43%	100%
Traffic Generation Rates in trips per TSF								
Daily			1.337	0.058	0.078	0.207	0.343	1.68
Morning Peak Hour			0.088	0.004	0.005	0.014	0.023	0.11
Evening Peak Hour			0.096	0.004	0.006	0.015	0.025	0.12
Traffic Generation in Vehicles								
Daily			287	12	17	45	74	361
Morning Peak Hour								
Inbound			14	1	1	2	4	18
Outbound			5	-	-	1	1	6
Total			19	1	1	3	5	24
Evening Peak Hour								
Inbound			7	-	-	1	1	8
Outbound			14	1	1	2	4	18
Total			21	1	1	3	5	26
Passenger Car Equivalent's (PCE'S) Factor <sup>3</sup>								
			1.00	1.50	2.00	3.00		
Traffic Generation in PCE's								
Daily			287	18	34	135	187	474
Morning Peak Hour								
Inbound			14	2	2	6	10	24
Outbound			5	-	-	3	3	8
Total			19	2	2	9	13	32
Evening Peak Hour								
Inbound			7	-	-	3	3	10
Outbound			14	2	2	6	10	24
Total			21	2	2	9	13	34

<sup>1</sup> Source: Institute of Transportation Engineers, Trip Generation, 9th Edition, 2012, Land Use Category 152 and City of Fontana, Truck Trip Generation Study, August 2003.

<sup>2</sup> TSF = Thousand Square Feet

<sup>3</sup> Passenger Car Equivalent factors are recommended by San Bernardino Associated Governments (SANBAG).

Figure 11  
Project Trip Distribution - Cars



Figure 12  
Project Outbound Trip Distribution - Trucks



Figure 13  
 Project Inbound Trip Distribution - Trucks



Figure 14  
 Project Average Daily Traffic Volumes



**Legend**

0.1 = Vehicles Per Day (1,000's)  
 NOM = Nominal, Less Than 50  
 Vehicles Per Day







Figure 17  
Project Contribution Test Volumes



## IV. Future Conditions

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### A. Future Volumes

As described within Section I.C., the Buildout Year (2035) average daily traffic volume forecasts with the project are developed using a growth increment process based on volumes predicted by the SBTAM Traffic Model Year 2008 and Year 2035 traffic models. The growth increment for Buildout Year (2035) on each roadway segment is the increase in SBTAM Traffic Model volumes from existing Year 2015 to Year 2035. The final Buildout Year (2035) roadway segment volume used for analysis purposes is then determined by adding the Buildout Year (2035) growth increment volume to the existing counted volume.

Being that the SBTAM traffic model only has traffic volumes for Valley Boulevard and does not have Redwood Avenue, Rosemary Drive, Iris Drive, or Hunter Street within its network, a growth rate was formulated for Opening Year (2017) traffic conditions. The Existing and Opening Year (2017) average daily traffic volumes for Valley Boulevard were used to determine the growth rate. The formula used is:  $\frac{((2017 \text{ ADT} - \text{Existing ADT}) / \text{Existing ADT})}{2 \text{ years}}$ . Using the ADT data as shown in Appendix C, the annual growth rate is 2.14%  $\frac{((19,500 - 18,700) / 18,700)}{2}$ .

Opening Year (2017) traffic volumes consist of Existing traffic volumes with an annual ambient growth rate of 2.14% applied over a two year period  $(1.0214^2 = 1.0428)$ .

The County of San Bernardino staff stated that there are no cumulative developments within the study area to be included in this analysis. The City of Fontana provided a list of cumulative development in the study area. Cumulative development in the study area that are within the unincorporated County of San Bernardino and City of Fontana are shown in Figure 18. Cumulative development has been added to Opening Year (2017) traffic conditions. Table 3 shows the cumulative development daily and peak hour trip generation. Figure 19 shows the cumulative development average daily traffic volumes. Cumulative development morning and evening peak hour intersection turning movement volumes are shown on Figures 20 and 21, respectively.

#### 1. Existing Plus Project

The average daily traffic volumes for Existing Plus Project traffic conditions have been determined. Existing Plus Project average daily traffic volumes are shown on Figure 22.

#### 2. Opening Year (2017) With Ambient

The average daily traffic volumes for Opening Year (2017) With Ambient traffic conditions have been determined as described above using the growth interpolation process (see Section I.C.). Opening Year (2017) With Ambient average daily traffic volumes are shown on Figure 23.

3. Opening Year (2017) With Ambient and Project

The average daily traffic volumes for Opening Year (2017) With Ambient and Project traffic conditions have been determined as described above using the volume addition process (see Section I.C.). Opening Year (2017) With Ambient and Project average daily traffic volumes are shown on Figure 24.

4. Opening Year (2017) With Ambient and Cumulative and Project

The average daily traffic volumes for Opening Year (2017) With Ambient and Cumulative and Project traffic conditions have been determined as described above using the volume addition process (see Section I.C.). Opening Year (2017) With Ambient and Cumulative and Project average daily traffic volumes are shown on Figure 25.

**B. Future Level of Service**

1. Existing Plus Project

The Existing Plus Project delay and Level of Service for the study area roadway network are shown in Table 4. Table 4 shows delay values based on the geometrics at the study area intersections without and with improvements. Existing Plus Project delay calculation worksheets are provided in Appendix D. Existing Plus Project morning and evening peak hour intersection turning movement volumes are shown on Figures 26 and 27, respectively.

For Existing Plus Project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

2. Opening Year (2017) With Ambient

The Opening Year (2017) With Ambient delay and Level of Service for the study area roadway network are shown in Table 5. Table 5 shows delay values based on the existing geometrics at the study area intersections. Opening Year (2017) With Ambient delay calculation worksheets are provided in Appendix D. Opening Year (2017) With Ambient morning and evening peak hour intersection turning movement volumes are shown on Figures 28 and 29, respectively.

For Opening Year (2017) With Ambient traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours.

3. Opening Year (2017) With Ambient and Project

The Opening Year (2017) With Ambient and Project delay and Level of Service for the study area roadway network are shown in Table 6. Table 6 shows delay values based on the geometrics at the study area intersections without and with improvements. Opening Year (2017) With Ambient and Project delay calculation worksheets are

provided in Appendix D. Opening Year (2017) With Ambient and Project morning and evening peak hour intersection turning movement volumes are shown on Figures 30 and 31, respectively.

For Opening Year (2017) With Ambient and Project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

4. Opening Year (2017) With Ambient and Cumulative and Project

The Opening Year (2017) With Ambient and Cumulative and Project delay and Level of Service for the study area roadway network are shown in Table 7. Table 7 shows delay values based on the geometrics at the study area intersections without and with improvements. Opening Year (2017) With Ambient and Cumulative and Project delay calculation worksheets are provided in Appendix D. Opening Year (2017) With Ambient and Cumulative and Project morning and evening peak hour intersection turning movement volumes are shown on Figures 32 and 33, respectively.

For Opening Year (2017) With Ambient and Cumulative and Project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

**Table 3**

**Other Development Trip Generation<sup>1</sup>**

Traffic Analysis Zone	Name	Land Use	Quantity	Units <sup>2</sup>	Peak Hour						Daily
					Morning			Evening			
					Inbound	Outbound	Total	Inbound	Outbound	Total	
1	ASP '13-43	Medical Office	5.306	TSF	10	3	13	5	14	19	192
2	DRP '14-11	Light Industrial - Cars	145.750	TSF	93	13	106	14	97	111	798
		Light Industrial - Trucks	145.750	TSF	57	10	67	10	61	71	493
	DRP '14-12	Light Industrial - Cars	322.750	TSF	205	28	233	30	216	246	1,768
		Light Industrial - Trucks	322.750	TSF	127	16	143	21	133	154	1,088
	ASP '13-24	Auto Repair Center	6.945	TSF	11	5	16	11	11	22	139
ASP '13-47	Donation Center	47.902	TSF	35	16	51	120	120	240	2,742	
Total					538	91	629	211	652	863	7,220

<sup>1</sup> Source: City of Fontana Development List

<sup>2</sup> TSF = Thousand Square Feet

<sup>3</sup> Source: Institute of Transportation Engineers, Trip Generation, 9th Edition, 2012, Land Use Categories 110, 720, 815, and 942.

City of Fontana, Truck Trip Generation Study, August 2003.

San Diego Association of Governments, Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002.

**Table 4**

**Existing Plus Project Intersection Delay and Level of Service**

Intersection	Jurisdiction	Traffic Control <sup>3</sup>	Intersection Approach Lanes <sup>1</sup>												Peak Hour Delay-LOS <sup>2</sup>	
			Northbound			Southbound			Eastbound			Westbound			Morning	Evening
			L	T	R	L	T	R	L	T	R	L	T	R		
Redwood Avenue (NS) at:																
Project North Access (EW) - #1	County of SB	CSS	<u>0.5</u>	0.5	0	0	0.5	0.5	<u>0.5</u>	0	<u>0.5</u>	0	0	0	9.0-A	9.2-A
Rosemary Drive (EW) - #2	County of SB	CSS	0	0.5	0.5	0.5	0.5	0	0	0	0	0.5	0	0.5	9.9-A	9.9-A
Iris Drive (EW) - #3	County of SB	CSS	0	0.5	0.5	0.5	0.5	0	0	0	0	0.5	0	0.5	10.2-B	10.0-A
Project South Access (EW) - #4	County of SB	CSS	<u>0.5</u>	0.5	0	0	0.5	0.5	0	0	<u>1</u>	0	0	0	8.9-A	8.9-A
Hunter Street (EW) - #5	County of SB	CSS	0.5	0.5	0	0	0.5	0.5	0.5	0	0.5	0	0	0	10.5-B	10.6-B
Valley Boulevard (EW) - #6	County of SB/City of Fontana	TS	0.5	0.5	d	0.5	0.5	d	1	2	d	1	2	d	18.3-B	18.3-B

<sup>1</sup> When a right turn lane 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; d = De Facto Right Turn; 1 = Improvement

<sup>2</sup> Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the 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 the individual movement (or movements sharing a single lane) are shown.

<sup>3</sup> CSS = Cross Street Stop; TS = Traffic Signal

**Table 5**

**Opening Year (2017) With Ambient Intersection Delay and Level of Service**

Intersection	Jurisdiction	Traffic Control <sup>3</sup>	Intersection Approach Lanes <sup>1</sup>												Peak Hour Delay-LOS <sup>2</sup>		
			Northbound			Southbound			Eastbound			Westbound			Morning	Evening	
			L	T	R	L	T	R	L	T	R	L	T	R			
Redwood Avenue (NS) at:																	
Rosemary Drive (EW) - #2	County of SB	CSS	0	0.5	0.5	0.5	0.5	0	0	0	0	0.5	0	0.5	9.9-A	9.9-A	
Iris Drive (EW) - #3	County of SB	CSS	0	0.5	0.5	0.5	0.5	0	0	0	0	0.5	0	0.5	10.1-B	10.0-A	
Hunter Street (EW) - #5	County of SB	CSS	0.5	0.5	0	0	0.5	0.5	0.5	0	0.5	0	0	0	10.3-B	10.5-B	
Valley Boulevard (EW) - #6	County of SB/City of Fontana	TS	0.5	0.5	d	0.5	0.5	d	1	2	d	1	2	d	18.2-B	18.2-B	

<sup>1</sup> When a right turn lane 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; d = De Facto Right Turn

<sup>2</sup> Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the 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 the individual movement (or movements sharing a single lane) are shown.

<sup>3</sup> CSS = Cross Street Stop; TS = Traffic Signal

Table 6

Opening Year (2017) With Ambient and Project Intersection Delay and Level of Service

Intersection	Jurisdiction	Traffic Control <sup>3</sup>	Intersection Approach Lanes <sup>1</sup>												Peak Hour Delay-LOS <sup>2</sup>		
			Northbound			Southbound			Eastbound			Westbound			Morning	Evening	
			L	T	R	L	T	R	L	T	R	L	T	R			
Redwood Avenue (NS) at:																	
Project North Access (EW) - #1	County of SB	CSS	0.5	0.5	0	0	0.5	0.5	0.5	0	0	0.5	0	0	0	9.1-A	9.2-A
Rosemary Drive (EW) - #2	County of SB	CSS	0	0.5	0.5	0.5	0.5	0	0	0	0	0.5	0	0.5	10.0-A	9.9-A	
Iris Drive (EW) - #3	County of SB	CSS	0	0.5	0.5	0.5	0.5	0	0	0	0	0.5	0	0.5	10.3-B	10.1-B	
Project South Access (EW) - #4	County of SB	CSS	0.5	0.5	0	0	0.5	0.5	0	0	1	0	0	0	8.9-A	8.9-A	
Hunter Street (EW) - #5	County of SB	CSS	0.5	0.5	0	0	0.5	0.5	0.5	0	0.5	0	0	0	10.6-B	10.7-B	
Valley Boulevard (EW) - #6	County of SB/City of Fontana	TS	0.5	0.5	d	0.5	0.5	d	1	2	d	1	2	d	18.4-B	18.5-B	

<sup>1</sup> When a right turn lane 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; d = De Facto Right Turn 1 = Improvement

<sup>2</sup> Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the 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 the individual movement (or movements sharing a single lane) are shown.

<sup>3</sup> CSS = Cross Street Stop; TS = Traffic Signal

Table 7

Opening Year (2017) With Ambient and Cumulative and Project Intersection Delay and Level of Service

Intersection	Jurisdiction	Traffic Control <sup>3</sup>	Intersection Approach Lanes <sup>1</sup>												Peak Hour Delay-LOS <sup>2</sup>	
			Northbound			Southbound			Eastbound			Westbound			Morning	Evening
			L	T	R	L	T	R	L	T	R	L	T	R		
Redwood Avenue (NS) at:																
Project North Access (EW) - #1	County of SB	CSS	<u>0.5</u>	0.5	0	0	0.5	0.5	<u>0.5</u>	0	<u>0.5</u>	0	0	0	9.1-A	9.2-A
Rosemary Drive (EW) - #2	County of SB	CSS	0	0.5	0.5	0.5	0.5	0	0	0	0	0.5	0	0.5	10.0-A	9.9-A
Iris Drive (EW) - #3	County of SB	CSS	0	0.5	0.5	0.5	0.5	0	0	0	0	0.5	0	0.5	10.3-B	10.1-B
Project South Access (EW) - #4	County of SB	CSS	<u>0.5</u>	0.5	0	0	0.5	0.5	0	0	<u>1</u>	0	0	0	8.9-A	8.9-A
Hunter Street (EW) - #5	County of SB	CSS	0.5	0.5	0	0	0.5	0.5	0.5	0	0.5	0	0	0	10.6-B	10.7-B
Valley Boulevard (EW) - #6	County of SB/City of Fontana	TS	0.5	0.5	d	0.5	0.5	d	1	2	d	1	2	d	18.5-B	18.6-B

<sup>1</sup> When a right turn lane 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; d = De Facto Right Turn; 1 = Improvement

<sup>2</sup> Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the 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 the individual movement (or movements sharing a single lane) are shown.

<sup>3</sup> CSS = Cross Street Stop; TS = Traffic Signal

Figure 18  
Cumulative Development Traffic Analysis Zone Map



Figure 19  
 Cumulative Development Average Daily Traffic Volumes



Figure 20  
 Cumulative Development  
 Morning Peak Hour Intersection Turning Movement Volumes

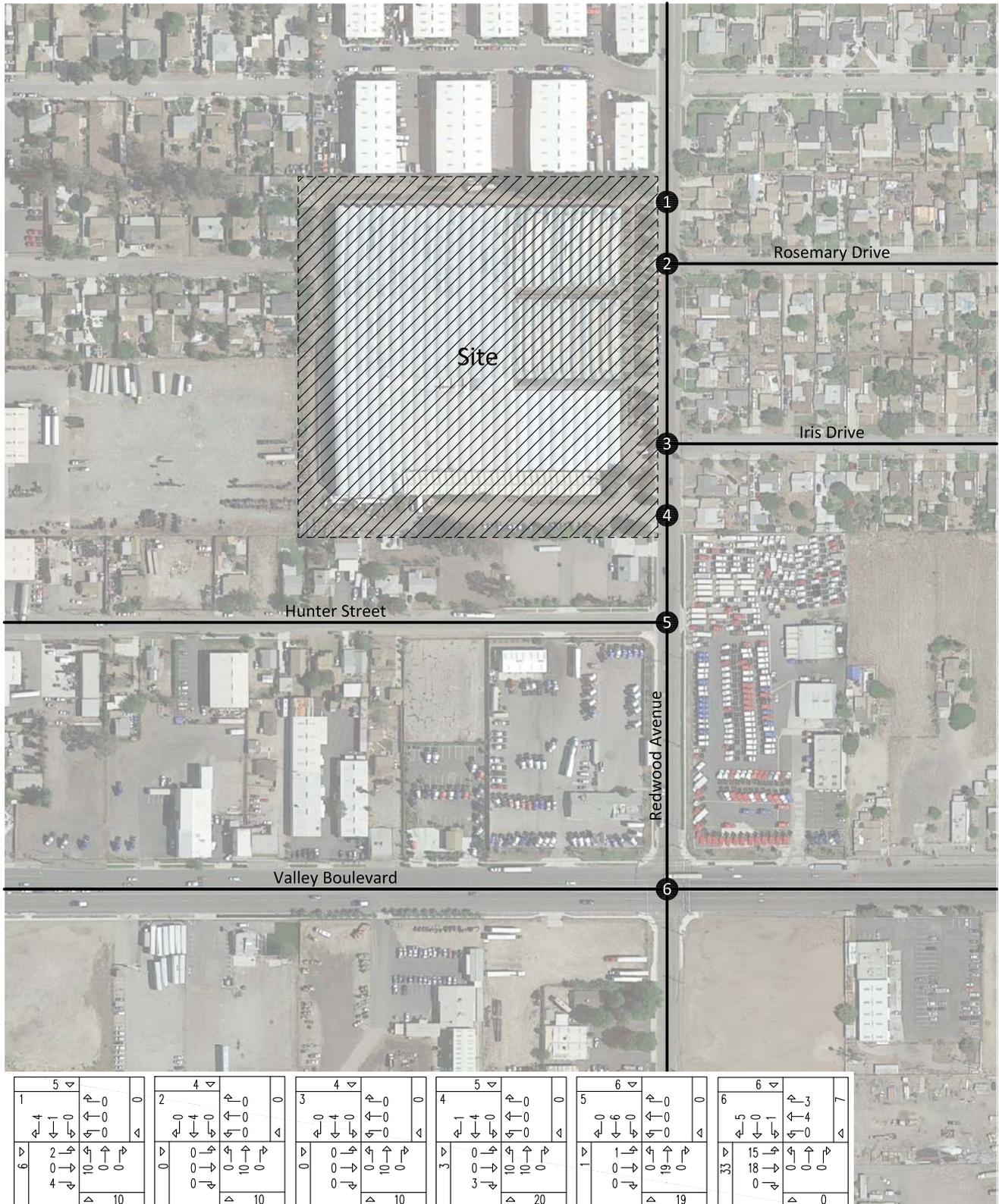




Figure 22  
Existing Plus Project Average Daily Traffic Volumes



Figure 23  
 Opening Year (2017) With Ambient Average Daily Traffic Volumes



**Legend**  
 19.5 = Vehicles Per Day (1,000's)

Figure 24  
 Opening Year (2017) With Ambient and Project Average Daily Traffic Volumes



Figure 25  
 Opening Year (2017) With Ambient and Cumulative and Project  
 Average Daily Traffic Volumes





Figure 27  
Existing Plus Project  
Evening Peak Hour Intersection Turning Movement Volumes



1	101	2	109	3	111	4	118	5	140	6	138
← 2	← 38	← 0	← 102	← 0	← 108	← 0	← 118	← 11	← 2	← 58	← 2
→ 0	→ 0	→ 7	→ 7	→ 3	→ 5	→ 0	→ 0	→ 0	→ 0	→ 2	→ 78
↑ 0	↑ 0	↑ 14	↑ 0	↑ 0	↑ 10	↑ 0	↑ 0	↑ 0	↑ 0	↑ 4	↑ 54
↓ 0	↓ 0	↓ 17	↓ 128	↓ 150	↓ 20	↓ 3	↓ 170	↓ 12	↓ 125	↓ 4	↓ 423
▲ 133	▲ 152	▲ 170	▲ 173	▲ 137	▲ 39						









Figure 31  
 Opening Year (2017) With Ambient and Project  
 Evening Peak Hour Intersection Turning Movement Volumes



1	105	113	115	123	145	143
← 2	← 0	← 0	← 0	← 0	← 11	← 60
← 103	← 106	← 112	← 123	← 134	← 48	← 52
→ 0	→ 7	→ 3	→ 0	→ 0	→ 130	→ 1112
↑ 0	↑ 15	↑ 5	↑ 0	↑ 0	↑ 0	↑ 2
↑ 0	↑ 18	↑ 10	↑ 0	↑ 0	↑ 4	↑ 441
↑ 134	↑ 133	↑ 21	↑ 177	↑ 130	↑ 4	↑ 56
→ 0	→ 25	→ 15	→ 0	→ 0	→ 8	→ 41
△ 139	△ 158	△ 177	△ 180	△ 143	△ 40	△ 499

Figure 32  
 Opening Year (2017) With Ambient and Cumulative and Project  
 Morning Peak Hour Intersection Turning Movement Volumes



Figure 33  
 Opening Year (2017) With Ambient and Cumulative and Project  
 Evening Peak Hour Intersection Turning Movement Volumes



## V. Conclusions and Recommendations

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### A. Summary

The traffic issues related to the proposed land use and development have been evaluated in the context of the California Environmental Quality Act.

The County of San Bernardino is the lead agency responsible for preparation of the traffic impact analysis, in accordance with the California Environmental Quality Act authorizing legislation. This report analyzes traffic impacts for the anticipated opening date with full occupancy of the development in Year 2017, at which time it will be generating trips at its full potential.

A series of scoping discussions were conducted with the County of San Bernardino to define the desired analysis locations for each future analysis year. In addition, staff from the County of San Bernardino has also been contacted to discuss the project and its associated travel patterns.

No analysis is required further than 5 miles from the project site. The roadway elements that must be analyzed are dependent on both the analysis year (project Opening Year) and project generated traffic volumes. The identification of the study area, and the intersections and highway segments requiring analysis, was based on an estimate of the two-way traffic volumes on the roadway segments near the project site. All arterial segments have been included in the analysis when the anticipated project volume equals or exceeds 50 two-way trips in the peak hours. The requirement is 100 two-way peak hour trips for freeways.

The project does not contribute trips greater than the freeway threshold volume of 100 two-way peak hour trips. The project does not contribute trips greater than the arterial link threshold volume of 50 two-way trips in the morning and evening peak hours in the adjacent City of Fontana.

The average daily traffic volume forecasts have been determined using the growth increment approach on the San Bernardino Transportation Analysis Model (SBTAM) traffic model Year 2008 and Year 2035 average daily traffic volume forecasts (see Appendix C). This difference defines the growth in traffic over the 35 year period. The incremental growth in average daily traffic volume has been factored to reflect the forecast growth between Year 2015 and Year 2035. For this purpose, linear growth between the Year 2008 base condition and the forecast Year 2035 condition was assumed. Since the increment between Year 2015 and Year 2035 is 20 years of the 35 year time frame, a factor of 0.57 (i.e., 20/35) was used.

The Buildout Year (2035) daily roadway segment volume forecasts have been determined using the growth increment approach on the SBTAM traffic model Year 2008 and Year 2035 volumes. The growth increment calculation worksheet is shown in Appendix C. Being that the SBTAM model only has traffic volumes for Valley Boulevard and does not have Redwood

Avenue, Rosemary Drive, Iris Drive, or Hunter Street within its network, a growth rate was formulated for Opening Year (2017) traffic conditions. The Existing and Opening Year (2017) average daily traffic volumes for Valley Boulevard were used to determine the growth rate. The formula used is:  $\frac{((2017 \text{ ADT} - \text{Existing ADT}) / \text{Existing ADT})}{2 \text{ years}}$ . Using the ADT data as shown in Appendix C, the annual growth rate is 2.14%  $\frac{((19,500 - 18,700) / 18700)}{2}$ .

Opening Year (2017) traffic volumes consist of Existing traffic volumes with an annual ambient growth rate of 2.14% applied over a two year period  $(1.0214^2 = 1.0428)$ .

The County of San Bernardino staff stated that there are no cumulative developments within the study area to be included in this analysis. The City of Fontana provided a list of cumulative development in the study area. Cumulative development has been added to Opening Year (2017) traffic conditions.

Project traffic volumes were then added to the SBTAM traffic model traffic volumes. Quality control checks and forecast adjustments were performed as necessary to ensure that all future traffic volume forecasts reflect a minimum of 10% growth over existing traffic volumes for Buildout Year (2035) traffic volumes. The Opening Year (2017) traffic volumes have been interpolated from the Buildout Year (2035) traffic volumes based upon a portion of the future growth increment. The result of this traffic forecasting procedure is a series of traffic volumes suitable for traffic operations analysis.

**B. Existing Conditions**

Regional access to the project site is provided by the I-10 Freeway. Local access is provided by various roadways in the vicinity of the site. The east-west roadways expected to provide local access include Rosemary Drive, Iris Drive, Hunter Street, and Valley Boulevard. The north-south roadway expected to provide local access is Redwood Avenue.

For Existing traffic conditions, the study area intersections currently operate within acceptable Levels of Service during the peak hours.

**C. Project Trips**

Trip generation rates were determined for daily trips, morning peak hour inbound and outbound trips, and evening peak hour inbound and outbound trips for the proposed land use. By multiplying the trip generation rates by the land use quantity, the traffic volumes are determined. Table 2 shows the project trip generation based upon rates obtained from the Institute of Transportation Engineers, Trip Generation, 9th Edition, and the City of Fontana, Truck Trip Generation Study, August 2003.

The proposed development is projected to generate approximately 474 daily vehicle trips in Passenger Car Equivalent's, 32 of which will occur during the morning peak hour in Passenger Car Equivalent's and 34 of which will occur during the evening peak hour in Passenger Car Equivalent's.

To determine the trip distributions for the proposed project, peak hour traffic counts of the existing directional distribution of traffic for existing areas in the vicinity of the site and other additional information on future development and traffic impacts in the area were reviewed.

**D. Future Conditions**

An Existing Plus Project and Opening Year (2017) analysis are included in this report. The traffic operations analyses are summarized in Table 8.

1. Existing Plus Project

For Existing Plus Project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

2. Opening Year (2017) With Ambient

For Opening Year (2017) With Ambient traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours.

3. Opening Year (2017) With Ambient and Project

For Opening Year (2017) With Ambient and Project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

4. Opening Year (2017) With Ambient and Cumulative and Project

For Opening Year (2017) With Ambient and Cumulative and Project traffic conditions, the study area intersections are projected to operate within acceptable Levels of Service during the peak hours, with improvements.

**E. Recommendations**

The recommendations in this section address on-site improvements, off-site improvements and the phasing of all necessary study area transportation improvements.

1. On-Site Improvements

On-site improvements and improvements adjacent to the site will be required in conjunction with the proposed development to ensure adequate circulation within the project itself (see Figure 34).

Construct Redwood Avenue from the north project boundary to the south project boundary at its ultimate half-section width including landscaping and parkway improvements in conjunction with development, as necessary.

Sight distance at project accesses should be reviewed with respect to California Department of Transportation/County of San Bernardino standards in conjunction with the preparation of final grading, landscaping, and street improvement plans. The final grading, landscaping, and street improvement plans shall demonstrate that sight distance standards are met. Such plans must be reviewed by the County and approved as consistent with this measure prior to issue of grading permits.

On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project.

The site should provide sufficient parking spaces to meet County of San Bernardino parking code requirements in order to service on-site parking demand.

2. Off-Site Improvements

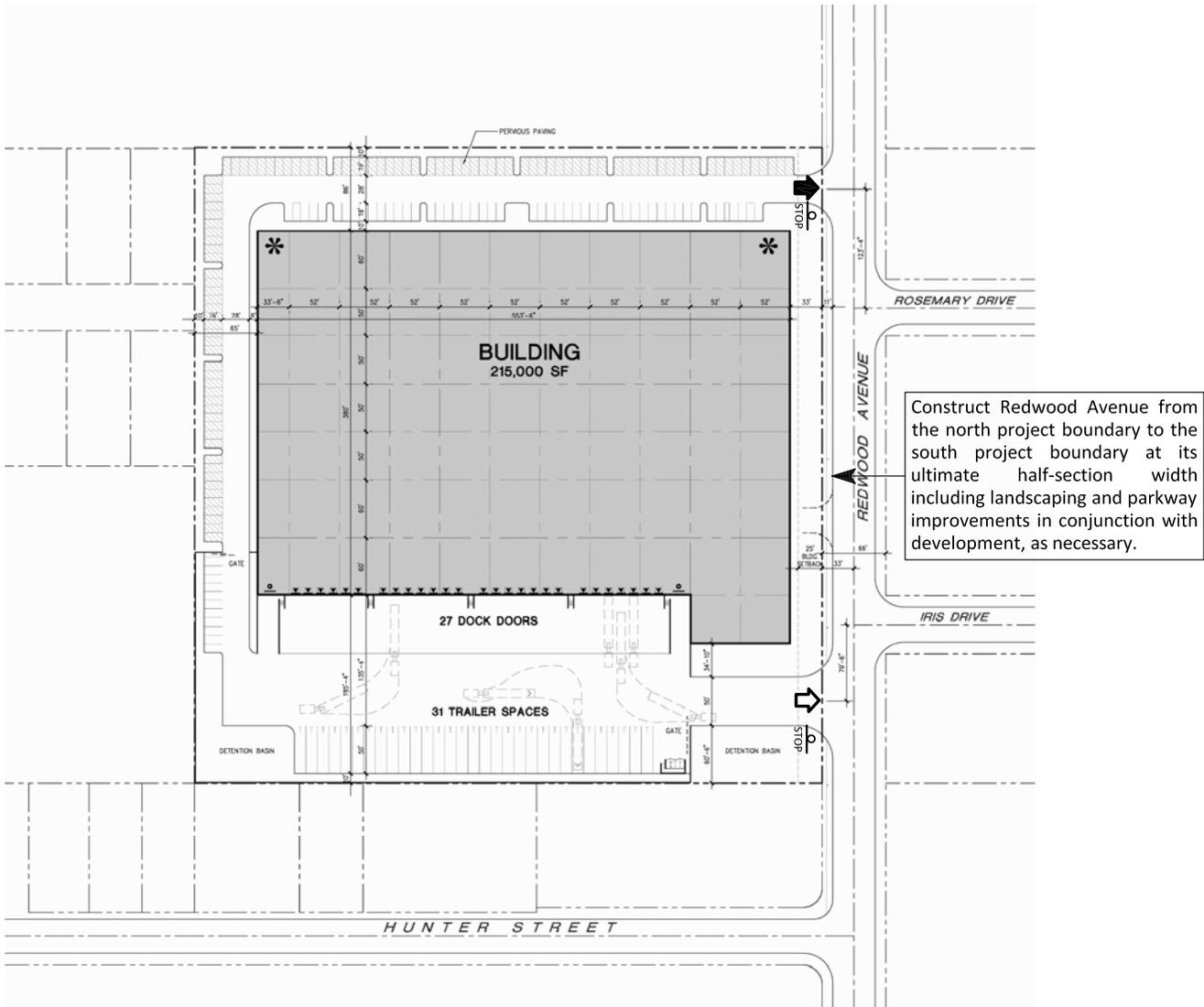
As is the case for any roadway design, the County of San Bernardino should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

**Table 8**

**Intersection Delay and Level of Service Summary**

Intersection	Jurisdiction	Peak Hour Delay-LOS									
		Existing		Existing Plus Project		Opening Year (2017)					
						With Ambient		With Ambient and Project		With Ambient and Cumulative and Project	
		Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening
Redwood Avenue (NS) at:											
Project North Access (EW) - #1	County of SB	--	--	9.0-A	9.2-A	--	--	9.1-A	9.2-A	9.1-A	9.2-A
Rosemary Drive (EW) - #2	County of SB	9.8-A	9.8-A	9.9-A	9.9-A	9.9-A	9.9-A	10.0-A	9.9-A	10.0-A	9.9-A
Iris Drive (EW) - #3	County of SB	10.0-B	9.9-A	10.2-B	10.0-A	10.1-B	10.0-A	10.3-B	10.1-B	10.3-B	10.1-B
Project South Access (EW) - #4	County of SB	--	--	8.9-A	8.9-A	--	--	8.9-A	8.9-A	8.9-A	8.9-A
Hunter Street (EW) - #5	County of SB	10.2-B	10.3-B	10.5-B	10.6-B	10.3-B	10.5-B	10.6-B	10.7-B	10.6-B	10.7-B
Valley Boulevard (EW) - #6	County of SB/City of Fontana	18.1-B	18.0-B	18.3-B	18.3-B	18.2-B	18.2-B	18.4-B	18.5-B	18.5-B	18.6-B

Figure 34  
Circulation Recommendations



Sight distance at project accesses should be reviewed with respect to California Department of Transportation/County of San Bernardino standards in conjunction with the preparation of final grading, landscaping, and street improvement plans. The final grading, landscaping, and street improvement plans shall demonstrate that sight distance standards are met. Such plans must be reviewed by the County and approved as consistent with this measure prior to issue of grading permits.

On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project.

The site should provide sufficient parking spaces to meet County of San Bernardino parking code requirements in order to service on-site parking demand.

As is the case for any roadway design, the County of San Bernardino should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

- Legend**
- = Stop Sign
  - = Full Access Driveway
  - = Right Turns In/Out Only and Left Turns In Only Access Driveway

## **Appendices**

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**Appendix A – Glossary of Transportation Terms**

**Appendix B – Traffic Count Worksheets**

**Appendix C – Future Growth Increment Calculation Worksheets**

**Appendix D – Explanation and Calculation of Intersection Delay**

**APPENDIX A**

**Glossary of Transportation Terms**

## GLOSSARY OF TRANSPORTATION TERMS

### COMMON ABBREVIATIONS

AC:	Acres
ADT:	Average Daily Traffic
Caltrans:	California Department of Transportation
DU:	Dwelling Unit
ICU:	Intersection Capacity Utilization
LOS:	Level of Service
TSF:	Thousand Square Feet
V/C:	Volume/Capacity
VMT:	Vehicle Miles Traveled

### TERMS

**AVERAGE DAILY TRAFFIC:** The total volume during a year divided by the number of days in a year. Usually only weekdays are included.

**BANDWIDTH:** The number of seconds of green time available for through traffic in a signal progression.

**BOTTLENECK:** A constriction along a travelway that limits the amount of traffic that can proceed downstream from its location.

**CAPACITY:** The maximum number of vehicles that can be reasonably expected to pass over a given section of a lane or a roadway in a given time period.

**CHANNELIZATION:** The separation or regulation of conflicting traffic movements into definite paths of travel by the use of pavement markings, raised islands, or other suitable means to facilitate the safe and orderly movements of both vehicles and pedestrians.

**CLEARANCE INTERVAL:** Nearly same as yellow time. If there is an all red interval after the end of a yellow, then that is also added into the clearance interval.

**CORDON:** An imaginary line around an area across which vehicles, persons, or other items are counted (in and out).

**CYCLE LENGTH:** The time period in seconds required for one complete signal cycle.

**CUL-DE-SAC STREET:** A local street open at one end only, and with special provisions for turning around.

**DAILY CAPACITY:** The daily volume of traffic that will result in a volume during the peak hour equal to the capacity of the roadway.

**DELAY:** The time consumed while traffic is impeded in its movement by some element over which it has no control, usually expressed in seconds per vehicle.

**DEMAND RESPONSIVE SIGNAL:** Same as traffic-actuated signal.

**DENSITY:** The number of vehicles occupying in a unit length of the through traffic lanes of a roadway at any given instant. Usually expressed in vehicles per mile.

**DETECTOR:** A device that responds to a physical stimulus and transmits a resulting impulse to the signal controller.

**DESIGN SPEED:** A speed selected for purposes of design. Features of a highway, such as curvature, superelevation, and sight distance (upon which the safe operation of vehicles is dependent) are correlated to design speed.

**DIRECTIONAL SPLIT:** The percent of traffic in the peak direction at any point in time.

**DIVERSION:** The rerouting of peak hour traffic to avoid congestion.

**FORCED FLOW:** Opposite of free flow.

**FREE FLOW:** Volumes are well below capacity. Vehicles can maneuver freely and travel is unimpeded by other traffic.

**GAP:** Time or distance between successive vehicles in a traffic stream, rear bumper to front bumper.

**HEADWAY:** Time or distance spacing between successive vehicles in a traffic stream, front bumper to front bumper.

**INTERCONNECTED SIGNAL SYSTEM:** A number of intersections that are connected to achieve signal progression.

**LEVEL OF SERVICE:** A qualitative measure of a number of factors, which include speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating costs.

**LOOP DETECTOR:** A vehicle detector consisting of a loop of wire embedded in the roadway, energized by alternating current and producing an output circuit closure when passed over by a vehicle.

**MINIMUM ACCEPTABLE GAP:** Smallest time headway between successive vehicles in a traffic stream into which another vehicle is willing and able to cross or merge.

**MULTI-MODAL:** More than one mode; such as automobile, bus transit, rail rapid transit, and bicycle transportation modes.

**OFFSET:** The time interval in seconds between the beginning of green at one intersection and the beginning of green at an adjacent intersection.

**PLATOON:** A closely grouped component of traffic that is composed of several vehicles moving, or standing ready to move, with clear spaces ahead and behind.

**ORIGIN-DESTINATION SURVEY:** A survey to determine the point of origin and the point of destination for a given vehicle trip.

**PASSENGER CAR EQUIVALENTS (PCE):** One car is one Passenger Car Equivalent. A truck is equal to 2 or 3 Passenger Car Equivalents in that a truck requires longer to start, goes slower, and accelerates slower. Loaded trucks have a higher Passenger Car Equivalent than empty trucks.

**PEAK HOUR:** The 60 consecutive minutes with the highest number of vehicles.

**PRETIMED SIGNAL:** A type of traffic signal that directs traffic to stop and go on a predetermined time schedule without regard to traffic conditions. Also, fixed time signal.

**PROGRESSION:** A term used to describe the progressive movement of traffic through several signalized intersections.

**SCREEN-LINE:** An imaginary line or physical feature across which all trips are counted, normally to verify the validity of mathematical traffic models.

**SIGNAL CYCLE:** The time period in seconds required for one complete sequence of signal indications.

**SIGNAL PHASE:** The part of the signal cycle allocated to one or more traffic movements.

**STARTING DELAY:** The delay experienced in initiating the movement of queued traffic from a stop to an average running speed through a signalized intersection.

**TRAFFIC-ACTUATED SIGNAL:** A type of traffic signal that directs traffic to stop and go in accordance with the demands of traffic, as registered by the actuation of detectors.

**TRIP:** The movement of a person or vehicle from one location (origin) to another (destination). For example, from home to store to home is two trips, not one.

**TRIP-END:** One end of a trip at either the origin or destination; i.e. each trip has two trip-ends. A trip-end occurs when a person, object, or message is transferred to or from a vehicle.

**TRIP GENERATION RATE:** The quantity of trips produced and/or attracted by a specific land use stated in terms of units such as per dwelling, per acre, and per 1,000 square feet of floor space.

**TRUCK:** A vehicle having dual tires on one or more axles, or having more than two axles.

**UNBALANCED FLOW:** Heavier traffic flow in one direction than the other. On a daily basis, most facilities have balanced flow. During the peak hours, flow is seldom balanced in an urban area.

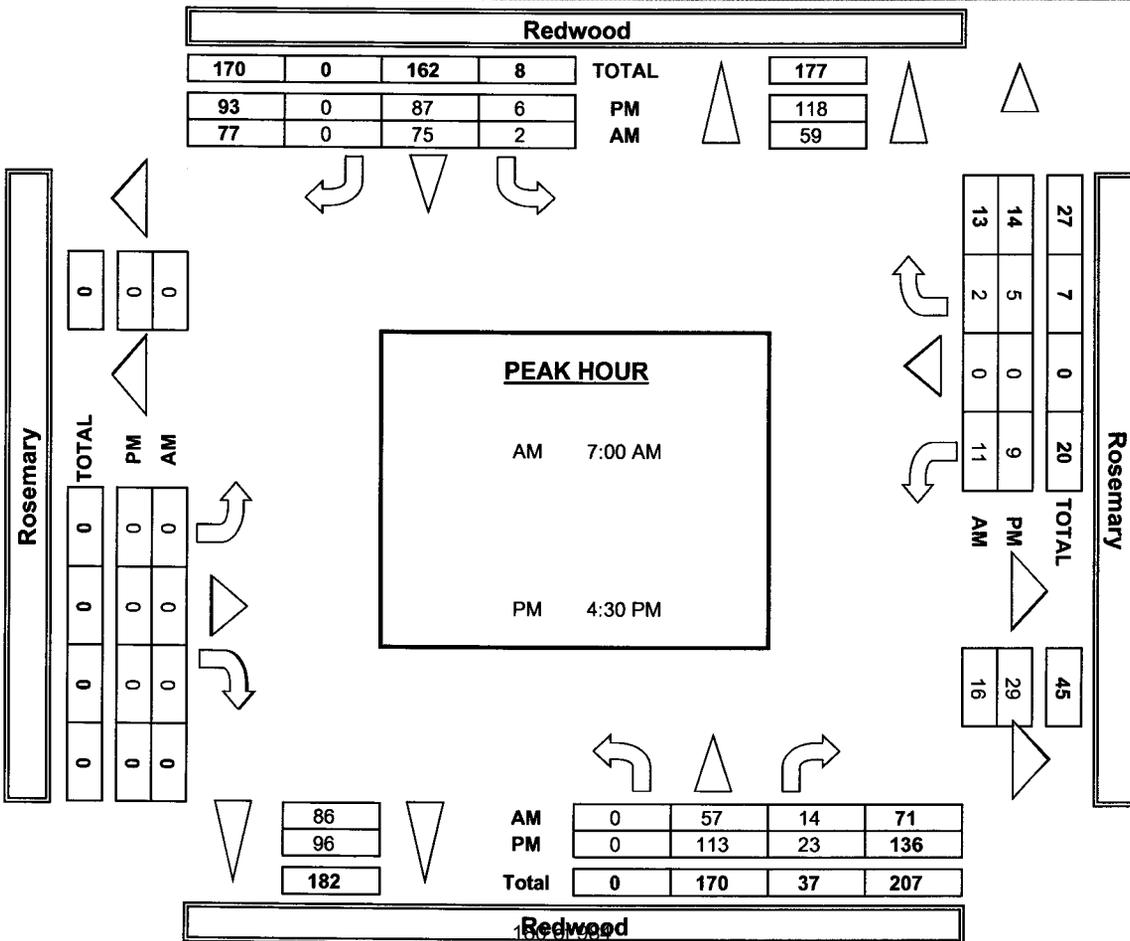
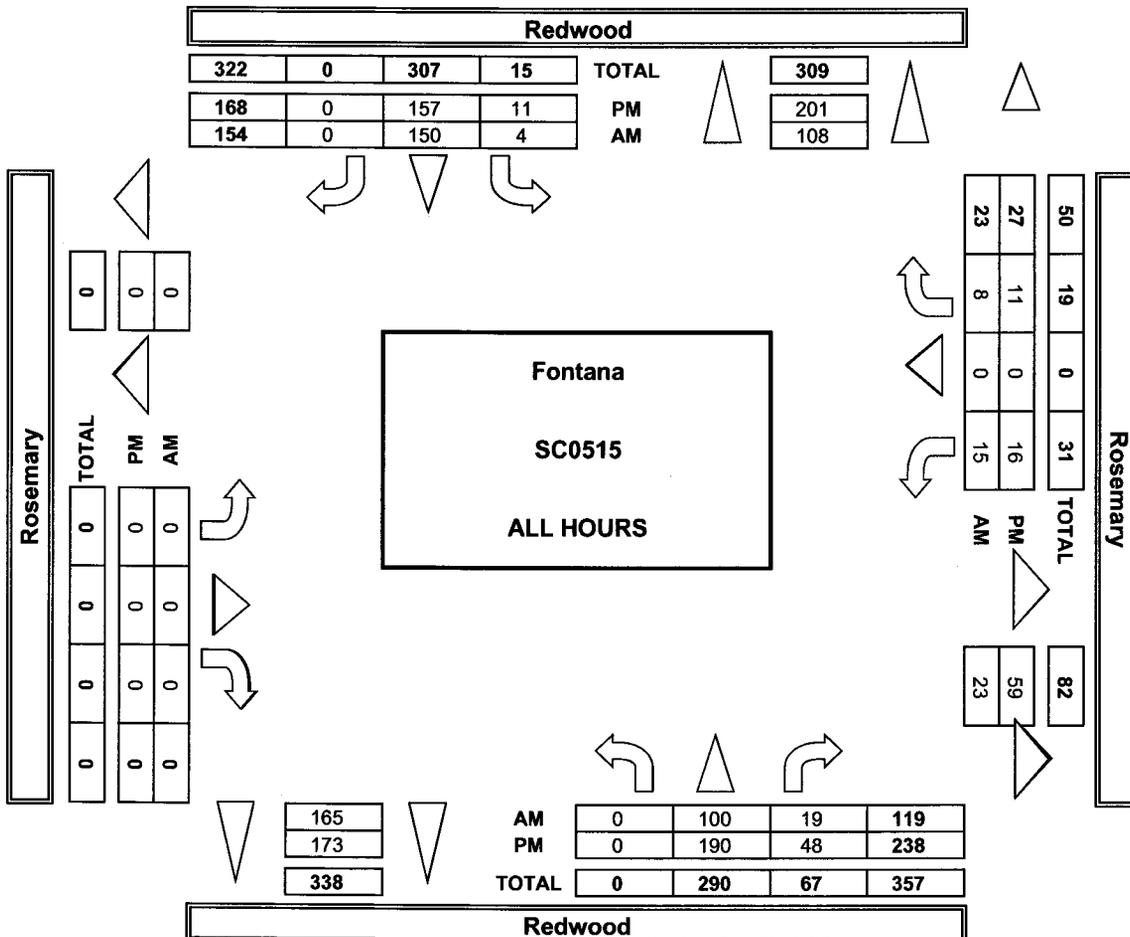
**VEHICLE MILES OF TRAVEL:** A measure of the amount of usage of a section of highway, obtained by multiplying the average daily traffic by length of facility in miles.

**APPENDIX B**

**Traffic Count Worksheets**



**AimTD LLC**  
TURNING MOVEMENT COUNTS



## INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE: 1/13/15 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Fontana Redwood Rosemary	PROJECT #: SC0515 LOCATION #: 1 CONTROL: Stop 1way W
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<b>CLASS 1:</b> PASSENGER VEHICLES	<b>NOTES:</b>	
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LANES:	NORTHBOUND <small>Redwood</small>			SOUTHBOUND <small>Redwood</small>			EASTBOUND <small>Rosemary</small>			WESTBOUND <small>Rosemary</small>			TOTAL	U-TURNS				
	NL X	NT 1	NR 0	SL 0	ST 1	SR X	EL X	ET X	ER X	WL 0.5	WT X	WR 0.5		NB	SB	EB	WB	TTL

AM	7:00 AM	0	16	3	1	27	0	0	0	0	4	0	0	51						0
	7:15 AM	0	11	1	0	16	0	0	0	0	5	0	0	33						0
	7:30 AM	0	14	2	0	10	0	0	0	0	0	0	1	27						0
	7:45 AM	0	11	7	0	12	0	0	0	0	1	0	1	32						0
	8:00 AM	0	8	0	1	17	0	0	0	0	0	0	3	29						0
	8:15 AM	0	10	1	0	21	0	0	0	0	0	0	1	33						0
	8:30 AM	0	7	0	1	13	0	0	0	0	3	0	0	24						0
	8:45 AM	0	10	0	0	16	0	0	0	0	1	0	2	29						0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0						0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0						0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0						0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0						0
	VOLUMES	0	87	14	3	132	0	0	0	0	14	0	8	258						0
	APPROACH %	0%	86%	14%	2%	98%	0%	0%	0%	0%	64%	0%	36%							0
APP/DEPART	101	/	95	135	/	146	0	/	17	22	/	0	0						0	
BEGIN PEAK HR	7:00 AM																			
VOLUMES	0	52	13	1	65	0	0	0	0	10	0	2	143						0	
APPROACH %	0%	80%	20%	2%	98%	0%	0%	0%	0%	83%	0%	17%							0	
PEAK HR FACTOR	0.855									0.000			0.600							
APP/DEPART	65	/	54	66	/	75	0	/	14	12	/	0	0						0	
PM	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0						0	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0						0	
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0						0	
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0						0	
	4:00 PM	0	10	5	2	21	0	0	0	0	2	0	1	41						0
	4:15 PM	0	14	8	1	11	0	0	0	0	0	0	1	35						0
	4:30 PM	0	30	4	1	24	0	0	0	0	0	0	0	59						0
	4:45 PM	0	21	3	2	16	0	0	0	0	1	0	0	43						0
	5:00 PM	0	24	8	1	20	0	0	0	0	7	0	3	63						0
	5:15 PM	0	28	7	1	18	0	0	0	0	0	0	2	56						0
	5:30 PM	0	22	7	1	18	0	0	0	0	3	0	2	53						0
	5:45 PM	0	22	5	1	12	0	0	0	0	2	0	2	44						0
	VOLUMES	0	171	47	10	140	0	0	0	0	15	0	11	394						0
	APPROACH %	0%	78%	22%	7%	93%	0%	0%	0%	0%	58%	0%	42%							0
APP/DEPART	218	/	182	150	/	155	0	/	57	26	/	0	0						0	
BEGIN PEAK HR	4:30 PM																			
VOLUMES	0	103	22	5	78	0	0	0	0	8	0	5	221						0	
APPROACH %	0%	82%	18%	6%	94%	0%	0%	0%	0%	62%	0%	38%							0	
PEAK HR FACTOR	0.893									0.000			0.325							
APP/DEPART	125	/	108	83	/	86	0	/	27	13	/	0	0						0	



# INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

<b>DATE:</b> 1/13/15 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Fontana Redwood Rosemary	PROJECT #: LOCATION #: CONTROL:	SC0515 1 Stop 1way W
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<b>CLASS 2:</b> 2-AXLE WORK VEHICLES/ TRUCKS	<b>NOTES:</b>		▲ N ◀ W      E ▶ S ▼
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LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	

U-TURNS				
NB	SB	EB	WB	TTL

<b>AM</b>	7:00 AM	0	0	1	0	1	0	0	0	0	0	0	0	2						
	7:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	2						
	7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1						
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0						
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0						
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0						
	8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1						
	8:45 AM	0	4	0	0	3	0	0	0	0	0	0	0	7						
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0						
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0						

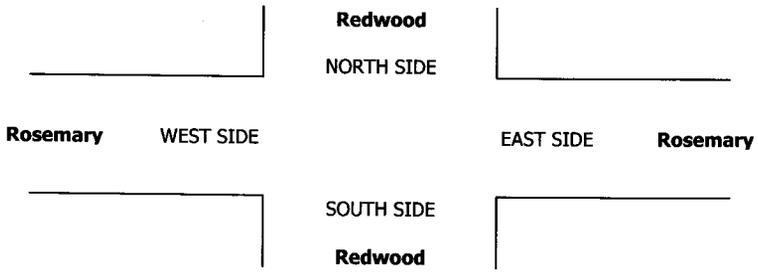

VOLUMES	0	7	1	0	5	0	0	0	0	0	0	0	13
APPROACH %	0%	88%	13%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
APP/DEPART	8	/	7	5	/	5	0	/	1	0	/	0	0
BEGIN PEAK HR	8:30 AM												
VOLUMES	0	5	0	0	3	0	0	0	0	0	0	8	
APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	0%	0%	0%		
PEAK HR FACTOR	0.313				0.250			0.000			0.000	0.286	
APP/DEPART	5	/	5	3	/	3	0	/	0	0	/	0	0

0	0	0	0	0
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<b>PM</b>	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0							
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0							
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0							
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0							
	4:00 PM	0	0	0	0	1	0	0	0	0	0	0	1							
	4:15 PM	0	4	0	0	3	0	0	0	0	0	0	7							
	4:30 PM	0	1	1	0	5	0	0	0	0	1	0	8							
	4:45 PM	0	2	0	0	2	0	0	0	0	0	0	4							
	5:00 PM	0	4	0	1	1	0	0	0	0	0	0	6							
	5:15 PM	0	0	0	0	1	0	0	0	0	0	0	1							


VOLUMES	0	16	1	1	13	0	0	0	0	1	0	0	32
APPROACH %	0%	94%	6%	7%	93%	0%	0%	0%	0%	100%	0%	0%	
APP/DEPART	17	/	16	14	/	14	0	/	2	1	/	0	0
BEGIN PEAK HR	4:15 PM												
VOLUMES	0	11	1	1	11	0	0	0	0	1	0	0	25
APPROACH %	0%	92%	8%	8%	92%	0%	0%	0%	0%	100%	0%	0%	
PEAK HR FACTOR	0.750				0.600			0.000			0.250		0.781
APP/DEPART	12	/	11	12	/	12	0	/	2	1	/	0	0

0	0	0	0	0
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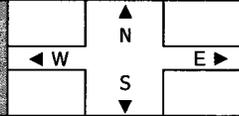




# INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

<b>DATE:</b> 1/13/15 TUESDAY	<b>LOCATION:</b> NORTH & SOUTH: Fontana EAST & WEST: Redwood Rosemary	<b>PROJECT #:</b> SC0515 <b>LOCATION #:</b> 1 <b>CONTROL:</b> Stop 1way W	
<b>CLASS 5:</b> RV	<b>NOTES:</b>		



LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Redwood			Redwood			Rosemary			Rosemary			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	

U-TURNS				
NB	SB	EB	WB	TTL

<b>AM</b>	7:00 AM	0	0	0	0	3	0	0	0	0	0	0	0	3					0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0

0	0	0	0	0
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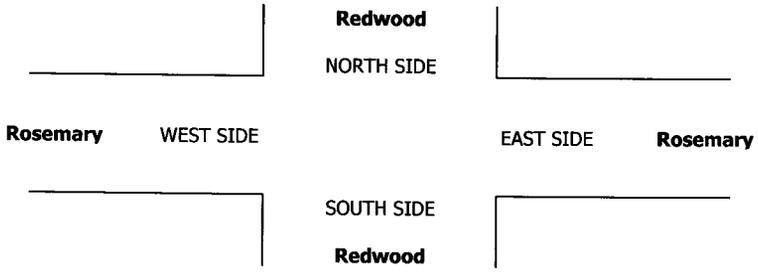
VOLUMES	0	0	0	0	3	0	0	0	0	0	0	0	3
APPROACH %	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
APP/DEPART	0	/	0	3	/	3	0	/	0	0	/	0	0
BEGIN PEAK HR	7:00 AM												
VOLUMES	0	0	0	0	3	0	0	0	0	0	0	0	3
APPROACH %	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	
PEAK HR FACTOR	0.000			0.250			0.000			0.000			0.250
APP/DEPART	0	/	0	3	/	3	0	/	0	0	/	0	0

0	0	0	0	0
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<b>PM</b>	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0

0	0	0	0	0
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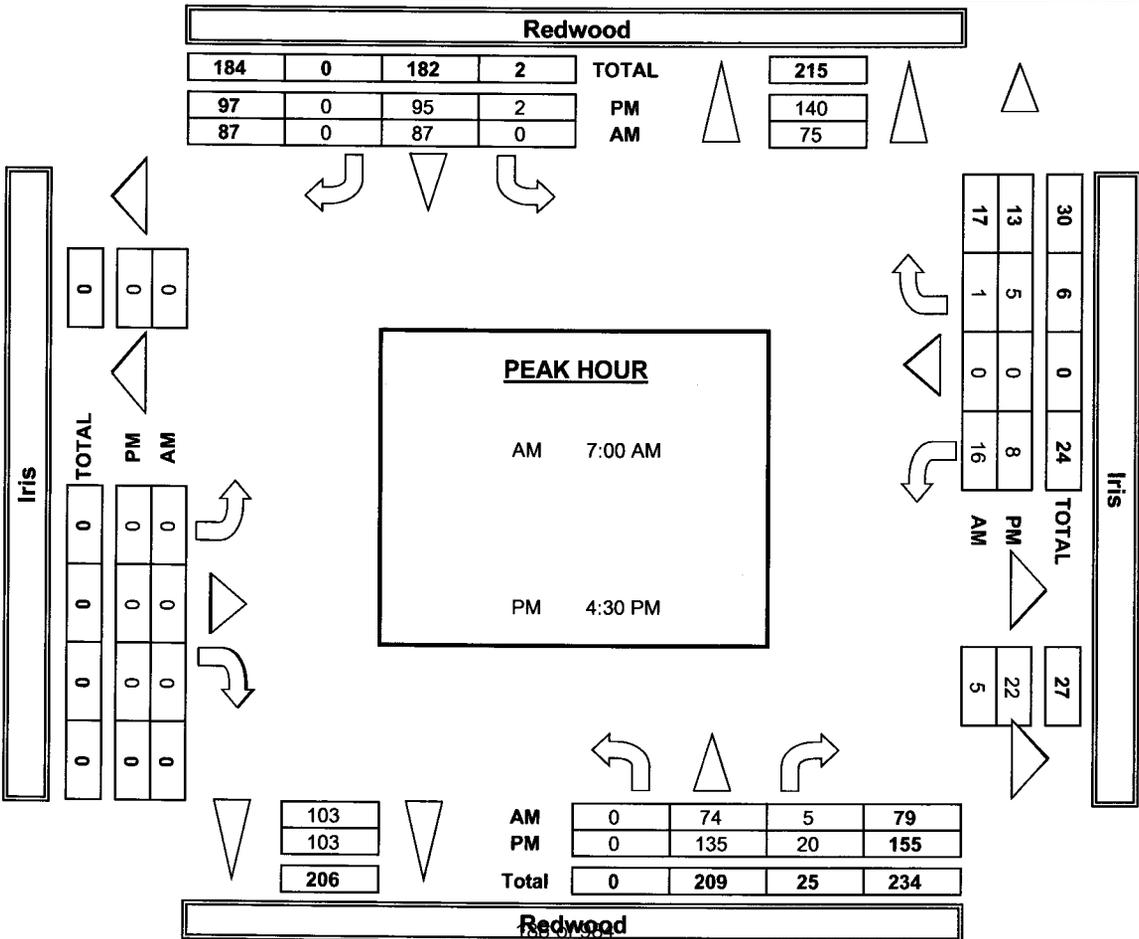
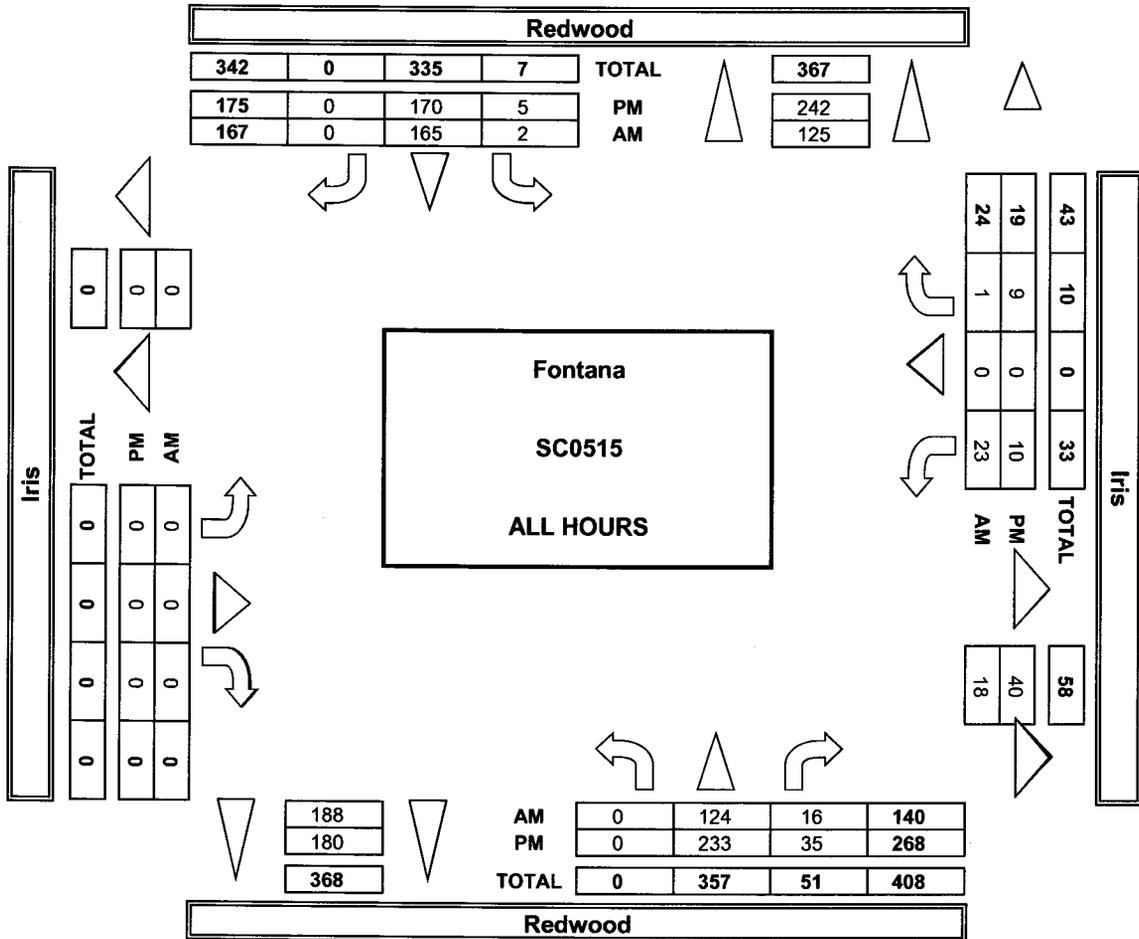
VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0
BEGIN PEAK HR	5:45 PM												
VOLUMES	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
PEAK HR FACTOR	0.000			0.000			0.000			0.000			0.000
APP/DEPART	0	/	0	0	/	0	0	/	0	0	/	0	0







**AimTD LLC**  
TURNING MOVEMENT COUNTS



## INTERSECTION TURNING MOVEMENT COUNTS

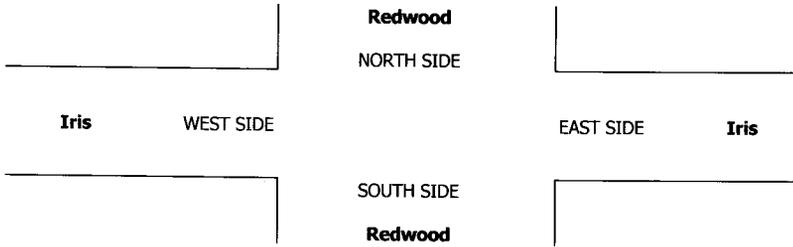
PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

<b>DATE:</b> 1/13/15 TUESDAY	<b>LOCATION:</b> NORTH & SOUTH: EAST & WEST:	Fontana Redwood Iris	<b>PROJECT #:</b> SC0515 <b>LOCATION #:</b> 2 <b>CONTROL:</b> Stop 1way W
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<b>CLASS 1:</b> PASSENGER VEHICLES	<b>NOTES:</b>	
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LANES:	NORTHBOUND <small>Redwood</small>			SOUTHBOUND <small>Redwood</small>			EASTBOUND <small>Iris</small>			WESTBOUND <small>Iris</small>			TOTAL	U-TURNS				
	NL X	NT 1	NR 0	SL 0	ST 1	SR X	EL X	ET X	ER X	WL 0.5	WT X	WR 0.5		NB	SB	EB	WB	TTL

<b>AM</b>	7:00 AM	0	19	2	0	33	0	0	0	0	4	0	0	58					0
	7:15 AM	0	12	0	0	20	0	0	0	0	4	0	0	36					0
	7:30 AM	0	16	1	0	10	0	0	0	0	5	0	1	33					0
	7:45 AM	0	21	2	0	13	0	0	0	0	3	0	0	39					0
	8:00 AM	0	9	3	0	18	0	0	0	0	0	0	0	30					0
	8:15 AM	0	11	3	0	21	0	0	0	0	4	0	0	39					0
	8:30 AM	0	7	2	0	15	0	0	0	0	2	0	0	26					0
	8:45 AM	0	14	3	2	16	0	0	0	0	1	0	0	36					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	0	109	16	2	146	0	0	0	0	23	0	1	297	0	0	0	0	0
APPROACH %	0%	87%	13%	1%	99%	0%	0%	0%	0%	96%	0%	4%							
APP/DEPART	125	/	110	148	/	169	0	/	18	24	/	0	0						
BEGIN PEAK HR	7:00 AM																		
VOLUMES	0	68	5	0	76	0	0	0	0	16	0	1	166						
APPROACH %	0%	93%	7%	0%	100%	0%	0%	0%	0%	94%	0%	6%							
PEAK HR FACTOR	0.793																		
APP/DEPART	73	/	69	76	/	92	0	/	5	17	/	0	0						
<b>PM</b>	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:00 PM	0	15	5	1	22	0	0	0	0	0	0	0	43					0
	4:15 PM	0	27	5	0	13	0	0	0	0	1	0	0	46					0
	4:30 PM	0	34	4	1	27	0	0	0	0	1	0	2	69					0
	4:45 PM	0	25	7	0	17	0	0	0	0	1	0	0	50					0
	5:00 PM	0	33	3	0	27	0	0	0	0	4	0	2	69					0
	5:15 PM	0	33	6	0	18	0	0	0	0	2	0	1	60					0
	5:30 PM	0	27	4	1	20	0	0	0	0	1	0	2	55					0
	5:45 PM	0	24	1	0	15	0	0	0	0	0	0	2	42					0
	VOLUMES	0	218	35	3	159	0	0	0	0	10	0	9	434	0	0	0	0	0
APPROACH %	0%	86%	14%	2%	98%	0%	0%	0%	0%	53%	0%	47%							
APP/DEPART	253	/	227	162	/	169	0	/	38	19	/	0	0						
BEGIN PEAK HR	4:30 PM																		
VOLUMES	0	125	20	1	89	0	0	0	0	8	0	5	248						
APPROACH %	0%	86%	14%	1%	99%	0%	0%	0%	0%	62%	0%	38%							
PEAK HR FACTOR	0.929																		
APP/DEPART	145	/	130	90	/	97	0	/	21	13	/	0	0						

















# INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

**DATE:**  
1/13/15  
**TUESDAY**

**LOCATION:**  
NORTH & SOUTH:  
EAST & WEST:

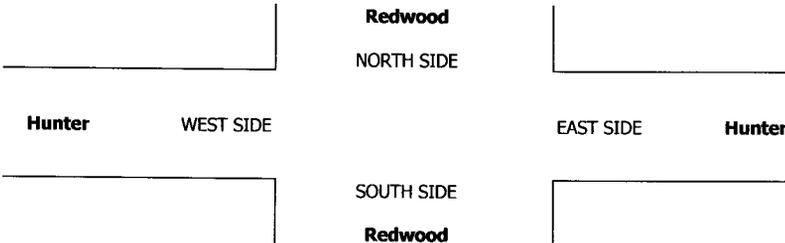
Fontana  
Redwood  
Hunter

**PROJECT #:** SC0515  
**LOCATION #:** 3  
**CONTROL:** Stop 1way E

<b>CLASS 1:</b>	<b>NOTES:</b>	
PASSENGER VEHICLES		

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR		NB	SB	EB	WB	TTL

<b>AM</b>	7:00 AM	0	15	0	0	37	5	10	0	8	0	0	0	75						0
	7:15 AM	1	8	0	0	19	3	3	0	3	0	0	0	37						0
	7:30 AM	1	10	0	0	15	0	9	0	3	0	0	0	38						0
	7:45 AM	3	8	0	0	13	4	14	0	7	0	0	0	49						0
	8:00 AM	0	4	0	0	12	3	9	0	6	0	0	0	34						0
	8:15 AM	1	7	0	0	22	4	8	0	8	0	0	0	50						0
	8:30 AM	1	6	0	0	17	2	4	0	7	0	0	0	37						0
	8:45 AM	4	10	0	0	15	3	4	0	5	0	0	0	41						0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0						0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0						0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0						0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0						0	
VOLUMES	11	68	0	0	150	24	61	0	47	0	0	0	361						0	
APPROACH %	14%	86%	0%	0%	86%	14%	56%	0%	44%	0%	0%	0%							0	
APP/DEPART	79	/	129	174	/	197	108	/	0	0	/	35	0						0	
BEGIN PEAK HR	7:00 AM																			
VOLUMES	5	41	0	0	84	12	36	0	21	0	0	0	199						0	
APPROACH %	11%	89%	0%	0%	88%	13%	63%	0%	37%	0%	0%	0%							0	
PEAK HR FACTOR	0.767			0.571			0.679			0.000			0.663							0
APP/DEPART	46	/	77	96	/	105	57	/	0	0	/	17	0						0	
<b>PM</b>	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0						0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0						0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0						0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0						0
	4:00 PM	2	13	0	0	20	3	5	0	19	0	0	0	62						0
	4:15 PM	1	20	0	0	13	3	13	0	9	0	0	0	59						0
	4:30 PM	3	23	0	0	30	3	9	0	17	0	0	0	85						0
	4:45 PM	0	19	0	0	18	4	12	0	15	0	0	0	68						0
	5:00 PM	6	29	0	0	31	2	12	0	13	0	0	0	93						0
	5:15 PM	1	23	0	0	19	1	10	0	8	0	0	0	62						0
	5:30 PM	1	18	0	0	18	3	11	0	10	0	0	0	61						0
5:45 PM	0	23	0	0	12	1	6	0	8	0	0	0	50						0	
VOLUMES	14	168	0	0	161	20	78	0	99	0	0	0	540						0	
APPROACH %	8%	92%	0%	0%	89%	11%	44%	0%	56%	0%	0%	0%							0	
APP/DEPART	182	/	246	181	/	260	177	/	0	0	/	34	0						0	
BEGIN PEAK HR	4:30 PM																			
VOLUMES	10	94	0	0	98	10	43	0	53	0	0	0	308						0	
APPROACH %	10%	90%	0%	0%	91%	9%	45%	0%	55%	0%	0%	0%							0	
PEAK HR FACTOR	0.743			0.818			0.889			0.000			0.828							0
APP/DEPART	104	/	137	108	/	151	96	/	0	0	/	20	0						0	







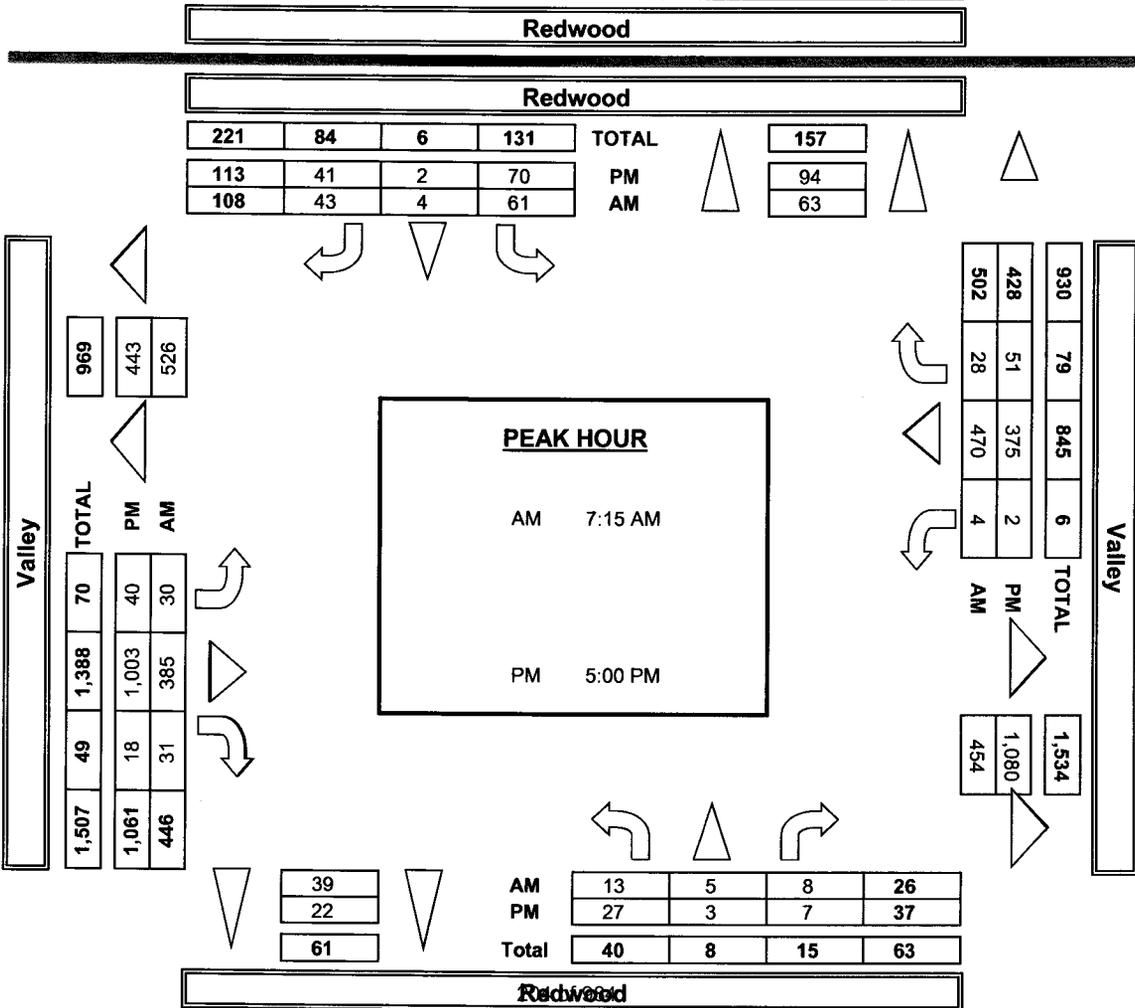
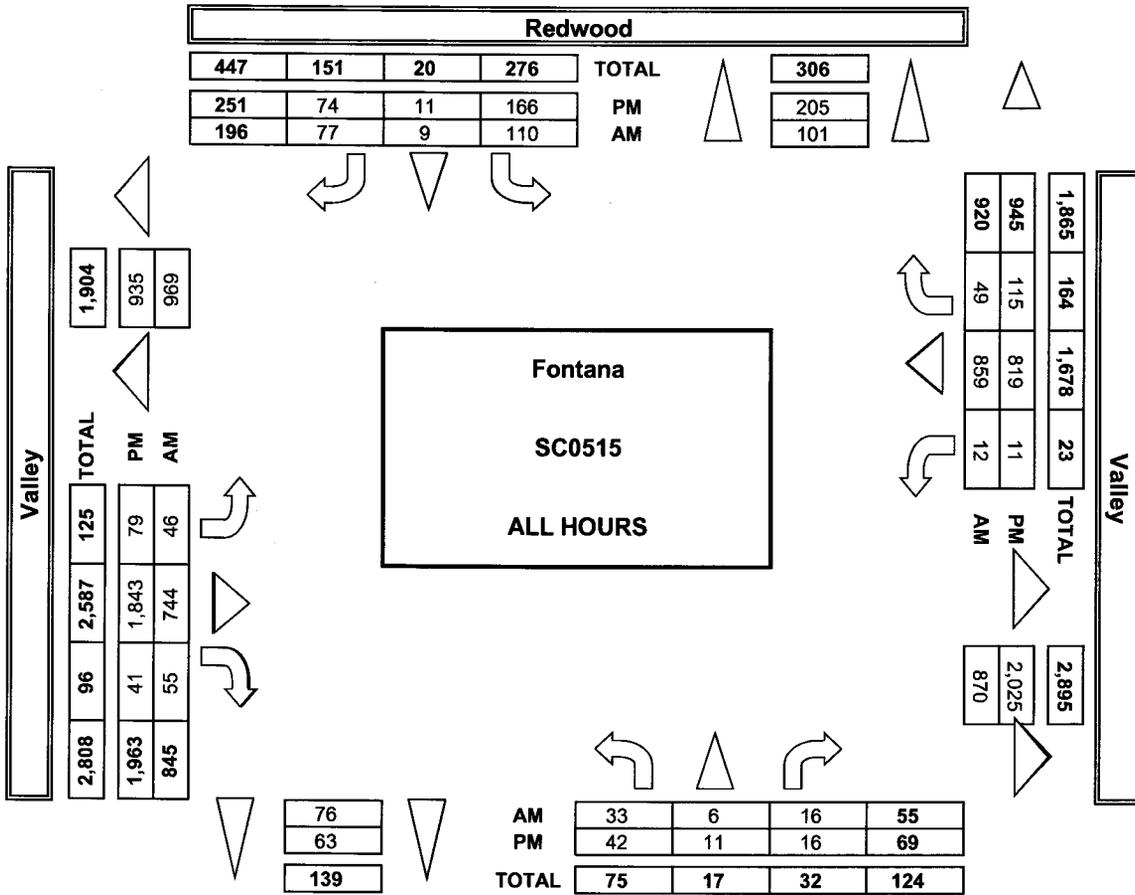








**AimTD LLC**  
TURNING MOVEMENT COUNTS





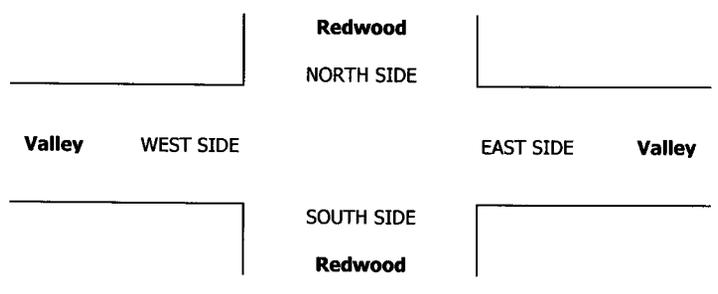
# INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE: 1/15/15 THURSDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Fontana Redwood Valley	PROJECT #: LOCATION #: CONTROL:	SC0515 4 SIGNAL
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<b>CLASS 2:</b> 2-AXLE WORK VEHICLES/ TRUCKS	<b>NOTES:</b>	
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR		NB	SB	EB	WB	TTL
<b>LANES:</b>	0	1	0	0	1	0	1	2	0	1	2	0						
<b>AM</b>																		
7:00 AM	0	0	0	2	0	0	0	5	0	0	4	0					0	
7:15 AM	0	0	0	2	0	1	1	6	1	0	6	0					0	
7:30 AM	0	0	0	0	0	0	0	6	0	0	3	0					0	
7:45 AM	1	0	0	0	0	0	0	3	1	0	4	0					0	
8:00 AM	0	0	0	1	0	0	1	10	1	0	8	0					0	
8:15 AM	3	0	0	0	0	0	0	6	0	0	9	0					0	
8:30 AM	1	0	0	1	0	0	0	6	2	0	6	0					0	
8:45 AM	0	0	0	2	1	0	0	12	2	0	7	0					0	
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0					0	
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0					0	
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0					0	
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0					0	
<b>VOLUMES</b>	5	0	0	8	1	1	2	54	7	0	47	0					125	
<b>APPROACH %</b>	100%	0%	0%	80%	10%	10%	3%	86%	11%	0%	100%	0%						
<b>APP/DEPART</b>	5	/	2	10	/	8	63	/	62	47	/	53					0	
<b>BEGIN PEAK HR</b>	8:00 AM																	
<b>VOLUMES</b>	4	0	0	4	1	0	1	34	5	0	30	0					79	
<b>APPROACH %</b>	100%	0%	0%	80%	20%	0%	3%	85%	13%	0%	100%	0%						
<b>PEAK HR FACTOR</b>	0.333			0.417			0.714			0.833			0.823					
<b>APP/DEPART</b>	4	/	1	5	/	6	40	/	38	30	/	34					0	
<b>PM</b>																		
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0					0	
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0					0	
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0					0	
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0					0	
4:00 PM	0	0	0	1	0	2	0	10	0	0	5	0					0	
4:15 PM	0	0	0	0	0	0	0	11	0	0	9	1					0	
4:30 PM	0	0	0	0	0	1	0	15	0	0	9	1					0	
4:45 PM	0	1	0	1	0	0	1	8	0	0	8	0					0	
5:00 PM	0	1	1	0	0	1	2	10	0	0	4	1					0	
5:15 PM	0	0	0	1	0	0	0	12	0	0	5	0					0	
5:30 PM	0	0	0	0	0	1	1	7	0	0	6	0					0	
5:45 PM	0	0	0	0	0	0	0	7	1	0	7	0					0	
<b>VOLUMES</b>	0	2	1	3	0	5	4	80	1	0	53	3					152	
<b>APPROACH %</b>	0%	67%	33%	38%	0%	63%	5%	94%	1%	0%	95%	5%						
<b>APP/DEPART</b>	3	/	9	8	/	1	85	/	84	56	/	58					0	
<b>BEGIN PEAK HR</b>	4:15 PM																	
<b>VOLUMES</b>	0	2	1	1	0	2	3	44	0	0	30	3					86	
<b>APPROACH %</b>	0%	67%	33%	33%	0%	67%	6%	94%	0%	0%	91%	9%						
<b>PEAK HR FACTOR</b>	0.375			0.750			0.783			0.825			0.827					
<b>APP/DEPART</b>	3	/	8	3	/	0	47	/	46	33	/	32					0	



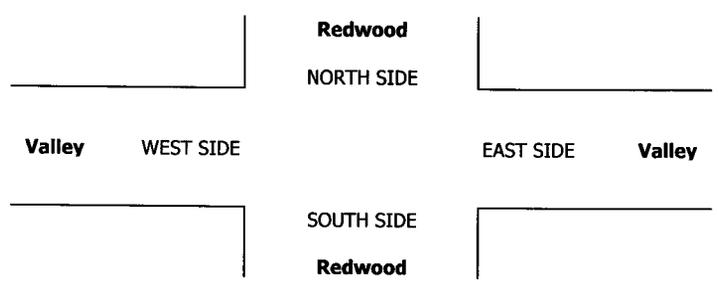
# INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

<b>DATE:</b> 1/15/15 THURSDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	Fontana Redwood Valley	PROJECT #: LOCATION #: CONTROL:	SC0515 4 SIGNAL
<b>CLASS 3:</b> 3-AXLE TRUCKS	<b>NOTES:</b>			

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR		NB	SB	EB	WB	TTL

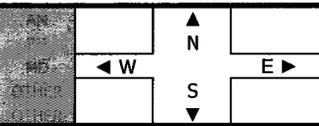
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1						0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	7:30 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	2					0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1					0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	VOLUMES	0	0	0	0	0	0	0	1	0	0	0	3	0	4					0
APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%	0%						0	
APP/DEPART	0	/	0	0	/	0	1	/	1	3	/	3	0						0	
BEGIN PEAK HR	7:30 AM																			
VOLUMES	0	0	0	0	0	0	0	1	0	0	2	0	3						0	
APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%							0	
PEAK HR FACTOR	0.000			0.000			0.250			0.500										0
APP/DEPART	0	/	0	0	/	0	1	/	1	2	/	2	0						0	
PM	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0	
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0	
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0	
	4:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	1					0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0
	4:30 PM	0	0	0	0	0	0	0	3	0	0	1	0	4					0	
	4:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	2					0	
	5:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	2					0	
	5:15 PM	0	0	0	0	0	0	0	1	0	0	1	0	2					0	
	5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1					0	
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0	
	VOLUMES	0	0	0	1	0	0	0	8	0	0	3	0	12					0	
APPROACH %	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	100%	0%						0		
APP/DEPART	0	/	0	1	/	0	8	/	9	3	/	3	0					0		
BEGIN PEAK HR	4:30 PM																			
VOLUMES	0	0	0	0	0	0	0	8	0	0	2	0	10					0		
APPROACH %	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%						0		
PEAK HR FACTOR	0.000			0.000			0.667			0.500									0	
APP/DEPART	0	/	0	0	/	0	8	/	8	2	/	2	0					0		



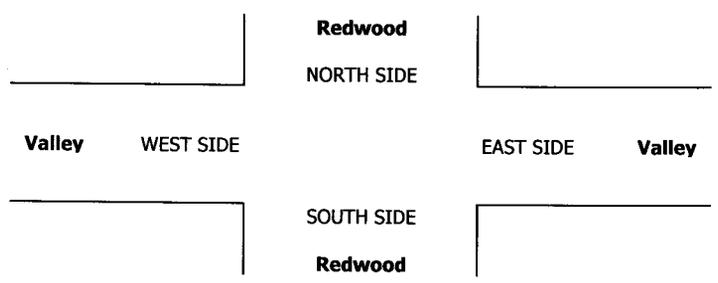
# INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

<b>DATE:</b> 1/15/15 THURSDAY	<b>LOCATION:</b> NORTH & SOUTH: EAST & WEST:	Fontana Redwood Valley	<b>PROJECT #:</b> SC0515 <b>LOCATION #:</b> 4 <b>CONTROL:</b> SIGNAL
<b>CLASS 4:</b> 4 OR MORE AXLE TRUCKS	<b>NOTES:</b>		



	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	U-TURNS				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR		NB	SB	EB	WB	TTL
<b>LANES:</b>	0	1	0	0	1	0	1	2	0	1	2	0						
<b>AM</b>																		
7:00 AM	0	0	0	0	0	0	1	9	0	0	1	0	11					0
7:15 AM	1	0	1	0	0	1	2	5	1	0	6	0	17					0
7:30 AM	0	0	0	0	0	0	0	6	1	0	5	0	12					0
7:45 AM	1	0	0	0	0	0	0	9	0	0	9	0	19					0
8:00 AM	1	0	0	0	0	0	0	8	0	0	6	0	15					0
8:15 AM	0	0	0	1	0	0	0	2	0	0	7	0	10					0
8:30 AM	0	0	0	1	0	0	0	10	0	0	8	0	19					0
8:45 AM	1	0	0	0	0	0	1	6	1	0	10	0	19					0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
<b>VOLUMES</b>	4	0	1	2	0	1	4	55	3	0	52	0	122	0	0	0	0	0
<b>APPROACH %</b>	80%	0%	20%	67%	0%	33%	6%	89%	5%	0%	100%	0%						
<b>APP/DEPART</b>	5	/	4	3	/	3	62	/	58	52	/	57	0					
<b>BEGIN PEAK HR</b>	8:00 AM																	
<b>VOLUMES</b>	2	0	0	2	0	0	1	26	1	0	31	0	63					
<b>APPROACH %</b>	100%	0%	0%	100%	0%	0%	4%	93%	4%	0%	100%	0%						
<b>PEAK HR FACTOR</b>	0.250			0.500			0.700			0.775			0.829					
<b>APP/DEPART</b>	2	/	1	2	/	1	28	/	28	31	/	33	0					
<b>PM</b>																		
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0					0
4:00 PM	0	0	0	1	0	0	1	8	0	0	6	0	16					0
4:15 PM	1	0	0	1	0	0	0	12	0	0	4	1	19					0
4:30 PM	0	0	0	0	0	0	0	4	2	0	5	0	11					0
4:45 PM	1	0	0	0	0	0	0	4	0	0	5	0	10					0
5:00 PM	0	0	0	0	0	0	0	5	1	0	2	0	8					0
5:15 PM	0	0	0	2	0	0	0	3	1	0	6	0	12					0
5:30 PM	0	0	0	0	0	0	0	6	0	0	3	0	9					0
5:45 PM	0	0	0	0	0	0	0	7	0	0	7	0	14					0
<b>VOLUMES</b>	2	0	0	4	0	0	1	49	4	0	38	1	99	0	0	0	0	0
<b>APPROACH %</b>	100%	0%	0%	100%	0%	0%	2%	91%	7%	0%	97%	3%						
<b>APP/DEPART</b>	2	/	2	4	/	4	54	/	53	39	/	40	0					
<b>BEGIN PEAK HR</b>	4:00 PM																	
<b>VOLUMES</b>	2	0	0	2	0	0	1	28	2	0	20	1	56					
<b>APPROACH %</b>	100%	0%	0%	100%	0%	0%	3%	90%	6%	0%	95%	5%						
<b>PEAK HR FACTOR</b>	0.500			0.500			0.646			0.875			0.737					
<b>APP/DEPART</b>	2	/	2	2	/	2	31	/	30	21	/	22	0					







**APPENDIX C**

**Future Growth Increment Calculation Worksheets**

INTERSECTION	LEG	MODEL	EXISTING	MODEL	FUTURE	OPENING
		2008 ADT	2015 ADT	2035 ADT	2035 ADT <sup>1</sup>	2017 ADT
Redwood Avenue (NS) / Valley Boulevard (EW) - #6	North	-	2,500	-	2,800	2,500
	South	-	800	-	900	800
	East	17,291	18,700	28,511	27,000	19,500
	West	17,291	18,700	28,511	27,000	19,500

<sup>1</sup> Adjusted for minimum 10% growth over existing ADT volumes.

**APPENDIX D**

**Explanation and Calculation of Intersection Delay**

## **EXPLANATION AND CALCULATION OF INTERSECTION LEVEL OF SERVICE USING DELAY METHODOLOGY**

The levels of service at the unsignalized and signalized intersections are calculated using the delay methodology in the Highway Capacity Manual. This methodology views an intersection as consisting of several lane groups. A lane group is a set of lanes serving a movement. If there are two northbound left turn lanes, then the lane group serving the northbound left turn movement has two lanes. Similarly, there may be three lanes in the lane group serving the northbound through movement, one lane in the lane group serving the northbound right turn movement, and so forth. It is also possible for one lane to serve two lane groups. A shared lane might result in there being 1.5 lanes in the northbound left turn lane group and 2.5 lanes in the northbound through lane group.

For each lane group, there is a capacity. That capacity is calculated by multiplying the number of lanes in the lane group times a theoretical maximum lane capacity per lane time's 12 adjustment factors.

Each of the 12 adjustment factors has a value of approximately 1.00. A value less than 1.00 is generally assigned when a less than desirable condition occurs.

The 12 adjustment factors are as follows:

1. Peak hour factor (to account for peaking within the peak hour)
2. Lane utilization factor (to account for not all lanes loading equally)
3. Lane width
4. Percent of heavy trucks
5. Approach grade
6. Parking
7. Bus stops at intersections
8. Area type (CBD or other)
9. Right turns
10. Left turns

11. Pedestrian activity
12. Signal progression

The maximum theoretical lane capacity and the 12 adjustment factors for it are all unknowns for which approximate estimates have been recommended in the Highway Capacity Manual. For the most part, the recommended values are not based on statistical analysis but rather on educated estimates. However, it is possible to use the delay method and get reasonable results as will be discussed below.

Once the lane group volume is known and the lane group capacity is known, a volume to capacity ratio can be calculated for the lane group.

With a volume to capacity ratio calculated, average delay per vehicle in a lane group can be estimated. The average delay per vehicle in a lane group is calculated using a complex formula provided by the Highway Capacity Manual, which can be simplified and described as follows:

Delay per vehicle in a lane group is a function of the following:

1. Cycle length
2. Amount of red time faced by a lane group
3. Amount of yellow time for that lane group
4. The volume to capacity ratio of the lane group

The average delay per vehicle for each lane group is calculated, and eventually an overall average delay for all vehicles entering the intersection is calculated. This average delay per vehicle is then used to judge Level of Service. The Level of Services are defined in the table that follows this discussion.

Experience has shown that when a maximum lane capacity of 1,900 vehicles per hour is used (as recommended in the Highway Capacity Manual), little or no yellow time penalty is used, and none of the 12 penalty factors are applied, calculated delay is realistic. The delay calculation for instance assumes that yellow time is totally unused. Yet experience shows that most of the yellow time is used.

An idiosyncrasy of the delay methodology is that it is possible to add traffic to an intersection and reduce the average total delay per vehicle. If the average total delay is 30 seconds per vehicle for all vehicles traveling through an intersection, and traffic is added to a movement that has an average total delay of 15 seconds per vehicle, then the overall average total delay is reduced.

The delay calculation for a lane group is based on a concept that the delay is a function of the amount of unused capacity available. As the volume approaches capacity and there is no more unused capacity available, then the delay rapidly increases. Delay is not proportional to volume, but rather increases rapidly as the unused capacity approaches zero.

Because delay is not linearly related to volumes, the delay does not reflect how close an intersection is to overloading. If an intersection is operating at Level of Service C and has an average total delay of 18 seconds per vehicle, you know very little as to what percent the traffic can increase before Level of Service E is reached.

## LEVEL OF SERVICE DESCRIPTION<sup>1</sup>

Level Of Service	Description	Average Total Delay Per Vehicle (Seconds)	
		Signalized	Unsignalized
A	Level of Service A occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	0 to 10.00	0 to 10.00
B	Level of Service B generally occurs with good progression and/or short cycle lengths. More vehicles stop than for Level of Service A, causing higher levels of average total delay.	10.01 to 20.00	10.01 to 15.00
C	Level of Service C generally results when there is fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.	20.01 to 35.00	15.01 to 25.00
D	Level of Service D generally results in noticeable congestion. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume to capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	35.01 to 55.00	25.01 to 35.00
E	Level of Service E is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high volume to capacity ratios. Individual cycle failures are frequent occurrences.	55.01 to 80.00	35.01 to 50.00
F	Level of Service F is considered to be unacceptable to most drivers. This condition often occurs with oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection. It may also occur at high volume to capacity ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.	80.01 and up	50.01 and up

<sup>1</sup> Source: [Highway Capacity Manual](#) Special Report 209, Transportation Research Board, National Research Council, Washington, D.C., 2000.

**Existing**

9988 Redwood Avenue Project
Existing
Morning Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Redwood Avenue (NS) at Rosemary Drive (EW)

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: A[ 9.8]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Approach, Movement, Control, Rights, and Lanes.

Volume Module table with 12 columns representing different movement directions and 10 rows of volume-related metrics.

Critical Gap Module table with 12 columns and 2 rows of gap and follow-up time data.

Capacity Module table with 12 columns and 4 rows of capacity and volume/capacity data.

Level Of Service Module table with 12 columns and 10 rows of delay, LOS, and approach-related data.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Existing
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Redwood Avenue (NS) at Rosemary Drive (EW)

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: A[ 9.8]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module: Table with 12 columns for volume metrics across four directions.

Critical Gap Module: Table with 12 columns for gap metrics across four directions.

Capacity Module: Table with 12 columns for capacity metrics across four directions.

Level Of Service Module: Table with 12 columns for LOS metrics across four directions.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Existing
Morning Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Redwood Avenue (NS) at Iris Drive (EW)

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B [ 10.0]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module table with 12 columns representing traffic movements and 10 rows of volume-related metrics like Base Vol, Growth Adj, etc.

Critical Gap Module table with 12 columns and 2 rows showing gap times for critical and follow-up movements.

Capacity Module table with 12 columns and 4 rows showing capacity metrics like Cnflct Vol, Potent Cap, etc.

Level Of Service Module table with 12 columns and 10 rows showing delay and LOS for various movements.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Existing
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Redwood Avenue (NS) at Iris Drive (EW)

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: A[ 9.9]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module table with 12 columns representing different traffic movements and 10 rows of volume data.

Critical Gap Module table with 12 columns and 2 rows of gap and follow-up time data.

Capacity Module table with 12 columns and 4 rows of capacity and volume data.

Level Of Service Module table with 12 columns and 10 rows of LOS and delay data.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Existing
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #5 Redwood Avenue (NS) at Hunter Street (EW)
\*\*\*\*\*

Average Delay (sec/veh): 3.1 Worst Case Level Of Service: B[ 10.2]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Approach, Movement, Control, Rights, and Lanes.

Volume Module: Table with 13 columns for volume metrics (Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume) across 4 movements.

Critical Gap Module: Table with 13 columns for gap metrics (Critical Gp, FollowUpTim) across 4 movements.

Capacity Module: Table with 13 columns for capacity metrics (Cnflct Vol, Potent Cap., Move Cap., Volume/Cap) across 4 movements.

Level Of Service Module: Table with 13 columns for LOS metrics (2Way95thQ, Control Del, LOS by Move, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS) across 4 movements.

Note: Queue reported is the number of cars per lane.
\*\*\*\*\*

9988 Redwood Avenue Project
Existing
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Redwood Avenue (NS) at Hunter Street (EW)

Average Delay (sec/veh): 3.3 Worst Case Level Of Service: B [ 10.3]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module:

Table with 12 columns representing different traffic movements. Rows include Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and FinalVolume.

Critical Gap Module:

Table with 12 columns. Rows include Critical Gp and FollowUpTim.

Capacity Module:

Table with 12 columns. Rows include Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module:

Table with 12 columns. Rows include 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Existing
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #6 Redwood Avenue (NS) at Valley Boulevard (EW)
\*\*\*\*\*

Cycle (sec): 90 Critical Vol./Cap.(X): 0.233
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 18.1
Optimal Cycle: OPTIMIZED Level Of Service: B
\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns representing different traffic movements and 13 rows of volume-related metrics like Base Vol, Growth Adj, etc.

Saturation Flow Module: Table with 13 columns and 4 rows showing Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns and 10 rows showing Vol/Sat, Crit Moves, Green/Cycle, etc.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Existing
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 Redwood Avenue (NS) at Valley Boulevard (EW)

Cycle (sec): 130 Critical Vol./Cap.(X): 0.378
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 18.0
Optimal Cycle: OPTIMIZED Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Permitted/Protected), Rights (Include), Min. Green, and Lanes.

Volume Module: Table with 13 columns representing different traffic movements. Rows include Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module: Table with 13 columns. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns. Rows include Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.

**Existing Plus Project**

9988 Redwood Avenue Project
Existing Plus Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Redwood Avenue (NS) at Project North Access (EW)

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: A[ 9.0]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module:

Table with 13 columns representing different traffic components and 13 rows of volume data.

Critical Gap Module:

Table with 13 columns for gap and follow-up times across different movements.

Capacity Module:

Table with 13 columns for capacity-related metrics and 4 rows of data.

Level Of Service Module:

Table with 13 columns for LOS metrics and 10 rows of data.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Existing Plus Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Redwood Avenue (NS) at Project North Access (EW)

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: A[ 9.2]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module: Table with 12 columns for volume metrics like Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Final Volume.

Critical Gap Module: Table with 12 columns for gap metrics like Critical Gp, FollowUpTim.

Capacity Module: Table with 12 columns for capacity metrics like Cnflct Vol, Potent Cap., Move Cap., Volume/Cap.

Level Of Service Module: Table with 12 columns for LOS metrics like 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Existing Plus Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Redwood Avenue (NS) at Rosemary Drive (EW)

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: A[ 9.9]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module:

Table with 12 columns representing traffic volumes and adjustments. Rows include Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and FinalVolume.

Critical Gap Module:

Table with 3 columns for critical gaps and follow-up times. Rows include Critical Gp and FollowUpTim.

Capacity Module:

Table with 3 columns for capacity metrics. Rows include Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module:

Table with 3 columns for level of service metrics. Rows include 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Existing Plus Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Redwood Avenue (NS) at Rosemary Drive (EW)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: A[ 9.9]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module:

Table with 12 columns representing traffic volumes and adjustments for different movements and directions.

Critical Gap Module:

Table with 12 columns showing critical gap and follow-up time values for different movements.

Capacity Module:

Table with 12 columns showing conflict volume, potential capacity, and volume/capacity ratios.

Level Of Service Module:

Table with 12 columns showing Level of Service (LOS) and delay values for different movements and approaches.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Existing Plus Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Redwood Avenue (NS) at Iris Drive (EW)

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: B[ 10.2]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module:

Table with 12 columns representing traffic volumes and adjustments for different movements and directions.

Critical Gap Module:

Table with 12 columns showing critical gap and follow-up time values for various movements.

Capacity Module:

Table with 12 columns showing conflict volume, potential capacity, and volume/capacity ratios.

Level Of Service Module:

Table with 12 columns showing delay, LOS, and shared capacity/queue values for different approaches.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Existing Plus Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Redwood Avenue (NS) at Iris Drive (EW)

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: A[ 10.0]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module:

Table with 12 columns representing different volume metrics like Base Vol, Growth Adj, Initial Bse, etc.

Critical Gap Module:

Table with 3 columns for Critical Gap and FollowUpTim values.

Capacity Module:

Table with 3 columns for Capacity metrics like Cnflct Vol, Potent Cap., Move Cap., etc.

Level Of Service Module:

Table with 3 columns for Level of Service metrics like 2Way95thQ, Control Del, LOS by Move, etc.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Existing Plus Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Redwood Avenue (NS) at Project South Access (EW)

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: A[ 8.9]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module: Table with 12 columns representing different traffic movements and 10 rows of volume data including Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume.

Critical Gap Module: Table with 12 columns and 2 rows showing Critical Gap and FollowUpTim values.

Capacity Module: Table with 12 columns and 4 rows showing Capacity-related metrics like Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module: Table with 12 columns and 10 rows showing Level of Service metrics like 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Existing Plus Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Redwood Avenue (NS) at Project South Access (EW)

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: A[ 8.9]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module:

Table with 12 columns representing traffic flows. Rows include Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume.

Critical Gap Module:

Table with 12 columns. Rows include Critical Gp and FollowUpTim.

Capacity Module:

Table with 12 columns. Rows include Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module:

Table with 12 columns. Rows include 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Existing Plus Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Redwood Avenue (NS) at Hunter Street (EW)

Average Delay (sec/veh): 2.9 Worst Case Level Of Service: B[ 10.5]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module:

Table with 13 columns representing different traffic metrics and 12 rows of data.

Critical Gap Module:

Table with 13 columns for gap and follow-up times and 2 rows of data.

Capacity Module:

Table with 13 columns for capacity metrics and 4 rows of data.

Level Of Service Module:

Table with 13 columns for LOS metrics and 10 rows of data.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Existing Plus Project
Evening Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #5 Redwood Avenue (NS) at Hunter Street (EW)
\*\*\*\*\*

Average Delay (sec/veh): 3.1 Worst Case Level Of Service: B[ 10.6]

\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module:

Table with 13 columns representing traffic volumes and adjustments for different movements and directions.

Critical Gap Module:

Table with 13 columns showing critical gap values and follow-up times for various movements.

Capacity Module:

Table with 13 columns showing conflict volumes, potential capacity, and volume-to-capacity ratios.

Level Of Service Module:

Table with 13 columns showing Level of Service (LOS) values for different queue types and movements.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project  
Existing Plus Project  
Morning Peak Hour

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #6 Redwood Avenue (NS) at Valley Boulevard (EW)  
\*\*\*\*\*

Cycle (sec): 85 Critical Vol./Cap.(X): 0.245  
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 18.3  
Optimal Cycle: OPTIMIZED 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			Protected			Protected											
Rights:	Include			Include			Include			Include											
Min. Green:	32	32	32	32	32	32	10	20	20	10	20	20									
Lanes:	0	1	0	0	1	0	0	1	0	0	1	1	0	2	0	1	1	0	2	0	1

Volume Module:

Base Vol:	20	5	10	63	4	46	35	460	36	4	534	28
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:	20	5	10	63	4	46	35	460	36	4	534	28
Added Vol:	0	0	0	1	0	5	15	0	0	0	0	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	5	10	64	4	51	50	460	36	4	534	31
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:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	21	5	10	67	4	53	52	481	38	4	559	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	5	10	67	4	53	52	481	38	4	559	32
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
FinalVolume:	21	5	10	67	4	53	52	481	38	4	559	32

Saturation Flow Module:

Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.81	0.19	1.00	0.94	0.06	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1375	344	1800	1605	100	1800	1700	3600	1800	1700	3600	1800

Capacity Analysis Module:

Vol/Sat:	0.02	0.02	0.01	0.04	0.04	0.03	0.03	0.13	0.02	0.00	0.16	0.02
Crit Moves:				****			****				****	
Green/Cycle:	0.38	0.38	0.38	0.38	0.38	0.38	0.12	0.37	0.37	0.18	0.44	0.44
Volume/Cap:	0.04	0.04	0.02	0.11	0.11	0.08	0.26	0.36	0.06	0.01	0.36	0.04
Delay/Veh:	16.8	16.8	16.6	17.3	17.3	17.1	34.8	19.7	17.3	28.4	16.2	13.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.8	16.8	16.6	17.3	17.3	17.1	34.8	19.7	17.3	28.4	16.2	13.8
LOS by Move:	B	B	B	B	B	B	C	B	B	C	B	B
HCM2kAvgQ:	0	0	0	1	1	1	2	5	1	0	5	0

\*\*\*\*\*  
Note: Queue reported is the number of cars per lane.  
\*\*\*\*\*

9988 Redwood Avenue Project
Existing Plus Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 Redwood Avenue (NS) at Valley Boulevard (EW)

Cycle (sec): 125 Critical Vol./Cap.(X): 0.380
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 18.3
Optimal Cycle: OPTIMIZED Level Of Service: B

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module table with 13 columns and 15 rows including Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module table with 13 columns and 4 rows including Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module table with 13 columns and 10 rows including Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.

**Opening Year (2017) With Ambient**

9988 Redwood Avenue Project
Opening Year (2017) With Ambient
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Redwood Avenue (NS) at Rosemary Drive (EW)

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: A[ 9.9]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module: Table with 12 columns representing different traffic movements and 10 rows of volume-related metrics like Base Vol, Growth Adj, etc.

Critical Gap Module: Table with 12 columns and 2 rows showing gap times and follow-up times.

Capacity Module: Table with 12 columns and 4 rows showing conflict volumes, potential capacity, and volume/capacity ratios.

Level Of Service Module: Table with 12 columns and 10 rows showing LOS metrics for different movements and approaches.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project  
 Opening Year (2017) With Ambient  
 Evening Peak Hour

Level Of Service Computation Report  
 2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*  
 Intersection #2 Redwood Avenue (NS) at Rosemary Drive (EW)  
 \*\*\*\*\*

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: A[ 9.9]  
 \*\*\*\*\*

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	1	0	0	0	0	0	0	0	0

Volume Module:

Base Vol:	0	123	24	7	92	0	0	0	0	17	0	14
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	128	25	7	96	0	0	0	0	18	0	15
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	128	25	7	96	0	0	0	0	18	0	15
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:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	0	146	28	8	109	0	0	0	0	20	0	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	146	28	8	109	0	0	0	0	20	0	17

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.5	4.0	3.3

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	174	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	286	286	160
Potent Cap.:	xxxx	xxxx	xxxxx	1415	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	709	627	890
Move Cap.:	xxxx	xxxx	xxxxx	1415	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	706	623	890
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	0.03	0.00	0.02

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx			
Control Del:	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx			
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	779	xxxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	0.1	xxxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	9.9	xxxxxx			
Shared LOS:	*	*	*	A	*	*	*	*	*	*	A	*			
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			9.9					
ApproachLOS:	*			*			*			A					

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Opening Year (2017) With Ambient
Morning Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #3 Redwood Avenue (NS) at Iris Drive (EW)
\*\*\*\*\*

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B [ 10.1]
\*\*\*\*\*

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and 3 rows: Movement (L-T-R), Control (Uncontrolled, Stop Sign), Rights (Include), Lanes (0-1).

Volume Module: Table with 12 columns for volume components (Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume) and 12 rows for different movements.

Critical Gap Module: Table with 12 columns for gap components (Critical Gp, FollowUpTim) and 12 rows for different movements.

Capacity Module: Table with 12 columns for capacity components (Cnflct Vol, Potent Cap., Move Cap., Volume/Cap) and 12 rows for different movements.

Level Of Service Module: Table with 12 columns for LOS components (2Way95thQ, Control Del, LOS by Move, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS) and 12 rows for different movements.

\*\*\*\*\*
Note: Queue reported is the number of cars per lane.
\*\*\*\*\*

9988 Redwood Avenue Project  
 Opening Year (2017) With Ambient  
 Evening Peak Hour

Level Of Service Computation Report  
 2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*  
 Intersection #3 Redwood Avenue (NS) at Iris Drive (EW)  
 \*\*\*\*\*

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: A[ 10.0]  
 \*\*\*\*\*

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	0	0	1	0	0	0	0	0	0	0	0

Volume Module:

Base Vol:	0	145	20	3	98	0	0	0	0	10	0	5
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	151	21	3	102	0	0	0	0	10	0	5
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	151	21	3	102	0	0	0	0	10	0	5
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	169	23	3	114	0	0	0	0	12	0	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	169	23	3	114	0	0	0	0	12	0	6

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.5	4.0	3.3

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	192	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	302	302	181
Potent Cap.:	xxxx	xxxx	xxxxx	1393	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	694	614	867
Move Cap.:	xxxx	xxxx	xxxxx	1393	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	693	613	867
Volume/Cap:	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	0.00	0.01

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT											
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	742	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	0.1	xxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxx	7.6	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	10.0	xxxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	A	*
ApproachDel:	xxxxxxx	10.0	xxxxxxx									
ApproachLOS:	*	*	*	A	*	*	*	*	*	A	*	*

\*\*\*\*\*  
 Note: Queue reported is the number of cars per lane.  
 \*\*\*\*\*

9988 Redwood Avenue Project
Opening Year (2017) With Ambient
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Redwood Avenue (NS) at Hunter Street (EW)

Average Delay (sec/veh): 3.1 Worst Case Level Of Service: B[ 10.3]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module table with 13 columns representing different traffic movements and 10 rows of volume-related metrics.

Critical Gap Module table with 13 columns and 2 rows showing gap times and critical gap values.

Capacity Module table with 13 columns and 4 rows showing capacity and volume/capacity ratios.

Level Of Service Module table with 13 columns and 10 rows showing delay, LOS, and approach delay.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project  
 Opening Year (2017) With Ambient  
 Evening Peak Hour

Level Of Service Computation Report  
 2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*  
 Intersection #5 Redwood Avenue (NS) at Hunter Street (EW)  
 \*\*\*\*\*

Average Delay (sec/veh): 3.3 Worst Case Level Of Service: B[ 10.5]  
 \*\*\*\*\*

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	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0

Volume Module:

Base Vol:	12	118	0	0	110	10	46	0	58	0	0	0
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	13	123	0	0	115	10	48	0	61	0	0	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:	13	123	0	0	115	10	48	0	61	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:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:	15	147	0	0	137	12	57	0	72	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	15	147	0	0	137	12	57	0	72	0	0	0

Critical Gap Module:

Critical Gp:	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.4	6.5	6.2	xxxxxx	xxxx	xxxxxx
FollowUpTim:	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.5	4.0	3.3	xxxxxx	xxxx	xxxxxx

Capacity Module:

Cnflct Vol:	149	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	320	320	143	xxxx	xxxx	xxxxxx
Potent Cap.:	1444	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	678	600	910	xxxx	xxxx	xxxxxx
Move Cap.:	1444	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	672	594	910	xxxx	xxxx	xxxxxx
Volume/Cap:	0.01	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	0.09	0.00	0.08	xxxx	xxxx	xxxxxx

Level Of Service Module:

2Way95thQ:	0.0	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx			
Control Del:	7.5	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx			
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	787	xxxxxx	xxxx	xxxx	xxxxxx			
SharedQueue:	0.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	0.6	xxxxxx	xxxxxx	xxxx	xxxxxx			
Shrd ConDel:	7.5	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	10.5	xxxxxx	xxxxxx	xxxx	xxxxxx			
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*			
ApproachDel:	xxxxxx			xxxxxx			10.5			xxxxxx					
ApproachLOS:	*			*			B			*					

\*\*\*\*\*  
 Note: Queue reported is the number of cars per lane.  
 \*\*\*\*\*

9988 Redwood Avenue Project
Opening Year (2017) With Ambient
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #6 Redwood Avenue (NS) at Valley Boulevard (EW)
\*\*\*\*\*

Cycle (sec): 90 Critical Vol./Cap. (X): 0.243
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 18.2
Optimal Cycle: OPTIMIZED Level Of Service: B
\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, etc.

Note: Queue reported is the number of cars per lane.
\*\*\*\*\*

9988 Redwood Avenue Project  
 Opening Year (2017) With Ambient  
 Evening Peak Hour

Level Of Service Computation Report  
 2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
 Intersection #6 Redwood Avenue (NS) at Valley Boulevard (EW)  
 \*\*\*\*\*

Cycle (sec): 130 Critical Vol./Cap.(X): 0.394  
 Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 18.2  
 Optimal Cycle: OPTIMIZED 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			Protected			Protected											
Rights:	Include			Include			Include			Include											
Min. Green:	32	32	32	32	32	32	10	20	20	10	20	20									
Lanes:	0	1	0	0	1	0	0	1	0	0	1	1	0	2	0	1	1	0	2	0	1

Volume Module:

Base Vol:	27	4	8	75	2	42	44	1066	23	2	423	52
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	28	4	8	78	2	44	46	1112	24	2	441	54
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:	28	4	8	78	2	44	46	1112	24	2	441	54
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:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	30	4	9	82	2	46	48	1169	25	2	464	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	4	9	82	2	46	48	1169	25	2	464	57
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
FinalVolume:	30	4	9	82	2	46	48	1169	25	2	464	57

Saturation Flow Module:

Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.88	0.12	1.00	0.98	0.02	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1491	221	1800	1658	44	1800	1700	3600	1800	1700	3600	1800

Capacity Analysis Module:

Vol/Sat:	0.02	0.02	0.00	0.05	0.05	0.03	0.03	0.32	0.01	0.00	0.13	0.03
Crit Moves:				****			****			****		
Green/Cycle:	0.25	0.25	0.25	0.25	0.25	0.25	0.24	0.63	0.63	0.08	0.47	0.47
Volume/Cap:	0.08	0.08	0.02	0.20	0.20	0.10	0.12	0.51	0.02	0.02	0.27	0.07
Delay/Veh:	37.8	37.8	37.1	39.1	39.1	38.0	39.2	13.3	9.0	55.5	20.9	18.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.8	37.8	37.1	39.1	39.1	38.0	39.2	13.3	9.0	55.5	20.9	18.8
LOS by Move:	D	D	D	D	D	D	D	B	A	E	C	B
HCM2kAvgQ:	1	1	0	3	3	1	2	13	0	0	5	1

\*\*\*\*\*  
 Note: Queue reported is the number of cars per lane.  
 \*\*\*\*\*

**Opening Year (2017) With Ambient and Project**

9988 Redwood Avenue Project
Opening Year (2017) With Ambient and Project
Morning Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Redwood Avenue (NS) at Project North Access (EW)

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: A[ 9.1]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module table with 12 columns and 11 rows including Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume.

Critical Gap Module table with 12 columns and 2 rows including Critical Gp and FollowUpTim.

Capacity Module table with 12 columns and 4 rows including Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module table with 12 columns and 10 rows including 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Opening Year (2017) With Ambient and Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Redwood Avenue (NS) at Project North Access (EW)

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: A[ 9.2]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module: Table with 12 columns for volume components like Base Vol, Growth Adj, Initial Bse, etc.

Critical Gap Module: Table with 12 columns for gap values and follow-up times.

Capacity Module: Table with 12 columns for capacity-related metrics like Cnflct Vol, Potent Cap., etc.

Level Of Service Module: Table with 12 columns for LOS metrics like 2Way95thQ, Control Del, etc.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Opening Year (2017) With Ambient and Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #2 Redwood Avenue (NS) at Rosemary Drive (EW)
\*\*\*\*\*

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: A[ 10.0]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module: Table with 12 columns representing different traffic movements and 10 rows of volume-related metrics like Base Vol, Growth Adj, etc.

Critical Gap Module: Table with 12 columns and 2 rows showing critical gap and follow-up time values.

Capacity Module: Table with 12 columns and 4 rows showing conflict volume, potential capacity, and volume/capacity ratios.

Level Of Service Module: Table with 12 columns and 10 rows showing delay, LOS, and queue length for different movements.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Opening Year (2017) With Ambient and Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Redwood Avenue (NS) at Rosemary Drive (EW)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: A[ 9.9]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module:

Table with 12 columns representing traffic volumes and adjustments. Rows include Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume.

Critical Gap Module:

Table with 12 columns for critical gap and follow-up time. Rows include Critical Gp and FollowUpTim.

Capacity Module:

Table with 12 columns for capacity metrics. Rows include Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module:

Table with 12 columns for level of service metrics. Rows include 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., Shared Queue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project  
 Opening Year (2017) With Ambient and Project  
 Morning Peak Hour

Level Of Service Computation Report  
 2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #3 Redwood Avenue (NS) at Iris Drive (EW)

\*\*\*\*\*

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: B [ 10.3]

\*\*\*\*\*

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	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0

Volume Module:

Base Vol:	0	82	5	1	103	0	0	0	0	16	0	1
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	86	5	1	107	0	0	0	0	17	0	1
Added Vol:	0	10	0	0	4	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	96	5	1	111	0	0	0	0	17	0	1
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:	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
PHF Volume:	0	134	7	1	156	0	0	0	0	23	0	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	134	7	1	156	0	0	0	0	23	0	1

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.5	4.0	3.3

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	141	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	296	296	137
Potent Cap.:	xxxx	xxxx	xxxxx	1455	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	699	619	917
Move Cap.:	xxxx	xxxx	xxxxx	1455	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	699	618	917
Volume/Cap:	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	0.00	0.00

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Control Del:	xxxxxx	xxxx	xxxxxx	7.5	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT											
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	709	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	0.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	0.1	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	7.5	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	10.3	xxxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxxx	10.3										
ApproachLOS:	*	*	*	*	*	*	*	*	*	B		

\*\*\*\*\*

Note: Queue reported is the number of cars per lane.

\*\*\*\*\*

9988 Redwood Avenue Project
Opening Year (2017) With Ambient and Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Redwood Avenue (NS) at Iris Drive (EW)

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: B[ 10.1]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module:

Table with 12 columns representing different traffic movements. Rows include Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume.

Critical Gap Module:

Table with 12 columns. Rows include Critical Gp and FollowUpTim.

Capacity Module:

Table with 12 columns. Rows include Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module:

Table with 12 columns. Rows include 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Opening Year (2017) With Ambient and Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Redwood Avenue (NS) at Project South Access (EW)

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: A[ 8.9]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Approach, Movement, Control, Rights, and Lanes.

Volume Module table with 12 columns representing different traffic movements and rows for Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and FinalVolume.

Critical Gap Module table with 12 columns and rows for Critical Gp and FollowUpTim.

Capacity Module table with 12 columns and rows for Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module table with 12 columns and rows for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Opening Year (2017) With Ambient and Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Redwood Avenue (NS) at Project South Access (EW)

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: A[ 8.9]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module:

Table with 12 columns representing traffic volumes and adjustment factors for various vehicle types and conditions.

Critical Gap Module:

Table with 12 columns showing critical gap and follow-up time values for different movements.

Capacity Module:

Table with 12 columns showing conflict volume, potential capacity, and volume-to-capacity ratios.

Level Of Service Module:

Table with 12 columns showing Level of Service (LOS) and delay values for different movements and approaches.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Opening Year (2017) With Ambient and Project
Morning Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #5 Redwood Avenue (NS) at Hunter Street (EW)

\*\*\*\*\*

Average Delay (sec/veh): 2.9 Worst Case Level Of Service: B[ 10.6]

\*\*\*\*\*

Table with 4 columns: Approach (North Bound, South Bound, East Bound, West Bound) and 3 rows: Movement, Control, Rights, Lanes.

Volume Module: Table with 13 columns for traffic volumes and 13 rows for various metrics like Base Vol, Growth Adj, Initial Bse, etc.

Critical Gap Module: Table with 13 columns for gap metrics and 2 rows for Critical Gp and FollowUpTim.

Capacity Module: Table with 13 columns for capacity metrics and 4 rows for Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module: Table with 13 columns for LOS metrics and 8 rows for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

\*\*\*\*\*

Note: Queue reported is the number of cars per lane.

\*\*\*\*\*

9988 Redwood Avenue Project
Opening Year (2017) With Ambient and Project
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Redwood Avenue (NS) at Hunter Street (EW)

Average Delay (sec/veh): 3.2 Worst Case Level Of Service: B[ 10.7]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module:

Table with 13 columns representing traffic volumes and adjustments for different movements and directions.

Critical Gap Module:

Table with 13 columns showing critical gap and follow-up times for various movements.

Capacity Module:

Table with 13 columns showing conflict volumes, potential capacity, and volume/capacity ratios.

Level Of Service Module:

Table with 13 columns showing Level of Service (LOS) for different movements and approaches.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Opening Year (2017) With Ambient and Project
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #6 Redwood Avenue (NS) at Valley Boulevard (EW)
\*\*\*\*\*

Cycle (sec): 90 Critical Vol./Cap.(X): 0.254
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 18.4
Optimal Cycle: OPTIMIZED Level Of Service: B
\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

Volume Module: Table with 13 columns representing different traffic volumes and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Saturation Flow Module: Table with 13 columns for Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns for Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, etc.

Note: Queue reported is the number of cars per lane.
\*\*\*\*\*

9988 Redwood Avenue Project  
 Opening Year (2017) With Ambient and Project  
 Evening Peak Hour

Level Of Service Computation Report  
 2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
 Intersection #6 Redwood Avenue (NS) at Valley Boulevard (EW)  
 \*\*\*\*\*

Cycle (sec): 130 Critical Vol./Cap.(X): 0.396  
 Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 18.5  
 Optimal Cycle: OPTIMIZED 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			Protected			Protected											
Rights:	Include			Include			Include			Include											
Min. Green:	32	32	32	32	32	32	10	20	20	10	20	20									
Lanes:	0	1	0	0	1	0	0	1	0	0	1	1	0	2	0	1	1	0	2	0	1

Volume Module:

Base Vol:	27	4	8	75	2	42	44	1066	23	2	423	52
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	28	4	8	78	2	44	46	1112	24	2	441	54
Added Vol:	0	0	0	3	0	16	6	0	0	0	0	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	28	4	8	81	2	60	52	1112	24	2	441	56
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:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	30	4	9	85	2	63	55	1169	25	2	464	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	4	9	85	2	63	55	1169	25	2	464	59
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
FinalVolume:	30	4	9	85	2	63	55	1169	25	2	464	59

Saturation Flow Module:

Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00	0.94	1.00	1.00
Lanes:	0.88	0.12	1.00	0.98	0.02	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1491	221	1800	1660	43	1800	1700	3600	1800	1700	3600	1800

Capacity Analysis Module:

Vol/Sat:	0.02	0.02	0.00	0.05	0.05	0.03	0.03	0.32	0.01	0.00	0.13	0.03
Crit Moves:				****			****			****		
Green/Cycle:	0.25	0.25	0.25	0.25	0.25	0.25	0.24	0.63	0.63	0.08	0.47	0.47
Volume/Cap:	0.08	0.08	0.02	0.21	0.21	0.14	0.14	0.51	0.02	0.02	0.27	0.07
Delay/Veh:	37.8	37.8	37.1	39.2	39.2	38.4	39.4	13.3	9.0	55.5	20.9	18.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.8	37.8	37.1	39.2	39.2	38.4	39.4	13.3	9.0	55.5	20.9	18.8
LOS by Move:	D	D	D	D	D	D	D	B	A	E	C	B
HCM2kAvgQ:	1	1	0	3	3	2	2	13	0	0	5	1

\*\*\*\*\*  
 Note: Queue reported is the number of cars per lane.  
 \*\*\*\*\*

**Opening Year (2017) With Ambient and Cumulative and Project**

9988 Redwood Avenue Project
Opening Year (2017) With Ambient and Project and Cumulative
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #1 Redwood Avenue (NS) at Project North Access (EW)
\*\*\*\*\*

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: A[ 9.1]
\*\*\*\*\*

Table with columns: Approach (North Bound, South Bound, East Bound, West Bound), Movement (L, T, R), Control (Uncontrolled, Stop Sign), Rights (Include), Lanes (0, 1, 0, 0, 0).

Volume Module: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume.

Critical Gap Module: Critical Gp, FollowUpTim.

Capacity Module: Cnflict Vol, Potent Cap., Move Cap., Volume/Cap.

Level Of Service Module: 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

\*\*\*\*\*
Note: Queue reported is the number of cars per lane.
\*\*\*\*\*

9988 Redwood Avenue Project
Opening Year (2017) With Ambient and Project and Cumulative
Evening Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #1 Redwood Avenue (NS) at Project North Access (EW)
\*\*\*\*\*

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: A[ 9.2]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module: Table with 13 columns for traffic flow metrics. Rows include Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and FinalVolume.

Critical Gap Module: Table with 13 columns for gap metrics. Rows include Critical Gp and FollowUpTim.

Capacity Module: Table with 13 columns for capacity metrics. Rows include Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module: Table with 13 columns for LOS metrics. Rows include 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.
\*\*\*\*\*

9988 Redwood Avenue Project  
 Opening Year (2017) With Ambient and Project and Cumulative  
 Morning Peak Hour

Level Of Service Computation Report  
 2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*  
 Intersection #2 Redwood Avenue (NS) at Rosemary Drive (EW)  
 \*\*\*\*\*

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: A[ 10.0]  
 \*\*\*\*\*

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	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0

Volume Module:

Base Vol:	0	64	15	3	92	0	0	0	0	13	0	2
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	67	16	3	96	0	0	0	0	14	0	2
Added Vol:	0	10	0	0	4	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	77	16	3	100	0	0	0	0	14	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:	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
PHF Volume:	0	109	22	4	142	0	0	0	0	19	0	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	109	22	4	142	0	0	0	0	19	0	3

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	131	xxxx	xxxxx	xxxx	xxxx	xxxxx	270	270	120
Potent Cap.:	xxxx	xxxx	xxxxx	1467	xxxx	xxxxx	xxxx	xxxx	xxxxx	723	640	937
Move Cap.:	xxxx	xxxx	xxxxx	1467	xxxx	xxxxx	xxxx	xxxx	xxxxx	722	638	937
Volume/Cap:	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	0.00	0.00

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	745	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.0	xxxxx			
Shared LOS:	*	*	*	A	*	*	*	*	*	*	A	*			
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			10.0					
ApproachLOS:	*			*			*			A					

\*\*\*\*\*  
 Note: Queue reported is the number of cars per lane.  
 \*\*\*\*\*

9988 Redwood Avenue Project
Opening Year (2017) With Ambient and Project and Cumulative
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Redwood Avenue (NS) at Rosemary Drive (EW)

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: A[ 9.9]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module: Table with 12 columns for volume and adjustment factors. Rows include Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, and Final Volume.

Critical Gap Module: Table with 6 columns for gap and timing. Rows include Critical Gp and FollowUpTim.

Capacity Module: Table with 6 columns for capacity and volume. Rows include Cnflct Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module: Table with 12 columns for LOS and delay. Rows include 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, and ApproachLOS.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Opening Year (2017) With Ambient and Project and Cumulative
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 Redwood Avenue (NS) at Iris Drive (EW)

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: B [ 10.3]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module table with 12 columns for traffic volumes and 12 rows for various volume metrics like Base Vol, Growth Adj, etc.

Critical Gap Module table with 12 columns for gap metrics and 2 rows for Critical Gap and FollowUpTim.

Capacity Module table with 12 columns for capacity metrics and 4 rows for Conflict Vol, Potent Cap., Move Cap., and Volume/Cap.

Level Of Service Module table with 12 columns for LOS metrics and 10 rows for various LOS-related parameters.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project  
 Opening Year (2017) With Ambient and Project and Cumulative  
 Evening Peak Hour

Level Of Service Computation Report  
 2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*  
 Intersection #3 Redwood Avenue (NS) at Iris Drive (EW)  
 \*\*\*\*\*

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: B[ 10.1]  
 \*\*\*\*\*

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	1	0	0	0	0	0	0	0	0

Volume Module:

Base Vol:	0	145	20	3	98	0	0	0	0	10	0	5
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	0	151	21	3	102	0	0	0	0	10	0	5
Added Vol:	0	5	0	0	10	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	156	21	3	112	0	0	0	0	10	0	5
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:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	175	23	3	125	0	0	0	0	12	0	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	175	23	3	125	0	0	0	0	12	0	6

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxxx	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.5	4.0	3.3

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxxx	198	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	319	319	186
Potent Cap.:	xxxx	xxxx	xxxxxx	1387	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	679	601	861
Move Cap.:	xxxx	xxxx	xxxxxx	1387	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	678	600	861
Volume/Cap:	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	0.00	0.01

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxxx	0.0	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Control Del:	xxxxxx	xxxx	xxxxxx	7.6	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT											
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	729	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	0.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	0.1	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	7.6	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	10.1	xxxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx	10.1	xxxxxx									
ApproachLOS:	*	*	*	*	*	*	*	*	*	B	*	

\*\*\*\*\*  
 Note: Queue reported is the number of cars per lane.  
 \*\*\*\*\*

9988 Redwood Avenue Project
Opening Year (2017) With Ambient and Project and Cumulative
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #4 Redwood Avenue (NS) at Project South Access (EW)
\*\*\*\*\*
Average Delay (sec/veh): 0.4 Worst Case Level Of Service: A[ 8.9]
\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module: Table with 12 columns for volume components (Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume) across four directions.

Critical Gap Module: Table with 12 columns for critical gap and follow-up time across four directions.

Capacity Module: Table with 12 columns for capacity components (Conflict Vol, Potent Cap., Move Cap., Volume/Cap) across four directions.

Level Of Service Module: Table with 12 columns for LOS components (2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS) across four directions.

Note: Queue reported is the number of cars per lane.

9988 Redwood Avenue Project
Opening Year (2017) With Ambient and Project and Cumulative
Evening Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #4 Redwood Avenue (NS) at Project South Access (EW)

\*\*\*\*\*

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: A[ 8.9]

\*\*\*\*\*

Table with columns: Approach, Movement, Control, Rights, Lanes. Rows: North Bound, South Bound, East Bound, West Bound. Sub-rows: L, T, R.

Volume Module:

Table with columns: Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, FinalVolume. Rows: North Bound, South Bound, East Bound, West Bound.

Critical Gap Module:

Table with columns: Critical Gp, FollowUpTim. Rows: North Bound, South Bound, East Bound, West Bound.

Capacity Module:

Table with columns: Cnflct Vol, Potent Cap., Move Cap., Volume/Cap. Rows: North Bound, South Bound, East Bound, West Bound.

Level Of Service Module:

Table with columns: 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS. Rows: North Bound, South Bound, East Bound, West Bound.

\*\*\*\*\*

Note: Queue reported is the number of cars per lane.

\*\*\*\*\*

9988 Redwood Avenue Project  
 Opening Year (2017) With Ambient and Project and Cumulative  
 Morning Peak Hour

Level Of Service Computation Report  
 2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*  
 Intersection #5 Redwood Avenue (NS) at Hunter Street (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:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	1	0	0	0	1	0	0	1	0	0	0

Volume Module:

Base Vol:	5	47	0	0	99	15	42	0	25	0	0	0
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	5	49	0	0	103	16	44	0	26	0	0	0
Added Vol:	0	19	0	0	6	0	1	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	68	0	0	109	16	45	0	26	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:	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
PHF Volume:	8	102	0	0	165	24	67	0	39	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	8	102	0	0	165	24	67	0	39	0	0	0

Critical Gap Module:

Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflict Vol:	188	xxxx	xxxxx	xxxxx	xxxx	xxxxx	295	295	176	xxxx	xxxx	xxxxx
Potent Cap.:	1398	xxxx	xxxxx	xxxxx	xxxx	xxxxx	701	620	872	xxxx	xxxx	xxxxx
Move Cap.:	1398	xxxx	xxxxx	xxxxx	xxxx	xxxxx	698	617	872	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.10	0.00	0.05	xxxx	xxxx	xxxxx

Level Of Service Module:

2Way95thQ:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Control Del:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxx	753	xxxxx	xxxx	xxxx	xxxxx			
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx			
Shrd ConDel:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.6	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*			
ApproachDel:	xxxxxx			xxxxxx			10.6			xxxxxx					
ApproachLOS:	*			*			B			*					

\*\*\*\*\*  
 Note: Queue reported is the number of cars per lane.  
 \*\*\*\*\*

9988 Redwood Avenue Project  
 Opening Year (2017) With Ambient and Project and Cumulative  
 Evening Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #5 Redwood Avenue (NS) at Hunter Street (EW)

\*\*\*\*\*  
Average Delay (sec/veh): 3.2 Worst Case Level Of Service: B[ 10.7]  
\*\*\*\*\*

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	0	0	0	0	0	0	1	0	0	0	0	0	0	0

Volume Module:

Base Vol:	12	118	0	0	110	10	46	0	58	0	0	0
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	13	123	0	0	115	10	48	0	61	0	0	0
Added Vol:	0	7	0	0	19	1	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	13	130	0	0	134	11	48	0	61	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:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:	15	155	0	0	160	14	57	0	72	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	15	155	0	0	160	14	57	0	72	0	0	0

Critical Gap Module:

Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx

Capacity Module:

Cnflct Vol:	173	xxxx	xxxxx	xxxx	xxxx	xxxxx	352	352	166	xxxx	xxxx	xxxxx
Potent Cap.:	1416	xxxx	xxxxx	xxxx	xxxx	xxxxx	650	576	883	xxxx	xxxx	xxxxx
Move Cap.:	1416	xxxx	xxxxx	xxxx	xxxx	xxxxx	645	570	883	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.09	0.00	0.08	xxxx	xxxx	xxxxx

Level Of Service Module:

2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT											
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	759	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.7	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			10.7			xxxxxx		
ApproachLOS:	*			*			B			*		

\*\*\*\*\*  
Note: Queue reported is the number of cars per lane.  
\*\*\*\*\*

9988 Redwood Avenue Project
Opening Year (2017) With Ambient and Project and Cumulative
Morning Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*

Intersection #6 Redwood Avenue (NS) at Valley Boulevard (EW)

\*\*\*\*\*

Cycle (sec): 90 Critical Vol./Cap. (X): 0.255

Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 18.5

Optimal Cycle: OPTIMIZED Level Of Service: B

\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, Min. Green, and Lanes.

-----|-----|-----|-----|

Volume Module:

Table with 13 columns representing different traffic volumes and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

-----|-----|-----|-----|

Saturation Flow Module:

Table with 13 columns for saturation flow metrics: Sat/Lane, Adjustment, Lanes, Final Sat., etc.

-----|-----|-----|-----|

Capacity Analysis Module:

Table with 13 columns for capacity analysis metrics: Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, etc.

\*\*\*\*\*

Note: Queue reported is the number of cars per lane.

\*\*\*\*\*

9988 Redwood Avenue Project
Opening Year (2017) With Ambient and Project and Cumulative
Evening Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*
Intersection #6 Redwood Avenue (NS) at Valley Boulevard (EW)
\*\*\*\*\*

Cycle (sec): 130 Critical Vol./Cap.(X): 0.399
Loss Time (sec): 6 (Y+R=3.0 sec) Average Delay (sec/veh): 18.6
Optimal Cycle: OPTIMIZED Level Of Service: B
\*\*\*\*\*

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement (L-T-R), Control (Permitted/Protected), Rights (Include), Min. Green, and Lanes.

Volume Module: Table with 13 columns representing different traffic movements. Rows include Base Vol, Growth Adj, Initial Bse, Added Vol, PasserByVol, Initial Fut, User Adj, PHF Adj, PHF Volume, Reduct Vol, Reduced Vol, PCE Adj, MLF Adj, and Final Volume.

Saturation Flow Module: Table with 13 columns. Rows include Sat/Lane, Adjustment, Lanes, and Final Sat.

Capacity Analysis Module: Table with 13 columns. Rows include Vol/Sat, Crit Moves, Green/Cycle, Volume/Cap, Delay/Veh, User DelAdj, AdjDel/Veh, LOS by Move, and HCM2kAvgQ.

Note: Queue reported is the number of cars per lane.



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**PHASE I ENVIRONMENTAL SITE ASSESSMENT**

Kallisto Greenhouses  
9988 Redwood Avenue  
Fontana, San Bernardino County, California 92335

**Prepared For:**

Carlyle Investment Management, LLC  
1001 Pennsylvania Avenue, N.W.  
Washington, D.C. 20004

**Prepared By:**

Blackstone Consulting LLC  
Project No. CARLDC034.01

**January 13, 2015**

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## EXECUTIVE SUMMARY

Blackstone Consulting LLC (Blackstone) performed a Phase I Environmental Site Assessment (Phase I ESA) of the Kallisto Greenhouses located at 9988 Redwood Avenue in Fontana, San Bernardino County, California (site). It is understood that the site is planned for acquisition. The purpose of the Phase I ESA is to identify recognized environmental conditions (RECs) in accordance with ASTM Standard E 1527-13 and other agreed-upon ASTM *Non-Scope Considerations (Business Environmental Risk Issues)*.

### SITE INSPECTION

**Name of Inspector:** Allan S. Coffee  
**Date of Inspection:** December 18, 2014  
**Site Representative:** Mr. James Rietkerk, Manager and Owner Representative

### SITE DESCRIPTION

**Street Address:** 9988 Redwood Avenue  
**City and State:** Fontana, California  
**Legal Description:** San Bernardino County Assessor's Parcel Number: 0234-101-21-0000  
**Owner(s):** R. Rietkerk and Kathryne D. Rietkerk, Trustees of the Rietkerk Family Trust  
**Site Size:** Approximately 9.89 acres  
**Site Use:** The site is used as a commercial nursery for potted plants, and is developed with a large greenhouse which covers the majority of the property. The greenhouse is divided into multiple sections, which are climate controlled based on the type of plant in each area. All of the plants are potted and are located on the gravel-covered ground surface, on racks or in hanging overhead planters.  
**Year(s) Built:** 1977-2005

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<b>Structure(s)</b>	<b>Location On Site</b>	<b>Number of Stories</b>	<b>Size (approx. square feet)</b>
<i>Site Building</i>	Throughout	One	257,000

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**Other Site Features:** Asphalt, gravel-covered and unpaved areas surround the greenhouse on the site. An exterior plant sales area is located on the eastern exterior of the site building along Redwood Avenue. The unpaved northern and western portions of the site include empty racks for potted plants and palm trees in larger pots on the ground. An asphalt-paved area on the southwestern portion of the site includes a dry storage area used to store and segregate soil, gravel and other solid materials. A scrap pile containing metal and plastic piping, plant rack and other materials also is located in the southwestern corner of the site. A shipping and receiving area is located within the southern portion of the site building. A retail sales area is located in the southeastern area of the site building.

A portable container located on the northern perimeter of the site is used for the storage of pesticides and fertilizers, and includes a roof vent and appropriate warning signage. The site is equipped with a diesel-fired emergency generator.

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## HISTORICAL INFORMATION

Reasonably ascertainable historical information indicates the site consisted of an orchard with a residence and outbuilding located in the southeastern corner of the site as early as 1938. The agricultural use of the site ceased by 1953, and the residential structures were removed from the site by 1966. The site was comprised of vacant grass-covered land traversed by several dirt pathways from at least 1953 until the site was developed with a commercial nursery in 1976. By 1977, the initial section of the present-day greenhouse was developed on the northeastern portion of the site. The greenhouse was expanded in multiple phases, and was completed in its current configuration in 2005. The site has been utilized by Kallisto Greenhouses since 1976 as a commercial potted plant nursery.

The historical agricultural use of the site (orchards from at least the late 1930s until the 1950s) and the present-day commercial nursery operation may have involved the use of pesticides and/or herbicides, as well as fertilizers. Based on the review of historic aerial photographs and topographic maps, no evidence of significant historical pesticide storage buildings was identified at the site during the existence of the orchard. In addition, based on the historical records reviewed and interviews with the Site Representative, the nursery operations utilize minimal quantities of fertilizers and pesticides. Therefore, it is unlikely that large-scale preparation or storage of herbicides and/or pesticides occurred at the site. Moreover, evidence of spills or releases of hazardous materials has not been identified in association with the agricultural activities on the site or within the study area during the course of this assessment. Based on this information, the current and historic agricultural operations on the site are not considered a REC.

The adjoining properties historically consisted of agricultural land from at least 1938, with scattered residential development initiated in the area in the 1950s. The present-day adjoining

single-family residential properties were developed to the east and west by the mid-1950s, and the south adjoining residences were constructed in the 1960s. The eastern portion of the north adjoining property was agricultural land until developed with a single-family dwelling and greenhouses by 1953, which remained into the 1980s. The entire north adjoining property was razed in the mid-2000s and developed with the present-day multi-tenant commercial/light industrial center in 2005-2006.

Blackstone performed a Phase I ESA of the site in conformance with the scope and limitations of ASTM Standard Practice E 1527-13, the regulations at 40 CFR Part 312, and the March 3, 2011 Master Environmental Consulting Agreement between Carlyle Investment Management, LLC and Blackstone. Any exceptions to or deletions from this practice are described in Sections 1.2 through 1.4 of this report. This assessment has revealed no evidence of *recognized environmental conditions* (RECs) in connection with the site.

The following *Business Environmental Risk Issues* were identified in connection with the site:

- **Soil Management Plan:** No evidence of significant agricultural chemical storage, mixing or usage was identified on the site, and no releases or spills have been reported. However, based on the duration of the site use for above ground agricultural purposes, there is a potential for *de minimis* surficial soil impact in isolated locations at the site. Therefore, if soil excavation and export are required during site redevelopment, Blackstone recommends that a Soil Management Plan be prepared for the site to properly characterize and manage potentially impacted soils.
- **Septic Systems:** Septic systems were identified on the northern and southern sides of the site building. As the septic systems historically have been utilized for sanitary waste treatment only, the septic systems are not considered a REC. However, Blackstone recommends that the septic systems be properly closed during demolition.
- **Asbestos-Containing Materials (ACMs):** Blackstone conducted a limited visual survey for the presence of typically suspect ACM at the site. However, based on the initial construction date of the site building (1977), the presence of regulated asbestos is possible. Prior to demolition activities at the site, sampling of the specific materials to be disturbed will be necessary to satisfy National Emissions Standards for Hazardous Air Pollutants (NESHAPs) and state and local regulations. Furthermore, all regulated ACM must be handled in accordance with applicable regulations. These regulations may include removal of certain ACMs prior to demolition activities.
- **Lead-Based Paint (LBP):** Based on the initial construction date of the site building (1977), there is a potential for the presence of LBP at the site. As the site building is proposed to be demolished to facilitate redevelopment of the site, applicable federal, state, and local LBP regulations should be adhered to during demolition. These regulations do not typically require sampling, but rather agreement to use of proper dust suppression techniques during demolition as commonly stipulated in building demolition permits and demolition air quality control permits. Should the selected solid waste disposal facility or recycling facility require analyzing suspected LBP debris via

the toxicity characteristics leaching procedure (TCLP), the actual building materials designated for that facility will require analysis at that time.

This section is only intended to represent a brief summary of our findings, and is not a detailed account of all the information provided in this report. The report should be reviewed in its entirety prior to drawing any final conclusions as to potential environmental conditions associated with the site.

## 1.0 INTRODUCTION

### 1.1 PURPOSE

Blackstone Consulting LLC (Blackstone) performed a Phase I Environmental Site Assessment (Phase I ESA) of the Kallisto Greenhouses located at 9988 Redwood Avenue in Fontana, San Bernardino County, California (site).

The purpose of this Phase I ESA is to investigate and identify *recognized environmental conditions (RECs)* associated with the site and/or surrounding properties. ASTM Standard Practice E 1527-13 defines RECs as:

*The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property due to any release to the environment, under conditions indicative of a release to the environment, or under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.*

A *de minimis condition* is a condition that generally does not present a threat to human health or the *environment* and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

Additionally, this Phase I ESA was conducted to identify *controlled recognized environmental conditions (CRECs)* associated with the site and/or surrounding properties. ASTM Standard Practice E 1527-13 defines CRECs as:

*A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).*

This Phase I ESA also was conducted to identify *historical recognized environmental conditions (HRECs)* associated with the site and/or surrounding properties. ASTM Standard Practice E 1527-13 defines HRECs 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 (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).*

This practice is generally intended for the User to satisfy one of the requirements to qualify for the *innocent landowner, contiguous property owner, or bona fide prospective purchaser* limitations on CERCLA liability; that is, this practice constitutes all appropriate inquiries (AAI) into the

previous ownership and uses of the site consistent with good commercial or customary practice as defined at 42 U.S.C. §9601(35)(B) and the regulations at 40 CFR Part 312.

ASTM *Non-Scope Considerations (Business Environmental Risk Issues)* are detailed in Section 1.3 and outlined in the accepted scope detailed in the March 3, 2011 Master Environmental Consulting Agreement (Agreement) between Carlyle Investment Management, LLC (Carlyle) and Blackstone.

## 1.2 SPECIAL TERMS AND CONDITIONS

This Phase I ESA has been conducted in accordance with ASTM Standard Practice E 1527-13, the regulations at 40 CFR Part 312, and the Agreement between Carlyle and Blackstone. Qualifications of the professionals conducting this assessment have been provided in Appendix F.

Blackstone performed the professional services, obtained findings, rendered conclusions, and prepared recommendations in accordance with generally accepted practices of other environmental consultants undertaking similar assessments at the same time in the same geographical area.

Historical and environmental information pertaining to the site has been included in this report to the extent that such information is *practically reviewable*, as defined in the above-referenced standard practice.

## 1.3 SCOPE OF SERVICES

As detailed in the Agreement, this Phase I ESA was conducted in accordance with the industry standard ASTM Standard Practice E 1527-13 and as such in accordance with all appropriate inquiries (AAI) into the previous ownership and uses of the site consistent with good commercial or customary practice as defined at 42 U.S.C. §9601(35)(B) and the regulations at 40 CFR Part 312. This Phase I ESA included the following services:

1. A site inspection to identify and evaluate potential sources of RECs such as underground storage tanks (USTs), aboveground storage tanks (ASTs), equipment containing polychlorinated biphenyls (PCBs), waste and chemical storage areas, and wastewater and stormwater discharges. The inspection included observations for evidence of chemical spills, releases, or on site waste disposal.
2. A review of site records and interviews with site representatives with regard to current and former site operations to identify known or potential environmental concerns.
3. A visual survey of the properties in the vicinity of the site to evaluate the potential for RECs at the site from these properties.

4. A review of historical information to identify RECs at the site from historic on-site and off-site uses. To the extent feasible under the conditions of the assessment, the historical information obtained included verbal information from site and/or local agency representatives. In addition, some or all of the following records, where *publicly available* and *practically reviewable*, were reviewed: construction plans, zoning maps, building permits, property record cards, topographic maps, fire insurance maps, historical city directories, and aerial photographs.
5. A review of State and Federal environmental database information.

Blackstone also performed the following activities to identify ASTM *Non-Scope Considerations (Business Environmental Risk Issues)* in addition to the ASTM requirements and as required per the Agreement:

Document research, visual and/or sampling surveys, and interviews for the presence of:

- Air Emissions,
- Asbestos-containing materials (ACM),
- Lead-based paint (LBP),
- Radon,
- Apparent Mold Growth (AMG),
- Wetlands,
- Lead in Drinking Water,
- Endangered Species, and
- Cultural and Archeological Resources of Historical Significance.

The scope of this Phase I ESA did not include surface water, soil, soil vapor, or groundwater sampling. Consequently, conclusions provided with regard to surface water, soil, soil vapor, and groundwater impacts are limited to those that can be formed based on a non-intrusive investigation. The absence of environmental hazards in the subsurface cannot be guaranteed based on conditions observed on the surface.

Where performed, the limited ACM, LBP, AMG, and radon surveys are intended to provide an indication of the potential for significant environmental issues associated with these ASTM *Non-Scope Considerations (Business Environmental Risk Issues)*. Hidden materials or locations such as those inside walls, inaccessible attics, crawl spaces, and inside ductwork and piping were not evaluated. As such, these surveys should not be regarded as comprehensive surveys for demolition or renovation purposes or indoor air quality health risk assessments, vapor intrusion into buildings, or explosion hazards.

#### 1.4 SIGNIFICANT ASSUMPTIONS AND DATA GAPS

The site inspection consisted of a walkover of the site perimeter and exterior site areas, and a walk-through of the greenhouse, storage areas, mechanical areas and exterior portions of the site. Blackstone walked the perimeter of the site in a single pass. Building interiors were walked through at the direction of the Site Representative. Not all interior building areas were

observed. Furthermore, during the site inspection, Blackstone did not inspect inaccessible areas of the site including under stored materials, potted plants, plant racks or parked vehicles. The adjoining properties were visually observed from curbside without being entered. There is no reason to believe the inability to inspect these areas would alter the findings or recommendations set forth in this report or be considered a significant data gap.

The historical information reviewed for the site did not confirm the first developed use of the site. *Data failure*, as defined by ASTM, has occurred in attempting to identify obvious uses of the site back to the first developed use, or back to 1940, whichever is earlier. Useful information regarding the use of the site prior to 1938 was not available from the *standard historical sources* (including available aerial photographs, fire insurance maps, property tax files, recorded land title records, USGS topographic maps, local street directories, building department records, or zoning/land use records). There were no other reasonably ascertainable historical sources available for review that was considered sufficiently useful. It is the opinion of Blackstone that the data failure does not represent a significant data gap that impacts our ability to identify RECs.

Conclusions stated herein are based upon publicly available information and other documented sources. Blackstone has assumed, where reasonable, that the information reviewed is true and accurate. Blackstone assumes no responsibility for inaccurate information that is not otherwise obvious in light of information of which Blackstone has actual knowledge. Blackstone's site observations are of the conditions observed at the time of the assessment.

Blackstone reviewed an environmental database search report. Blackstone's conclusions based on the search report are limited to the accuracy of that report. To the extent possible, Blackstone's field observations are used to verify the information or identify errors and inconsistencies in the search report regarding the listed facilities in the immediate vicinity of the site.

This report provides an estimation of groundwater flow direction at the site based on visual observations and topographical data. This assessment did not include groundwater sampling and water table elevation measurement. True groundwater flow direction can only be determined through direct measurement of groundwater elevations from properly installed on-site groundwater monitoring wells. The groundwater flow direction estimation should not be considered a true measurement of groundwater flow direction.

## 2.0 USER PROVIDED INFORMATION

As defined under ASTM Standard Practice E 1527-13, Carlyle Investment Management, LLC (Carlyle) is considered the “User” of this Phase I ESA report. To qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2002 (the “*Brownfields Amendments*”), the User must provide certain information based on their relationship to the purpose of the due diligence and as required by 40 CFR 312.25, 312.28, 312.29, 312.30, and 312.31.

As part of this Phase I ESA, Blackstone requested certain information from the User. A copy of the User Questionnaire is provided in Appendix E. The information requested and associated responses are outlined below in Sections 2.2 through 2.4.

In addition, the owner’s representative, Mr. James Rietkerk, Manager and Owner Representative (“Site Representative”), provided information about the site. The information requested and associated responses are outlined below in Section 2.5.

### 2.1 REASON FOR PERFORMING THE PHASE I ESA

Blackstone understands that this assessment was performed for Carlyle as the potential purchaser of the site. As such, this Phase I ESA was conducted in an effort to qualify for the *innocent landowner, contiguous property owner, and bona fide prospective purchaser* defense to CERCLA liability and performed as an appropriate risk management and due diligence standard for real estate transactions in accordance with general industry standards which include ASTM Standard E 1527-13 and the regulations at 40 CFR Part 312.

### 2.2 ENVIRONMENTAL LIENS AND ACTIVITY USE AND LIMITATIONS (AULS)

With reference to environmental liens that are filed or recorded against the site (40 CFR 312.25) in recorded land title records or judicial records, it is unknown to the User if there are any environmental liens against the site that are filed or recorded under federal, tribal, state or local law.

With reference to activity and use limitations (AULs) that are in place on the site or that have been filed or recorded against the site (40 CFR 312.26(a)(1)(v) and (vi)) in recorded land title records or judicial records, it is unknown to the User if there are any AULs, such as *engineering controls*, land use restrictions or *institutional controls* that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law.

In addition, the User requested Blackstone to perform an environmental lien and AUL search as part of the scope of work. Refer to Section 6.6 for a discussion of the environmental lien and AUL search.

### **2.3 SPECIALIZED KNOWLEDGE, COMMONLY KNOWN & DEGREE OF OBVIOUSNESS**

With reference to specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28), it the User had no specialized knowledge or experience related to the site or nearby properties.

With reference to commonly known or *reasonably ascertainable* information about the site (40 CFR 312.30), it is unknown to the User if any commonly known or *reasonably ascertainable* information exists about the site that would help the *environmental professional* to identify conditions indicative of releases or threatened releases, such as:

1. Past uses of the site;
2. Specific chemicals that are present or once were present at the site;
3. Spills or other chemical releases that have taken place at the site; and
4. Environmental cleanups that have taken place at the site.

With reference to the degree of obviousness of the presence or likely presence of releases or threatened releases at the site, and the ability to detect releases or threatened releases by appropriate investigation (40 CFR 312.31), it is unknown to the User if any *obvious* indicators that point to the presence or likely presence of releases exist at the site.

### **2.4 VALUE REDUCTION FOR ENVIRONMENTAL ISSUES**

With reference to relationship of the purchase price to the fair market value of the site if it were not contaminated (40 CFR 312.29), it is unknown to the User if the purchase price of the site reasonably reflects the fair market value of the site, or has been reduced due to contamination known or believed to be present at the site.

### **2.5 OWNER, KEY SITE MANAGER, AND OCCUPANT INFORMATION**

Blackstone interviewed the Site Representative (also Key Site Manager) regarding environmental conditions at the site. This individual was not aware of: (1) pending, threatened, or past litigation relevant to environmental conditions on the site; (2) any pending, threatened, or past administrative proceedings relevant to environmental conditions in, on, or from the site; and (3) any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to environmental conditions on the site.

Representatives of the site/building occupants/operators were available for interview during this Phase I ESA. Information obtained from interviews with the building occupants/operators has been summarized within various sections of this report.

## 2.6 PAST OWNERS, OPERATORS AND OCCUPANT INTERVIEWS

In accordance with ASTM Standard Practice E 1527-13, interviews with past owners, operators, and occupants shall be conducted to the extent that they have been identified and that the information likely to be obtained is not duplicative of information already obtained. There is no reason to believe that such interviews were necessary for this site or would alter the findings or recommendations set forth in this report.

## 2.7 RELIANCE

This report may be relied upon by The Carlyle Group, L.P., Carlyle Investment Management, L.L.C., Carlyle Realty VII, L.P. and their investors, joint ventures, affiliates, lenders and assigns subject to the terms and conditions of the Agreement between Carlyle and Blackstone. No other person may rely on this report without written authorization from Blackstone and Carlyle. If any of the above limitations conflict with the Agreement, the Agreement governs.

### 3.0 SITE DESCRIPTION

The site is located at 9988 Redwood Avenue in Fontana, San Bernardino County, California. A Site Location Map, depicted on the U.S. Geological Survey (USGS) *Fontana, California* topographic quadrangle, is included in Appendix A.

#### 3.1 SITE CHARACTERISTICS AND FEATURES

**Street Address:** 9988 Redwood Avenue

**City and State:** Fontana, California

**Legal Description:** San Bernardino County Assessor’s Parcel Number: 0234-101-21-0000

**Owner(s):** R. Rietkerk and Kathryne D. Rietkerk, Trustees of the Rietkerk Family Trust

**Site Size:** Approximately 9.89 acres

**Zoning:** M-1 Light Industrial

**Site Use:** The site is used as a commercial nursery for potted plants, and is developed with a large greenhouse which covers the majority of the property. The greenhouse is divided into multiple sections, which are climate controlled based on the type of plant in each area. All of the plants are potted and are located on the gravel-covered ground surface, on racks or in hanging overhead planters.

**Year(s) Built:** 1977-2005

<b>Structure(s)</b>	<b>Location On Site</b>	<b>Number of Stories</b>	<b>Size (approx. square feet)</b>
<i>Site Building</i>	Throughout	One	257,00

#### **Construction Materials**

*Site Building* The site building is constructed of structural steel framing with corrugated metal and fiberglass walls, and a gravel-covered earthen floor.

**Heating/Cooling Systems:** The mechanical systems consist of individual evaporative coolers and air conditioners, and natural gas-fired overhead heaters. Several abandoned gas fired boilers are located in the mechanical area of the greenhouse.

**Other Site Features:** Asphalt, gravel-covered and unpaved areas surround the greenhouse on the site. An exterior plant sales area is located on the eastern exterior of the site building along Redwood Avenue. The unpaved northern and western portions of the site include empty racks for potted plants and palm trees in larger pots on the ground. An asphalt-paved area on the southwestern portion of the site includes a dry storage area used to store and segregate soil, gravel and other solid materials. A scrap pile containing metal and plastic piping, plant rack and other materials also is located in the southwestern corner of the site. A shipping and receiving area is located within the southern portion of the site building. A retail sales area is located in the southeastern area of the site building.

A portable container located on the northern perimeter of the site is used for the storage of pesticides and fertilizers, and includes a roof vent and appropriate warning signage. The site is equipped with a diesel-fired emergency generator.

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A Site Plan and Site Photographs are provided in Appendix A.

### 3.2 UTILITIES

**Electricity Provider:** Southern California Edison (SCE)

**Natural Gas Provider:** The Gas Company

**Potable Water:** City of Fontana Department of Public Works

**Sewer Services:** City of Fontana Department of Public Works

According to the Site Representative and records reviewed, the present-day site building has been connected to the municipal system for potable water supply since initial construction was completed in 1977. The site is equipped with two septic systems which are located on the northern and southern sides of the site building. As the septic systems historically have been utilized for sanitary waste treatment only, the septic systems are not considered a REC. However, Blackstone recommends that the septic systems be properly closed during demolition.

A residence was located on the site from at least 1938 through 1953. It is possible that the historical single-family residence utilized septic systems and/or potable water wells. However, any potential historical septic systems and/or water wells would likely have been removed during the demolition of these structures or discovered during the redevelopment of the site with the present-day improvements. Based on this information, the potential historical use of septic systems and/or water wells on the site is not considered a REC.

No RECs were identified as a result of the review of the site as described in this section of the report.

#### 4.0 VICINITY RECONNAISSANCE

The site is located in Fontana, San Bernardino County, California, within an area characterized by dense urban development. Adjoining property use is summarized as follows:

- North:** Four buildings (14631, 14651, 14671 and 14691 Mallory Drive) located within a commercial/light industrial business park, currently occupied by R&A Furniture Design, Town & Country Moving and Storage, and New Trend Custom Trailer
- East:** Redwood Avenue followed by single-family residences (9905-9987 Redwood Avenue)
- South:** A commercial building and vacant yard area (10010 Redwood Avenue) occupied by IRP Inc., a truck permit and licensing company, and single-family residences
- West:** A truck tire sales facility and large yard (CGR Tires & Service, 9979 Cherry Avenue) and single-family residences (14597 and 14598 Rosemary Drive)

Source	Findings
Field observations	Blackstone observed no industrial, manufacturing or military operations such as outdoor chemical or hazardous waste storage or handling activities that may impact the site and no evidence of chemical spills, releases, or waste disposal. From accessible vantage points, Blackstone identified no outdoor chemical or waste storage, wastewater treatment facilities, or other operations that may impact the site and no pits, ponds or lagoons for apparent discharge and/or treatment of process water.
Environmental databases search	Adjoining and/or nearby properties identified in the environmental databases searched are further discussed in Section 7.0.

No RECs were identified as a result of the vicinity reconnaissance.

5.0 PHYSICAL SETTING

	<i>Findings</i>	<i>Sources of Findings</i>
<b>Surficial Soils Beneath Site</b>	Tujunga gravelly loam sand	EDR Report
<b>Depth to Bedrock</b>	Greater than 100 feet bgs	California Water Quality Control Board Geotracker website
<b>Topography</b>	The site has a gentle slope to the southwest.	USGS <i>Fontana, California</i> topographic map
<b>Elevation</b>	Approximately 1060 feet NAVD	USGS <i>Fontana, California</i> topographic map
<b>Depth to Shallow Groundwater</b>	Greater than 150 feet bgs	California Water Quality Control Board Geotracker website
<b>Estimated Groundwater Flow Direction</b>	Southwest	USGS <i>Fontana, California</i> topographic map

*bgs*: below ground surface

*EDR Report*: Environmental Data Resources Database Report with GeoCheck®

*NAVD*: North American Vertical Datum, 1988

*USGS*: United States Geological Survey

No RECs were identified as a result of the physical setting records review.

## 6.0 HISTORICAL INFORMATION REVIEW

As part of this Phase I ESA, Blackstone reviewed historical information to identify RECs associated with the historical use of the site and surrounding properties. Blackstone obtained historical information from interviews with site representatives and other individuals familiar with the site as well as aerial photographs, historical maps, and other *practically reviewable* standard historical sources that are considered *reasonably ascertainable*.

### 6.1 HISTORICAL FIRE INSURANCE MAPS

Environmental Data Resources, Inc. (EDR) conducted a search of Sanborn historical fire insurance maps for the site and site vicinity. Sanborn historical fire insurance maps are scaled drawings that indicate the location and use of building structures present in a given area from as early as the late 1800s. The maps provide information regarding the development and historic use of site structures and can indicate the historic presence of tanks at the site.

According to EDR, historical fire insurance maps are not available for the site area. A summary of the map search is provided in Appendix B.

### 6.2 AERIAL PHOTOGRAPHS

Aerial photographs of the site area were obtained from EDR. The aerial photographs are reproduced in Appendix B and are summarized as follows:

Year	Aerial Photographs: Development/Land Uses	
	Site	Adjoining Properties
1938	The site appears primarily as an orchard. An apparent farmstead is visible in the southeastern corner of the site, which appears to include a residence and an outbuilding.	A roadway (present-day Redwood Avenue) is located along the eastern site perimeter. The adjoining properties appear as a mixture of agricultural and undeveloped land, with orchards to the north, east and south. Large rows of trees line the northern and southern perimeters of the site.
1953	The site appears as vacant grassland, with a trail visible traversing the northern portion of the site in an east-west direction. The farmstead buildings remain on the southeastern corner of the site.	Residential buildings, outbuildings and greenhouses are visible to the north of the site. The present-day single-family residences are located to the adjoining east, across the present-day roadway. The present-day building is located on the eastern portion of the south adjoining property. The present-day single-family residences are located on the northern portion of the west adjoining property. The western portion of the south adjoining property and the southern area of the west adjoining property appear as vacant land.

Year	Aerial Photographs: Development/Land Uses	
	Site	Adjoining Properties
1966	The farmstead structures are no longer visible on the southeastern corner of the site. The site appears as vacant grassland with several dirt paths visible traversing the site.	The adjoining properties appear similar to the previous aerial photograph, with the exception that some of the present-day residences are visible to the south of the site.
1977	A greenhouse is apparent on the northeastern corner of the site and is surrounded by a graded area. The remaining portions of the site appear as vacant grassland with several dirt pathways.	The adjoining properties appear similar to the previous aerial photograph.
1985	The entire site appears to have been graded, and approximately half of the present-day greenhouse is in place. The northwestern area of the site remains as graded undeveloped land.	The adjoining properties appear similar to the previous aerial photograph, with the exceptions that the greenhouses are no longer visible on the north adjoining property and the present-day commercial building and yard have been developed on the southern portion of the west adjoining property.
1990	The greenhouse has been expanded to include the northwestern area of the site. The western area of the site appears as vacant graded land. Vehicles are visible along the southern and northern perimeter of the site building.	The adjoining properties appear similar to the previous aerial photograph, with the exception that the present-day building and yard area are apparent to the south of the site.
1994	The greenhouse has been expanded to include the southwestern area of the site. The remaining areas of the site appear similar to the previous aerial photograph.	The adjoining properties appear similar to the previous aerial photograph.
2005	The greenhouse has been expanded into its present-day configuration.	The adjoining properties appear similar to the previous aerial photograph.
2006	The site appears similar to the previous aerial photograph.	The adjoining properties appear similar to the previous aerial photograph, with the exception that grading appears to be underway on the north adjoining property.
2009	The site appears similar to the previous aerial photograph.	The adjoining properties appear similar to the previous aerial photograph, except the present-day commercial/light industrial center are visible to the north of the site.
2010	The site appears similar to the previous aerial photograph.	The adjoining properties appear similar to the previous aerial photograph.
2012	The site appears similar to the previous aerial photograph.	The adjoining properties appear similar to the previous aerial photograph.

**Findings:** As discussed in Section 6.8, the former agricultural use and present-day greenhouse/nursery use of the site are not considered a REC. No RECs were identified as a result of the review of historical aerial photographs.

### 6.3 HISTORICAL TOPOGRAPHIC MAPS

Historical topographic maps of the site area were obtained from EDR. The historical topographic maps are included in Appendix B and are summarized as follows:

Year	Historical Topographic Maps: Development/Land Uses	
	Site	Adjoining Properties
1901	The site is depicted with tan shading (indicative of undeveloped or agricultural land).	The adjoining properties are depicted with tan shading. The east adjoining roadway is depicted on the map.
1942	The site is depicted with white shading (indicative of undeveloped or agricultural land), with a dwelling depicted on the southeastern corner of the site.	The north, east and west adjoining properties are depicted with white shading. The south adjoining property is depicted with green spotted shading (indicative of an orchard). Scattered residences are depicted in the site vicinity.
1943	The site is depicted as similar to the previous topographic map.	The adjoining properties are depicted as similar to the previous topographic map, except the south adjoining property is depicted with white shading. The east adjoining roadway is labeled as Redwood Avenue.
1953	The site is depicted as similar to the previous topographic map.	The present-day single-family residences are depicted to the adjoining east and west. The north and south adjoining properties remain with white shading.
1954	The site is depicted as similar to the previous topographic map.	The adjoining properties are depicted as similar to the previous topographic map, except a dwelling is depicted on the north adjoining property.
1967	The site is depicted as similar to the previous topographic map, except an unpaved road is depicted traversing the northern portion of the site from east to west.	The adjoining properties are depicted as similar to the previous topographic map.
1973	The site appears similar to the previous topographic map.	The adjoining properties are depicted as similar to the previous topographic map.
1975	The site is depicted with pink shading (indicative of dense urban development).	The adjoining properties are depicted with pink shading, with no details depicted.
1980	The site is depicted as similar to the 1973 topographic map, with white shading and an unpaved road, with the exception of a new building depicted in purple (indicative a recently added features) on the northeastern area of the site (location of the original greenhouse depicted in 1977 aerial photograph).	The adjoining properties are depicted similar to the 1973 topographic map, except an additional small building is depicted on the north adjoining property.

**Findings:** No RECs were identified as a result of the review of historical topographic maps.

#### 6.4 AGENCY RECORDS, INTERVIEWS AND OTHER HISTORICAL SOURCES

In accordance with ASTM E1527-13, Blackstone requested site history and/or regulatory information regarding the site from federal, state and/or local government officials. Information regarding the site is obtained from regulatory agency officials either by:

- 1) Conducting interviews by telephone or in-person at various federal, state and/or local agencies; or
- 2) Requesting file information via submission of an open records request to the appropriate agency contact based upon applicable agency requirements, and in accordance with the Freedom of Information Act (FOIA).

Findings from the interviews/records review are summarized below:

<i>Source</i>	<i>Information Requested</i>	<i>Findings</i>
California Water Resources Control Board (CWQCB) Geotracker database, via website	Information regarding environmental status of underground storage tanks (USTs), and groundwater investigations,	No records for the site address. No records for the adjoining properties.
Department of Toxic Substance Control (DTSC), via website	Hazardous materials incidents, emergency response incidents, regulatory determinations letters	No records for the site address. No records for the adjoining properties
South Coast Air Quality Management District (SCAQMD), via website	Air Emission Permits	No records for the site address.
San Bernardino Assessor's Office Database, via website	Ownership data, parcel information, valuation data	No conditions of environmental concern were on file for the site parcel. Site ownership and tax assessment data for the site parcel were obtained.
San Bernardino County Fire Department, (SBCFD), no contact name	Aboveground and underground storage tank permits, hazardous materials permits, emergency response incidents, regulatory determinations letters	A FOIA request was submitted to this agency. To date a response has not been received and these records are not considered reasonably ascertainable for inclusion in this report.
City of Fontana Water Company	2013 Annual Water Quality Report	No conditions of environmental concern were noted for the site water supply.
City of Fontana Fire Prevention	Fire life safety inspections	A FOIA request was submitted to this agency. To date a response has not been received and available records are not considered reasonably ascertainable for inclusion in this report.

<i>Source</i>	<i>Information Requested</i>	<i>Findings</i>
City of Fontana Building and Planning Department	Building records	No records of environmental concern.

**Findings:** No RECs were identified from the review of the local agency records, interviews, or other historical sources readily available.

## 6.5 CITY DIRECTORIES

Blackstone requested a city directory review for the site address from EDR. City directories were reviewed at approximate five-year intervals for the years spanning 1922 through 2013. The review of the historical city directories is summarized as follows:

<b>City Directory Review</b>		
<i>Site Listings</i>		
<i>Address</i>	<i>Occupant</i>	<i>Years</i>
9988 Redwood Avenue	Not listed	1922-1985
	Kallisto Greenhouses	1990-2013

<b>City Directory Review</b>			
<i>Adjoining Property Listings*</i>			
<i>Address</i>	<i>Occupant</i>	<i>Years</i>	<i>Direction</i>
14631-14671 Mallory Drive	Not listed	1922-2013	North
9965-10007 Redwood Avenue	Not listed	1922-1950	East
	Residential listings	1955-2013	
10010 Redwood Avenue	Not listed	1922-1955	South
	Residential listings	1960-2002	
	IRP	2003 and 2013	
	The Trainor Group	2008	
14616-14640 Hunter Street	Not listed	1922-2013	South
	Residential listings	2003	
9979 Cherry Avenue	Not listed	1922-1990	West
	Treadco Inc.	1996	
	GCR Truck Tire Service	2002-2003	

City Directory Review			
Adjoining Property Listings*			
Address	Occupant	Years	Direction
	BFS Retail & Commercial Operations	2008-2013	
*not all adjoining property addresses included in city directory abstract			

**Findings:** No RECs were identified as a result of the review of historical city directories.

## 6.6 ENVIRONMENTAL LIEN/AUL SEARCH

Blackstone independently obtained an environmental lien and activity & use limitation (AUL) search report from EDR. The lien and AUL report includes results from a search of available current land title records for environmental cleanup liens and other AULs, such as engineering controls and institutional controls. Review of the lien and AUL search report did not indicate evidence of environmental cleanup liens against the site or AULs having been filed or recorded under federal, tribal, state or local law. The lien and AUL search report is included in Appendix C.

## 6.7 PREVIOUS ENVIRONMENTAL REPORTS

Blackstone was not provided with previous environmental reports for review regarding the site.

## 6.8 HISTORICAL INFORMATION CONCLUSIONS

Reasonably ascertainable historical information indicates the site consisted of an orchard with a residence and outbuilding located in the southeastern corner of the site as early as 1938. The agricultural use of the site ceased by 1953, and the residential structures were removed from the site by 1966. The site was comprised of vacant grass-covered land traversed by several dirt pathways from at least 1953 until the site was developed with a commercial nursery in 1976. By 1977, the initial section of the present-day greenhouse was developed on the northeastern portion of the site. The greenhouse was expanded in multiple phases, and was completed in its current configuration in 2005. The site has been utilized by Kallisto Greenhouses since 1976 as a commercial potted plant nursery.

The historical agricultural use of the site (orchards from at least the late 1930s until the 1950s) and the present-day commercial nursery operation may have involved the use of pesticides and/or herbicides, as well as fertilizers. Based on the review of historic aerial photographs and topographic maps, no evidence of significant historical pesticide storage buildings was identified at the site during the existence of the orchard. In addition, based on the historical records reviewed and interviews with the Site Representative, the nursery operations utilize minimal quantities of fertilizers and pesticides. Therefore, it is unlikely that large-scale preparation or storage of herbicides and/or pesticides occurred at the site. Moreover, evidence of spills or releases of hazardous materials has not been identified in association with the

agricultural activities on the site or within the study area during the course of this assessment. Based on this information, the current and historic agricultural operations on the site are not considered a REC. While no evidence of significant agricultural chemical storage, mixing or usage was identified on the site, and no releases or spills have been reported, based on the duration of the site use for above ground agricultural purposes there is a potential for *de minimis* surficial soil impact in isolated locations at the site. Therefore, if soil excavation and export are required during site redevelopment, Blackstone recommends that a Soil Management Plan be prepared for the site to properly characterize and manage potentially impacted soils.

The adjoining properties historically consisted of agricultural land from at least 1938, with scattered residential development initiated in the area in the 1950s. The present-day adjoining single-family residential properties were developed to the east and west by the mid-1950s, and the south adjoining residences were constructed in the 1960s. The eastern portion of the north adjoining property was agricultural land until developed with a single-family dwelling and greenhouses by 1953, which remained into the 1980s. The entire north adjoining property was razed in the mid-2000s and developed with the present-day multi-tenant commercial/light industrial center in 2005-2006.

No RECs were identified as a result of the historical records review.

## 7.0 ENVIRONMENTAL DATABASE SEARCH AND REVIEW

EDR provided Blackstone a search report of federal, state, local, tribal and proprietary environmental databases to determine the environmental regulatory status of the site, adjoining facilities, and facilities identified within the specified approximate minimum search distance (AMSD) of the site. ASTM Standard E 1527-13 establishes the distance from the site that each database is searched. The database search report, including the date and a detailed description of each database searched, is provided in Appendix E.

The federal, state, local, tribal and proprietary databases searched, the search distances specified for each database, and the results of the environmental database search are summarized as follows:

### 7.1 FEDERAL, STATE, LOCAL, TRIBAL AND PROPRIETARY DATABASES

Blackstone reviewed the following databases:

<i>Standard Environmental Record Sources</i>	<i>Search Distance</i>
<b><i>Federal Databases</i></b>	
NPL: National Priority List Sites	1.0 mile
Proposed NPL: Proposed National Priority List Sites	1.0 mile
Delisted NPL: National Priority List Deletions	0.5 mile
NPL LIENS: Federal Superfund Liens	Site only
CERCLIS: Comprehensive Environmental Response, Compensation and Liability Information System	0.5 mile
FEDERAL FACILITY: Federal Facility Site Information Listing	1.0 mile
CERCLIS - NFRAP: No Further Remedial Action Planned Sites	0.5 mile
RCRA CORRACTS: Resource Conservation and Recovery Act - Corrective Action Sites	1.0 mile
RCRA TSDF: RCRA - Treatment, Storage and Disposal Facilities	0.5 mile
RCRA LQGs: RCRA - Large-Quantity Generators	Site and adjoining
RCRA SQGs: RCRA - Small-Quantity Generators	Site and adjoining
RCRA CESQG: RCRA - Conditionally Exempt Small-Quantity Generators	Site and adjoining
US ENG CONTROLS: Engineering Controls Sites List	Site only
US INST CONTROL: Sites with Institutional Controls	Site only
LUCIS: Land Use Control Information System	0.5 mile
ERNS: Emergency Response Notification System	Site only
FEMA UST: FEMA Owned UST Listing	Site and adjoining
<b><i>State and Tribal Databases</i></b>	
CA RESPONSE: State Response Sites	1.0 mile
CA ENVIROSTOR: DTSC Site Mitigation and Brownfields Reuse Program	1.0 mile
CA SWF/LF: Solid Waste Facilities & Landfill Sites	0.5 mile
CA LUST: Leaking Underground Fuel Tank Report	0.5 mile

<i>Standard Environmental Record Sources</i>	<i>Search Distance</i>
CA SLIC: Spills, Leaks, Investigations, and Cleanup (SLIC) Cases	0.5 mile
INDIAN LUST: Leaking Underground Storage Tanks on Indian Lands	0.5 mile
CA UST: Active Underground Storage Tanks	Site and adjoining
CA AST: Registered Aboveground Storage Tanks	Site and adjoining
INDIAN UST: Underground Storage Tanks on Indian Lands	Site and adjoining
CA VCP: Voluntary Cleanup Program Properties	0.5 mile
INDIAN VCP: Voluntary Cleanup Priority sites on Indian Lands	0.5 mile

<i>Additional Environmental Record Sources</i>	<i>Search Distance</i>
<i>Federal Databases</i>	
US BROWNFIELDS: Listing of Brownfields Sites	0.5 mile
ODI: Open Dump Inventory	0.5 mile
DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations	0.5 mile
US CDL: United States Clandestine Drug Labs	Site only
HIST US CDL: National Clandestine Laboratory Register	Site only
LIENS 2: CERCLA Lien Information	Site only
HMIRS: Hazardous Materials Information Reporting System	Site only
RCRA Non-Gen: RCRA - Non Generators	Site and adjoining
DOT OPS: Department of Transportation Incident and Accident Data	Site only
DOD: Department of Defense Sites	1.0 mile
FUDS: Formerly Used Defense Sites	1.0 mile
CONSENT: Superfund (CERCLA) Consent Decrees	1.0 mile
ROD: Records of Decision	1.0 mile
UMTRA: Uranium Mill Tailings Sites	0.5 mile
MINES: Mines Master Index File	0.25 mile
TRIS: Toxic Chemical Release Inventory System	Site only
TSCA: Toxic Substances Control Act	Site only
FTTS: Federal Insecticide, Fungicide & Rodenticide Act (FIFRA)/TSCA Tracking System	Site only
HIST FTTS: Historic FIFRA/TSCA Tracking System Listings	Site only
SSTS: Section 7 Tracking System	Site only
ICIS: Integrated Compliance Information System	Site only
PADS: PCB (Polychlorinated Biphenyl) Activity Database System	Site only
MLTS: Material Licensing Tracking System	Site only
RADINFO: Radiation Information Database	Site only
FINDS: Facility Index System/Facility Identification Initiative Program Summary	Site only
RAATS: RCRA Administrative Action Tracking System	Site only
RMP: Risk Management Plans	Site only
SCRD DRYCLEANERS: State Coalition For Remediation of Drycleaners Listing	0.5 mile
PCB TRANSFORMER: PCB Transformer Registration Database	Site only
COAL ASH EPA: Coal Combustion Residues Surface Impoundments List	0.5 mile
COAL ASH DOE: Steam-Electric Plan Operation Data - Power Plants	Site only
PROC: Certified Processors Database	0.5 mile
EPA WATCH LIST: EPA Watch List	Site only

<i>Additional Environmental Record Sources</i>	<i>Search Distance</i>
2020 CORRECTIVE ACTION: 2020 Corrective Action Program List - RCRA	0.25 mile
US FIN ASSUR: Financial Assurance Information	Site only
PRP: Potentially Responsible Parties	Site only
US AIRS: Aerometric Information Retrieval System Facility Subsystem	Site only
LEAD SMELTERS: Lead Smelter Sites	Site only
<i>State, Local and Tribal Databases</i>	
CA WMUDS/SWAT: Waste Management Unit Database	0.5 mile
CA SWRCY: Recycler Database	0.5 mile
CA HAULERS: Registered Waste Tire Haulers Listing	Site only
CA HIST Cal-Sites: Cal-Sites Database (replaced by ENVIROSTOR)	1.0 mile
CA SCH: School Property Evaluation Program	Site and adjoining
CA Toxic Pits: Toxic Pits Cleanup Act Sites	1.0 mile
CA CDL: Clandestine Drug Labs	Site only
CA FID UST: Facility Inventory UST Database	Site and adjoining
CA HIST UST: Historical UST Database	Site and adjoining
CA SWEEPS UST: Statewide Environmental Evaluation and Planning System UST Database	Site and adjoining
CA LIENS: Environmental Liens Listing	Site only
CA DEED: Deed Restriction Listing	Site only
CA CHMIRS: California Hazardous Material Incident Report System	Site only
CA LDS: Land Disposal Sites Listing	Site only
CA MCS: Military Cleanup Sites Listing	Site only
CA SPILLS 90: SPILLS 90 data from FirstSearch	Site only
CA BOND EXP. PLAN: Bond Expenditure Plan	1.0 mile
CA UIC: Underground Injection Control Listings	Site only
CA NPDES: NPDES Permits Listing	Site only
CA Cortese: CORTESE Hazardous Waste & Substances Sites List	0.5 mile
CA HIST CORTESE: Historical CORTESE Sites List	0.5 mile
CA CUPA Listings: CUPA Resources List	0.25 mile
CA Notify 65: Proposition 65 Records	1.0 mile
CA DRYCLEANERS: Cleaner Facilities	0.25 mile
CA WIP: Well Investigation Program Case List	0.25 mile
CA ENF: Enforcement Action Listing	Site only
San Bern. Co. Permit: Hazardous Materials Permit	0.25 mile
CA HAZNET: Facility and Manifest Data	Site only
CA EMI: Emissions Inventory Data	Site only
CA WDS: Waste Discharge System	Site only
CA HWP: EnviroStor Permitted Facilities Listing	1.0 mile
CA HWT: Registered Hazardous Waste Transporter Database	0.25 mile
CA MWMP: Medical Waste Management Program Listing	0.25 mile
CA FINANCIAL ASSURANCE: Financial Assurance Information Listing	Site only
INDIAN RESERV: Indian Reservations	1.0 mile
INDIAN ODI: Status of Open Dumps on Indian Lands	0.5 mile

<i>EDR High Risk Historical Records</i>	<i>Search Distance</i>
MGP: Manufactured Gas Plants Database	1.0 mile
Historical Auto Stations	0.25 mile
Historical Cleaners	0.25 mile

<i>EDR Recovered Government Archives</i>	<i>Search Distance</i>
RGA LF: Recovered Government Archive Solid Waste Facilities List	Site only
RGA LUST: Recovered Government Archive Leaking Underground Storage Tank	Site only

The results of the database search are summarized as follows:

**SITE:**

The site occupant, Kallisto Greenhouses Inc. at 9988 Redwood Avenue, is included on the San Bernardino County Permit database. The facility (ID: FA0000426) is identified with an inactive permit (PTY0003767) for hazardous materials handling (0-10 employees). The facility status is identified as inactive, and the permit expired on April 30, 2014. According to the Site Representative, the facility no longer qualifies as a hazardous materials handler based on the limited quantities of materials on the site. No violations are reported for the facility, and the facility is not identified on any database indicative of spills or releases. Based on the type and status of the regulatory listing (inactive hazardous material handling); the absence of reported spills, releases or violations; and the site observations, this listing is not considered a REC.

**ADJOINING OR FACILITIES IN CLOSE PROXIMITY:**

The facility located on the southern portion of the west adjoining property (9979 Cherry Avenue) is listed as Bridgestone Firestone Retail and Commercial, and is located crossgradient of the site based on inferred groundwater flow. This facility is listed on the CA FIDF UST, CA SWEEPS UST, CA San Bernardino County Permit, and CA Haulers databases. The database listings indicate that this facility is registered with four active USTs (unidentified volume and content), and is an active hazardous materials handler. No violations are reported for the facility, and the facility is not identified on any database indicative of spills or releases. While this facility shares a boundary with the site, the facility is comprised of a building along Cherry Avenue and a large truck parking area on the eastern portion of the property. Therefore, the facilities associated with this property are located approximately 200 feet to the west-southwest of the site. Based on the status of the regulatory listing (active hazmat handling, no violations), the absence of reported spills or releases, the observed distance of the facility from the site and the inferred crossgradient position from the site, this listing is not considered a REC.

Angel's and/or Extreme Mobile Auto Care (14661 and 14690 Mallory Drive) is located within the north adjoining commercial/light industrial center and upgradient relative to the inferred groundwater flow direction. This facility is identified on the EDR Historical Auto Stations database and CA San Bernardino County Permits. This facility was identified as an auto service station in 2012. The EDR Historical Auto Stations database is a proprietary database compiled exclusively from EDRs internal review of historical city directories and names potentially associated with auto related businesses, and is not indicative of a confirmed business location or operation. The county database indicates that this facility is permitted as a hazardous materials handler and small quantity waste generator, with no violations identified. This operation consists of service trucks which perform automotive maintenance and service at off-property locations. No violations are reported for the facility, and the facility is not identified on any database indicative of spills or releases. Based on the type and status of the regulatory listing (active hazmat handling, no violations) and the absence of reported spills, releases or violations, this listing is not considered a REC.

**NON-ADJOINING FACILITIES WITHIN APPROXIMATE MINIMUM SEARCH DISTANCE:**

As detailed in the EDR Report, several facilities on various databases are within the ASTM E 1527-13 Approximate Minimum Search Distance (AMSD). Based on factors such as distance to the site, topography, media affected (surface water, soil, soil vapor, groundwater, or air), depth to groundwater, anticipated groundwater flow direction away from the site, and/or a “Case Closed” and/or “No Further Action (NFA)” regulatory status, these non-adjoining facilities within the AMSD are unlikely to have current or former releases of hazardous substances and/or petroleum products that could migrate to the site and are not considered RECs.

## 7.2 UNMAPPABLE FACILITIES

Due to inadequate address information or other erroneous facility information, several facilities listed in the environmental databases searched could not be plotted by EDR on a radius map. However, these facilities are still identified in the EDR report by grouping them into an unmappable facility summary. Blackstone reviewed this summary to determine if any of the listed facilities include or adjoin the site. The unmappable facility listings are summarized as follows:

<b>SITE:</b> Not listed
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<b>ADJOINING FACILITIES:</b> None listed
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No facilities listed on the Unmappable site summary are located on or adjoining the site.

## 7.3 POTENTIAL VAPOR ENCROACHMENT CONDITIONS

Blackstone performed a Tier 1 Vapor Encroachment Screening in accordance with ASTM E 2600-10. The objective of Tier 1 screening is to determine if a Vapor Encroachment Condition (VEC) exists in connection with the site. Tier 1 screening is a non-numeric evaluation that considers available information for the site and nearby properties from historical sources, government records, and other resources that are practically reviewable and typically reviewed as part of a Phase I ESA. Based on the findings of the Phase I ESA, no potential VECs were identified in connection with the site, and no additional evaluation is recommended.

## 7.4 AFFIRMATION

Blackstone’s conclusions based on the EDR report are limited to the accuracy of that report. To the extent possible, Blackstone uses field observations to verify the information or identify errors and inconsistencies in the search report regarding the listed facilities in the immediate vicinity of the site. The provided database summary is sufficiently complete and current to be used as a source to satisfy the regulatory database requirements outlined in ASTM Standard E 1527-13.

## 7.5 ENVIRONMENTAL DATABASE SEARCH AND REVIEW CONCLUSIONS

Based upon Blackstone's review of the EDR database report, no regulatory file reviews are warranted. No RECs were identified as a result of the environmental database search and review.

## 8.0 SITE INSPECTION

**Name of Inspector:** Allan Coffee  
**Date of Site Inspection:** December 18, 2014

SITE REPRESENTATIVE		
<i>Name</i>	<i>Title or Association with Site</i>	<i>Years Associated with Site</i>
Mr. James Rietkerk	Manger and Owner	38 Years

The site inspection consisted of a walkover of the site perimeter and exterior site areas, and a walk-through of the greenhouse, storage areas, mechanical areas and exterior portions of the site. Blackstone walked the perimeter of the site in a single pass. Building interiors were walked through at the direction of the Site Representative. Not all interior building areas were observed. Furthermore, during the site inspection, Blackstone did not inspect inaccessible areas of the site including crawl spaces, under stored materials, plant racks or vehicles. The adjoining properties were visually observed from curbside without being entered. There is no reason to believe the inability to inspect these areas would alter the findings or recommendations set forth in this report or be considered a significant data gap.

### 8.1 UNDERGROUND STORAGE TANKS (USTS)

<i>Number of USTs</i>	<i>Capacity (gallons)</i>	<i>Contents</i>	<i>Location</i>	<i>Status/Notes</i>	<i>REC</i>
None					No

No physical evidence of current or former USTs was identified during the site inspection. The Site Representative was unaware of current or former USTs.

### 8.2 ABOVEGROUND STORAGE TANKS (ASTS)

<i>Number of ASTs</i>	<i>Capacity (gallons)</i>	<i>Contents</i>	<i>Location</i>	<i>Status/Notes</i>	<i>REC</i>
1	200	Diesel	Roof, below the emergency generator unit (integrated double-walled "belly" tank)	Fuels emergency generator; registration not required. Equipment is presumed to be owned by the site. No visible evidence of leakage or spillage was observed. No concerns were identified.	No

No physical evidence of other current or former ASTs was identified during the site inspection. The Site Representative was unaware of other current or former ASTs.

### 8.3 CHEMICALS AND MATERIALS USAGE

The following section describes non-bulk (55-gallons or less) chemical and petroleum storage at the site. Where applicable, all bulk fixed chemical and petroleum product storage (i.e. USTs and/or ASTs) is discussed in Sections 8.1 and 8.2.

<i>Chemical or Material</i>	<i>Use</i>	<i>Container Type</i>	<i>Location</i>	<i>REC</i>
General janitorial and household cleaning supplies	General cleaning	1-gallon or smaller	Maintenance storage areas	No
Cleaners, paints	General Maintenance	5-gallons or smaller	Maintenance storage areas	No
Gasoline	Equipment	5-gallons	Maintenance Storage	No
Agricultural chemicals (pesticides and fertilizers)	Agricultural	5-gallons or less	Stored in large portable container (with roof vent and warning signage) on northern side of greenhouse	No

No evidence of surface staining, spills, or releases was apparent in the chemical storage areas. According to the Site Representative, no releases of chemicals or materials requiring emergency response and/or agency notification have occurred at the site.

Based on the historical records reviewed and interviews with the Site Representative, the nursery operations utilize minimal quantities of fertilizers and pesticides. Fertilizers are applied via the watering system to the potted plants. It is unlikely that large-scale preparation or storage of herbicides and/or pesticides occurred at the site. Moreover, evidence of spills or releases of hazardous materials has not been identified in association with agricultural activities on the site. As such, the storage and use of agricultural chemicals is not considered a REC.

### 8.4 HAZARDOUS WASTES

<i>Hazardous Waste</i>	<i>Generated By</i>	<i>Storage Container</i>	<i>Disposal Details/Removed by</i>	<i>Status/Notes</i>	<i>REC</i>
None					No

No physical evidence of on-site hazardous waste disposal was identified during the site inspection. The Site Representative was unaware of any on-site hazardous waste disposal.

## 8.5 NON-HAZARDOUS WASTES

<i>Non-Hazardous Waste</i>	<i>Generated By</i>	<i>Storage Container</i>	<i>Storage Location</i>	<i>Disposal Details</i>	<i>REC</i>
General refuse	Staff and residents	Trash containers	Enclosure	Removed for off-site contracted disposal company	No

No physical evidence of on-site non-hazardous waste disposal was identified during the site inspection. The Site Representative was unaware of any on-site non-hazardous waste disposal.

## 8.6 POLYCHLORINATED BIPHENYLS (PCBS)

PCBs can be present in coolants or lubricating oils used in older electrical transformers, hydraulic systems, and other similar equipment. The 1976 Toxic Substances Control Act (TSCA) extended regulatory control over the use of PCBs to the United States Environmental Protection Agency (USEPA). In November 1979, the USEPA generally prohibited the domestic manufacture of PCBs in electromagnets, transformers, and heat-transfer and hydraulic equipment.

<i>Equipment</i>	<i>Location</i>	<i>Owner</i>	<i>Status/Notes</i>	<i>REC</i>
Pole-mounted transformers	Along the site perimeter	SCE	See discussion below	No

The transformers are owned and maintained by SCE and were observed in good condition, with no evidence of fluid release. Based on the presumed installation date of the electrical transformers (pre-1978), there is a potential for the presence of PCB-containing fluid. However, should fluid spills or releases from an electrical transformer occur, associated remediation efforts are typically the responsibility of the transformer owner (SCE) per Federal regulation (40 CFR 761.125). As such, the transformers are not considered a REC.

## 8.7 WASTEWATER DISCHARGES

<i>Type</i>	<i>Generated By</i>	<i>Discharged To</i>	<i>Status/Notes</i>	<i>REC</i>
Sanitary	Site workers	Two on-site septic systems	No environmental concerns noted	No

The site is equipped with two on-site septic systems for the disposal of sanitary waste on the site. According to the Site Representative, the septic systems were installed under a permit from the County of San Bernardino. Blackstone recommends that the septic systems be properly closed during demolition. No physical evidence of other septic systems, cesspools, clarifiers, or oil/water separators was identified during the site inspection.

**8.8 STORMWATER DISCHARGES**

<i>Discharged From</i>	<i>Discharged To</i>	<i>Potential Impacts</i>	<i>REC</i>
Roofs through internal drain systems	Direct discharge to the municipal storm water collection system	No concerns noted	No
Exterior site surfaces	Surface gradient to municipal storm water collection system inlets located off-site	No concerns noted	No

No on-site stormwater retention basins were observed. The Site Representative was unaware of such features on the site.

**8.9 PITS, PONDS, AND LAGOONS (ON-SITE PROCESS WATER DISCHARGE)**

<i>Type</i>	<i>Contents</i>	<i>Location</i>	<i>Status/Notes</i>	<i>REC</i>
None				No

No pits, ponds or lagoons used for process water discharge were observed at the site. The Site Representative was unaware of other such features on the site.

**8.10 WELLS**

<i>Type</i>	<i>Location</i>	<i>Status/Notes</i>	<i>REC</i>
None			No

No physical evidence of groundwater monitoring wells, dry wells, injection wells, extraction wells, vapor wells, or groundwater production wells was identified during the site inspection. The Site Representative was unaware of on-site wells.

**8.11 UNDERGROUND PRODUCT PIPELINES**

<i>Type</i>	<i>Location</i>	<i>Status/Notes</i>	<i>REC</i>
None			No

No physical evidence of underground product pipelines carrying petroleum or other hazardous substances was identified during the site inspection. The Site Representative was unaware of on-site product pipelines.

**8.12 ODORS**

<i>Odors</i>	<i>Location</i>	<i>Status/Notes</i>	<i>REC</i>
None			No

No unusual odors indicative of environmental concerns were identified during the site inspection. The Site Representative was unaware of such odors at the site.

### 8.13 POOLS OF LIQUID

<i>Pools of Liquid</i>	<i>Location</i>	<i>Status/Notes</i>	<i>REC</i>
None			No

No pools or sumps containing liquids indicative of environmental concerns were identified during the site inspection. The Site Representative was unaware of pools or sumps containing liquids at the site.

### 8.14 STRESSED VEGETATION OR STAINED SURFACES

<i>Stressed Vegetation or Stained Surfaces</i>	<i>Location</i>	<i>Status/Notes</i>	<i>REC</i>
None			No

No stained soils or stressed vegetation were observed by Blackstone. The Site Representative was unaware of stressed vegetation or stained surfaces.

### 8.15 SITE INSPECTION CONCLUSIONS

No evidence of RECs was identified in connection with the site as a result of the site inspection.

## 9.0 ASTM NON-SCOPE CONSIDERATIONS

Blackstone performed the following client-specific activities to identify *ASTM Non-Scope Considerations (Business Environmental Risk Issues)* in addition to the ASTM requirements and as required per the Agreement.

### 9.1 AIR EMISSIONS

<i>Regulated Emissions Source</i>	<i>Discharged To</i>	<i>Potential Impacts</i>	<i>Status/Notes</i>	<i>REC</i>
None				No

### 9.2 ASBESTOS-CONTAINING MATERIALS (ACM)

Frequently encountered types of ACM used in building construction include floor tile and mastic, spray-applied fireproofing, acoustical/decorative ceiling plaster, wallboard and joint compound, insulation, and many other building materials in common use prior to 1981. Materials that contain greater than one percent asbestos fibers are considered regulated ACM and must be handled according to USEPA and Occupational Safety and Health Administration (OSHA) regulations.

Blackstone conducted a limited visual survey for the presence of typically suspect ACM in the building areas accessed at the site. No suspect ACM was identified in the building areas accessed at the site. Hidden materials such as those inside walls, inaccessible attics, crawl spaces, and inside ductwork were not evaluated.

In accordance with the scope of work, no bulk samples were collected. However, based on the date of the initial construction of the site building (1977), the presence of regulated asbestos in hidden areas or areas not accessed is possible. As such, prior to demolition activities at the site, sampling of the specific materials to be disturbed will be necessary to satisfy National Emissions Standards for Hazardous Air Pollutants (NESHAPs) and state and local regulations. Furthermore, all regulated ACM must be handled in accordance with applicable regulations. These regulations may include removal of certain ACMs prior to demolition activities.

### 9.3 LEAD-BASED PAINT (LBP)

Based on the initial construction date of the site building (1977), there is a potential for the presence of LBP at the site. As the site building is proposed to be demolished to facilitate redevelopment of the site, applicable federal, state, and local LBP regulations should be adhered to during demolition. These regulations do not typically require sampling, but rather agreement to use of proper dust suppression techniques during demolition as commonly stipulated in building demolition permits and demolition air quality control permits. Should the selected solid waste disposal facility or recycling facility require analyzing suspected LBP debris via the

toxicity characteristics leaching procedure (TCLP), the actual building materials designated for that facility will require analysis at that time.

#### 9.4 RADON GAS

A review of records regarding radon concentrations in San Bernardino County, California, was conducted to determine if concentrations of radon in the general area of the site are within the USEPA guidelines. The USEPA uses a continuous exposure level of 4.0 pCi/L (picoCuries per liter of air) or greater as a guidance level at which further evaluation and potential remedial actions are recommended.

According to USEPA Office of Radiation and Indoor Air information/mapping, the site is located within a Radon Zone Level 2. This zone has a predicted average indoor radon gas screening level between 2.0 pCi/L and 4.0 pCi/L, which is within USEPA guidance levels. Based on the Radon Zone 2 designation and the non-residential use of the site building, no further evaluation of radon is recommended.

#### 9.5 APPARENT MOLD GROWTH (AMG)

As part of this site assessment, Blackstone performed the following tasks: looked for evidence of AMG in the areas surveyed during the site assessment; made inquiries of property management regarding past and current leaks or known mold issues; made inquiries of property management whether there have been tenant complaints regarding health problems, musty odors or water leaks; observed areas where significant leaks were reported; and conducted a representative visual/olfactory survey for evidence of current or past water leakage and/or mold.

No AMG was observed within the building areas accessed. The Site Representative was not aware of AMG issues at the site, and no complaints were reported. The limited AMG visual survey is intended to provide an indication of the potential for significant environmental issues associated with AMG. Due to the size of the site, all areas could not be examined for AMG. In addition, inaccessible areas such as behind walls, in crawl spaces, and inside ductwork were not inspected. As such, the limited AMG visual survey should not be regarded as a comprehensive survey.

#### 9.6 WETLANDS

As defined by the USEPA and U.S. Army Corps of Engineers (USACE), wetlands are "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions."

Wetlands possess three essential characteristics: (1) hydrophytic vegetation; (2) hydric soils; and (3) hydrology. All three characteristics must be prevalent to document an area as a jurisdictional wetland.

<b>Wetlands</b>	
<i>Information Source</i>	<i>Findings</i>
National Wetlands Inventory (NWI) on-line Wetland Mapper: ( <a href="http://wetlandsfws.er.usgs.gov/NWI/download.html">http://wetlandsfws.er.usgs.gov/NWI/download.html</a> )	No mapped federal wetlands are located at the site.
Field observations	No vegetation or ponded areas that are characteristic of possible wetlands were observed at the site.

## 9.7 LEAD IN DRINKING WATER

The City of Fontana Water Company provides drinking water to the site. The 2013 Annual Water Quality Report (the most recent report available for review) indicates the municipal water system meets the requirements as established by the USEPA, state, and local authorities for lead content in drinking water.

## 9.8 ENDANGERED SPECIES

Redevelopment of the site will likely be subject to environmental review under the California Environmental Quality Act (CEQA) for potential impacts to biological and other resources during the planning process managed by the local permitting agency. Any required federal and state biological resources screening, such as nesting bird surveys, should be performed prior to demolition or the start of construction as stipulated by permitting requirements and as required by law.

## 9.9 CULTURAL OR ARCHEOLOGICAL RESOURCES OF HISTORICAL SIGNIFICANCE

A complete archaeological resources survey is outside the scope of this Phase I ESA and was not conducted as part of this assessment. Blackstone reviewed the National Register of Historic Places. Although the site and nearby properties are not listed on the National Register of Historic Places, this registry lists only known historical locations and, therefore, cannot be used to conclude whether development activities at the site would have the potential to encounter previously unknown historical or archaeological resources. Appropriate archaeological and historical surveys of the property, if required, should be performed under the direction of the local permitting agency as part of any redevelopment of the site.

## 10.0 CONCLUSIONS

Blackstone performed a Phase I ESA of the site in conformance with the scope and limitations of ASTM Standard Practice E 1527-13, the regulations at 40 CFR Part 312, and the March 3, 2011 Master Environmental Consulting Agreement between Carlyle Investment Management, LLC and Blackstone. Any exceptions to or deletions from this practice are described in Sections 1.2 through 1.4 of this report. This assessment has revealed no evidence of *recognized environmental conditions (RECs)* in connection with the site.

The following *Business Environmental Risk Issues* were identified in connection with the site:

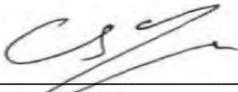
- **Soil Management Plan:** No evidence of significant agricultural chemical storage, mixing or usage was identified on the site, and no releases or spills have been reported. However, based on the duration of the site use for above ground agricultural purposes, there is a potential for *de minimis* surficial soil impact in isolated locations at the site. Therefore, if soil excavation and export are required during site redevelopment, Blackstone recommends that a Soil Management Plan be prepared for the site to properly characterize and manage potentially impacted soils.
- **Septic Systems:** Septic systems were identified on the northern and southern sides of the site building. As the septic systems historically have been utilized for sanitary waste treatment only, the septic systems are not considered a REC. However, Blackstone recommends that the septic systems be properly closed during demolition.
- **Asbestos-Containing Materials (ACMs):** Blackstone conducted a limited visual survey for the presence of typically suspect ACM at the site. However, based on the initial construction date of the site building (1977), the presence of regulated asbestos is possible. Prior to demolition activities at the site, sampling of the specific materials to be disturbed will be necessary to satisfy National Emissions Standards for Hazardous Air Pollutants (NESHAPs) and state and local regulations. Furthermore, all regulated ACM must be handled in accordance with applicable regulations. These regulations may include removal of certain ACMs prior to demolition activities.
- **Lead-Based Paint (LBP):** Based on the initial construction date of the site building (1977), there is a potential for the presence of LBP at the site. As the site building is proposed to be demolished to facilitate redevelopment of the site, applicable federal, state, and local LBP regulations should be adhered to during demolition. These regulations do not typically require sampling, but rather agreement to use of proper dust suppression techniques during demolition as commonly stipulated in building demolition permits and demolition air quality control permits. Should the selected solid waste disposal facility or recycling facility require analyzing suspected LBP debris via the toxicity characteristics leaching procedure (TCLP), the actual building materials designated for that facility will require analysis at that time.

## 11.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

This Phase I Environmental Site Assessment (ESA) Report documents the research methodology used by qualified environmental professionals of Blackstone to identify recognized environmental conditions using the scope and limitations of ASTM Standard Practice E 1527-13 and the March 3, 2011 Master Environmental Consulting Agreement between Carlyle Investment Management, LLC and Blackstone.

We declare that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in §312.10 of 40 CFR 312, and we have the specific qualifications based on education, training, and experience to assess a site of the nature, history, and setting of the subject site. We have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Prepared By:

  
\_\_\_\_\_  
Allan S. Coffee  
Associate

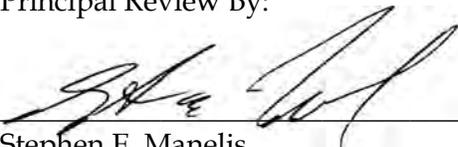
01/13/15  
Date

Technical Review and Concurrence By:

  
\_\_\_\_\_  
Russell K. Balderson  
Associate

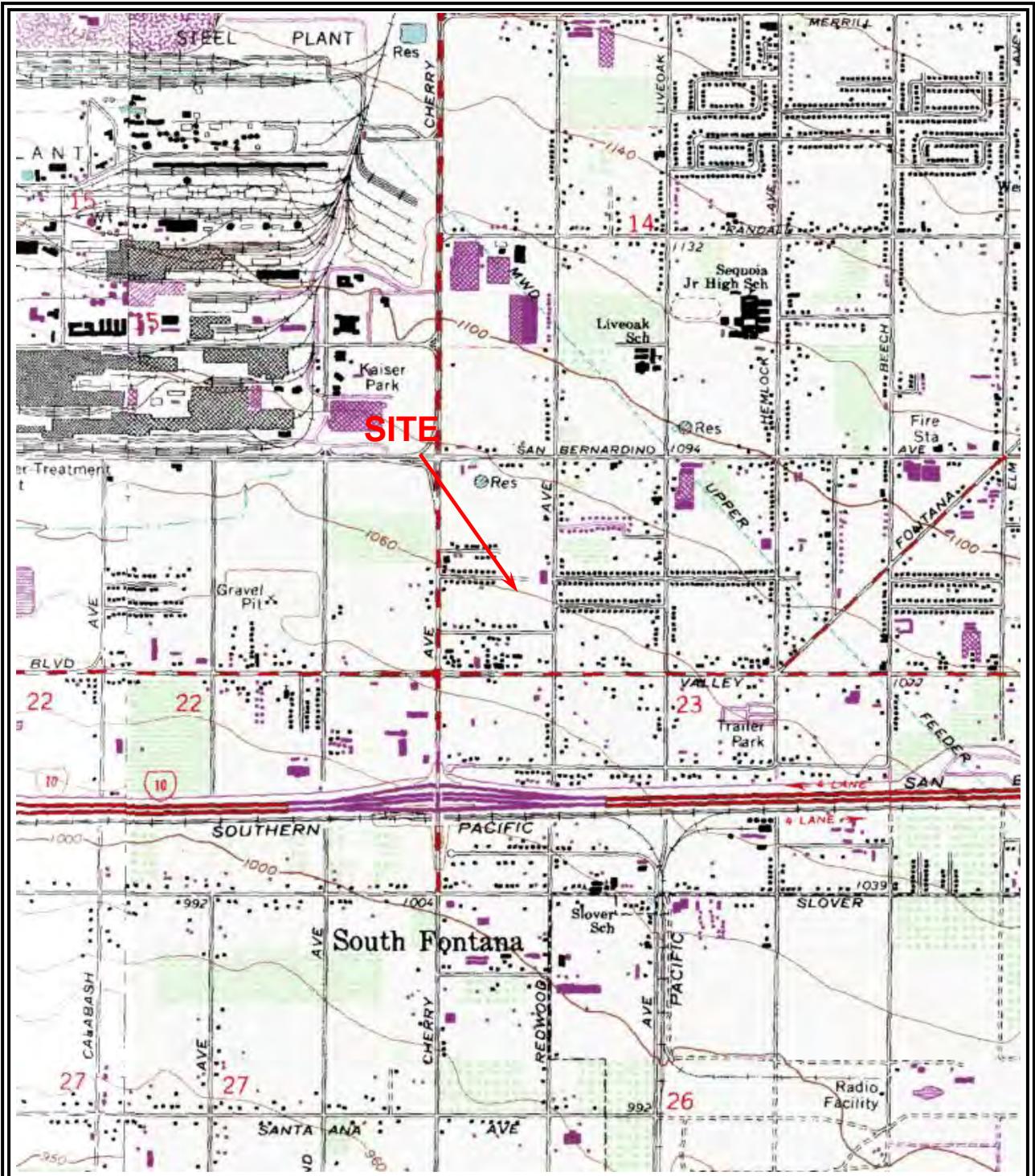
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Principal Review By:

  
\_\_\_\_\_  
Stephen E. Manelis  
Principal

01/13/15  
Date

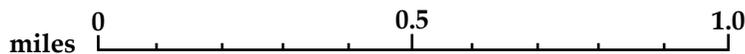
DD  
QA/QC



Project No. CARLDC034.01

Kallisto Greenhouses  
 Fontana, San Bernardino County, California

**Site Location Map**  
 (USGS Fontana, CA, Topographic Map, 1980)





Project No. CARLDC034.01

Kallisto Greenhouses  
Fontana, San Bernardino County, California

**Site Plan**  
(Not to Scale)





**PHOTOGRAPH 1**  
Entrance and parking area on southern area of site  
looking west



**PHOTOGRAPH 2**  
Southwestern corner of site looking northeast



**PHOTOGRAPH 3**  
Northern portion of site looking east



**PHOTOGRAPH 4**  
Western portion of the site looking south

Project No. CARLDC034.01

Kallisto Greenhouses  
Fontana, San Bernardino County, California





**PHOTOGRAPH 5**  
Site building interior



**PHOTOGRAPH 6**  
Site building interior



**PHOTOGRAPH 7**  
Agricultural storage container on northern portion  
of site



**PHOTOGRAPH 8**  
Shop room on the interior of site building



**Kallisto Greenhouses**

9988 Redwood Avenue  
Fontana, CA 92335

Inquiry Number: 4163658.3

December 17, 2014

## Certified Sanborn® Map Report



6 Armstrong Road, 4th Floor  
Shelton, Connecticut 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# Certified Sanborn® Map Report

12/17/14

**Site Name:**

Kallisto Greenhouses  
9988 Redwood Avenue  
Fontana, CA 92335

**Client Name:**

Blackstone Consulting, LLC  
188 State St  
Portland, ME 04101



EDR Inquiry # 4163658.3

Contact: Amy Stanton

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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:

**Site Name:** Kallisto Greenhouses  
**Address:** 9988 Redwood Avenue  
**City, State, Zip:** Fontana, CA 92335  
**Cross Street:**  
**P.O. #** NA  
**Project:** CARLDC034.01  
**Certification #** 5AFF-485C-9273



Sanborn® Library search results  
Certification # 5AFF-485C-9273

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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:

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Project No. CARLDC034.01

Kallisto Greenhouse  
Fontana, San Bernardino County, California

**2012 Aerial Photograph**  
(Approximate Scale: 1 inch = 500 feet)





Project No. CARLDC034.01

Kallisto Greenhouse  
Fontana, San Bernardino County, California

**2010 Aerial Photograph**  
(Approximate Scale: 1 inch = 500 feet)





Project No. CARLDC034.01

Kallisto Greenhouse  
Fontana, San Bernardino County, California

**2009 Aerial Photograph**  
(Approximate Scale: 1 inch = 500 feet)





Project No. CARLDC034.01

Kallisto Greenhouse  
Fontana, San Bernardino County, California

**2006 Aerial Photograph**  
(Approximate Scale: 1 inch = 500 feet)





Project No. CARLDC034.01

Kallisto Greenhouse  
Fontana, San Bernardino County, California

**2005 Aerial Photograph**  
(Approximate Scale: 1 inch = 500 feet)





Project No. CARLDC034.01

Kallisto Greenhouse  
Fontana, San Bernardino County, California

**1994 Aerial Photograph**  
(Approximate Scale: 1 inch = 500 feet)





Project No. CARLDC034.01

Kallisto Greenhouse  
Fontana, San Bernardino County, California

**1990 Aerial Photograph**  
(Approximate Scale: 1 inch = 500 feet)





Project No. CARLDC034.01

Kallisto Greenhouse  
Fontana, San Bernardino County, California

### 1985 Aerial Photograph

(Approximate Scale: 1 inch = 500 feet)





Project No. CARLDC034.01

Kallisto Greenhouse  
Fontana, San Bernardino County, California

**1977 Aerial Photograph**  
(Approximate Scale: 1 inch = 500 feet)



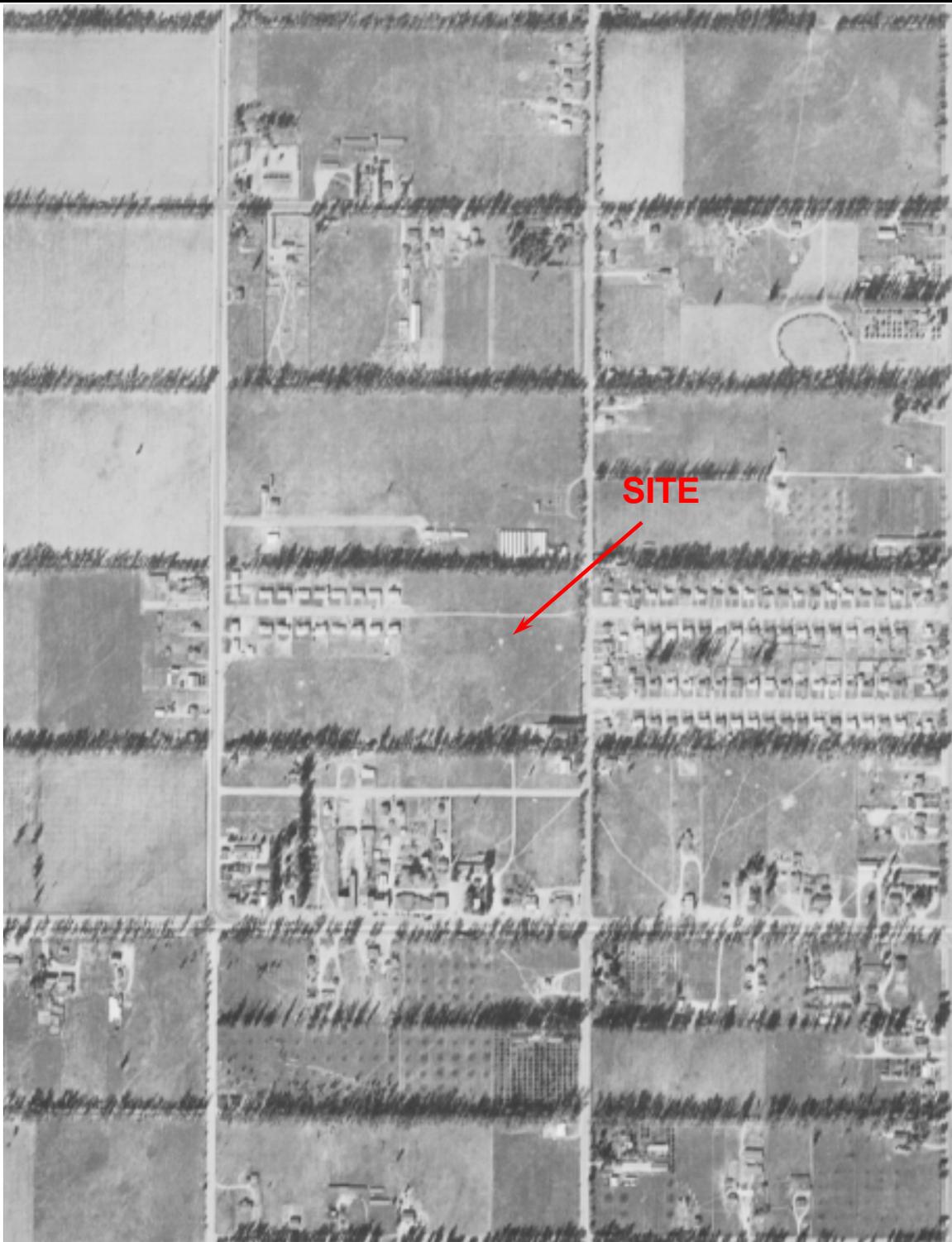


Project No. CARLDC034.01

Kallisto Greenhouse  
Fontana, San Bernardino County, California

**1966 Aerial Photograph**  
(Approximate Scale: 1 inch = 500 feet)



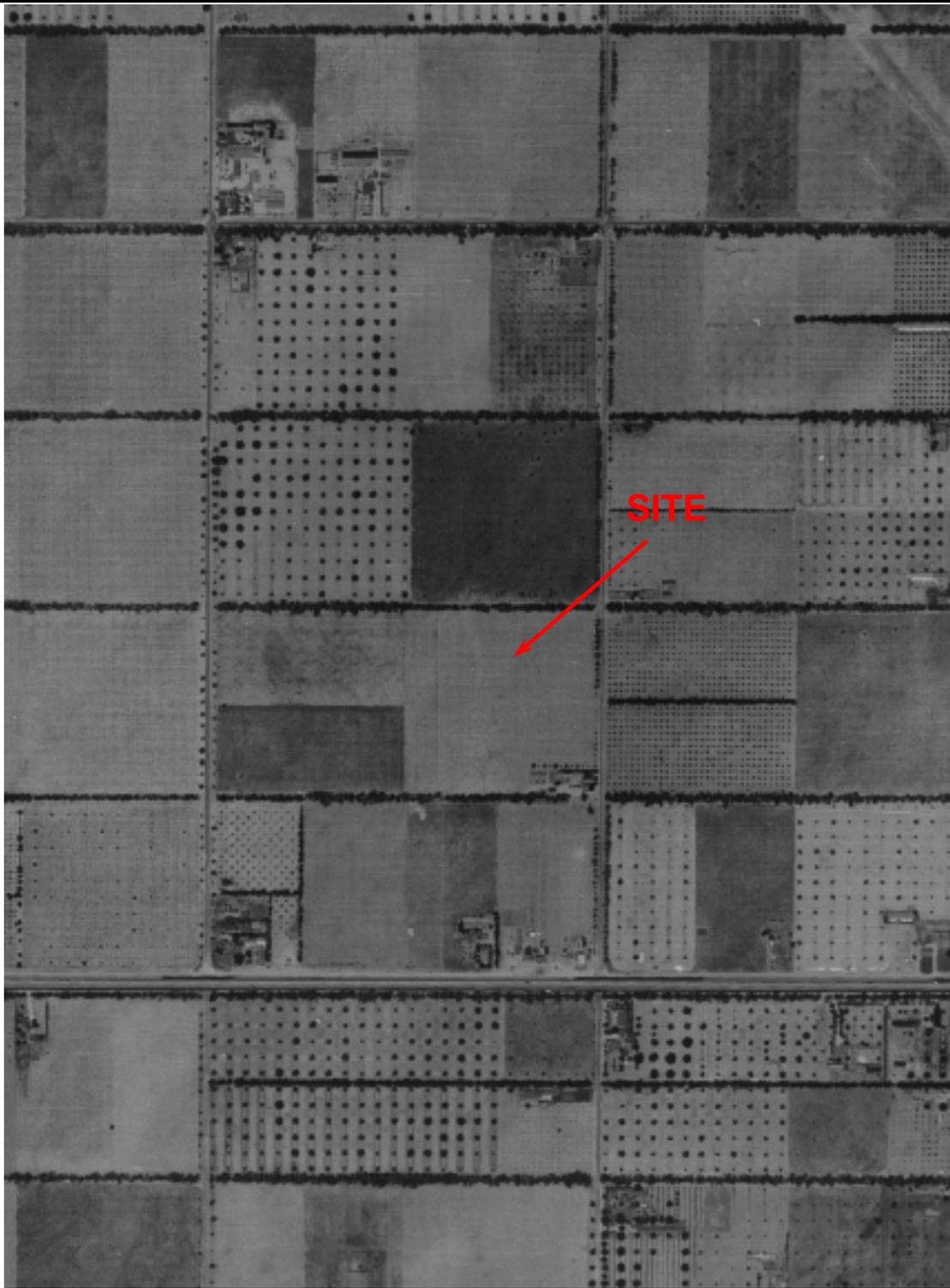


Project No. CARLDC034.01

Kallisto Greenhouse  
Fontana, San Bernardino County, California

**1953 Aerial Photograph**  
(Approximate Scale: 1 inch = 500 feet)





Project No. CARLDC034.01

Kallisto Greenhouse  
Fontana, San Bernardino County, California

**1938 Aerial Photograph**  
(Approximate Scale: 1 inch = 500 feet)





**Kallisto Greenhouses**

9988 Redwood Avenue  
Fontana, CA 92335

Inquiry Number: 4163658.4

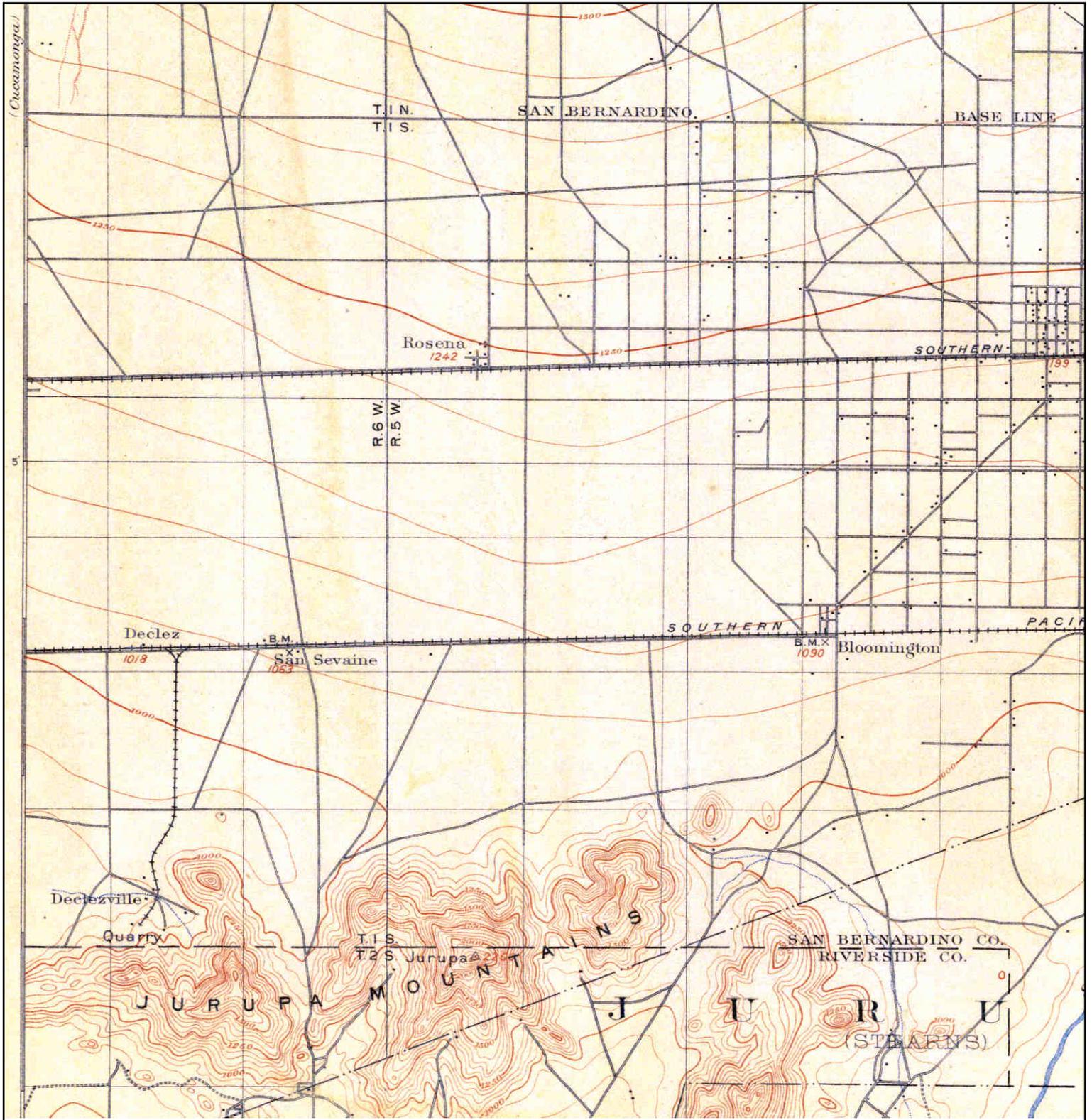
December 17, 2014

# EDR Historical Topographic Map Report



6 Armstrong Road, 4th Floor  
Shelton, Connecticut 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

# Historical Topographic Map



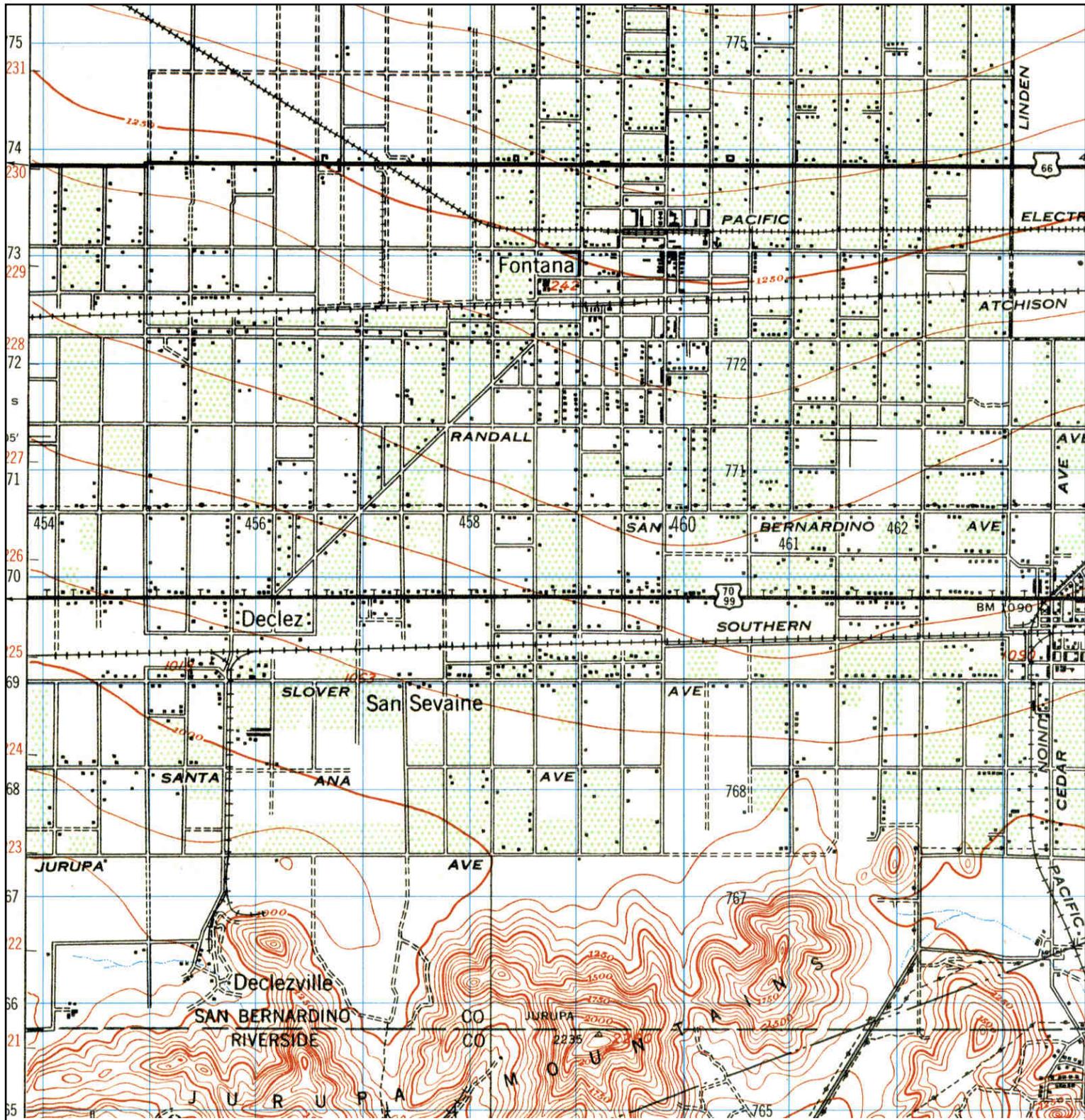
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	<p><b>SERIES:</b> 15  <b>SCALE:</b> 1:62500</p>		

# Historical Topographic Map



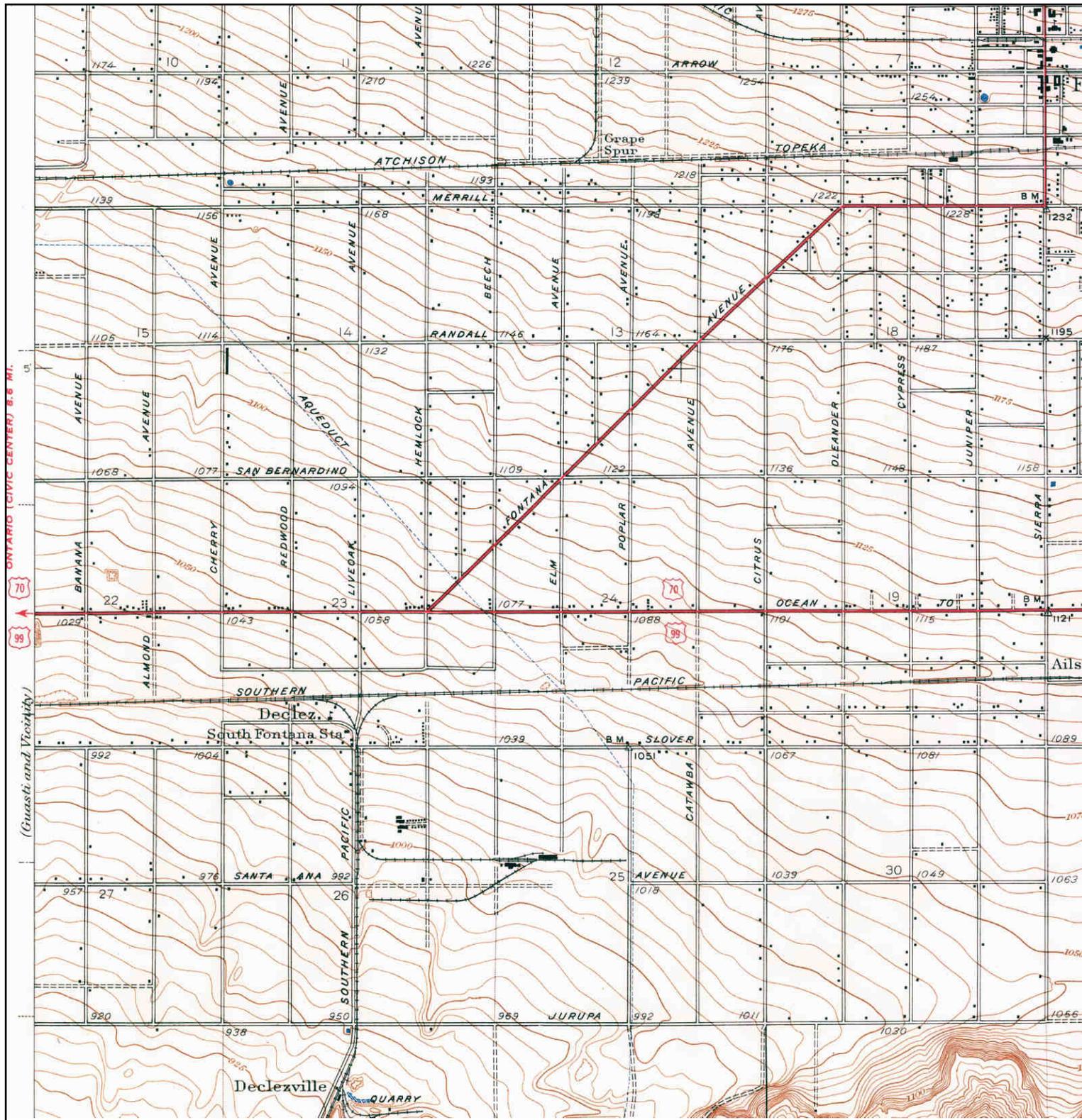
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# Historical Topographic Map



<p>N ↑</p>	<p><b>TARGET QUAD</b>                  NAME: SAN BERNARDINO                  MAP YEAR: 1942</p>	<p><b>SITE NAME:</b> Kallisto Greenhouses  <b>ADDRESS:</b> 9988 Redwood Avenue                  Fontana, CA 92335  <b>LAT/LONG:</b> 34.0729 / -117.4857</p>	<p><b>CLIENT:</b> Blackstone Consulting, LLC  <b>CONTACT:</b> Amy Stanton  <b>INQUIRY#:</b> 4163658.4  <b>RESEARCH DATE:</b> 12/17/2014</p>
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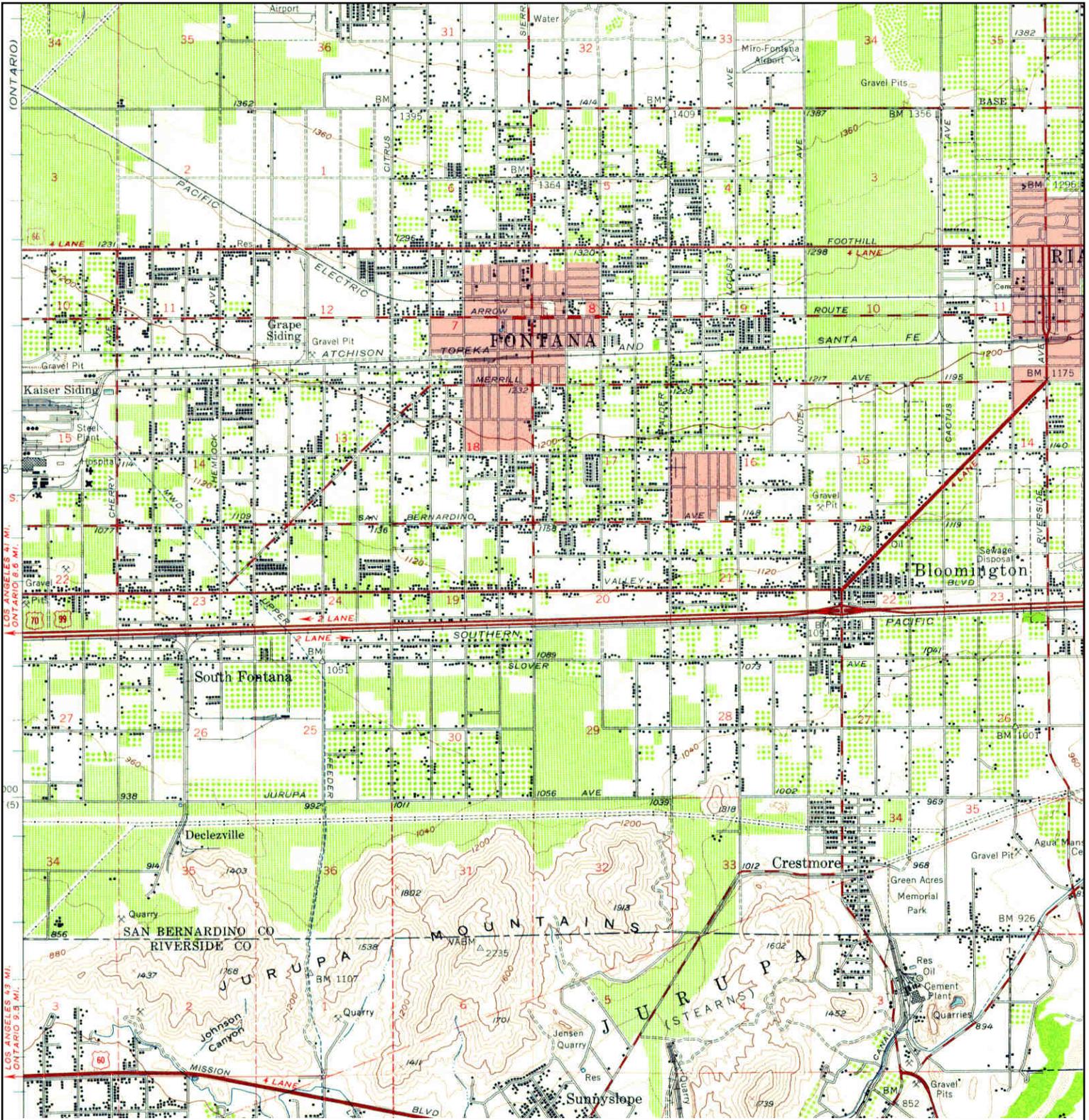
# Historical Topographic Map



<p>N ↑</p>	<p><b>TARGET QUAD</b>                  NAME: FONTANA                  MAP YEAR: 1943</p>	<p><b>SITE NAME:</b> Kallisto Greenhouses  <b>ADDRESS:</b> 9988 Redwood Avenue                  Fontana, CA 92335  <b>LAT/LONG:</b> 34.0729 / -117.4857</p>	<p><b>CLIENT:</b> Blackstone Consulting, LLC  <b>CONTACT:</b> Amy Stanton  <b>INQUIRY#:</b> 4163658.4  <b>RESEARCH DATE:</b> 12/17/2014</p>
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# Historical Topographic Map



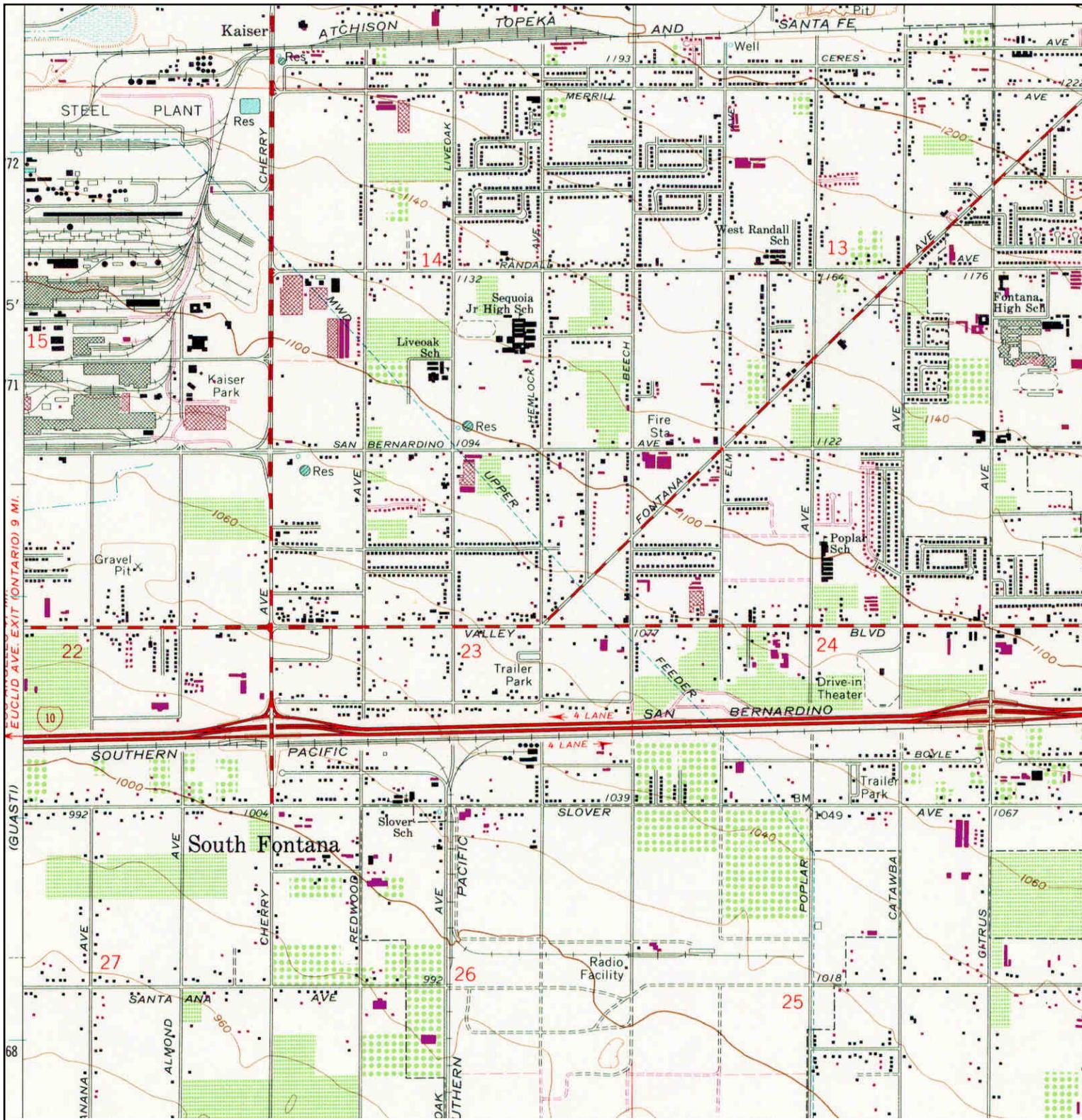
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	<b>MAP YEAR:</b> 1954	<b>FONTANA, CA 92335</b>	<b>INQUIRY#:</b> 4163658.4
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# Historical Topographic Map



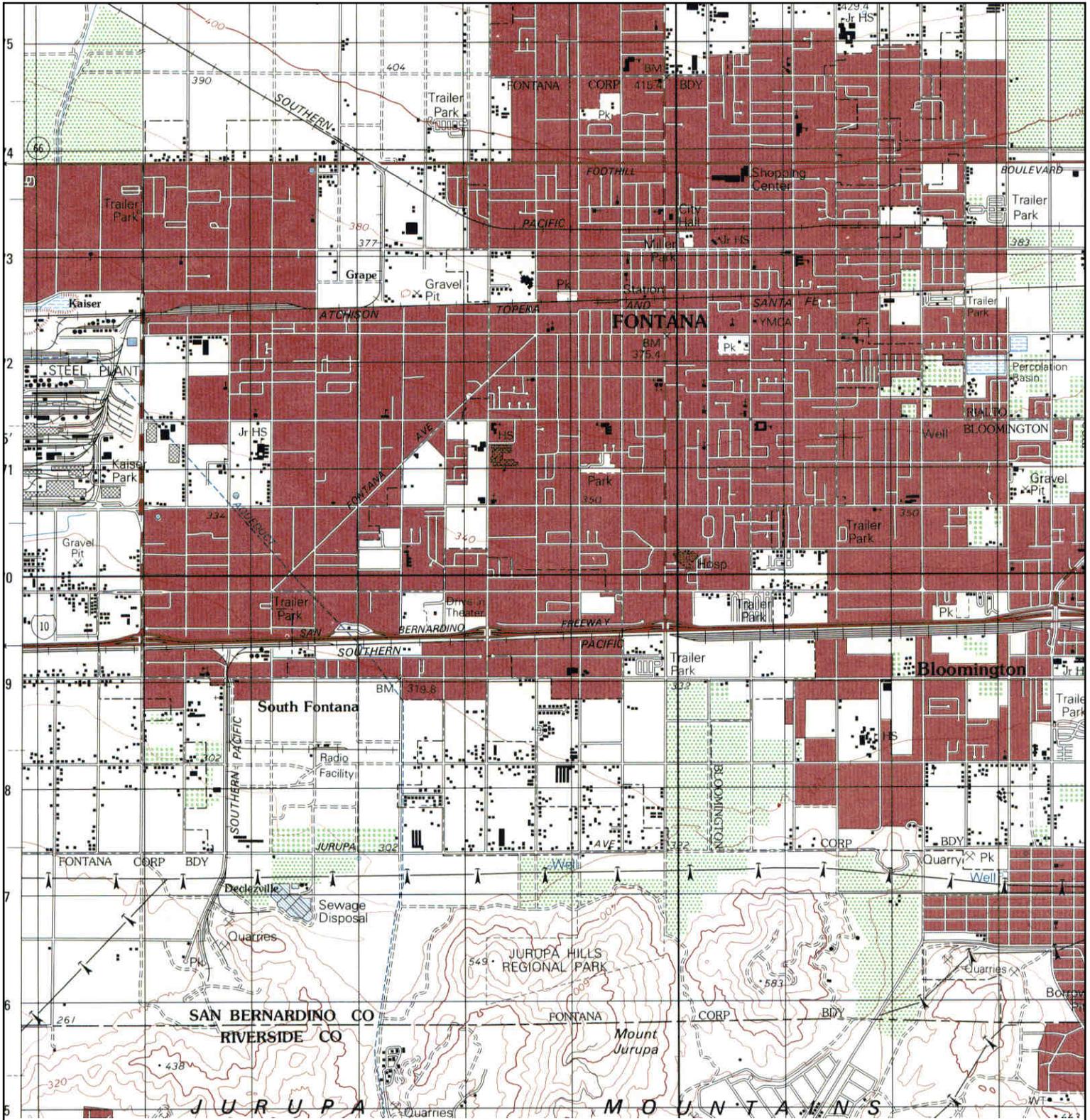
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	SERIES: 7.5 SCALE: 1:24000		

# Historical Topographic Map



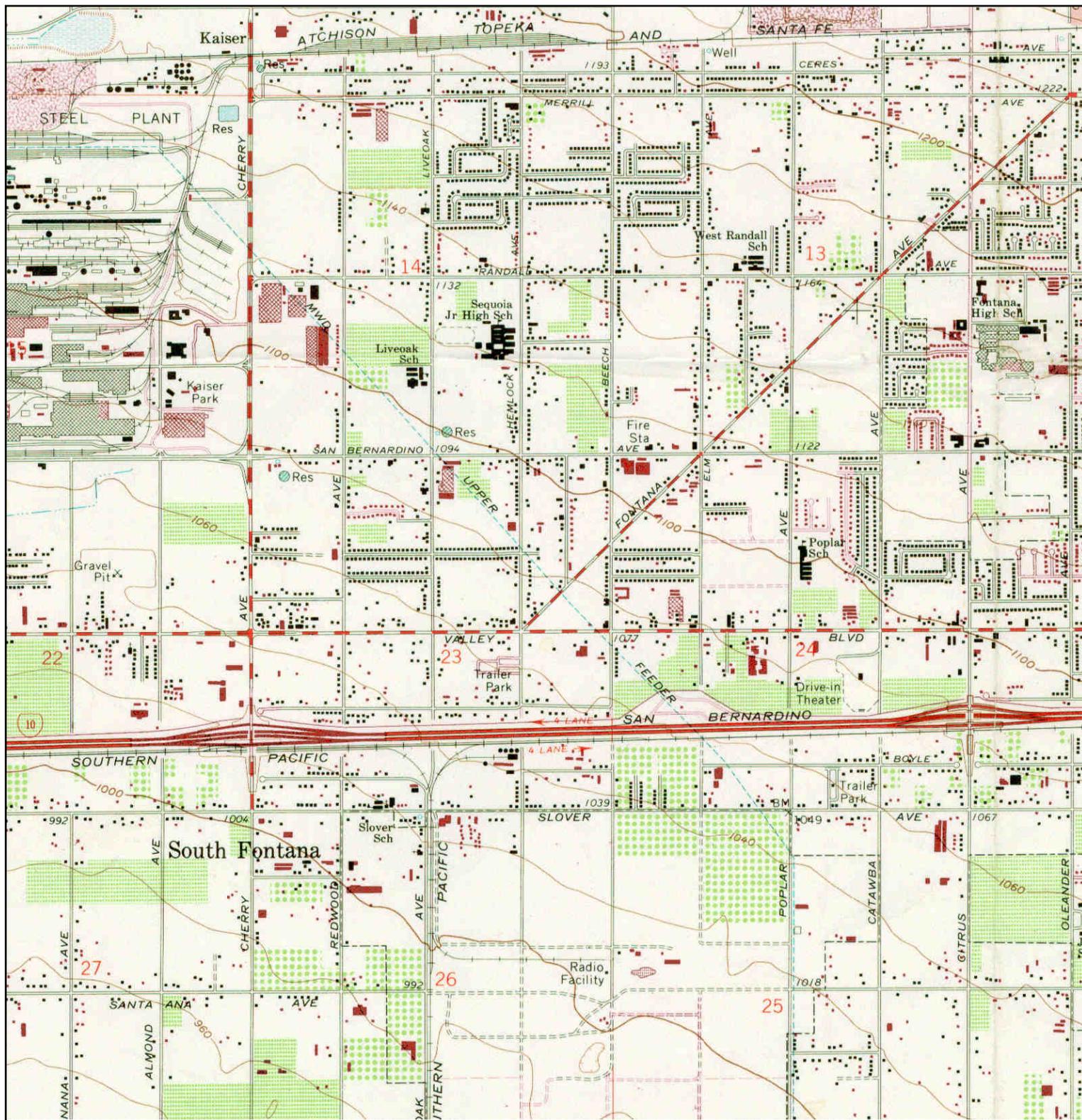
<p>N ↑</p>	<b>TARGET QUAD</b>	<b>SITE NAME:</b> Kallisto Greenhouses	<b>CLIENT:</b> Blackstone Consulting, LLC
	<b>NAME:</b> FONTANA	<b>ADDRESS:</b> 9988 Redwood Avenue	<b>CONTACT:</b> Amy Stanton
	<b>MAP YEAR:</b> 1973	<b>LAT/LONG:</b> 34.0729 / -117.4857	<b>INQUIRY#:</b> 4163658.4
	<b>PHOTOREVISED FROM :</b> 1967		<b>RESEARCH DATE:</b> 12/17/2014
	<b>SERIES:</b> 7.5		
	<b>SCALE:</b> 1:24000		

# Historical Topographic Map



	<b>TARGET QUAD</b>	<b>SITE NAME:</b> Kallisto Greenhouses	<b>CLIENT:</b> Blackstone Consulting, LLC
	<b>NAME:</b> SAN BERNARDINO	<b>ADDRESS:</b> 9988 Redwood Avenue	<b>CONTACT:</b> Amy Stanton
	<b>MAP YEAR:</b> 1975	<b>FONTANA, CA 92335</b>	<b>INQUIRY#:</b> 4163658.4
	<b>SERIES:</b> 15	<b>LAT/LONG:</b> 34.0729 / -117.4857	<b>RESEARCH DATE:</b> 12/17/2014
	<b>SCALE:</b> 1:50000		

# Historical Topographic Map



<p>N ↑</p>	<b>TARGET QUAD</b>	<b>SITE NAME:</b> Kallisto Greenhouses	<b>CLIENT:</b> Blackstone Consulting, LLC	
	<b>NAME:</b> FONTANA	<b>ADDRESS:</b> 9988 Redwood Avenue	<b>CONTACT:</b> Amy Stanton	
	<b>MAP YEAR:</b> 1980	<b>LAT/LONG:</b> 34.0729 / -117.4857	<b>INQUIRY#:</b> 4163658.4	<b>RESEARCH DATE:</b> 12/17/2014
	<b>PHOTOREVISED FROM :</b> 1967			
	<b>SERIES:</b> 7.5			
	<b>SCALE:</b> 1:24000			

**Kallisto Greenhouses**

9988 Redwood Avenue  
Fontana, CA 92335

Inquiry Number: 4163658.7S  
December 24, 2014

# The EDR Environmental LienSearch™



6 Armstrong Road,  
Fourth Floor  
Shelton, CT 06484  
800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

## EDR Environmental LienSearch™ Report

The EDR 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 address 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' offices, registries of deeds, 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 EDR at 1-800-352-0050  
with any questions or comments.

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# EDR Environmental LienSearch™ Report

## TARGET PROPERTY INFORMATION

### ADDRESS

KALLISTO GREENHOUSES  
9988 REDWOOD AVENUE  
FONTANA, CA 92335

### RESEARCH SOURCE

Source 1: San Bernardino Assessor  
San Bernardino County, California

Source 2: San Bernardino Recorder  
San Bernardino County, California

### PROPERTY INFORMATION

#### **Deed 1:**

Type of Deed: Individual Grant Deed

Title is vested in: Jim R. Rietkerk and Kathryn D. Rietkerk, Trustees of the Rietkerk Family Trust, established 06/28/1989

Title received from: Jim R. Rietkerk and Kathryn D. Rietkerk, husband and wife as joint tenants

Deed Dated: 06/28/1989

Deed Recorded: 08/21/1989

Instrument: 89-303998

**Legal Description:** All that certain piece or parcel of land being the East ½ of Farm Lot 916 according to map showing a subdivision of lands belonging to the Semi-Tropic Land and Water Company, as per plat recorded in Book 11 of Maps, Page 12, situate and lying in the County of San Bernardino, State of California.

**Legal Current Owner:** Jim R. Rietkerk and Kathryn D. Rietkerk, Trustees of the Rietkerk Family Trust, established 06/28/1989

**Property Identifiers:** 0234-101-21-0000

### ENVIRONMENTAL LIEN

Environmental Lien: Found  Not Found

If found:

1<sup>st</sup> Party:

2<sup>nd</sup> Party:

Dated:

Recorded:

Book:

Page:

Docket:

Volume:

Instrument:

Comments:

Miscellaneous:

## EDR Environmental LienSearch™ Report

### OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AUL's:                      Found                       Not Found

If found:

1<sup>st</sup> Party:

2<sup>nd</sup> Party:

Dated:

Recorded:

Book:

Page:

Docket:

Volume:

Instrument:

Comments:

Miscellaneous:

**EDR Environmental LienSearch™ Report**

**DEED EXHIBIT**



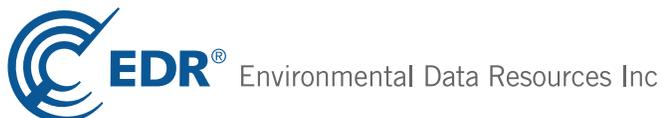
**Kallisto Greenhouses**

9988 Redwood Avenue  
Fontana, CA 92335

Inquiry Number: 4163658.2s

December 17, 2014

# The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

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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

9988 REDWOOD AVENUE  
SAN BERNARDINO County, CA 92335

#### COORDINATES

Latitude (North): 34.0729000 - 34° 4' 22.44"  
Longitude (West): 117.4857000 - 117° 29' 8.52"  
Universal Transverse Mercator: Zone 11  
UTM X (Meters): 455183.8  
UTM Y (Meters): 3770150.8  
Elevation: 1062 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 34117-A4 FONTANA, CA  
Most Recent Revision: 1980  
  
West Map: 34117-A5 GUASTI, CA  
Most Recent Revision: 1981

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20120519, 20120428  
Source: USDA

### 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:

<u>Site</u>	<u>Database(s)</u>	<u>EPA ID</u>
KALLISTO GREENHOUSES INC 9988 REDWOOD AVE FONTANA, CA 92335	CA San Bern. Co. Permit	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***

CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System  
FEDERAL FACILITY..... Federal Facility Site Information listing

#### ***Federal RCRA generators list***

RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

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

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

#### ***Federal ERNS list***

ERNS..... Emergency Response Notification System

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

CA 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***

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

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

INDIAN VCP..... Voluntary Cleanup Priority Listing

# EXECUTIVE SUMMARY

## ADDITIONAL ENVIRONMENTAL RECORDS

### **Local Brownfield lists**

US BROWNFIELDS..... A Listing of Brownfields Sites

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

ODI..... Open Dump Inventory  
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations  
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands  
CA WMUDS/SWAT..... Waste Management Unit Database

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

US CDL..... Clandestine Drug Labs  
CA SCH..... School Property Evaluation Program  
CA Toxic Pits..... Toxic Pits Cleanup Act Sites  
CA CDL..... Clandestine Drug Labs  
US HIST CDL..... National Clandestine Laboratory Register

### **Local Land Records**

LIENS 2..... CERCLA Lien Information  
CA LIENS..... Environmental Liens Listing

### **Records of Emergency Release Reports**

HMIRS..... Hazardous Materials Information Reporting System  
CA LDS..... Land Disposal Sites Listing  
CA MCS..... Military Cleanup Sites Listing  
CA SPILLS 90..... SPILLS 90 data from FirstSearch

### **Other Ascertainable Records**

DOT OPS..... Incident and Accident Data  
DOD..... Department of Defense Sites  
FUDS..... Formerly Used Defense Sites  
ROD..... Records Of Decision  
UMTRA..... Uranium Mill Tailings Sites  
US MINES..... Mines Master Index File  
TRIS..... Toxic Chemical Release Inventory System  
TSCA..... Toxic Substances Control Act  
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)  
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing  
SSTS..... Section 7 Tracking Systems  
ICIS..... Integrated Compliance Information System  
PADS..... PCB Activity Database System  
MLTS..... Material Licensing Tracking System  
RADINFO..... Radiation Information Database  
RAATS..... RCRA Administrative Action Tracking System  
RMP..... Risk Management Plans

## EXECUTIVE SUMMARY

CA UIC.....	UIC Listing
CA Cortese.....	"Cortese" Hazardous Waste & Substances Sites List
CA CUPA Listings.....	CUPA Resources List
CA Notify 65.....	Proposition 65 Records
CA DRYCLEANERS.....	Cleaner Facilities
CA WIP.....	Well Investigation Program Case List
INDIAN RESERV.....	Indian Reservations
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
CA HWT.....	Registered Hazardous Waste Transporter Database
CA MWMP.....	Medical Waste Management Program Listing
PCB TRANSFORMER.....	PCB Transformer Registration Database
EPA WATCH LIST.....	EPA WATCH LIST
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
LEAD SMELTERS.....	Lead Smelter Sites
PRP.....	Potentially Responsible Parties
COAL ASH DOE.....	Steam-Electric Plant Operation Data

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR US Hist Cleaners.....	EDR Exclusive Historic Dry Cleaners

### EDR RECOVERED GOVERNMENT ARCHIVES

#### ***Exclusive Recovered Govt. Archives***

CA RGA LUST.....	Recovered Government Archive Leaking Underground Storage Tank
CA RGA LF.....	Recovered Government Archive Solid Waste Facilities List

### 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 CORRACTS facilities list***

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows

## EXECUTIVE SUMMARY

which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 06/10/2014 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>KAISER VENTURES, INC.</b>	<b>13429 SAN BERNARDINO AV</b>	<b>NNW 1/2 - 1 (0.673 mi.)</b>	<b>P75</b>	<b>127</b>

### ***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 06/10/2014 has revealed that there are 7 RCRA-SQG sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>INLAND KENWORTH INC</b>	<b>9730 CHERRY AVE</b>	<b>NW 1/8 - 1/4 (0.223 mi.)</b>	<b>K54</b>	<b>88</b>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CHATFIELD CLARKE CO INC</b>	<b>14614 VALLY BLVD</b>	<b>S 0 - 1/8 (0.118 mi.)</b>	<b>E10</b>	<b>12</b>
<b>BIG RIG TRUCK REPAIR</b>	<b>14578 VALLEY BLVD</b>	<b>SSW 0 - 1/8 (0.119 mi.)</b>	<b>E12</b>	<b>18</b>
<b>BUTLER FLEET SERVICE</b>	<b>14714 VALLEY BLVD</b>	<b>SSE 0 - 1/8 (0.120 mi.)</b>	<b>D13</b>	<b>19</b>
<b>EMPIRE FORD NEW HOLLAND INC</b>	<b>14635 VALLEY BLVD</b>	<b>S 1/8 - 1/4 (0.128 mi.)</b>	<b>E17</b>	<b>21</b>
<b>SOUTHWEST TRUCK REPAIR</b>	<b>14887 E VALLEY</b>	<b>SW 1/8 - 1/4 (0.166 mi.)</b>	<b>I45</b>	<b>75</b>
<b>TIME OUT L L C D B A AM PM 11</b>	<b>10062 CHERRY AVE</b>	<b>SW 1/8 - 1/4 (0.185 mi.)</b>	<b>J49</b>	<b>83</b>

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

CA ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP'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 (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 CA ENVIROSTOR list, as provided by EDR, and dated 11/03/2014 has revealed that there are 4 CA ENVIROSTOR sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>KAISER STEEL</b> Status: Active Status: Certified / Operation & Maintenance	<b>9400 CHERRY AVENUE</b>	<b>NNW 1/2 - 1 (0.673 mi.)</b>	<b>P79</b>	<b>170</b>

## EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>MASTER HALCO</b> Status: Inactive - Action Required	9125 CHERRY AVE.	N 1/2 - 1 (0.972 mi.)	Q81	289
<b>MASTER HALCO, INC.</b> Status: Refer: RCRA	9125 CHERRY AVENUE	N 1/2 - 1 (0.977 mi.)	Q82	294
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>TREON STEEL FABRICATORS INC</b> Status: Refer: 1248 Local Agency	10665 REDWOOD AV	S 1/2 - 1 (0.832 mi.)	80	288

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

CA 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 CA SWF/LF list, as provided by EDR, and dated 08/18/2014 has revealed that there is 1 CA SWF/LF site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>RANCHO DISPOSAL INC</b>	9890 CHERRY AVE	WNW 1/8 - 1/4 (0.138 mi.)	F33	38

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

CA 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 CA LUST list, as provided by EDR, and dated 10/28/2014 has revealed that there are 11 CA LUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>RANCHO DISPOSAL INC</b> Status: Completed - Case Closed	9890 CHERRY AVE	WNW 1/8 - 1/4 (0.138 mi.)	F33	38
<b>AZ FUEL STOP</b> Status: Completed - Case Closed	14529 SAN BERNARDINO AV	NNW 1/4 - 1/2 (0.260 mi.)	64	99
<b>SPEEDY FUEL</b>	9668 REDWOOD AVE	NNE 1/4 - 1/2 (0.286 mi.)	M65	102
<b>SPEEDY FUEL</b> Status: Completed - Case Closed	9668 REDWOOD AVE	NNE 1/4 - 1/2 (0.286 mi.)	M66	104
<b>PIPELINE TRUCKING COMPANY</b> Status: Completed - Case Closed	9813 ALMOND AVE	WNW 1/4 - 1/2 (0.392 mi.)	O71	116
<b>PIPELINE TRUCKING COMPANY</b>	9813 ALMOND AVE	WNW 1/4 - 1/2 (0.392 mi.)	O72	117
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>BURRTEC WASTE INDUSTRIES</b> Status: Completed - Case Closed	9950 CHERRY AVE	W 1/8 - 1/4 (0.132 mi.)	G29	34

## EXECUTIVE SUMMARY

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>MOBIL STATION</b> Status: Completed - Case Closed	<b>14518 VALLEY BLVD</b>	<b>SW 1/8 - 1/4 (0.158 mi.)</b>	<b>I37</b>	<b>64</b>
<b>TRUCK TOWN</b> Status: Completed - Case Closed	<b>10238 CHERRY AVE</b>	<b>SSW 1/4 - 1/2 (0.321 mi.)</b>	<b>N68</b>	<b>107</b>
<b>BTE FUEL STOP</b>	<b>10002 ALMOND AVE</b>	<b>W 1/4 - 1/2 (0.380 mi.)</b>	<b>70</b>	<b>114</b>
<b>LITTLE SISTER'S TRUCK WASH</b> Status: Completed - Case Closed	<b>14264 VALLEY BLVD</b>	<b>WSW 1/4 - 1/2 (0.440 mi.)</b>	<b>73</b>	<b>120</b>

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

CA 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 CA UST list, as provided by EDR, and dated 09/17/2014 has revealed that there are 4 CA UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>RANCHO DISPOSAL INC</b>	<b>9890 CHERRY AVE</b>	<b>WNW 1/8 - 1/4 (0.138 mi.)</b>	<b>F33</b>	<b>38</b>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>EMPIRE FORD NEW HOLLAND INC</b>	<b>14635 VALLEY BLVD</b>	<b>S 1/8 - 1/4 (0.128 mi.)</b>	<b>E17</b>	<b>21</b>
<b>SON'S MOBIL STATION</b>	<b>14518 VALLEY BLVD</b>	<b>SW 1/8 - 1/4 (0.158 mi.)</b>	<b>I38</b>	<b>68</b>
<b>ARCO AM/PM</b>	<b>10062 CHERRY AVE</b>	<b>SW 1/8 - 1/4 (0.185 mi.)</b>	<b>J50</b>	<b>86</b>

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

A review of the CA AST list, as provided by EDR, and dated 08/01/2009 has revealed that there are 3 CA AST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>INLAND KENWORTH INC</b>	<b>9730 CHERRY AVE</b>	<b>NW 1/8 - 1/4 (0.223 mi.)</b>	<b>K54</b>	<b>88</b>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>SCOTT EQUIPMENT INC</b>	<b>14635 VALLEY BLVD</b>	<b>S 1/8 - 1/4 (0.128 mi.)</b>	<b>E18</b>	<b>24</b>
<b>EARTH CONSTRUCTION &amp; MINING</b>	<b>10131 REDWOOD AVE</b>	<b>SSE 1/8 - 1/4 (0.165 mi.)</b>	<b>D41</b>	<b>70</b>

### **ADDITIONAL ENVIRONMENTAL RECORDS**

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

CA SWRCY: A listing of recycling facilities in California.

A review of the CA SWRCY list, as provided by EDR, and dated 09/16/2014 has revealed that there are 3

## EXECUTIVE SUMMARY

CA SWRCY sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MILLENNIA RECYCLING <b>BEST VALUE RECYCLING LLC</b>	14699 EL MOLINO ST <b>15062 VALLEY BLVD</b>	NNE 0 - 1/8 (0.090 mi.) <b>ESE 1/4 - 1/2 (0.470 mi.)</b>	C7 <b>74</b>	10 <b>126</b>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>ALAMO RECYCLING INC</b>	<b>14930 VALLEY BLVD</b>	<b>ESE 1/4 - 1/2 (0.319 mi.)</b>	<b>67</b>	<b>106</b>

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

CA HIST Cal-Sites: Formerly known as ASPIS, this database contains both known and potential hazardous substance sites. The source is the California Department of Toxic Substance Control. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

A review of the CA HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there are 4 CA HIST Cal-Sites sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
KAISER STEEL - CHEMWEST AREA <b>KAISER STEEL-EAST SLAG PILE/SE</b>	9400 CHERRY AVENUE <b>9400 CHERRY AVENUE</b>	NNW 1/2 - 1 (0.673 mi.) <b>NNW 1/2 - 1 (0.673 mi.)</b>	P76 <b>P77</b>	147 <b>155</b>
KAISER STEEL - BYPRODUCTS AREA <b>KAISER STEEL</b>	9400 CHERRY AVENUE <b>9400 CHERRY AVENUE</b>	NNW 1/2 - 1 (0.673 mi.) <b>NNW 1/2 - 1 (0.673 mi.)</b>	P78 <b>P79</b>	161 <b>170</b>

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

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 8 CA FID UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>RANCHO DISPOSAL INC</b>	<b>9890 CHERRY AVE</b>	<b>WNW 1/8 - 1/4 (0.138 mi.)</b>	<b>F33</b>	<b>38</b>
<b>FULLERTON ENTERPRISES</b>	<b>9820 CHERRY AV</b>	<b>NW 1/8 - 1/4 (0.166 mi.)</b>	<b>H44</b>	<b>72</b>
<b>VANGAS, INC.</b>	<b>9808 CHERRY AVE</b>	<b>NW 1/8 - 1/4 (0.175 mi.)</b>	<b>H48</b>	<b>81</b>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>BRIDGESTONE FIRESTONE RETAIL &amp; SCOTT DIESEL SERVICE</b>	<b>9979 CHERRY AVE</b> <b>9978 CHERRY AVE</b>	<b>WSW 1/8 - 1/4 (0.130 mi.)</b> <b>WSW 1/8 - 1/4 (0.132 mi.)</b>	<b>G22</b> <b>G28</b>	<b>26</b> <b>33</b>
<b>BAYWOOD EXPRESS</b>	<b>9950 CHERRY AVE</b>	<b>W 1/8 - 1/4 (0.132 mi.)</b>	<b>G32</b>	<b>37</b>
MOBIL STATION	14518 VALLEY BLVD	SW 1/8 - 1/4 (0.158 mi.)	I36	64
<b>TRANS WEST FORD TRUCK</b>	<b>10150 CHERRY AVE</b>	<b>SW 1/8 - 1/4 (0.227 mi.)</b>	<b>55</b>	<b>93</b>

## EXECUTIVE SUMMARY

CA HIST UST: Historical UST Registered Database.

A review of the CA HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 8 CA HIST UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>RANCHO DISPOSAL INC</b>	<b>9890 CHERRY AVE</b>	<b>WNW 1/8 - 1/4 (0.138 mi.)</b>	<b>F33</b>	<b>38</b>
ADAMS AND COMPANIES INC.	9820 CHERRY AVE	NW 1/8 - 1/4 (0.166 mi.)	H42	71
ADAMS & CO.	9820 CHERRY AVE	NW 1/8 - 1/4 (0.166 mi.)	H43	71
<b>VANGAS, INC.</b>	<b>9808 CHERRY AVE</b>	<b>NW 1/8 - 1/4 (0.175 mi.)</b>	<b>H47</b>	<b>77</b>

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CARL'S TRANSPORT REFRIGERATION</b>	<b>9978 CHERRY AVE</b>	<b>WSW 1/8 - 1/4 (0.132 mi.)</b>	<b>G27</b>	<b>32</b>
A & W TRUCK CENTER	9950 CHERRY AVE	W 1/8 - 1/4 (0.132 mi.)	G31	37
ABRAHAM RIDA	14518 VALLEY BLVD	SW 1/8 - 1/4 (0.158 mi.)	I39	69
<b>TRANS WEST FORD TRUCK</b>	<b>10150 CHERRY AVE</b>	<b>SW 1/8 - 1/4 (0.227 mi.)</b>	<b>55</b>	<b>93</b>

CA 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 CA SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 8 CA SWEEPS UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>RANCHO DISPOSAL INC</b>	<b>9890 CHERRY AVE</b>	<b>WNW 1/8 - 1/4 (0.138 mi.)</b>	<b>F33</b>	<b>38</b>
<b>FULLERTON ENTERPRISES</b>	<b>9820 CHERRY AV</b>	<b>NW 1/8 - 1/4 (0.166 mi.)</b>	<b>H44</b>	<b>72</b>
<b>VANGAS, INC.</b>	<b>9808 CHERRY AVE</b>	<b>NW 1/8 - 1/4 (0.175 mi.)</b>	<b>H48</b>	<b>81</b>

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>BRIDGESTONE FIRESTONE RETAIL &amp; SCOTT DIESEL SERVICE</b>	<b>9979 CHERRY AVE</b>	<b>WSW 1/8 - 1/4 (0.130 mi.)</b>	<b>G22</b>	<b>26</b>
<b>BAYWOOD EXPRESS</b>	<b>9978 CHERRY AVE</b>	<b>WSW 1/8 - 1/4 (0.132 mi.)</b>	<b>G28</b>	<b>33</b>
<b>MOBIL STATION</b>	<b>9950 CHERRY AVE</b>	<b>W 1/8 - 1/4 (0.132 mi.)</b>	<b>G32</b>	<b>37</b>
<b>TRANS WEST FORD TRUCK</b>	<b>14518 VALLEY BLVD</b>	<b>SW 1/8 - 1/4 (0.158 mi.)</b>	<b>I37</b>	<b>64</b>
	<b>10150 CHERRY AVE</b>	<b>SW 1/8 - 1/4 (0.227 mi.)</b>	<b>55</b>	<b>93</b>

### 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 06/10/2014 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>G C S WESTERN POWER AND EQUIPM</b>	<b>10062 LIVE OAK AVE</b>	<b>ESE 1/8 - 1/4 (0.232 mi.)</b>	<b>L58</b>	<b>95</b>

## EXECUTIVE SUMMARY

CONSENT: Major Legal settlements that establish responsibility and standards for cleanup at NPL (superfund) sites. Released periodically by U.S. District Courts after settlement by parties to litigation matters.

A review of the CONSENT list, as provided by EDR, and dated 12/31/2013 has revealed that there is 1 CONSENT site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>KAISER VENTURES, INC.</b>	<b>13429 SAN BERNARDINO AV</b>	<b>NNW 1/2 - 1 (0.673 mi.)</b>	<b>P75</b>	<b>127</b>

CA BOND EXP. 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.

A review of the CA BOND EXP. PLAN list, as provided by EDR, and dated 01/01/1989 has revealed that there is 1 CA BOND EXP. PLAN site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>KAISER STEEL-EAST SLAG PILE/SE</b>	<b>9400 CHERRY AVENUE</b>	<b>NNW 1/2 - 1 (0.673 mi.)</b>	<b>P77</b>	<b>155</b>

CA 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 [CALSTATES]. This listing is no longer updated by the state agency.

A review of the CA HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 6 CA HIST CORTESE sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>RANCHO DISPOSAL INC</b>	<b>9890 CHERRY AVE</b>	<b>WNW 1/8 - 1/4 (0.138 mi.)</b>	<b>F33</b>	<b>38</b>
<b>AZ FUEL STOP</b>	<b>14529 SAN BERNARDINO AV</b>	<b>NNW 1/4 - 1/2 (0.260 mi.)</b>	<b>64</b>	<b>99</b>
<b>PIPELINE TRUCKING COMPANY</b>	<b>9813 ALMOND AVE</b>	<b>WNW 1/4 - 1/2 (0.392 mi.)</b>	<b>O72</b>	<b>117</b>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>BURRTEC WASTE INDUSTRIES</b>	<b>9950 CHERRY AVE</b>	<b>W 1/8 - 1/4 (0.132 mi.)</b>	<b>G29</b>	<b>34</b>
<b>MOBIL STATION</b>	<b>14518 VALLEY BLVD</b>	<b>SW 1/8 - 1/4 (0.158 mi.)</b>	<b>I37</b>	<b>64</b>
<b>TRUCK TOWN</b>	<b>10238 CHERRY AVE</b>	<b>SSW 1/4 - 1/2 (0.321 mi.)</b>	<b>N69</b>	<b>114</b>

San Bernardino County Fire Department Hazardous Materials Division.

A review of the CA San Bern. Co. Permit list, as provided by EDR, and dated 08/06/2014 has revealed that there are 30 CA San Bern. Co. Permit sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>XTREME MOBILE REPAIR INC</b>	<b>14690 MALLORY DR&amp; 14961</b>	<b>NE 0 - 1/8 (0.036 mi.)</b>	<b>A3</b>	<b>8</b>
<b>GUANGDA DEVELOPMENT USA, INC.</b>	<b>14622 EL MOLINO ST</b>	<b>N 0 - 1/8 (0.105 mi.)</b>	<b>8</b>	<b>11</b>
<b>NESCO</b>	<b>9881 N CHERRY AVE</b>	<b>WNW 1/8 - 1/4 (0.126 mi.)</b>	<b>F16</b>	<b>21</b>
<b>KROPPS PARTS AND SERVICE INC.</b>	<b>14571 ANDEL DR</b>	<b>NNW 1/8 - 1/4 (0.129 mi.)</b>	<b>20</b>	<b>25</b>
<b>FULLERTON ENTERPRISES</b>	<b>9820 CHERRY AV</b>	<b>NW 1/8 - 1/4 (0.166 mi.)</b>	<b>H44</b>	<b>72</b>
<b>VANGAS, INC.</b>	<b>9808 CHERRY AVE</b>	<b>NW 1/8 - 1/4 (0.175 mi.)</b>	<b>H47</b>	<b>77</b>
<b>AVILA AUTO BODY REPAIRS</b>	<b>9823 CHERRY AVE</b>	<b>NW 1/8 - 1/4 (0.185 mi.)</b>	<b>H52</b>	<b>87</b>
<b>INLAND KENWORTH INC</b>	<b>9730 CHERRY AVE</b>	<b>NW 1/8 - 1/4 (0.223 mi.)</b>	<b>K54</b>	<b>88</b>

## EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
GOODING ENTERPRISES	9743 CHERRY AVE	NW 1/8 - 1/4 (0.230 mi.)	K56	94
PACIFIC SOUTHWEST LUMBER	9712 REDWOOD AVE	NNE 1/8 - 1/4 (0.233 mi.)	M60	97
RUSH TRUCK LEASING	9727 CHERRY AVE	NNW 1/8 - 1/4 (0.245 mi.)	K63	98

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
TOM'S TRUCK REPAIR	14546 HUNTER AVE	SW 0 - 1/8 (0.072 mi.)	B4	9
BEST DEAL TRUCK SALES	14682 VALLEY BLVD	SSE 0 - 1/8 (0.116 mi.)	D9	11
<b>CHATFIELD CLARKE CO INC</b>	<b>14614 VALLY BLVD</b>	<b>S 0 - 1/8 (0.118 mi.)</b>	<b>E10</b>	<b>12</b>
<b>BIG RIG TRUCK REPAIRING</b>	<b>14578 VALLEY BLVD</b>	<b>SSW 0 - 1/8 (0.119 mi.)</b>	<b>E11</b>	<b>17</b>
<b>EMPIRE FORD NEW HOLLAND INC</b>	<b>14635 VALLEY BLVD</b>	<b>S 1/8 - 1/4 (0.128 mi.)</b>	<b>E17</b>	<b>21</b>
CARGO SOLUTION EXPRESS INC	14587 VALLEY BLVD	SSW 1/8 - 1/4 (0.129 mi.)	E21	25
<b>BRIDGESTONE FIRESTONE RETAIL &amp; RENE'S MOTOR SPORTS INC</b>	<b>9979 CHERRY AVE</b>	<b>WSW 1/8 - 1/4 (0.130 mi.)</b>	<b>G22</b>	<b>26</b>
	<b>10007 CHERRY AVE</b>	<b>WSW 1/8 - 1/4 (0.131 mi.)</b>	<b>G23</b>	<b>28</b>
EMPIRE SPEEDO & TACH	9996 CHERRY AVE	WSW 1/8 - 1/4 (0.132 mi.)	G24	29
GENERAL ENVIRONMENTAL MGMT, IN	9980 CHERRY AVE	WSW 1/8 - 1/4 (0.132 mi.)	G26	31
<b>CARL'S TRANSPORT REFRIGERATION</b>	<b>9978 CHERRY AVE</b>	<b>WSW 1/8 - 1/4 (0.132 mi.)</b>	<b>G27</b>	<b>32</b>
<b>SCOTT DIESEL SERVICE</b>	<b>9978 CHERRY AVE</b>	<b>WSW 1/8 - 1/4 (0.132 mi.)</b>	<b>G28</b>	<b>33</b>
<b>MOBIL STATION</b>	<b>14518 VALLEY BLVD</b>	<b>SW 1/8 - 1/4 (0.158 mi.)</b>	<b>I37</b>	<b>64</b>
<b>EARTH CONSTRUCTION &amp; MINING</b>	<b>10131 REDWOOD AVE</b>	<b>SSE 1/8 - 1/4 (0.165 mi.)</b>	<b>D41</b>	<b>70</b>
<b>ARCO AM/PM</b>	<b>10062 CHERRY AVE</b>	<b>SW 1/8 - 1/4 (0.185 mi.)</b>	<b>J50</b>	<b>86</b>
AMERICAN TRANSMISSION EX	14765 VALLEY BLVD	SE 1/8 - 1/4 (0.217 mi.)	53	88
<b>TRANS WEST FORD TRUCK</b>	<b>10150 CHERRY AVE</b>	<b>SW 1/8 - 1/4 (0.227 mi.)</b>	<b>55</b>	<b>93</b>
CASE POWER AND EQUIPMENT	10062 LIVE OAK AVE	ESE 1/8 - 1/4 (0.232 mi.)	L59	97
CARL'S JR #48	14454 VALLEY BLVD	SW 1/8 - 1/4 (0.234 mi.)	J61	97

TX Ind. Haz Waste: The Industrial and Hazardous Waste Database contains summary reports by waste handlers, generators and shippers in Texas.

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

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
HAZ-PAK	9980 CHERRY AVE	WSW 1/8 - 1/4 (0.132 mi.)	G25	30

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

A review of the CA HWP list, as provided by EDR, and dated 08/26/2014 has revealed that there is 1 CA HWP site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>KAISER VENTURES, INC.</b>	<b>13429 SAN BERNARDINO AV</b>	<b>NNW 1/2 - 1 (0.673 mi.)</b>	<b>P75</b>	<b>127</b>

## EXECUTIVE SUMMARY

CA PROC: A listing of certified processors.

A review of the CA PROC list, as provided by EDR, and dated 09/16/2014 has revealed that there is 1 CA PROC site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MILLENNIA RECYCLING	14699 EL MOLINO ST	NNE 0 - 1/8 (0.090 mi.)	C6	10

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

EDR US Hist Auto Stat: 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 US Hist Auto Stat list, as provided by EDR, has revealed that there are 13 EDR US Hist Auto Stat sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
Not reported	14690 MALLORY DR	NE 0 - 1/8 (0.036 mi.)	A2	8
Not reported	9905 CHERRY AVE	WNW 0 - 1/8 (0.125 mi.)	F15	21
Not reported	9881 CHERRY AVE	WNW 1/8 - 1/4 (0.129 mi.)	F19	24
Not reported	9823 CHERRY AVE	NW 1/8 - 1/4 (0.154 mi.)	H35	63
Not reported	9743 CHERRY AVE	NW 1/8 - 1/4 (0.230 mi.)	K57	95
Not reported	9727 CHERRY AVE	NNW 1/8 - 1/4 (0.245 mi.)	K62	98
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
Not reported	14546 HUNTER ST	SW 0 - 1/8 (0.072 mi.)	B5	9
Not reported	14714 VALLEY BLVD	SSE 0 - 1/8 (0.120 mi.)	D14	21
Not reported	9950 CHERRY AVE	W 1/8 - 1/4 (0.132 mi.)	G30	36
Not reported	14765 VALLEY BLVD	SE 1/8 - 1/4 (0.154 mi.)	34	62
Not reported	14518 VALLEY BLVD	SW 1/8 - 1/4 (0.158 mi.)	I40	70
Not reported	14510 VALLEY BLVD	SW 1/8 - 1/4 (0.167 mi.)	I46	77
Not reported	10062 CHERRY AVE	SW 1/8 - 1/4 (0.185 mi.)	J51	87

## EXECUTIVE SUMMARY

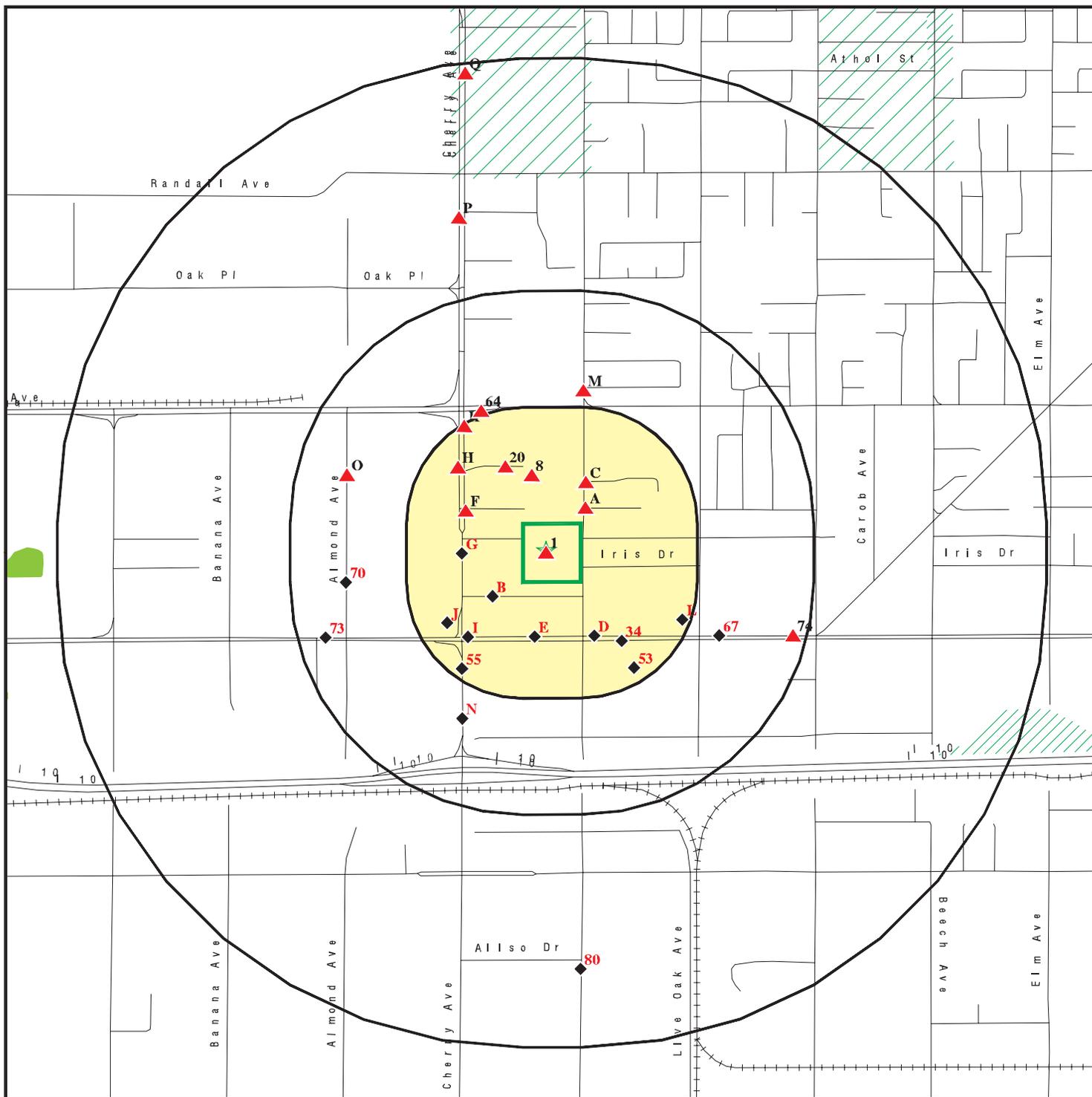
Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

Site Name

Database(s)

CA CDL  
CA CDL

# OVERVIEW MAP - 4163658.2S



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

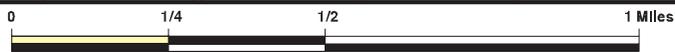
Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone

National Wetland Inventory

Areas of Concern

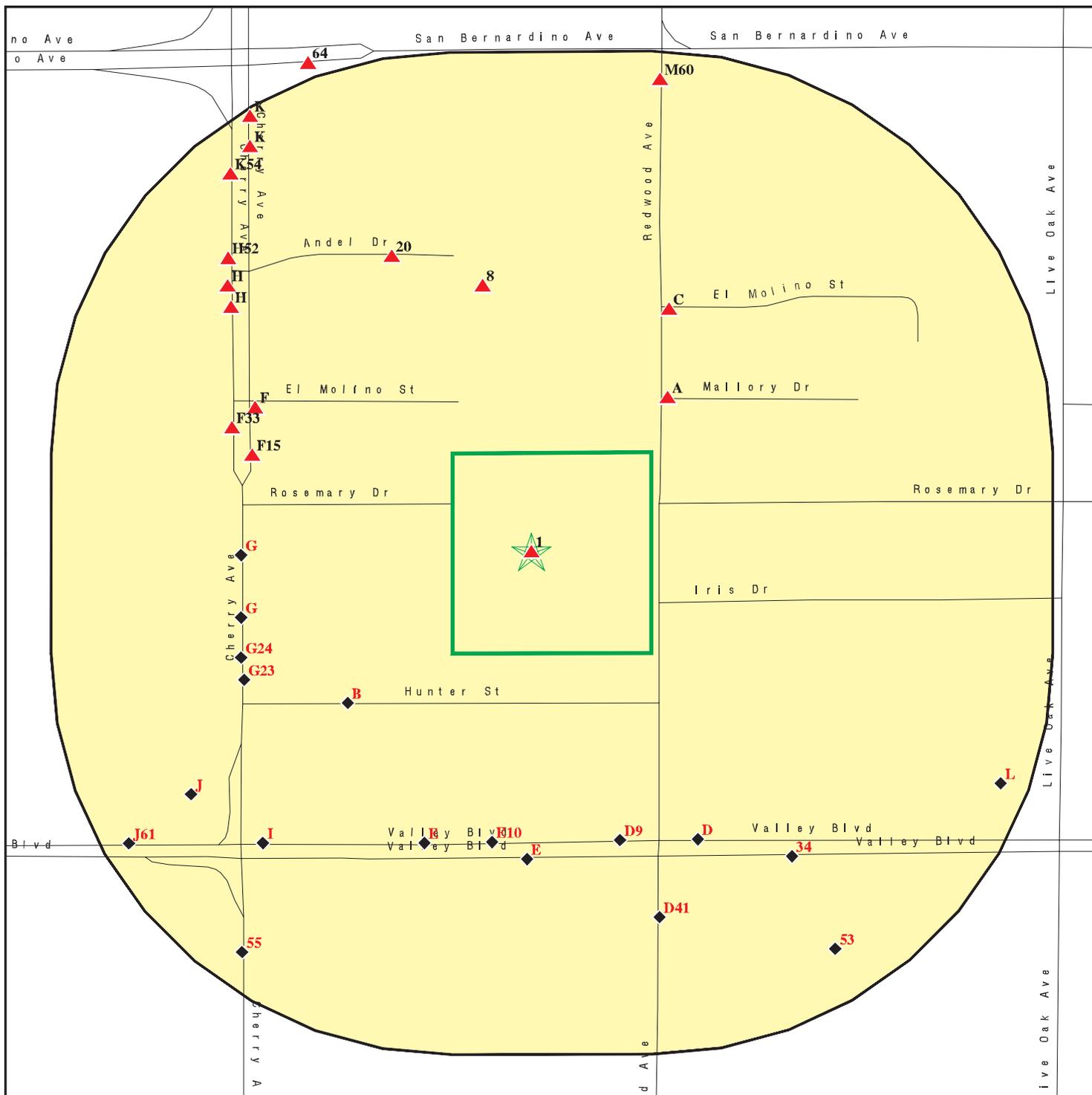


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Kallisto Greenhouses  
 ADDRESS: 9988 Redwood Avenue  
 Fontana CA 92335  
 LAT/LONG: 34.0729 / 117.4857

CLIENT: Blackstone Consulting, LLC  
 CONTACT: Amy Stanton  
 INQUIRY #: 4163658.2s  
 DATE: December 17, 2014 11:59 am

# DETAIL MAP - 4163658.2S



Target Property

Sites at elevations higher than or equal to the target property

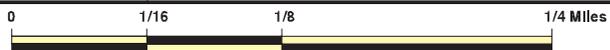
Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites



Indian Reservations BIA

Areas of Concern

Oil & Gas pipelines from USGS

100-year flood zone

500-year flood zone



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: Kallisto Greenhouses  
 ADDRESS: 9988 Redwood Avenue  
 Fontana CA 92335  
 LAT/LONG: 34.0729 / 117.4857

CLIENT: Blackstone Consulting, LLC  
 CONTACT: Amy Stanton  
 INQUIRY #: 4163658.2s  
 DATE: December 17, 2014 12:00 pm

## 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
<b>STANDARD ENVIRONMENTAL RECORDS</b>								
<b><i>Federal NPL site list</i></b>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
<b><i>Federal Delisted NPL site list</i></b>								
Delisted NPL	1.000		0	0	0	0	NR	0
<b><i>Federal CERCLIS list</i></b>								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
<b><i>Federal CERCLIS NFRAP site List</i></b>								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA CORRACTS facilities list</i></b>								
CORRACTS	1.000		0	0	0	1	NR	1
<b><i>Federal RCRA non-CORRACTS TSD facilities list</i></b>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA generators list</i></b>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		3	4	NR	NR	NR	7
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<b><i>Federal institutional controls / engineering controls registries</i></b>								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
<b><i>Federal ERNS list</i></b>								
ERNS	TP		NR	NR	NR	NR	NR	0
<b><i>State- and tribal - equivalent NPL</i></b>								
CA RESPONSE	1.000		0	0	0	0	NR	0
<b><i>State- and tribal - equivalent CERCLIS</i></b>								
CA ENVIROSTOR	1.000		0	0	0	4	NR	4
<b><i>State and tribal landfill and/or solid waste disposal site lists</i></b>								
CA SWF/LF	0.500		0	1	0	NR	NR	1
<b><i>State and tribal leaking storage tank lists</i></b>								
CA LUST	0.500		0	3	8	NR	NR	11

## 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
CA SLIC	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
<b>State and tribal registered storage tank lists</b>								
CA UST	0.250		0	4	NR	NR	NR	4
CA AST	0.250		0	3	NR	NR	NR	3
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
<b>State and tribal voluntary cleanup sites</b>								
CA VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
<b>ADDITIONAL ENVIRONMENTAL RECORDS</b>								
<b>Local Brownfield lists</b>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b>Local Lists of Landfill / Solid Waste Disposal Sites</b>								
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
CA SWRCY	0.500		1	0	2	NR	NR	3
CA HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
CA WMUDS/SWAT	0.500		0	0	0	NR	NR	0
<b>Local Lists of Hazardous waste / Contaminated Sites</b>								
US CDL	TP		NR	NR	NR	NR	NR	0
CA HIST Cal-Sites	1.000		0	0	0	4	NR	4
CA SCH	0.250		0	0	NR	NR	NR	0
CA Toxic Pits	1.000		0	0	0	0	NR	0
CA CDL	TP		NR	NR	NR	NR	NR	0
US HIST CDL	TP		NR	NR	NR	NR	NR	0
<b>Local Lists of Registered Storage Tanks</b>								
CA FID UST	0.250		0	8	NR	NR	NR	8
CA HIST UST	0.250		0	8	NR	NR	NR	8
CA SWEEPS UST	0.250		0	8	NR	NR	NR	8
<b>Local Land Records</b>								
LIENS 2	TP		NR	NR	NR	NR	NR	0
CA LIENS	TP		NR	NR	NR	NR	NR	0
CA DEED	0.500		0	0	0	NR	NR	0
<b>Records of Emergency Release Reports</b>								
HMIRS	TP		NR	NR	NR	NR	NR	0
CA CHMIRS	TP		NR	NR	NR	NR	NR	0
CA LDS	TP		NR	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
CA MCS	TP		NR	NR	NR	NR	NR	0
CA SPILLS 90	TP		NR	NR	NR	NR	NR	0
<b>Other Ascertainable Records</b>								
RCRA NonGen / NLR	0.250		0	1	NR	NR	NR	1
DOT OPS	TP		NR	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	1	NR	1
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	1	NR	1
CA UIC	TP		NR	NR	NR	NR	NR	0
CA NPDES	TP		NR	NR	NR	NR	NR	0
CA Cortese	0.500		0	0	0	NR	NR	0
CA HIST CORTESE	0.500		0	3	3	NR	NR	6
CA CUPA Listings	0.250		0	0	NR	NR	NR	0
CA Notify 65	1.000		0	0	0	0	NR	0
CA DRYCLEANERS	0.250		0	0	NR	NR	NR	0
CA WIP	0.250		0	0	NR	NR	NR	0
CA ENF	TP		NR	NR	NR	NR	NR	0
CA San Bern. Co. Permit	0.250	1	6	24	NR	NR	NR	31
CA HAZNET	TP		NR	NR	NR	NR	NR	0
TX Ind. Haz Waste	0.250		0	1	NR	NR	NR	1
CA EMI	TP		NR	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
CA HWT	0.250		0	0	NR	NR	NR	0
CA MWMP	0.250		0	0	NR	NR	NR	0
CA HWP	1.000		0	0	0	1	NR	1
CA PROC	0.500		1	0	0	NR	NR	1
CA WDS	TP		NR	NR	NR	NR	NR	0
CA Financial Assurance	TP		NR	NR	NR	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
US AIRS	TP		NR	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
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		4	9	NR	NR	NR	13
EDR US Hist Cleaners	0.250		0	0	NR	NR	NR	0

### EDR RECOVERED GOVERNMENT ARCHIVES

#### ***Exclusive Recovered Govt. Archives***

CA RGA LUST	TP		NR	NR	NR	NR	NR	0
CA RGA LF	TP		NR	NR	NR	NR	NR	0

#### NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

<b>1</b>	<b>KALLISTO GREENHOUSES INC</b>	<b>CA San Bern. Co. Permit</b>	<b>S104761934</b>
<b>Target Property</b>	<b>9988 REDWOOD AVE</b> <b>FONTANA, CA 92335</b>		<b>N/A</b>

**Actual:** 1062 ft.

San Bern. Co. Permit:  
 Region: SAN BERNARDINO  
 Facility ID: FA0000526  
 Owner: KALLISTO GREENHOUSES INC  
 Permit Number: PT0003767  
 Permit Category: HAZMAT HANDLER 0-10 EMPLOYEES  
 Facility Status: INACTIVE  
 Expiration Date: 04/30/2014

<b>A2</b>		<b>EDR US Hist Auto Stat</b>	<b>1015232358</b>
<b>NE</b>	<b>14690 MALLORY DR</b>		<b>N/A</b>
<b>&lt; 1/8</b>	<b>FONTANA, CA 92335</b>		
<b>0.036 mi.</b>			
<b>189 ft.</b>	<b>Site 1 of 2 in cluster A</b>		

**Relative:** Higher

EDR Historical Auto Stations:  
 Name: ANGELS MOBILE REPAIR  
 Year: 2012  
 Address: 14690 MALLORY DR

**Actual:** 1072 ft.

<b>A3</b>	<b>XTREME MOBILE REPAIR INC</b>	<b>CA San Bern. Co. Permit</b>	<b>S112274140</b>
<b>NE</b>	<b>14690 MALLORY DR &amp; 14961 MALLORY</b>		<b>N/A</b>
<b>&lt; 1/8</b>	<b>FONTANA, CA 92335</b>		
<b>0.036 mi.</b>			
<b>189 ft.</b>	<b>Site 2 of 2 in cluster A</b>		

**Relative:** Higher

San Bern. Co. Permit:  
 Region: SAN BERNARDINO  
 Facility ID: FA0014851  
 Owner: XTREME MOBILE REPAIR INC  
 Permit Number: PT0025856  
 Permit Category: SMALL QUANTITY GENERATOR  
 Facility Status: ACTIVE  
 Expiration Date: 01/31/2015

Region: SAN BERNARDINO  
 Facility ID: FA0014851  
 Owner: XTREME MOBILE REPAIR INC  
 Permit Number: PT0025855  
 Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS  
 Facility Status: ACTIVE  
 Expiration Date: 01/31/2015

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**B4**  
**SW**  
**< 1/8**  
**0.072 mi.**  
**381 ft.**

**TOM'S TRUCK REPAIR**  
**14546 HUNTER AVE**  
**FONTANA, CA 92335**

**CA San Bern. Co. Permit**

**S104771163**  
**N/A**

**Site 1 of 2 in cluster B**

**Relative:**  
**Lower**

San Bern. Co. Permit:  
Region: SAN BERNARDINO  
Facility ID: FA0006708  
Owner: BUCHANAN, TOM  
Permit Number: PT0008450  
Permit Category: SPECIAL GENERATOR  
Facility Status: INACTIVE  
Expiration Date: 04/30/2010

**Actual:**  
**1053 ft.**

**B5**  
**SW**  
**< 1/8**  
**0.072 mi.**  
**381 ft.**

**14546 HUNTER ST**  
**FONTANA, CA 92335**

**EDR US Hist Auto Stat**

**1015230891**  
**N/A**

**Site 2 of 2 in cluster B**

**Relative:**  
**Lower**

EDR Historical Auto Stations:  
Name: TOMS TRUCK REPAIR  
Year: 1999  
Address: 14546 HUNTER ST  
  
Name: TOMS TRUCK REPAIR  
Year: 2000  
Address: 14546 HUNTER ST  
  
Name: TOMS TRUCK REPAIR  
Year: 2001  
Address: 14546 HUNTER ST  
  
Name: TOMS TRUCK REPAIR  
Year: 2002  
Address: 14546 HUNTER ST  
  
Name: TOMS TRUCK REPAIR  
Year: 2003  
Address: 14546 HUNTER ST  
  
Name: TOMS TRUCK REPAIR  
Year: 2004  
Address: 14546 HUNTER ST  
  
Name: TOMS TRUCK REPAIR  
Year: 2005  
Address: 14546 HUNTER ST  
  
Name: TOMS TRUCK REPAIR  
Year: 2006  
Address: 14546 HUNTER ST  
  
Name: TOMS TRUCK REPAIR  
Year: 2007  
Address: 14546 HUNTER ST  
  
Name: TOMS TRUCK REPAIR  
Year: 2009

**Actual:**  
**1053 ft.**

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**(Continued)**

**1015230891**

Address: 14546 HUNTER ST  
 Name: TOMS TRUCK REPAIR  
 Year: 2010  
 Address: 14546 HUNTER ST

**C6  
 NNE  
 < 1/8  
 0.090 mi.  
 476 ft.**

**MILLENIA RECYCLING  
 14699 EL MOLINO ST  
 FONTANA, CA 92335**

**CA PROC S117227931  
 N/A**

**Site 1 of 2 in cluster C**

**Relative:  
 Higher**

PROC:

Reg Id: 209321  
 Cert Id: PR209321.001  
 Organization Id: 209321  
 Organization Name: Millenia Asset Management Inc  
 Mailing Address: 14699 El Molino St  
 Mailing City: Fontana  
 Mailing State: CA  
 Mailing Zip Code: 92335  
 Website: Not reported  
 Email: garytatar@milleniarecycling.com  
 Phone Number: (909) 252-7000  
 Grand Father: N/A  
 Rural: N/A  
 Operation Begin Date: 08/14/2014  
 Aluminium: Y  
 Glass: Y  
 Plastic: Y  
 Bimetal: Y  
 Agency: N/A  
 Monday Hours Of Operation: Not reported  
 Tuesday Hours Of Operation: Not reported  
 Wednesday Hours Of Operation: Not reported  
 Thursday Hours Of Operation: Not reported  
 Friday Hours Of Operation: Not reported  
 Saturday Hours Of Operation: Not reported  
 Sunday Hours Of Operation: Not reported

**Actual:  
 1076 ft.**

**C7  
 NNE  
 < 1/8  
 0.090 mi.  
 476 ft.**

**MILLENIA RECYCLING  
 14699 EL MOLINO ST  
 FONTANA, CA 92335**

**CA SWRCY S117230881  
 N/A**

**Site 2 of 2 in cluster C**

**Relative:  
 Higher**

SWRCY:

Reg Id: 209321  
 Cert Id: RC209321.001  
 Mailing Address: 14699 El Molino St  
 Mailing City: Fontana  
 Mailing State: CA  
 Mailing Zip Code: 92335  
 Website: Not reported  
 Email: garytatar@milleniarecycling.com  
 Phone Number: (909) 252-7000

**Actual:  
 1076 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MILLENIA RECYCLING (Continued)**

**S117230881**

Grand Father: N  
Rural: N  
Operation Begin Date: 08/14/2014  
Aluminium: Y  
Glass: Y  
Plastic: Y  
Bimetal: Y  
Agency: N/A  
Monday Hours Of Operation: 12:00 pm - 5:00 pm  
Tuesday Hours Of Operation: 12:00 pm - 5:00 pm  
Wednesday Hours Of Operation: 12:00 pm - 5:00 pm  
Thursday Hours Of Operation: 12:00 pm - 5:00 pm  
Friday Hours Of Operation: 12:00 pm - 5:00 pm  
Saturday Hours Of Operation: 12:00 pm - 5:00 pm  
Sunday Hours Of Operation: CLOSED  
Organization ID: 209321  
Organization Name: Millenia Asset Management Inc

**8**  
**North**  
**< 1/8**  
**0.105 mi.**  
**553 ft.**

**GUANGDA DEVELOPMENT USA, INC.**  
**14622 EL MOLINO ST**  
**FONTANA, CA 92335**

**CA San Bern. Co. Permit S109521207**  
**N/A**

**Relative:**  
**Higher**

San Bern. Co. Permit:  
Region: SAN BERNARDINO  
Facility ID: FA0012133  
Owner: WEN, QING  
Permit Number: PT0021360  
Permit Category: HAZMAT HANDLER 0-10 EMPLOYEES (W/GEN PRMT)  
Facility Status: INACTIVE  
Expiration Date: 03/31/2011

**Actual:**  
**1074 ft.**

Region: SAN BERNARDINO  
Facility ID: FA0012133  
Owner: WEN, QING  
Permit Number: PT0021361  
Permit Category: HAZARDOUS WASTE GENERATOR - 0-10 EMPLOYEES  
Facility Status: INACTIVE  
Expiration Date: 03/31/2011

**D9**  
**SSE**  
**< 1/8**  
**0.116 mi.**  
**615 ft.**

**BEST DEAL TRUCK SALES**  
**14682 VALLEY BLVD**  
**FONTANA, CA 92335**

**CA San Bern. Co. Permit S105790375**  
**N/A**

**Relative:**  
**Lower**

San Bern. Co. Permit:  
Region: SAN BERNARDINO  
Facility ID: FA0007692  
Owner: GHODSI, AL & PAUL GHODSI  
Permit Number: PT0013245  
Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS  
Facility Status: ACTIVE  
Expiration Date: 03/31/2015

**Actual:**  
**1051 ft.**

**Site 1 of 4 in cluster D**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BEST DEAL TRUCK SALES (Continued)**

**S105790375**

Region: SAN BERNARDINO  
Facility ID: FA0007692  
Owner: GHODSI, AL & PAUL GHODSI  
Permit Number: PT0013244  
Permit Category: SMALL QUANTITY GENERATOR  
Facility Status: ACTIVE  
Expiration Date: 03/31/2015

**E10**  
**South**  
**< 1/8**  
**0.118 mi.**  
**621 ft.**

**CHATFIELD CLARKE CO INC**  
**14614 VALLY BLVD**  
**FONTANA, CA 92335**

**RCRA-SQG 1000698086**  
**CA San Bern. Co. Permit CAD983572819**  
**CA EMI**

**Site 1 of 6 in cluster E**

**Relative:**  
**Lower**

RCRA-SQG:  
Date form received by agency: 02/14/1992  
Facility name: CHATFIELD CLARKE CO INC

**Actual:**  
**1048 ft.**

Facility address: 14614 VALLY BLVD  
FONTANA, CA 92335

EPA ID: CAD983572819  
Contact: RAY MONDAY  
Contact address: 14614 VALLY BLVD  
FONTANA, CA 92335

Contact country: US  
Contact telephone: (714) 823-4297

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: MONDAY FAMILY TRUST  
Owner/operator address: 437 W NEWBURGH ST  
GLEN DORA, CA 91740

Owner/operator country: Not reported  
Owner/operator telephone: (818) 963-5196  
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

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CHATFIELD CLARKE CO INC (Continued)**

**1000698086**

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

San Bern. Co. Permit:

Region: SAN BERNARDINO  
Facility ID: FA0001866  
Owner: CHATFIELD CLARKE COMPANY  
Permit Number: PT0002867  
Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL  
Facility Status: ACTIVE  
Expiration Date: 11/30/2014

EMI:

Year: 1987  
County Code: 36  
Air Basin: SC  
Facility ID: 17065  
Air District Name: SC  
SIC Code: 3479  
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: 8  
Reactive Organic Gases Tons/Yr: 7  
Carbon Monoxide Emissions Tons/Yr: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 1  
Part. Matter 10 Micrometers & Smllr Tons/Yr: 1

Year: 1990  
County Code: 36  
Air Basin: SC  
Facility ID: 17065  
Air District Name: SC  
SIC Code: 3479  
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: 0  
NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smllr Tons/Yr: 0

Year: 1997  
County Code: 36  
Air Basin: SC  
Facility ID: 87330  
Air District Name: SC  
SIC Code: 2499

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CHATFIELD CLARKE CO INC (Continued)**

**1000698086**

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 & Smlr Tons/Yr: 0

Year: 1998  
County Code: 36  
Air Basin: SC  
Facility ID: 87330  
Air District Name: SC  
SIC Code: 2499  
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 & Smlr Tons/Yr: 0

Year: 1999  
County Code: 36  
Air Basin: SC  
Facility ID: 87330  
Air District Name: SC  
SIC Code: 2499  
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 & Smlr Tons/Yr: 0

Year: 2000  
County Code: 36  
Air Basin: SC  
Facility ID: 87330  
Air District Name: SC  
SIC Code: 2499  
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

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CHATFIELD CLARKE CO INC (Continued)**

**1000698086**

NOX - Oxides of Nitrogen Tons/Yr: 0  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Year: 2001  
County Code: 36  
Air Basin: SC  
Facility ID: 87330  
Air District Name: SC  
SIC Code: 2499  
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 & Smlr Tons/Yr: 0

Year: 2002  
County Code: 36  
Air Basin: SC  
Facility ID: 87330  
Air District Name: SC  
SIC Code: 2493  
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 & Smlr Tons/Yr: 0

Year: 2003  
County Code: 36  
Air Basin: SC  
Facility ID: 87330  
Air District Name: SC  
SIC Code: 2493  
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 & Smlr Tons/Yr: 0

Year: 2004

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CHATFIELD CLARKE CO INC (Continued)**

**1000698086**

County Code: 36  
Air Basin: SC  
Facility ID: 87330  
Air District Name: SC  
SIC Code: 2493  
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: 0.0001445  
Reactive Organic Gases Tons/Yr: 0  
Carbon Monoxide Emissions Tons/Yr: 0.000495  
NOX - Oxides of Nitrogen Tons/Yr: 0.00193  
SOX - Oxides of Sulphur Tons/Yr: 0.00046415  
Particulate Matter Tons/Yr: 0.0000655  
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Year: 2006  
County Code: 36  
Air Basin: SC  
Facility ID: 87330  
Air District Name: SC  
SIC Code: 2490  
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: .002  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Year: 2007  
County Code: 36  
Air Basin: SC  
Facility ID: 87330  
Air District Name: SC  
SIC Code: 2490  
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: .002  
SOX - Oxides of Sulphur Tons/Yr: 0  
Particulate Matter Tons/Yr: 0  
Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**E11**  
**SSW**  
 < 1/8  
 0.119 mi.  
 630 ft.

**BIG RIG TRUCK REPAIRING**  
**14578 VALLEY BLVD**  
**FONTANA, CA 92335**

**CA San Bern. Co. Permit**  
**CA WDS**

**S104586888**  
**N/A**

**Site 2 of 6 in cluster E**

**Relative:**  
**Lower**

San Bern. Co. Permit:

Region: SAN BERNARDINO  
 Facility ID: FA0001468  
 Owner: BIG RIG TRUCK REPAIRING INC.  
 Permit Number: PT0008777  
 Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS  
 Facility Status: ACTIVE  
 Expiration Date: 04/30/2015

**Actual:**  
**1048 ft.**

Region: SAN BERNARDINO  
 Facility ID: FA0001468  
 Owner: BIG RIG TRUCK REPAIRING INC.  
 Permit Number: PT0008778  
 Permit Category: SMALL QUANTITY GENERATOR  
 Facility Status: ACTIVE  
 Expiration Date: 04/30/2015

CA WDS:

Facility ID: Santa Ana River 362328001  
 Facility Type: Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.  
 Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.  
 NPDES Number: Not reported  
 Subregion: 8  
 Facility Telephone: Not reported  
 Facility Contact: JIM MARTIN  
 Agency Name: MARTIN JIM  
 Agency Address: 14578 VALLEY BLVD.  
 Agency City,St,Zip: FONTANA 92335  
 Agency Contact: JIM MARTIN  
 Agency Telephone: Not reported  
 Agency Type: Private  
 SIC Code: 7538  
 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: PROCES  
 Waste Type2: Not reported  
 Waste2: Process Waste (Waste produced as part of the industrial/manufacturing process)  
 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

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**BIG RIG TRUCK REPAIRING (Continued)**

**S104586888**

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 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.

**E12**  
**SSW**  
**< 1/8**  
**0.119 mi.**  
**630 ft.**

**BIG RIG TRUCK REPAIR**  
**14578 VALLEY BLVD**  
**FONTANA, CA 92335**  
**Site 3 of 6 in cluster E**

**RCRA-SQG 1000129966**  
**FINDS CAD982347940**

**Relative:**  
**Lower**

RCRA-SQG:

Date form received by agency:02/18/1988  
 Facility name: BIG RIG TRUCK REPAIR  
 Facility address: 14578 VALLEY BLVD  
 FONTANA, CA 92335  
 EPA ID: CAD982347940  
 Mailing address: VALLEY BLVD  
 FONTANA, CA 92335  
 Contact: ENVIRONMENTAL MANAGER  
 Contact address: 14578 VALLEY BLVD  
 FONTANA, CA 92335  
 Contact country: US  
 Contact telephone: (714) 823-1844  
 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

**Actual:**  
**1048 ft.**

Owner/Operator Summary:

Owner/operator name: NOT REQUIRED  
 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: Operator  
 Owner/Op start date: Not reported  
 Owner/Op end date: Not reported  
 Owner/operator name: JIM MARTIN  
 Owner/operator address: NOT REQUIRED

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BIG RIG TRUCK REPAIR (Continued)**

**1000129966**

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

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

FINDS:

Registry ID: 110002798269

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.

D13  
SSE  
< 1/8  
0.120 mi.  
632 ft.

**BUTLER FLEET SERVICE**  
**14714 VALLEY BLVD**  
**FONTANA, CA 92335**  
**Site 2 of 4 in cluster D**

**RCRA-SQG 1004676049**  
**FINDS CAR000080291**

Relative:  
Lower

RCRA-SQG:  
Date form received by agency: 08/11/2000  
Facility name: BUTLER FLEET SERVICE  
Facility address: 14714 VALLEY BLVD  
FONTANA, CA 92335  
EPA ID: CAR000080291  
Contact: JOHN MONROE  
Contact address: 14714 VALLEY BLVD  
FONTANA, CA 92335  
Contact country: US  
Contact telephone: (909) 429-6623  
Contact email: Not reported

Actual:  
1052 ft.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BUTLER FLEET SERVICE (Continued)**

**1004676049**

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: BUTLER FLEET SERVICE  
Owner/operator address: 110 SUMMIT AVE  
MONTVALE, MT 07645  
Owner/operator country: Not reported  
Owner/operator telephone: (800) 848-3300  
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

**Hazardous Waste Summary:**

Waste code: D039  
Waste name: TETRACHLOROETHYLENE

Violation Status: No violations found

**FINDS:**

Registry ID: 110002941899

**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.

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

**D14** **EDR US Hist Auto Stat** **1015232861**  
**SSE** **14714 VALLEY BLVD** **N/A**  
**< 1/8** **FONTANA, CA 92335**  
**0.120 mi.**  
**632 ft.** **Site 3 of 4 in cluster D**

**Relative:** EDR Historical Auto Stations:  
**Lower** Name: TOMS TRUCK REPAIR & PAINTING  
Year: 1999  
Address: 14714 VALLEY BLVD  
**Actual:**  
**1052 ft.** Name: TOMS TRUCK REPAIR & PAINTING  
Year: 2000  
Address: 14714 VALLEY BLVD  
Name: R & J TRUCK REPAIR  
Year: 2004  
Address: 14714 VALLEY BLVD

**F15** **EDR US Hist Auto Stat** **1015689852**  
**WNW** **9905 CHERRY AVE** **N/A**  
**< 1/8** **FONTANA, CA 92335**  
**0.125 mi.**  
**659 ft.** **Site 1 of 4 in cluster F**

**Relative:** EDR Historical Auto Stations:  
**Higher** Name: TRUCK COLLISION PARTS INC  
Year: 2010  
Address: 9905 CHERRY AVE  
**Actual:**  
**1062 ft.**

**F16** **NESCO** **CA San Bern. Co. Permit** **S106911006**  
**WNW** **9881 N CHERRY AVE** **N/A**  
**1/8-1/4** **FONTANA, CA 92335**  
**0.126 mi.**  
**667 ft.** **Site 2 of 4 in cluster F**

**Relative:** San Bern. Co. Permit:  
**Higher** Region: SAN BERNARDINO  
Facility ID: FA0004965  
**Actual:** Owner: UNION INDUSTRIAL GAS GROUP  
**1065 ft.** Permit Number: PT0000937  
Permit Category: HAZMAT HANDLER 0-10 EMPLOYEES  
Facility Status: INACTIVE  
Expiration Date: 08/31/2003

**E17** **EMPIRE FORD NEW HOLLAND INC** **RCRA-SQG** **1000403070**  
**South** **14635 VALLEY BLVD** **FINDS** **CAD981617004**  
**1/8-1/4** **FONTANA, CA 92335** **CA UST**  
**0.128 mi.** **CA San Bern. Co. Permit**  
**677 ft.** **Site 4 of 6 in cluster E**

**Relative:** RCRA-SQG:  
**Lower** Date form received by agency: 05/06/1999  
Facility name: EMPIRE FORD NEW HOLLAND INC  
**Actual:** Facility address: 14635 VALLEY BLVD  
**1048 ft.** FONTANA, CA 92335  
EPA ID: CAD981617004

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**EMPIRE FORD NEW HOLLAND INC (Continued)**

**1000403070**

Mailing address: P O BOX 1599  
FONTANA, CA 92334  
Contact: DEAN MORTON  
Contact address: 14635 VALLEY BLVD  
FONTANA, CA 92335  
Contact country: US  
Contact telephone: (909) 822-8008  
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: RICHARD N SCOTT  
Owner/operator address: 14635 VALLEY BLVD  
FONTANA, CA 92335  
Owner/operator country: Not reported  
Owner/operator telephone: (909) 822-8008  
Legal status: District  
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  
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  
Used 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

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**EMPIRE FORD NEW HOLLAND INC (Continued)**

**1000403070**

FINDS:

Registry ID: 110002725506

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.

UST:

Facility ID: 86012087  
Latitude: 34.070534  
Longitude: -117.484364  
Permitting Agency: SAN BERNARDINO COUNTY

San Bern. Co. Permit:

Region: SAN BERNARDINO  
Facility ID: FA0002905  
Owner: SCOTT, RICHARD N.  
Permit Number: PT0020778  
Permit Category: APSA 1,320-10,000 GAL FAC CAPACITY  
Facility Status: INACTIVE  
Expiration Date: 10/31/2013

Region: SAN BERNARDINO  
Facility ID: FA0002905  
Owner: SCOTT, RICHARD N.  
Permit Number: PT0023819  
Permit Category: EPCRA FACILITY  
Facility Status: INACTIVE  
Expiration Date: 10/31/2013

Region: SAN BERNARDINO  
Facility ID: FA0002905  
Owner: SCOTT, RICHARD N.  
Permit Number: PT0003072  
Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS  
Facility Status: ACTIVE  
Expiration Date: 10/31/2014

Region: SAN BERNARDINO  
Facility ID: FA0002905  
Owner: SCOTT, RICHARD N.  
Permit Number: PT0003073  
Permit Category: SMALL QUANTITY GENERATOR  
Facility Status: ACTIVE  
Expiration Date: 10/31/2014

Region: SAN BERNARDINO  
Facility ID: FA0002905  
Owner: SCOTT, RICHARD N.  
Permit Number: PT0011304

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**EMPIRE FORD NEW HOLLAND INC (Continued)**

**1000403070**

Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)  
Facility Status: ACTIVE  
Expiration Date: 10/31/2014

Region: SAN BERNARDINO  
Facility ID: FA0002905  
Owner: SCOTT, RICHARD N.  
Permit Number: PT0011305  
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)  
Facility Status: ACTIVE  
Expiration Date: 10/31/2014

**E18**  
**South**  
**1/8-1/4**  
**0.128 mi.**  
**677 ft.**

**SCOTT EQUIPMENT INC**  
**14635 VALLEY BLVD**  
**FONTANA, CA 92335**

**FINDS** **1008152646**  
**CA AST** **N/A**

**Site 5 of 6 in cluster E**

**Relative:**  
**Lower**

**FINDS:**

Registry ID: 110018960695

**Actual:**  
**1048 ft.**

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.

**AST:**

Certified Unified Program Agencies: San Bernardino  
Owner: SCOTT, RICHARD N.  
Total Gallons: 2,170

**F19**  
**WNW**  
**1/8-1/4**  
**0.129 mi.**  
**679 ft.**

**9881 CHERRY AVE**  
**FONTANA, CA 92335**

**EDR US Hist Auto Stat** **1015689203**  
**N/A**

**Site 3 of 4 in cluster F**

**Relative:**  
**Higher**

**EDR Historical Auto Stations:**

Name: UNION INDUSTRY GAS & SP INC  
Year: 2003  
Address: 9881 CHERRY AVE

**Actual:**  
**1065 ft.**

Name: UNION INDUSTRY GAS & SUP INC  
Year: 2004  
Address: 9881 CHERRY AVE

Name: UNION INDUSTRY GAS SUP NEV  
Year: 2008  
Address: 9881 CHERRY AVE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

20  
NNW  
1/8-1/4  
0.129 mi.  
681 ft.

**KROPPS PARTS AND SERVICE INC.**  
14571 ANDEL DR  
FONTANA, CA 92335

CA San Bern. Co. Permit S108240234  
N/A

Relative:  
Higher

San Bern. Co. Permit:

Region: SAN BERNARDINO  
Facility ID: FA0006815  
Owner: BILL HANNA  
Permit Number: PT0007145  
Permit Category: HAZARDOUS WASTE GENERATOR - 0-10 EMPLOYEES  
Facility Status: INACTIVE  
Expiration Date: 09/30/2006

Actual:  
1074 ft.

Region: SAN BERNARDINO  
Facility ID: FA0006815  
Owner: BILL HANNA  
Permit Number: PT0007146  
Permit Category: HAZMAT HANDLER 0-10 EMPLOYEES (W/GEN PRMT)  
Facility Status: INACTIVE  
Expiration Date: 09/30/2006

Region: SAN BERNARDINO  
Facility ID: FA0010701  
Owner: KROPPS PARTS AND SERVICE, INC.  
Permit Number: PT0018361  
Permit Category: CONDITIONALLY EXEMPT SM QTY GENERATOR  
Facility Status: ACTIVE  
Expiration Date: 12/31/2014

Region: SAN BERNARDINO  
Facility ID: FA0010701  
Owner: KROPPS PARTS AND SERVICE, INC.  
Permit Number: PT0018360  
Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS  
Facility Status: ACTIVE  
Expiration Date: 12/31/2014

E21  
SSW  
1/8-1/4  
0.129 mi.  
682 ft.

**CARGO SOLUTION EXPRESS INC**  
14587 VALLEY BLVD  
FONTANA, CA 92335

CA San Bern. Co. Permit S108744122  
N/A

Site 6 of 6 in cluster E

Relative:  
Lower

San Bern. Co. Permit:

Region: SAN BERNARDINO  
Facility ID: FA0013904  
Owner: CARGO SOLUTION EXPRESS INC  
Permit Number: PT0024446  
Permit Category: EPCRA FACILITY  
Facility Status: INACTIVE  
Expiration Date: 09/30/2013

Actual:  
1047 ft.

Region: SAN BERNARDINO  
Facility ID: FA0013904  
Owner: CARGO SOLUTION EXPRESS INC  
Permit Number: PT0024445  
Permit Category: APSA 1,320-10,000 GAL FAC CAPACITY  
Facility Status: ACTIVE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CARGO SOLUTION EXPRESS INC (Continued)**

**S108744122**

Expiration Date: 09/30/2014

Region: SAN BERNARDINO  
Facility ID: FA0013904  
Owner: CARGO SOLUTION EXPRESS INC  
Permit Number: PT0024444  
Permit Category: SMALL QUANTITY GENERATOR  
Facility Status: ACTIVE  
Expiration Date: 09/30/2014

Region: SAN BERNARDINO  
Facility ID: FA0013904  
Owner: CARGO SOLUTION EXPRESS INC  
Permit Number: PT0024443  
Permit Category: HAZARDOUS MATERIALS 11-30 CHEMICALS  
Facility Status: ACTIVE  
Expiration Date: 09/30/2014

**G22**  
**WSW**  
**1/8-1/4**  
**0.130 mi.**  
**684 ft.**

**BRIDGESTONE FIRESTONE RETAIL & COMMERCIAL, LLC**  
**9979 CHERRY AVE**  
**FONTANA, CA 92335**

**CA FID UST**  
**CA SWEEPS UST**  
**CA San Bern. Co. Permit**  
**CA HAULERS**

**S101591032**  
**N/A**

**Site 1 of 11 in cluster G**

**Relative:**  
**Lower**

CA FID UST:

Facility ID: 36000921  
Regulated By: UTNKA  
Regulated ID: Not reported  
Cortese Code: Not reported  
SIC Code: Not reported  
Facility Phone: Not reported  
Mail To: Not reported  
Mailing Address: 9979 CHERRY  
Mailing Address 2: Not reported  
Mailing City,St,Zip: FONTANA 92335  
Contact: Not reported  
Contact Phone: Not reported  
DUNs Number: Not reported  
NPDES Number: Not reported  
EPA ID: Not reported  
Comments: Not reported  
Status: Active

**Actual:**  
**1055 ft.**

SWEEPS UST:

Status: Active  
Comp Number: 11263  
Number: 1  
Board Of Equalization: 44-020319  
Referral Date: 03-24-92  
Action Date: 03-24-92  
Created Date: 09-26-88  
Owner Tank Id: Not reported  
SWRCB Tank Id: 36-000-011263-000001  
Tank Status: A  
Capacity: 1  
Active Date: 09-26-88  
Tank Use: UNKNOWN

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BRIDGESTONE FIRESTONE RETAIL & COMMERCIAL, LLC (Continued)**

**S101591032**

STG: P  
Content: UNKNOWN  
Number Of Tanks: 4

Status: Active  
Comp Number: 11263  
Number: 1  
Board Of Equalization: 44-020319  
Referral Date: 03-24-92  
Action Date: 03-24-92  
Created Date: 09-26-88  
Owner Tank Id: Not reported  
SWRCB Tank Id: 36-000-011263-000002  
Tank Status: A  
Capacity: 1  
Active Date: 09-26-88  
Tank Use: UNKNOWN  
STG: P  
Content: UNKNOWN  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 11263  
Number: 1  
Board Of Equalization: 44-020319  
Referral Date: 03-24-92  
Action Date: 03-24-92  
Created Date: 09-26-88  
Owner Tank Id: Not reported  
SWRCB Tank Id: 36-000-011263-000003  
Tank Status: A  
Capacity: 1  
Active Date: 09-26-88  
Tank Use: UNKNOWN  
STG: P  
Content: UNKNOWN  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 11263  
Number: 1  
Board Of Equalization: 44-020319  
Referral Date: 03-24-92  
Action Date: 03-24-92  
Created Date: 09-26-88  
Owner Tank Id: Not reported  
SWRCB Tank Id: 36-000-011263-000004  
Tank Status: A  
Capacity: 1  
Active Date: 09-26-88  
Tank Use: UNKNOWN  
STG: P  
Content: UNKNOWN  
Number Of Tanks: Not reported

San Bern. Co. Permit:  
Region: SAN BERNARDINO

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BRIDGESTONE FIRESTONE RETAIL & COMMERCIAL, LLC (Continued)**

**S101591032**

Facility ID: FA0011789  
Owner: BRIDGESTONE RETAIL OPERATIONS LLC  
Permit Number: PT0020509  
Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL  
Facility Status: ACTIVE  
Expiration Date: 09/30/2014

**HAULERS:**

Facility ID: 1221901  
Facility Phone: (909) 357-0601  
Business Email Address: Not reported  
Contact Person: Debora Gallegos, Kern Brewer  
Mailing Address: 9979 Cherry Ave  
Mailing City: Fontana  
Mailing State: CA  
Mailing Zip: 92335  
Mailing County: San Bernardino  
Mailing Phone: (909) 357-0601  
Waste Tire Permit Summary: No Permit record for this business.

**Detail:**

SR#: 175  
Current Role: End Use  
Current Role Status: Yes  
Facility ID: 1221901

SR#: 175  
Current Role: Generator  
Current Role Status: Yes  
Facility ID: 1221901

SR#: 175  
Current Role: Hauler  
Current Role Status: Registered  
Facility ID: 1221901

**G23**  
**WSW**  
**1/8-1/4**  
**0.131 mi.**  
**690 ft.**

**RENE'S MOTOR SPORTS INC**  
**10007 CHERRY AVE**  
**FONTANA, CA 92335**

**CA San Bern. Co. Permit**  
**CA HAULERS**

**S104771134**  
**N/A**

**Site 2 of 11 in cluster G**

**Relative:**  
**Lower**

San Bern. Co. Permit:  
Region: SAN BERNARDINO  
Facility ID: FA0011289  
Owner: CORDOVA, SALVADOR  
Permit Number: PT0019491  
Permit Category: SMALL QUANTITY GENERATOR  
Facility Status: ACTIVE  
Expiration Date: 11/30/2014

**Actual:**  
**1052 ft.**

Region: SAN BERNARDINO  
Facility ID: FA0011289  
Owner: CORDOVA, SALVADOR  
Permit Number: PT0019492  
Permit Category: HAZARDOUS MATERIALS 4-10 CHEMICALS  
Facility Status: ACTIVE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RENE'S MOTOR SPORTS INC (Continued)**

**S104771134**

Expiration Date: 11/30/2014

Region: SAN BERNARDINO  
Facility ID: FA0006694  
Owner: TIRE'S WAREHOUSE INC  
Permit Number: PT0005662  
Permit Category: CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR  
Facility Status: INACTIVE  
Expiration Date: 09/30/2007

**HAULERS:**

Facility ID: 1540934  
Facility Phone: (909) 829-3130  
Business Email Address: Not reported  
Contact Person: Salvador Cordava  
Mailing Address: 10007 Cherry Ave  
Mailing City: Fontana  
Mailing State: CA  
Mailing Zip: 92335  
Mailing County: San Bernardino  
Mailing Phone: (909) 829-3130  
Waste Tire Permit Summary: No Permit record for this business.

**Detail:**

SR#: 1025  
Current Role: End Use  
Current Role Status: Yes  
Facility ID: 1540934

SR#: 1025  
Current Role: Generator  
Current Role Status: Yes  
Facility ID: 1540934

SR#: 1025  
Current Role: Hauler  
Current Role Status: Registered  
Facility ID: 1540934

**G24**  
**WSW**  
**1/8-1/4**  
**0.132 mi.**  
**695 ft.**

**EMPIRE SPEEDO & TACH**  
**9996 CHERRY AVE**  
**FONTANA, CA 92335**  
**Site 3 of 11 in cluster G**

**CA San Bern. Co. Permit S104766046**  
**N/A**

**Relative:**  
**Lower**

San Bern. Co. Permit:

Region: SAN BERNARDINO  
Facility ID: FA0002915  
Owner: BENNETT, DEREK  
Permit Number: PT0008547  
Permit Category: CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR  
Facility Status: INACTIVE  
Expiration Date: 04/30/2008

**Actual:**  
**1053 ft.**

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**G25**  
**WSW**  
**1/8-1/4**  
**0.132 mi.**  
**695 ft.**

**HAZ-PAK**  
**9980 CHERRY AVE**  
**FONTANA, CA 92335**  
**Site 4 of 11 in cluster G**

**TX Ind. Haz Waste**    **S103931389**  
**N/A**

**Relative:**  
**Lower**

Ind. Haz Waste:  
 Registration Number: 86013  
 Registration Initial Notification Date: 02/15/1999  
 Registration Last Amendment Date: 02/13/2001  
 EPA Identification: Not reported  
 Primary NAICS Code: 484121  
 Status Change Date: 19990215  
 Land Type: Not reported  
 Description of Facility Site Location: Not reported  
 Site Primary Standard Industrial Code: Not reported  
 Site Primary SIC Description: Not reported  
 Registration is Generator of Waste: No  
 Registration is Receivers of Waste: No  
 Registration is Transporter of Waste: Yes  
 Registration is Transfer Facility: No  
 Facility is STEERS Reporter: No  
 Required to Submit Annual Waste Summary: No  
 Facility Involved In Recycling: No  
 Revcr Has Monthly Reporting Requirement: 0  
 Mexican Facility: Not reported  
 Type of Generator: Not reported  
 TNRCC Region: Not reported  
 Company Name: HAZ-PAK INC  
 Contact Name: LARRY KOLLING  
 Contact Telephone Number: 800-3261011  
 Mailing Address: 9980 CHERRY AVE  
 Mailing Address2: Not reported  
 Mailing City,St,Zip: FONTANA, CA 923355219  
 Mailing County: UNITED STATES  
 Facility Country: UNITED STATES  
 TNRCC Facility ID: 109113  
 Site Owner Tax ID: 0  
 Site Location Latitude: -00.000  
 Site Location Longitude: -000.000  
 Last Update to NOR Data: 20051220  
 Ind. waste permit Number: Not reported  
 Mun waste permit Number: Not reported  
 Non Notifier: No

Business Records Not Found for this RegNo/Year:

Owner:

Owner Mailing Address: 9980 CHERRY AVE  
 Owner Mailing Address2: Not reported  
 Owner Mailing Address3: Not reported  
 Owner City,St,Zip: FONTANA, CA 92335 5219  
 Owner Country: UNITED STA  
 Owner Phone Number: 1-800-3261011  
 Owner Fax Number: Not reported  
 Owner Email Address: Not reported  
 Owner Business Type: Unknown  
 Owner Tax Id: 17523769705  
 Owner Bankruptcy Code: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HAZ-PAK (Continued)**

**S103931389**

Operator Records Not Found for this RegNo/Year:

Contact:

Contact Name: LARRY KOLLING  
Contact Title: OPERATIONS MANAGER  
Contact Role: PRICONT  
Contact Address: 9980 CHERRY AVE  
Contact Address2: Not reported  
Contact City,St,Zip: FONTANA, CA 92335 5219  
Contact Phone: 1-800-3261011  
Contact Fax: Not reported  
Contact Email: Not reported

Contact:

Contact Name: Not reported  
Contact Title: Not reported  
Contact Role: OWNCON  
Contact Address: 9980 CHERRY AVE  
Contact Address2: Not reported  
Contact City,St,Zip: FONTANA, CA 92335 5219  
Contact Phone: 1-800-3261011  
Contact Fax: Not reported  
Contact Email: Not reported

Unit Records Not Found for this RegNo/Year:

One Time Shipper Records Not Found for this RegNo/Year:

Receiver Type: Not reported  
Transporter for hire: 1  
Transport own waste: 0  
Eq 01, if transport waste type = 1: 01  
Eq 02, if transport waste type = 2: 02  
Eq 03, if transport waste type = 3: 03  
Eq 04, if transport waste type = H: 04  
Target TCEQ unique facid for discarded(merged) facility: Not reported

Waste Records Not Found for this RegNo/Year:

**G26**  
**WSW**  
**1/8-1/4**  
**0.132 mi.**  
**695 ft.**

**GENERAL ENVIRONMENTAL MGMT, INC.**  
**9980 CHERRY AVE**  
**FONTANA, CA 92335**

**CA San Bern. Co. Permit 1000819039**  
**N/A**

**Site 5 of 11 in cluster G**

**Relative:**  
**Lower**

San Bern. Co. Permit:

Region: SAN BERNARDINO  
Facility ID: FA0003728  
Owner: DELPERDANG, JEANNE PRES  
Permit Number: PT0008047  
Permit Category: HAZMAT HANDLER 0-10 EMPLOYEES (W/GEN PRMT)  
Facility Status: INACTIVE  
Expiration Date: 07/31/2004

**Actual:**  
**1055 ft.**

Region: SAN BERNARDINO  
Facility ID: FA0003728  
Owner: DELPERDANG, JEANNE PRES  
Permit Number: PT0008046  
Permit Category: CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR  
Facility Status: INACTIVE  
Expiration Date: 07/31/2004

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**GENERAL ENVIRONMENTAL MGMT, INC. (Continued)**

**1000819039**

Region: SAN BERNARDINO  
Facility ID: FA0011647  
Owner: ESPINOZA, GUILLERMO  
Permit Number: PT0020148  
Permit Category: SMALL QUANTITY GENERATOR  
Facility Status: ACTIVE  
Expiration Date: 05/31/2015

Region: SAN BERNARDINO  
Facility ID: FA0011647  
Owner: ESPINOZA, GUILLERMO  
Permit Number: PT0022462  
Permit Category: APSA 1,320-10,000 GAL FAC CAPACITY  
Facility Status: ACTIVE  
Expiration Date: 05/31/2015

Region: SAN BERNARDINO  
Facility ID: FA0011647  
Owner: ESPINOZA, GUILLERMO  
Permit Number: PT0020149  
Permit Category: HAZARDOUS MATERIALS 4-10 CHEMICALS  
Facility Status: ACTIVE  
Expiration Date: 05/31/2015

**G27**  
**WSW**  
**1/8-1/4**  
**0.132 mi.**  
**695 ft.**

**CARL'S TRANSPORT REFRIGERATION**  
**9978 CHERRY AVE**  
**FONTANA, CA 92335**

**CA HIST UST**  
**CA San Bern. Co. Permit**

**U001574892**  
**N/A**

**Site 6 of 11 in cluster G**

**Relative:**  
**Lower**

**HIST UST:**

Region: STATE  
Facility ID: 00000040147  
Facility Type: Other  
Other Type: REPAIR SHOP  
Total Tanks: 0001  
Contact Name: Not reported  
Telephone: 7148233338  
Owner Name: JAMES BRONIKOWSKI  
Owner Address: 9033 ALTA LOMA DRIVE  
Owner City,St,Zip: ALTA LOMA, CA 91701

**Actual:**  
**1055 ft.**

Tank Num: 001  
Container Num: 1  
Year Installed: Not reported  
Tank Capacity: 00000300  
Tank Used for: WASTE  
Type of Fuel: WASTE OIL  
Tank Construction: Not reported  
Leak Detection: None

**San Bern. Co. Permit:**

Region: SAN BERNARDINO  
Facility ID: FA0001783  
Owner: FLOWERS, GINA  
Permit Number: PT0004283  
Permit Category: SPECIAL GENERATOR

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CARL'S TRANSPORT REFRIGERATION (Continued)**

**U001574892**

Facility Status: INACTIVE  
Expiration Date: 11/30/2012

Region: SAN BERNARDINO  
Facility ID: FA0001783  
Owner: FLOWERS, GINA  
Permit Number: PT0004282  
Permit Category: SPECIAL HANDLER  
Facility Status: INACTIVE  
Expiration Date: 11/30/2012

**G28**  
**WSW**  
**1/8-1/4**  
**0.132 mi.**  
**695 ft.**

**SCOTT DIESEL SERVICE**  
**9978 CHERRY AVE**  
**FONTANA, CA 92335**

**CA FID UST S101619278**  
**CA SWEEPS UST N/A**  
**CA San Bern. Co. Permit**

**Site 7 of 11 in cluster G**

**Relative:**  
**Lower**

CA FID UST:  
Facility ID: 36008970  
Regulated By: UTNKA  
Regulated ID: 00040147  
Cortese Code: Not reported  
SIC Code: Not reported  
Facility Phone: Not reported  
Mail To: Not reported  
Mailing Address: 9978 CHERRY AVE  
Mailing Address 2: Not reported  
Mailing City,St,Zip: FONTANA 92335  
Contact: Not reported  
Contact Phone: Not reported  
DUNS Number: Not reported  
NPDES Number: Not reported  
EPA ID: Not reported  
Comments: Not reported  
Status: Active

**Actual:**  
**1055 ft.**

SWEEPS UST:  
Status: Active  
Comp Number: 40147  
Number: 9  
Board Of Equalization: 44-020984  
Referral Date: 08-28-91  
Action Date: 08-28-91  
Created Date: 02-29-88  
Owner Tank Id: 1  
SWRCB Tank Id: 36-000-040147-000001  
Tank Status: A  
Capacity: 300  
Active Date: 07-08-88  
Tank Use: OIL  
STG: W  
Content: WASTE OIL  
Number Of Tanks: 1

San Bern. Co. Permit:  
Region: SAN BERNARDINO  
Facility ID: FA0014973

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SCOTT DIESEL SERVICE (Continued)**

**S101619278**

Owner: DIESEL UNLIMITED INC  
Permit Number: PT0026044  
Permit Category: CONDITIONALLY EXEMPT SM QTY GENERATOR SPECIAL  
Facility Status: ACTIVE  
Expiration Date: 03/31/2015

**G29**  
**West**  
**1/8-1/4**  
**0.132 mi.**  
**695 ft.**

**BURRTEC WASTE INDUSTRIES**  
**9950 CHERRY AVE**  
**FONTANA, CA 92335**

**CA HIST CORTESE** **S102425930**  
**CA LUST** **N/A**

**Site 8 of 11 in cluster G**

**Relative:**  
**Lower**

HIST CORTESE:  
Region: CORTESE  
Facility County Code: 36  
Reg By: LTNKA  
Reg Id: 083602791T

**Actual:**  
**1058 ft.**

LUST:  
Region: STATE  
Global Id: T0607100405  
Latitude: 34.0727799  
Longitude: -117.4888909  
Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 09/04/1996  
Lead Agency: SAN BERNARDINO COUNTY  
Case Worker: Not reported  
Local Agency: Not reported  
RB Case Number: 083602791T  
LOC Case Number: 96006  
File Location: Local Agency  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Diesel  
Site History: Not reported

[Click here to access the California GeoTracker records for this facility:](#)

**Contact:**

Global Id: T0607100405  
Contact Type: Regional Board Caseworker  
Contact Name: VALERIE JAHN-BULL  
Organization Name: SANTA ANA RWQCB (REGION 8)  
Address: 3737 MAIN STREET, SUITE 500  
City: RIVERSIDE  
Email: vjahn-bull@waterboards.ca.gov  
Phone Number: 9517824903

**Status History:**

Global Id: T0607100405  
Status: Open - Remediation  
Status Date: 04/04/1996

Global Id: T0607100405  
Status: Completed - Case Closed  
Status Date: 09/04/1996

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BURRTEC WASTE INDUSTRIES (Continued)**

**S102425930**

Global Id: T0607100405  
Status: Open - Case Begin Date  
Status Date: 01/10/1996

Global Id: T0607100405  
Status: Open - Site Assessment  
Status Date: 01/19/1996

Regulatory Activities:

Global Id: T0607100405  
Action Type: ENFORCEMENT  
Date: 09/04/1996  
Action: Closure/No Further Action Letter

Global Id: T0607100405  
Action Type: Other  
Date: 01/10/1996  
Action: Leak Discovery

Global Id: T0607100405  
Action Type: REMEDIATION  
Date: 01/12/1996  
Action: Excavation

Global Id: T0607100405  
Action Type: Other  
Date: 01/29/1996  
Action: Leak Reported

Global Id: T0607100405  
Action Type: Other  
Date: 01/10/1996  
Action: Leak Stopped

LUST REG 8:

Region: 8  
County: San Bernardino  
Regional Board: Santa Ana Region  
Facility Status: Case Closed  
Case Number: 083602791T  
Local Case Num: 96006  
Case Type: Soil only  
Substance: Diesel  
Qty Leaked: Not reported  
Abate Method: Excavate and Dispose - remove contaminated soil and dispose in approved site  
Cross Street: Not reported  
Enf Type: CLOS  
Funding: Not reported  
How Discovered: Tank Closure  
How Stopped: Not reported  
Leak Cause: Not reported  
Leak Source: UNK  
Global ID: T0607100405  
How Stopped Date: 1/10/1996

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**BURRTEC WASTE INDUSTRIES (Continued)**

**S102425930**

Enter Date:	3/19/1996
Date Confirmation of Leak Began:	1/19/1996
Date Preliminary Assessment Began:	Not reported
Discover Date:	1/10/1996
Enforcement Date:	Not reported
Close Date:	9/4/1996
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	4/4/1996
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	3/19/1996
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.0729155
Longitude:	-117.488866
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	2
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	MTBE Detected. Site tested for MTBE & MTBE detected
MTBE Class:	*
Staff:	VJJ
Staff Initials:	BM7
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

**G30**  
**West**  
**1/8-1/4**  
**0.132 mi.**  
**695 ft.**

**9950 CHERRY AVE**  
**FONTANA, CA 92335**  
**Site 9 of 11 in cluster G**

**EDR US Hist Auto Stat 1015690530**  
**N/A**

**Relative:**  
**Lower**  
  
**Actual:**  
**1058 ft.**

EDR Historical Auto Stations:

Name:	AMERICAN WEST TRAILER REPAIR
Year:	2002
Address:	9950 CHERRY AVE
Name:	AMERICAN WEST TRAILER REPAIR
Year:	2003
Address:	9950 CHERRY AVE

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**G31**      **A & W TRUCK CENTER**  
**West**     **9950 CHERRY AVE**  
**1/8-1/4**   **FONTANA, CA 92335**  
**0.132 mi.**  
**695 ft.**    **Site 10 of 11 in cluster G**

**CA HIST UST**    **U001574812**  
**N/A**

**Relative:**     HIST UST:  
**Lower**            Region:            STATE  
                      Facility ID:        00000021363  
**Actual:**        Facility Type:     Other  
**1058 ft.**        Other Type:       TRUCKING  
                      Total Tanks:      0002  
                      Contact Name:    GENE WOLFINBARGER  
                      Telephone:        7148222002  
                      Owner Name:      GENE & TAMARA WOLFINBARGER  
                      Owner Address:   9964 CHERRY AVENUE  
                      Owner City,St,Zip: FONTANA, CA 92335

                     Tank Num:         001  
                      Container Num:    1  
                      Year Installed:    1970  
                      Tank Capacity:    00010000  
                      Tank Used for:    PRODUCT  
                      Type of Fuel:     DIESEL  
                      Tank Construction: Not reported  
                      Leak Detection:   Stock Inventor

                     Tank Num:         002  
                      Container Num:    2  
                      Year Installed:    1970  
                      Tank Capacity:    00001900  
                      Tank Used for:    PRODUCT  
                      Type of Fuel:     UNLEADED  
                      Tank Construction: Not reported  
                      Leak Detection:   Stock Inventor

**G32**      **BAYWOOD EXPRESS**  
**West**     **9950 CHERRY AVE**  
**1/8-1/4**   **FONTANA, CA 92335**  
**0.132 mi.**  
**695 ft.**    **Site 11 of 11 in cluster G**

**CA FID UST**    **S101591428**  
**CA SWEEPS UST**    **N/A**

**Relative:**     CA FID UST:  
**Lower**            Facility ID:        36007601  
                      Regulated By:    UTNKA  
**Actual:**        Regulated ID:     00021363  
**1058 ft.**        Cortese Code:     Not reported  
                      SIC Code:         Not reported  
                      Facility Phone:    Not reported  
                      Mail To:           Not reported  
                      Mailing Address:   9950 CHERRY AVE  
                      Mailing Address 2: Not reported  
                      Mailing City,St,Zip: FONTANA 92335  
                      Contact:           Not reported  
                      Contact Phone:    Not reported  
                      DUNs Number:     Not reported  
                      NPDES Number:    Not reported  
                      EPA ID:            Not reported  
                      Comments:        Not reported  
                      Status:            Active

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**BAYWOOD EXPRESS (Continued)**

**S101591428**

**SWEEPS UST:**

Status: Active  
 Comp Number: 21363  
 Number: 9  
 Board Of Equalization: 44-020741  
 Referral Date: 08-28-91  
 Action Date: 08-28-91  
 Created Date: 02-29-88  
 Owner Tank Id: 1  
 SWRCB Tank Id: 36-000-021363-000001  
 Tank Status: A  
 Capacity: 10000  
 Active Date: 07-08-88  
 Tank Use: M.V. FUEL  
 STG: P  
 Content: DIESEL  
 Number Of Tanks: 2

Status: Active  
 Comp Number: 21363  
 Number: 9  
 Board Of Equalization: 44-020741  
 Referral Date: 08-28-91  
 Action Date: 08-28-91  
 Created Date: 02-29-88  
 Owner Tank Id: 2  
 SWRCB Tank Id: 36-000-021363-000002  
 Tank Status: A  
 Capacity: 1900  
 Active Date: 07-08-88  
 Tank Use: M.V. FUEL  
 STG: P  
 Content: REG UNLEADED  
 Number Of Tanks: Not reported

**F33**  
**WNW**  
**1/8-1/4**  
**0.138 mi.**  
**731 ft.**

**RANCHO DISPOSAL INC**  
**9890 CHERRY AVE**  
**FONTANA, CA 92335**  
**Site 4 of 4 in cluster F**

**Relative:**  
**Higher**

**Actual:**  
**1063 ft.**

**CA SWF/LF** 1000171017  
**CA NPDES** N/A  
**CA HIST CORTESE**  
**CA LUST**  
**CA FID UST**  
**CA UST**  
**CA HIST UST**  
**CA SWEEPS UST**  
**CA ENF**  
**CA HAULERS**  
**CA WDS**

**LOS ANGELES CO. LF:**

Site ID: 229  
 Alt. Address: 9400 Cherry Ave. Bldg C, Fontana, CA 92235  
 Site Contact: Not reported  
 Site Contact Phone: (800) 325-9417  
 Site Email: Not reported  
 Site Website: Not reported  
 Site Type: Waste Hauler  
 Site SWIS Number: 19-AA-0587  
 Beginning Operation Date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RANCHO DISPOSAL INC (Continued)**

**1000171017**

Disposal Area(Acre): Not reported  
Local Enforcement Agency: Not reported  
Maximun Depth Fill(Ft): Not reported  
Permitted Capacity: Not reported  
Present Use: Not reported  
Remaining Capacity(Million): Not reported  
Status: Active  
Waste Accepted: Not reported  
Hours of Operation: Mon to Fri, 8 AM - 5 PM  
Area: Not reported

Detail As Of 01/2014:

Operator Name: Burrtec Waste Service - Fontana  
Operator Address: 9890 Cherry AVE.  
Operator City/State/Zip: Fontana, CA 92335  
Operator Contact: Robert Nino or Debbie  
Operator Telephone: Not reported  
Operator Email: rnino@burrtec.com  
Owner Name: Unknown  
Owner Address: Not reported  
Owner City/State/Zip: Not reported  
Owner Contact: Not reported  
Owner Telephone: Not reported  
Owner Email: Not reported

NPDES:

Npdes Number: CAS000001  
Facility Status: Active  
Agency Id: 0  
Region: 8  
Regulatory Measure Id: 213077  
Order No: 97-03-DWQ  
Regulatory Measure Type: Enrollee  
Place Id: Not reported  
WDID: 8 36I000268  
Program Type: Industrial  
Adoption Date Of Regulatory Measure: Not reported  
Effective Date Of Regulatory Measure: 03/06/1992  
Expiration Date Of Regulatory Measure: Not reported  
Termination Date Of Regulatory Measure: Not reported  
Discharge Name: Burrtec Waste Industries Inc  
Discharge Address: 9890 Cherry Avenue  
Discharge City: Fontana  
Discharge State: California  
Discharge Zip: 92335

HIST CORTESE:

Region: CORTESE  
Facility County Code: 36  
Reg By: LTNKA  
Reg Id: 083601088T

LUST:

Region: STATE  
Global Id: T0607100120  
Latitude: 34.0740665

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RANCHO DISPOSAL INC (Continued)**

**1000171017**

Longitude: -117.488866  
Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 02/24/1993  
Lead Agency: SAN BERNARDINO COUNTY  
Case Worker: Not reported  
Local Agency: Not reported  
RB Case Number: 083601088T  
LOC Case Number: 91034  
File Location: Local Agency  
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: T0607100120  
Contact Type: Regional Board Caseworker  
Contact Name: ROSE SCOTT  
Organization Name: SANTA ANA RWQCB (REGION 8)  
Address: 3737 MAIN STREET, SUITE 500  
City: RIVERSIDE  
Email: rscott@waterboards.ca.gov  
Phone Number: 9513206375

**Status History:**

Global Id: T0607100120  
Status: Open - Site Assessment  
Status Date: 02/06/1992

Global Id: T0607100120  
Status: Open - Case Begin Date  
Status Date: 11/19/1991

Global Id: T0607100120  
Status: Completed - Case Closed  
Status Date: 02/24/1993

Global Id: T0607100120  
Status: Open - Site Assessment  
Status Date: 11/21/1991

**Regulatory Activities:**

Global Id: T0607100120  
Action Type: Other  
Date: 11/21/1991  
Action: Leak Discovery

Global Id: T0607100120  
Action Type: Other  
Date: 02/06/1992  
Action: Leak Reported

Global Id: T0607100120  
Action Type: Other  
Date: 11/19/1991

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RANCHO DISPOSAL INC (Continued)**

**1000171017**

Action: Leak Stopped

Region: STATE  
Global Id: T0607184831  
Latitude: 34.074025  
Longitude: -117.488935  
Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 07/16/2009  
Lead Agency: SAN BERNARDINO COUNTY  
Case Worker: JC  
Local Agency: SAN BERNARDINO COUNTY  
RB Case Number: Not reported  
LOC Case Number: 2004028  
File Location: Not reported  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Diesel  
Site History: Not reported

[Click here to access the California GeoTracker records for this facility:](#)

Contact:

Global Id: T0607184831  
Contact Type: Local Agency Caseworker  
Contact Name: JACKSON CRUTSINGER  
Organization Name: SAN BERNARDINO COUNTY  
Address: 620 SOUTH E STREET  
City: SAN BERNARDINO  
Email: jcrutsinger@sbcfire.org  
Phone Number: Not reported

Global Id: T0607184831  
Contact Type: Regional Board Caseworker  
Contact Name: TOM E. MBEKE-EKANEM  
Organization Name: SANTA ANA RWQCB (REGION 8)  
Address: 3737 MAIN STREET, SUITE 500  
City: RIVERSIDE  
Email: tmbeke-ekanem@waterboards.ca.gov  
Phone Number: 9513202007

Status History:

Global Id: T0607184831  
Status: Open - Case Begin Date  
Status Date: 09/09/2004

Global Id: T0607184831  
Status: Open - Site Assessment  
Status Date: 11/02/2004

Global Id: T0607184831  
Status: Completed - Case Closed  
Status Date: 07/16/2009

Global Id: T0607184831  
Status: Open - Site Assessment  
Status Date: 12/10/2004

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RANCHO DISPOSAL INC (Continued)**

**1000171017**

Regulatory Activities:

Global Id:	T0607184831
Action Type:	RESPONSE
Date:	06/25/2009
Action:	Other Report / Document
Global Id:	T0607184831
Action Type:	Other
Date:	09/09/2004
Action:	Leak Discovery
Global Id:	T0607184831
Action Type:	RESPONSE
Date:	06/26/2009
Action:	Other Report / Document
Global Id:	T0607184831
Action Type:	Other
Date:	11/02/2004
Action:	Leak Reported
Global Id:	T0607184831
Action Type:	ENFORCEMENT
Date:	05/16/2009
Action:	Notice to Comply
Global Id:	T0607184831
Action Type:	ENFORCEMENT
Date:	05/18/2009
Action:	Staff Letter
Global Id:	T0607184831
Action Type:	ENFORCEMENT
Date:	05/18/2009
Action:	Notice to Comply
Global Id:	T0607184831
Action Type:	ENFORCEMENT
Date:	07/16/2009
Action:	Closure/No Further Action Letter

LUST REG 8:

Region:	8
County:	San Bernardino
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083601088T
Local Case Num:	91034
Case Type:	Soil only
Substance:	Waste Oil
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RANCHO DISPOSAL INC (Continued)**

**1000171017**

How Discovered:	Tank Closure
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	UNK
Global ID:	T0607100120
How Stopped Date:	11/19/1991
Enter Date:	2/11/1992
Date Confirmation of Leak Began:	11/21/1991
Date Preliminary Assessment Began:	Not reported
Discover Date:	11/21/1991
Enforcement Date:	Not reported
Close Date:	2/24/1993
Date Prelim Assessment Workplan Submitted:	2/6/1992
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	2/11/1992
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.0740665
Longitude:	-117.488866
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	RS
Staff Initials:	DG4
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

**CA FID UST:**

Facility ID:	36002653
Regulated By:	UTNKA
Regulated ID:	00006635
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	Not reported
Mail To:	Not reported
Mailing Address:	6670 FEDERAL BLVD
Mailing Address 2:	Not reported
Mailing City,St,Zip:	FONTANA 92335
Contact:	Not reported
Contact Phone:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RANCHO DISPOSAL INC (Continued)**

**1000171017**

DUNs Number: Not reported  
NPDES Number: Not reported  
EPA ID: Not reported  
Comments: Not reported  
Status: Active

UST:

Facility ID: 85007489  
Latitude: 34.0747819  
Longitude: -117.4881962  
Permitting Agency: SAN BERNARDINO COUNTY

HIST UST:

Region: STATE  
Facility ID: 00000006635  
Facility Type: Other  
Other Type: Not reported  
Total Tanks: 0003  
Contact Name: COLE BURR  
Telephone: 6192877555  
Owner Name: EDCO DISPOSAL CORP.  
Owner Address: 6670 FEDERAL BLVD  
Owner City,St,Zip: LEMON GROVE, CA 92045

Tank Num: 001  
Container Num: 14  
Year Installed: Not reported  
Tank Capacity: 00015000  
Tank Used for: PRODUCT  
Type of Fuel: DIESEL  
Tank Construction: Not reported  
Leak Detection: Stock Inventor

Tank Num: 002  
Container Num: 15  
Year Installed: Not reported  
Tank Capacity: 00015000  
Tank Used for: PRODUCT  
Type of Fuel: UNLEADED  
Tank Construction: Not reported  
Leak Detection: Stock Inventor

Tank Num: 003  
Container Num: 16  
Year Installed: Not reported  
Tank Capacity: 00000500  
Tank Used for: PRODUCT  
Type of Fuel: WASTE OIL  
Tank Construction: Not reported  
Leak Detection: Stock Inventor

SWEEPS UST:

Status: Active  
Comp Number: 6635  
Number: 1  
Board Of Equalization: 44-019932

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RANCHO DISPOSAL INC (Continued)**

**1000171017**

Referral Date: 03-24-92  
Action Date: 03-24-92  
Created Date: 02-29-88  
Owner Tank Id: 14  
SWRCB Tank Id: 36-000-006635-000001  
Tank Status: A  
Capacity: 15000  
Active Date: 07-08-88  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: 3

Status: Active  
Comp Number: 6635  
Number: 1  
Board Of Equalization: 44-019932  
Referral Date: 03-24-92  
Action Date: 03-24-92  
Created Date: 02-29-88  
Owner Tank Id: 15  
SWRCB Tank Id: 36-000-006635-000002  
Tank Status: A  
Capacity: 15000  
Active Date: 07-08-88  
Tank Use: M.V. FUEL  
STG: P  
Content: REG UNLEADED  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 6635  
Number: 1  
Board Of Equalization: 44-019932  
Referral Date: 03-24-92  
Action Date: 03-24-92  
Created Date: 02-29-88  
Owner Tank Id: 16  
SWRCB Tank Id: 36-000-006635-000003  
Tank Status: A  
Capacity: 500  
Active Date: 07-08-88  
Tank Use: OIL  
STG: W  
Content: WASTE OIL  
Number Of Tanks: Not reported

**ENF:**

Region: 8  
Facility Id: 266597  
Agency Name: Burrtec Waste Industries, Inc.  
Place Type: Facility  
Place Subtype: Not reported  
Facility Type: Industrial  
Agency Type: Privately-Owned Business  
# Of Agencies: 1  
Place Latitude: 34.074022

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RANCHO DISPOSAL INC (Continued)**

**1000171017**

Place Longitude: -117.488935  
SIC Code 1: 4212  
SIC Desc 1: Local Trucking Without Storage  
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: 2  
Complexity: C  
Pretreatment: X - Facility is not a POTW  
Facility Waste Type: Washwater waste  
Facility Waste Type 2: Not reported  
Facility Waste Type 3: Not reported  
Facility Waste Type 4: Not reported  
Program: WDRNONMUNIPRCS  
Program Category1: WDR  
Program Category2: WDR  
# Of Programs: 1  
WDID: 8 362397001  
Reg Measure Id: 144068  
Reg Measure Type: WDR  
Region: 8  
Order #: 98-070  
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: 05/09/2014  
Effective Date: 07/10/1998  
Expiration/Review Date: 07/07/2008  
Termination Date: 03/04/2011  
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: 58 - Non15 Based on (TTWQ)/CPLX  
Direction/Voice: Passive  
Enforcement Id(EID): 254215  
Region: 8  
Order / Resolution Number: UNKNOWN

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RANCHO DISPOSAL INC (Continued)**

**1000171017**

Enforcement Action Type: Oral Communication  
Effective Date: 08/25/2004  
Adoption/Issuance Date: Not reported  
Achieve Date: Not reported  
Termination Date: 08/25/2004  
ACL Issuance Date: Not reported  
EPL Issuance Date: Not reported  
Status: Historical  
Title: Enforcement - 8 362397001  
Description: Discussed ways to bring TDS levels down.  
Program: WDR  
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: 8  
Facility Id: 266597  
Agency Name: Burrtec Waste Industries, Inc.  
Place Type: Facility  
Place Subtype: Not reported  
Facility Type: Industrial  
Agency Type: Privately-Owned Business  
# Of Agencies: 1  
Place Latitude: 34.074022  
Place Longitude: -117.488935  
SIC Code 1: 4212  
SIC Desc 1: Local Trucking Without Storage  
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: 2  
Complexity: C  
Pretreatment: X - Facility is not a POTW  
Facility Waste Type: Washwater waste  
Facility Waste Type 2: Not reported  
Facility Waste Type 3: Not reported  
Facility Waste Type 4: Not reported  
Program: WDRNONMUNIPRCS  
Program Category1: WDR  
Program Category2: WDR  
# Of Programs: 1

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RANCHO DISPOSAL INC (Continued)**

**1000171017**

WDID: 8 362397001  
Reg Measure Id: 144068  
Reg Measure Type: WDR  
Region: 8  
Order #: 98-070  
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: 05/09/2014  
Effective Date: 07/10/1998  
Expiration/Review Date: 07/07/2008  
Termination Date: 03/04/2011  
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: 58 - Non15 Based on (TTWQ)/CPLX  
Direction/Voice: Passive  
Enforcement Id(EID): 248457  
Region: 8  
Order / Resolution Number: UNKNOWN  
Enforcement Action Type: Oral Communication  
Effective Date: 08/21/2002  
Adoption/Issuance Date: Not reported  
Achieve Date: Not reported  
Termination Date: 08/21/2002  
ACL Issuance Date: Not reported  
EPL Issuance Date: Not reported  
Status: Historical  
Title: Enforcement - 8 362397001  
Description: Spoke to operator about high TDS. He will be looking for a way to get it down.  
Program: WDR  
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: 8  
Facility Id: 266597  
Agency Name: Burrtec Waste Industries, Inc.  
Place Type: Facility  
Place Subtype: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RANCHO DISPOSAL INC (Continued)**

**1000171017**

Facility Type:	Industrial
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	34.074022
Place Longitude:	-117.488935
SIC Code 1:	4212
SIC Desc 1:	Local Trucking Without Storage
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:	2
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Washwater waste
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	WDRNONMUNIPRCS
Program Category1:	WDR
Program Category2:	WDR
# Of Programs:	1
WDID:	8 362397001
Reg Measure Id:	144068
Reg Measure Type:	WDR
Region:	8
Order #:	98-070
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:	05/09/2014
Effective Date:	07/10/1998
Expiration/Review Date:	07/07/2008
Termination Date:	03/04/2011
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:	58 - Non15 Based on (TTWQ)/CPLX

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RANCHO DISPOSAL INC (Continued)**

**1000171017**

Direction/Voice: Passive  
Enforcement Id(EID): 245728  
Region: 8  
Order / Resolution Number: UNKNOWN  
Enforcement Action Type: Oral Communication  
Effective Date: 01/08/2003  
Adoption/Issuance Date: Not reported  
Achieve Date: Not reported  
Termination Date: 01/08/2003  
ACL Issuance Date: Not reported  
EPL Issuance Date: Not reported  
Status: Historical  
Title: Enforcement - 8 362397001  
Description: Discussed the lack of sampling and reporting with Jesus Arreola. They had no reason for it.  
Program: WDR  
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: 8  
Facility Id: 266597  
Agency Name: Burrtec Waste Industries, Inc.  
Place Type: Facility  
Place Subtype: Not reported  
Facility Type: Industrial  
Agency Type: Privately-Owned Business  
# Of Agencies: 1  
Place Latitude: 34.074022  
Place Longitude: -117.488935  
SIC Code 1: 4212  
SIC Desc 1: Local Trucking Without Storage  
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: 2  
Complexity: C  
Pretreatment: X - Facility is not a POTW  
Facility Waste Type: Washwater waste  
Facility Waste Type 2: Not reported  
Facility Waste Type 3: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**RANCHO DISPOSAL INC (Continued)**

**1000171017**

Facility Waste Type 4:	Not reported
Program:	WDRNONMUNIPRCS
Program Category1:	WDR
Program Category2:	WDR
# Of Programs:	1
WDID:	8 362397001
Reg Measure Id:	144068
Reg Measure Type:	WDR
Region:	8
Order #:	98-070
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:	05/09/2014
Effective Date:	07/10/1998
Expiration/Review Date:	07/07/2008
Termination Date:	03/04/2011
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:	58 - Non15 Based on (TTWQ)/CPLX
Direction/Voice:	Passive
Enforcement Id(EID):	244461
Region:	8
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Oral Communication
Effective Date:	02/26/2003
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	02/26/2003
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 8 362397001
Description:	Spoke to operator about late report and high TDS. They will be trying to correct these problems.
Program:	WDR
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

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RANCHO DISPOSAL INC (Continued)**

**1000171017**

Region: 8  
Facility Id: 266597  
Agency Name: Burrtec Waste Industries, Inc.  
Place Type: Facility  
Place Subtype: Not reported  
Facility Type: Industrial  
Agency Type: Privately-Owned Business  
# Of Agencies: 1  
Place Latitude: 34.074022  
Place Longitude: -117.488935  
SIC Code 1: 4212  
SIC Desc 1: Local Trucking Without Storage  
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: 2  
Complexity: C  
Pretreatment: X - Facility is not a POTW  
Facility Waste Type: Washwater waste  
Facility Waste Type 2: Not reported  
Facility Waste Type 3: Not reported  
Facility Waste Type 4: Not reported  
Program: WDRNONMUNIPRCS  
Program Category1: WDR  
Program Category2: WDR  
# Of Programs: 1  
WDID: 8 362397001  
Reg Measure Id: 144068  
Reg Measure Type: WDR  
Region: 8  
Order #: 98-070  
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: 05/09/2014  
Effective Date: 07/10/1998  
Expiration/Review Date: 07/07/2008  
Termination Date: 03/04/2011  
WDR Review - Amend: Not reported  
WDR Review - Revise/Renew: Not reported  
WDR Review - Rescind: Not reported  
WDR Review - No Action Required: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**RANCHO DISPOSAL INC (Continued)**

**1000171017**

WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	58 - Non15 Based on (TTWQ)/CPLX
Direction/Voice:	Passive
Enforcement Id(EID):	244460
Region:	8
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Oral Communication
Effective Date:	12/06/2002
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	12/06/2002
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 8 362397001
Description:	Called and spoke to Jesus Arreola, the operations manager about the non reporting. Jesus said there was a personnel change at the company, and that there had been some oversights as a result.
Program:	WDR
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:	8
Facility Id:	266597
Agency Name:	Burrtec Waste Industries, Inc.
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Industrial
Agency Type:	Privately-Owned Business
# Of Agencies:	1
Place Latitude:	34.074022
Place Longitude:	-117.488935
SIC Code 1:	4212
SIC Desc 1:	Local Trucking Without Storage
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

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**RANCHO DISPOSAL INC (Continued)**

**1000171017**

Design Flow:	0
Threat To Water Quality:	2
Complexity:	C
Pretreatment:	X - Facility is not a POTW
Facility Waste Type:	Washwater waste
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	WDRNONMUNIPRCS
Program Category1:	WDR
Program Category2:	WDR
# Of Programs:	1
WDID:	8 362397001
Reg Measure Id:	144068
Reg Measure Type:	WDR
Region:	8
Order #:	98-070
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:	05/09/2014
Effective Date:	07/10/1998
Expiration/Review Date:	07/07/2008
Termination Date:	03/04/2011
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:	58 - Non15 Based on (TTWQ)/CPLX
Direction/Voice:	Passive
Enforcement Id(EID):	242130
Region:	8
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Oral Communication
Effective Date:	08/20/2003
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	08/20/2003
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 8 362397001
Description:	Discussed possibility of changing to a low TDS detergent to reduce TDS levels in discharge.
Program:	WDR
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	\$0.00

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RANCHO DISPOSAL INC (Continued)**

**1000171017**

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:	8
Facility Id:	266597
Agency Name:	Not reported
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Industrial
Agency Type:	Not reported
# Of Agencies:	Not reported
Place Latitude:	34.074022
Place Longitude:	-117.488935
SIC Code 1:	4212
SIC Desc 1:	Local Trucking Without Storage
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:	Enf Action
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:	Not reported
Program Category1:	Not reported
Program Category2:	WDR
# Of Programs:	Not reported
WDID:	Not reported
Reg Measure Id:	Not reported
Reg Measure Type:	Not reported
Region:	Not reported
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:	Not reported
Status Date:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RANCHO DISPOSAL INC (Continued)**

**1000171017**

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:	Not reported
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Not reported
Enforcement Id(EID):	241434
Region:	8
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Oral Communication
Effective Date:	04/10/2002
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	04/10/2002
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 8 362397001
Description:	Held a meeting with operator to discuss discharge exceedences and other issues.
Program:	WDR
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:	8
Facility Id:	266597
Agency Name:	Not reported
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Industrial
Agency Type:	Not reported
# Of Agencies:	Not reported
Place Latitude:	34.074022
Place Longitude:	-117.488935
SIC Code 1:	4212
SIC Desc 1:	Local Trucking Without Storage
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

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RANCHO DISPOSAL INC (Continued)**

**1000171017**

NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Enf Action
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:	Not reported
Program Category1:	Not reported
Program Category2:	WDR
# Of Programs:	Not reported
WDID:	Not reported
Reg Measure Id:	Not reported
Reg Measure Type:	Not reported
Region:	Not reported
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:	Not reported
Status Date:	Not reported
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:	Not reported
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Not reported
Enforcement Id(EID):	241433
Region:	8
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Oral Communication
Effective Date:	11/30/2001
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	11/30/2001
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 8 362397001
Description:	Informed operator we had not received 4th. quarter mon.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RANCHO DISPOSAL INC (Continued)**

**1000171017**

Program:	report.
Latest Milestone Completion Date:	WDR
# Of Programs1:	Not reported
Total Assessment Amount:	1
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:	8
Facility Id:	266597
Agency Name:	Not reported
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Industrial
Agency Type:	Not reported
# Of Agencies:	Not reported
Place Latitude:	34.074022
Place Longitude:	-117.488935
SIC Code 1:	4212
SIC Desc 1:	Local Trucking Without Storage
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:	Enf Action
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:	Not reported
Program Category1:	Not reported
Program Category2:	WDR
# Of Programs:	Not reported
WDID:	Not reported
Reg Measure Id:	Not reported
Reg Measure Type:	Not reported
Region:	Not reported
Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**RANCHO DISPOSAL INC (Continued)**

**1000171017**

Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Not reported
Status Date:	Not reported
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:	Not reported
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Not reported
Enforcement Id(EID):	241432
Region:	8
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Oral Communication
Effective Date:	08/30/2001
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	08/30/2001
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 8 362397001
Description:	Informed operator we had not received 3rd quarter mon. report.
Program:	WDR
Latest Milestone Completion Date:	4/24/2002
# 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:	8
Facility Id:	266597
Agency Name:	Not reported
Place Type:	Facility
Place Subtype:	Not reported
Facility Type:	Industrial
Agency Type:	Not reported
# Of Agencies:	Not reported
Place Latitude:	34.074022
Place Longitude:	-117.488935
SIC Code 1:	4212
SIC Desc 1:	Local Trucking Without Storage
SIC Code 2:	Not reported
SIC Desc 2:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RANCHO DISPOSAL INC (Continued)**

**1000171017**

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:	Enf Action
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:	Not reported
Program Category1:	Not reported
Program Category2:	WDR
# Of Programs:	Not reported
WDID:	Not reported
Reg Measure Id:	Not reported
Reg Measure Type:	Not reported
Region:	Not reported
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:	Not reported
Status Date:	Not reported
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:	Not reported
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Not reported
Enforcement Id(EID):	241431
Region:	8
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Oral Communication
Effective Date:	02/28/2001
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	02/28/2001

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RANCHO DISPOSAL INC (Continued)**

**1000171017**

ACL Issuance Date: Not reported  
EPL Issuance Date: Not reported  
Status: Historical  
Title: Enforcement - 8 362397001  
Description: Informed operator we had not received 1st. quarter report.  
Program: WDR  
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

**HAULERS:**

Facility ID: 1001726  
Facility Phone: (909) 429-4200  
Business Email Address: Not reported  
Contact Person: Jan Hernandez, Allan Williams, Michael Heftman, Eric D. Herbert  
Mailing Address: 9890 Cherry Ave  
Mailing City: Fontana  
Mailing State: CA  
Mailing Zip: 92335  
Mailing County: San Bernardino  
Mailing Phone: (909) 429-4200  
Waste Tire Permit Summary: No Permit record for this business.

**Detail:**

SR#: 187  
Current Role: End Use  
Current Role Status: Yes  
Facility ID: 1001726  
  
SR#: 187  
Current Role: Generator  
Current Role Status: Yes  
Facility ID: 1001726  
  
SR#: 187  
Current Role: Hauler  
Current Role Status: Registered  
Facility ID: 1001726

**CA WDS:**

Facility ID: Santa Ana River 36I000268  
Facility Type: Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.  
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

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**RANCHO DISPOSAL INC (Continued)**

**1000171017**

are assigned by the Regional Board

Subregion: 8

Facility Telephone: 9094294200

Facility Contact: OTTONELLO MIKE

Agency Name: BURRTEC WASTE INDUSTRIES INC.

Agency Address: 9890 CHERRY AVENUE

Agency City,St,Zip: FONTANA 92335

Agency Contact: TRACY SWEENEY

Agency Telephone: Not reported

Agency Type: Private

SIC Code: 0

SIC Code 2: Not reported

Primary Waste Type: Not reported

Primary Waste: Not reported

Waste Type2: Not reported

Waste2: Not reported

Primary Waste Type: Not reported

Secondary Waste: Not reported

Secondary Waste Type: Not reported

Design Flow: 0

Baseline Flow: 0

Reclamation: Not reported

POTW: Not reported

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 those who 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.

**34**  
**SE**  
**1/8-1/4**  
**0.154 mi.**  
**814 ft.**

**14765 VALLEY BLVD**  
**FONTANA, CA 92335**

**EDR US Hist Auto Stat 1015233315**  
**N/A**

**Relative:**  
**Lower**

**Actual:**  
**1054 ft.**

EDR Historical Auto Stations:

Name: AMERICAN TRANSMISSION EXCHANGE  
 Year: 1999  
 Address: 14765 VALLEY BLVD

Name: AMERICAN TRANSMISSION EXCHANGE  
 Year: 2000  
 Address: 14765 VALLEY BLVD

Name: AMERICAN TRANSMISSION EXCHANGE  
 Year: 2004  
 Address: 14765 VALLEY BLVD

Name: AMERICAN TRANSMISSION EXCHANGE  
 Year: 2010  
 Address: 14765 VALLEY BLVD

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

(Continued)

1015233315

Name: AMERICAN TRANSMISSION EXCHANGE  
Year: 2011  
Address: 14765 VALLEY BLVD

H35  
NW  
1/8-1/4  
0.154 mi.  
815 ft.

9823 CHERRY AVE  
FONTANA, CA 92335

Site 1 of 7 in cluster H

EDR US Hist Auto Stat

1015688500  
N/A

Relative:  
Higher

EDR Historical Auto Stations:

Actual:  
1069 ft.

Name: AVILA AUTO BODY  
Year: 1999  
Address: 9823 CHERRY AVE

Name: AVILA AUTO BODY  
Year: 2000  
Address: 9823 CHERRY AVE

Name: AVILA AUTO BODY  
Year: 2005  
Address: 9823 CHERRY AVE

Name: AVILA AUTO BODY  
Year: 2006  
Address: 9823 CHERRY AVE

Name: AVILA AUTO BODY  
Year: 2007  
Address: 9823 CHERRY AVE

Name: DANNY AVILA AUTO BODY INC  
Year: 2008  
Address: 9823 CHERRY AVE

Name: DANNY AVILA AUTO BODY INC  
Year: 2009  
Address: 9823 CHERRY AVE

Name: CALIFORNIA COLLISION SVC  
Year: 2010  
Address: 9823 CHERRY AVE

Name: AVILA AUTO BODY  
Year: 2011  
Address: 9823 CHERRY AVE

Name: AVILA AUTO BODY FRAME & PAINT  
Year: 2012  
Address: 9823 CHERRY AVE

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

**I36**      **MOBIL STATION**  
**SW**      **14518 VALLEY BLVD**  
**1/8-1/4**      **FONTANA, CA 90017**  
**0.158 mi.**  
**835 ft.**      **Site 1 of 7 in cluster I**

**CA FID UST**      **S101590969**  
                                 **N/A**

**Relative:**      CA FID UST:  
**Lower**      Facility ID:      36000395  
                         Regulated By:      UTNKA  
**Actual:**      Regulated ID:      00039217  
**1046 ft.**      Cortese Code:      Not reported  
                         SIC Code:      Not reported  
                         Facility Phone:      Not reported  
                         Mail To:      Not reported  
                         Mailing Address:      PO BOX 2122  
                         Mailing Address 2:      Not reported  
                         Mailing City,St,Zip:      FONTANA 90017  
                         Contact:      Not reported  
                         Contact Phone:      Not reported  
                         DUNS Number:      Not reported  
                         NPDES Number:      Not reported  
                         EPA ID:      Not reported  
                         Comments:      Not reported  
                         Status:      Active

**I37**      **MOBIL STATION**  
**SW**      **14518 VALLEY BLVD**  
**1/8-1/4**      **FONTANA, CA 92335**  
**0.158 mi.**  
**835 ft.**      **Site 2 of 7 in cluster I**

**CA HIST CORTESE**      **S102039278**  
                                 **CA LUST**      **N/A**  
                                 **CA SWEEPS UST**  
**CA San Bern. Co. Permit**

**Relative:**      HIST CORTESE:  
**Lower**      Region:      CORTESE  
                         Facility County Code:      36  
**Actual:**      Reg By:      LTNKA  
**1046 ft.**      Reg Id:      083602008T

**LUST:**  
Region:      STATE  
Global Id:      T0607100245  
Latitude:      34.070486  
Longitude:      -117.488496  
Case Type:      LUST Cleanup Site  
Status:      Completed - Case Closed  
Status Date:      06/20/1994  
Lead Agency:      SAN BERNARDINO COUNTY  
Case Worker:      Not reported  
Local Agency:      Not reported  
RB Case Number:      083602008T  
LOC Case Number:      90140  
File Location:      Local Agency  
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:      T0607100245  
Contact Type:      Regional Board Caseworker

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MOBIL STATION (Continued)**

**S102039278**

Contact Name: ROSE SCOTT  
Organization Name: SANTA ANA RWQCB (REGION 8)  
Address: 3737 MAIN STREET, SUITE 500  
City: RIVERSIDE  
Email: rscott@waterboards.ca.gov  
Phone Number: 9513206375

Status History:

Global Id: T0607100245  
Status: Completed - Case Closed  
Status Date: 06/20/1994

Global Id: T0607100245  
Status: Open - Case Begin Date  
Status Date: 12/28/1989

Global Id: T0607100245  
Status: Open - Site Assessment  
Status Date: 12/27/1992

Global Id: T0607100245  
Status: Open - Site Assessment  
Status Date: 12/04/1991

Regulatory Activities:

Global Id: T0607100245  
Action Type: Other  
Date: 12/28/1989  
Action: Leak Discovery

Global Id: T0607100245  
Action Type: Other  
Date: 02/27/1992  
Action: Leak Reported

Global Id: T0607100245  
Action Type: ENFORCEMENT  
Date: 06/20/1994  
Action: Closure/No Further Action Letter

Global Id: T0607100245  
Action Type: Other  
Date: 12/30/1989  
Action: Leak Stopped

LUST REG 8:

Region: 8  
County: San Bernardino  
Regional Board: Santa Ana Region  
Facility Status: Case Closed  
Case Number: 083602008T  
Local Case Num: 90140  
Case Type: Soil only  
Substance: Gasoline  
Qty Leaked: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MOBIL STATION (Continued)**

**S102039278**

Abate Method:	Not reported
Cross Street:	CHERRY
Enf Type:	CLOS
Funding:	Not reported
How Discovered:	Subsurface Monitoring
How Stopped:	Not reported
Leak Cause:	Structure Failure
Leak Source:	Tank
Global ID:	T0607100245
How Stopped Date:	12/30/1989
Enter Date:	3/11/1992
Date Confirmation of Leak Began:	12/4/1991
Date Preliminary Assessment Began:	Not reported
Discover Date:	12/28/1989
Enforcement Date:	Not reported
Close Date:	6/20/1994
Date Prelim Assessment Workplan Submitted:	12/27/1992
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	3/11/1992
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.0702966
Longitude:	-117.488319
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	RS
Staff Initials:	LH6
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

**SWEEPS UST:**

Status:	Active
Comp Number:	39217
Number:	9
Board Of Equalization:	44-000400
Referral Date:	07-28-92
Action Date:	07-28-92
Created Date:	02-29-88
Owner Tank Id:	1

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MOBIL STATION (Continued)**

**S102039278**

SWRCB Tank Id: 36-000-039217-000001  
Tank Status: A  
Capacity: 10000  
Active Date: 08-25-88  
Tank Use: M.V. FUEL  
STG: P  
Content: REG UNLEADED  
Number Of Tanks: 4

Status: Active  
Comp Number: 39217  
Number: 9  
Board Of Equalization: 44-000400  
Referral Date: 07-28-92  
Action Date: 07-28-92  
Created Date: 02-29-88  
Owner Tank Id: 2  
SWRCB Tank Id: 36-000-039217-000002  
Tank Status: A  
Capacity: 8000  
Active Date: 08-25-88  
Tank Use: M.V. FUEL  
STG: P  
Content: LEADED  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 39217  
Number: 9  
Board Of Equalization: 44-000400  
Referral Date: 07-28-92  
Action Date: 07-28-92  
Created Date: 02-29-88  
Owner Tank Id: 3  
SWRCB Tank Id: 36-000-039217-000003  
Tank Status: A  
Capacity: 6000  
Active Date: 08-25-88  
Tank Use: M.V. FUEL  
STG: P  
Content: REG UNLEADED  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 39217  
Number: 9  
Board Of Equalization: 44-000400  
Referral Date: 07-28-92  
Action Date: 07-28-92  
Created Date: 02-29-88  
Owner Tank Id: 4  
SWRCB Tank Id: 36-000-039217-000004  
Tank Status: A  
Capacity: 280  
Active Date: 08-25-88  
Tank Use: OIL  
STG: W

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MOBIL STATION (Continued)**

**S102039278**

Content: WASTE OIL  
Number Of Tanks: Not reported

San Bern. Co. Permit:

Region: SAN BERNARDINO  
Facility ID: FA0006288  
Owner: PATEL, VIRESHBHAI J  
Permit Number: PT0002212  
Permit Category: HAZMAT HANDLER - UST ONLY  
Facility Status: ACTIVE  
Expiration Date: 09/30/2014

Region: SAN BERNARDINO  
Facility ID: FA0006288  
Owner: PATEL, VIRESHBHAI J  
Permit Number: PT0027357  
Permit Category: WASTE INCIDENTAL UST OPERATION ONLY  
Facility Status: ACTIVE  
Expiration Date: 09/30/2014

Region: SAN BERNARDINO  
Facility ID: FA0006288  
Owner: PATEL, VIRESHBHAI J  
Permit Number: PT0012116  
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)  
Facility Status: ACTIVE  
Expiration Date: 09/30/2014

Region: SAN BERNARDINO  
Facility ID: FA0006288  
Owner: PATEL, VIRESHBHAI J  
Permit Number: PT0012117  
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)  
Facility Status: ACTIVE  
Expiration Date: 09/30/2014

Region: SAN BERNARDINO  
Facility ID: FA0006288  
Owner: PATEL, VIRESHBHAI J  
Permit Number: PT0012118  
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)  
Facility Status: ACTIVE  
Expiration Date: 09/30/2014

I38  
SW  
1/8-1/4  
0.158 mi.  
835 ft.

**SON'S MOBIL STATION**  
**14518 VALLEY BLVD**  
**FONTANA, CA 92335**  
**Site 3 of 7 in cluster I**

**CA UST U003971272**  
**N/A**

Relative:  
Lower

UST:  
Facility ID: 86008794  
Latitude: 34.071837  
Longitude: -117.487141  
Permitting Agency: SAN BERNARDINO COUNTY

Actual:  
1046 ft.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**I39**  
**SW**  
**1/8-1/4**  
**0.158 mi.**  
**835 ft.**

**ABRAHAM RIDA**  
**14518 VALLEY BLVD**  
**FONTANA, CA 90017**

**CA HIST UST**    **U001560693**  
**N/A**

**Site 4 of 7 in cluster I**

**Relative:**  
**Lower**

HIST UST:  
Region: STATE  
Facility ID: 00000039217  
Facility Type: Gas Station  
Other Type: Not reported  
Total Tanks: 0004  
Contact Name: Not reported  
Telephone: 7148232246  
Owner Name: MOBIL OIL CORPORATION  
Owner Address: 612 S. FLOWER STREET  
Owner City,St,Zip: LOS ANGELES, CA 90017

**Actual:**  
**1046 ft.**

Tank Num: 001  
Container Num: 1  
Year Installed: Not reported  
Tank Capacity: 00010000  
Tank Used for: PRODUCT  
Type of Fuel: UNLEADED  
Tank Construction: Not reported  
Leak Detection: Stock Inventor

Tank Num: 002  
Container Num: 2  
Year Installed: Not reported  
Tank Capacity: 00008000  
Tank Used for: PRODUCT  
Type of Fuel: REGULAR  
Tank Construction: Not reported  
Leak Detection: Stock Inventor

Tank Num: 003  
Container Num: 3  
Year Installed: Not reported  
Tank Capacity: 00006000  
Tank Used for: PRODUCT  
Type of Fuel: PREMIUM  
Tank Construction: Not reported  
Leak Detection: Stock Inventor

Tank Num: 004  
Container Num: 4  
Year Installed: Not reported  
Tank Capacity: 00000280  
Tank Used for: WASTE  
Type of Fuel: WASTE OIL  
Tank Construction: Not reported  
Leak Detection: Stock Inventor

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

**I40**  
**SW**  
**1/8-1/4**  
**0.158 mi.**  
**835 ft.**

**14518 VALLEY BLVD**  
**FONTANA, CA 92335**

**EDR US Hist Auto Stat**    **1015230592**  
**N/A**

**Site 5 of 7 in cluster I**

**Relative:**  
**Lower**

EDR Historical Auto Stations:

Name:                    MONARCH PETROLEUM  
Year:                     2006  
Address:                 14518 VALLEY BLVD

**Actual:**  
**1046 ft.**

Name:                    CBM VALERO  
Year:                     2007  
Address:                 14518 VALLEY BLVD

Name:                    MONARCH PETROLEUM  
Year:                     2008  
Address:                 14518 VALLEY BLVD

Name:                    MONARCH PETROLEUM  
Year:                     2009  
Address:                 14518 VALLEY BLVD

**D41**  
**SSE**  
**1/8-1/4**  
**0.165 mi.**  
**870 ft.**

**EARTH CONSTRUCTION & MINING**  
**10131 REDWOOD AVE**  
**FONTANA, CA 92335**

**CA AST**    **S109254360**  
**CA San Bern. Co. Permit**    **N/A**

**Site 4 of 4 in cluster D**

**Relative:**  
**Lower**

AST:

Certified Unified Program Agencies: San Bernardino  
Owner:                    POSS, CHUCK  
Total Gallons:            2,720

**Actual:**  
**1048 ft.**

San Bern. Co. Permit:

Region:                    SAN BERNARDINO  
Facility ID:                FA0011681  
Owner:                    POSS, CHUCK  
Permit Number:            PT0020246  
Permit Category:         HAZARDOUS MATERIALS 4-10 CHEMICALS  
Facility Status:          ACTIVE  
Expiration Date:          08/31/2014

Region:                    SAN BERNARDINO  
Facility ID:                FA0011681  
Owner:                    POSS, CHUCK  
Permit Number:            PT0020431  
Permit Category:         APSA 1,320-10,000 GAL FAC CAPACITY  
Facility Status:          ACTIVE  
Expiration Date:          08/31/2014

Region:                    SAN BERNARDINO  
Facility ID:                FA0011681  
Owner:                    POSS, CHUCK  
Permit Number:            PT0020245  
Permit Category:         SMALL QUANTITY GENERATOR  
Facility Status:          ACTIVE  
Expiration Date:          08/31/2014

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**EARTH CONSTRUCTION & MINING (Continued)**

**S109254360**

Region: SAN BERNARDINO  
Facility ID: FA0011688  
Owner: TEEL, KENNETH & MARTHA  
Permit Number: PT0020517  
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)  
Facility Status: INACTIVE  
Expiration Date: 08/31/2008

Region: SAN BERNARDINO  
Facility ID: FA0011688  
Owner: TEEL, KENNETH & MARTHA  
Permit Number: PT0020260  
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)  
Facility Status: INACTIVE  
Expiration Date: 08/31/2008

**H42  
NW  
1/8-1/4  
0.166 mi.  
874 ft.**

**ADAMS AND COMPANIES INC.  
9820 CHERRY AVE  
FONTANA, CA 92335  
Site 2 of 7 in cluster H**

**CA HIST UST U001574815  
N/A**

**Relative:  
Higher**

HIST UST:  
Region: STATE  
Facility ID: 00000013996  
Facility Type: Other  
Other Type: TRUCKING CO.  
Total Tanks: 0001  
Contact Name: WM. F. ADAMS.  
Telephone: 7148294411  
Owner Name: ADAMS AND COMPANIES INC.  
Owner Address: 9820 CHERRY AVE  
Owner City,St,Zip: FONTANA, CA 92335

**Actual:  
1069 ft.**

Tank Num: 001  
Container Num: 1  
Year Installed: 1983  
Tank Capacity: 00012000  
Tank Used for: PRODUCT  
Type of Fuel: DIESEL  
Tank Construction: 1/4 inches  
Leak Detection: Stock Inventor

**H43  
NW  
1/8-1/4  
0.166 mi.  
874 ft.**

**ADAMS & CO.  
9820 CHERRY AVE  
FONTANA, CA 92335  
Site 3 of 7 in cluster H**

**CA HIST UST U001574814  
N/A**

**Relative:  
Higher**

HIST UST:  
Region: STATE  
Facility ID: 00000039137  
Facility Type: Other  
Other Type: TRUCKING  
Total Tanks: 0002  
Contact Name: JESSE RODRIGUEZ

**Actual:  
1069 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ADAMS & CO. (Continued)**

**U001574814**

Telephone: 7148294411  
Owner Name: ADAMS & CO.  
Owner Address: 9820 CHERRY AVE.  
Owner City,St,Zip: FONTANA, CA 92335

Tank Num: 001  
Container Num: #1  
Year Installed: Not reported  
Tank Capacity: 00012000  
Tank Used for: PRODUCT  
Type of Fuel: DIESEL  
Tank Construction: Not reported  
Leak Detection: Stock Inventor

Tank Num: 002  
Container Num: #1  
Year Installed: 1983  
Tank Capacity: 00012000  
Tank Used for: PRODUCT  
Type of Fuel: DIESEL  
Tank Construction: Not reported  
Leak Detection: Stock Inventor

**H44  
NW  
1/8-1/4  
0.166 mi.  
874 ft.**

**FULLERTON ENTERPRISES  
9820 CHERRY AV  
FONTANA, CA, CA 92335  
Site 4 of 7 in cluster H**

**CA FID UST 1000192237  
CA SWEEPS UST N/A  
CA San Bern. Co. Permit  
CA EMI**

**Relative:  
Higher**

CA FID UST:  
Facility ID: 36003893  
Regulated By: UTNKA  
Regulated ID: 00039137  
Cortese Code: Not reported  
SIC Code: Not reported  
Facility Phone: Not reported  
Mail To: Not reported  
Mailing Address: 9820 CHERRY AVE  
Mailing Address 2: Not reported  
Mailing City,St,Zip: FONTANA 92335  
Contact: Not reported  
Contact Phone: Not reported  
DUNS Number: Not reported  
NPDES Number: Not reported  
EPA ID: Not reported  
Comments: Not reported  
Status: Active

**Actual:  
1069 ft.**

SWEEPS UST:  
Status: Active  
Comp Number: 39137  
Number: 9  
Board Of Equalization: 44-020966  
Referral Date: 08-28-91  
Action Date: 08-28-91  
Created Date: 02-29-88  
Owner Tank Id: #1

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FULLERTON ENTERPRISES (Continued)**

1000192237

SWRCB Tank Id: 36-000-039137-000001  
Tank Status: A  
Capacity: 12000  
Active Date: 07-08-88  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: 2

Status: Active  
Comp Number: 39137  
Number: 9  
Board Of Equalization: 44-020966  
Referral Date: 08-28-91  
Action Date: 08-28-91  
Created Date: 02-29-88  
Owner Tank Id: #1  
SWRCB Tank Id: 36-000-039137-000002  
Tank Status: A  
Capacity: 12000  
Active Date: 07-08-88  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: Not reported

San Bern. Co. Permit:

Region: SAN BERNARDINO  
Facility ID: FA0003354  
Owner: FULLERTON, MICHAEL  
Permit Number: PT0007734  
Permit Category: SPECIAL HANDLER  
Facility Status: INACTIVE  
Expiration Date: 05/31/2010

Region: SAN BERNARDINO  
Facility ID: FA0005575  
Owner: BURRTEC WASTE INDUSTRIES INC  
Permit Number: PT0012497  
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)  
Facility Status: INACTIVE  
Expiration Date: 09/30/2005

Region: SAN BERNARDINO  
Facility ID: FA0005575  
Owner: BURRTEC WASTE INDUSTRIES INC  
Permit Number: PT0012498  
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)  
Facility Status: INACTIVE  
Expiration Date: 09/30/2005

Region: SAN BERNARDINO  
Facility ID: FA0005575  
Owner: BURRTEC WASTE INDUSTRIES INC  
Permit Number: PT0012499  
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)  
Facility Status: INACTIVE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**FULLERTON ENTERPRISES (Continued)**

**1000192237**

Expiration Date: 09/30/2005

Region: SAN BERNARDINO  
Facility ID: FA0003354  
Owner: FULLERTON, MICHAEL  
Permit Number: PT0007735  
Permit Category: CONDITIONALLY EXEMPT SM QTY GENERATOR SPECIAL  
Facility Status: ACTIVE  
Expiration Date: 05/31/2015

Region: SAN BERNARDINO  
Facility ID: FA0005575  
Owner: BURRTEC WASTE INDUSTRIES INC  
Permit Number: PT0001318  
Permit Category: LARGE QUANTITY GENERATOR  
Facility Status: ACTIVE  
Expiration Date: 09/30/2014

Region: SAN BERNARDINO  
Facility ID: FA0005575  
Owner: BURRTEC WASTE INDUSTRIES INC  
Permit Number: PT0001317  
Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL  
Facility Status: ACTIVE  
Expiration Date: 09/30/2014

Region: SAN BERNARDINO  
Facility ID: FA0005575  
Owner: BURRTEC WASTE INDUSTRIES INC  
Permit Number: PT0026157  
Permit Category: APSA 10,001-100,000 GAL FAC CAPACITY  
Facility Status: ACTIVE  
Expiration Date: 09/30/2013

**EMI:**

Year: 1987  
County Code: 36  
Air Basin: SC  
Facility ID: 56079  
Air District Name: SC  
SIC Code: 7538  
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 & Smllr Tons/Yr: 0

Year: 1990  
County Code: 36  
Air Basin: SC  
Facility ID: 56079  
Air District Name: SC

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**FULLERTON ENTERPRISES (Continued)**

**1000192237**

SIC Code: 7538  
 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: 0  
 NOX - Oxides of Nitrogen Tons/Yr: 0  
 SOX - Oxides of Sulphur Tons/Yr: 0  
 Particulate Matter Tons/Yr: 0  
 Part. Matter 10 Micrometers & Smlr Tons/Yr: 0

Year: 1993  
 County Code: 36  
 Air Basin: SC  
 Facility ID: 56079  
 Air District Name: SC  
 SIC Code: 7538  
 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: 2  
 Reactive Organic Gases Tons/Yr: 2  
 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 & Smlr Tons/Yr: 0

Year: 1995  
 County Code: 36  
 Air Basin: SC  
 Facility ID: 56079  
 Air District Name: SC  
 SIC Code: 7538  
 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: 2  
 Reactive Organic Gases Tons/Yr: 2  
 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 & Smlr Tons/Yr: 0

**I45**  
**SW**  
**1/8-1/4**  
**0.166 mi.**  
**877 ft.**

**SOUTHWEST TRUCK REPAIR**  
**14887 E VALLEY**  
**FONTANA, CA 92335**  
**Site 6 of 7 in cluster I**

**RCRA-SQG 1000411020**  
**FINDS CAD981616402**

**Relative:**  
**Lower**

RCRA-SQG:  
 Date form received by agency: 09/01/1996  
 Facility name: SOUTHWEST TRUCK REPAIR  
 Facility address: 14887 E VALLEY  
 FONTANA, CA 92335  
 EPA ID: CAD981616402

**Actual:**  
**1046 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SOUTHWEST TRUCK REPAIR (Continued)**

**1000411020**

Mailing address: E VALLEY  
FONTANA, CA 92335  
Contact: Not reported  
Contact address: Not reported  
Not reported  
Contact country: Not reported  
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: BEX ENTERPRISES INC  
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  
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  
Used 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

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**SOUTHWEST TRUCK REPAIR (Continued)**

**1000411020**

FINDS:

Registry ID: 110009538027

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.

**I46**  
**SW**  
**1/8-1/4**  
**0.167 mi.**  
**881 ft.**

**14510 VALLEY BLVD**  
**FONTANA, CA 92335**  
**Site 7 of 7 in cluster I**

**EDR US Hist Auto Stat**

**1015230545**  
**N/A**

**Relative:**  
**Lower**

EDR Historical Auto Stations:

Name: SPEEDWAY MOBIL  
 Year: 2001  
 Address: 14510 VALLEY BLVD

**Actual:**  
**1046 ft.**

Name: SPEEDWAY MOBIL  
 Year: 2004  
 Address: 14510 VALLEY BLVD

**H47**  
**NW**  
**1/8-1/4**  
**0.175 mi.**  
**924 ft.**

**VANGAS, INC.**  
**9808 CHERRY AVE**  
**FONTANA, CA 92335**  
**Site 5 of 7 in cluster H**

**CA HIST UST**  
**CA CHMIRS**  
**CA San Bern. Co. Permit**

**U001574918**  
**N/A**

**Relative:**  
**Higher**

HIST UST:

Region: STATE  
 Facility ID: 00000029804  
 Facility Type: Gas Station  
 Other Type: Not reported  
 Total Tanks: 0003  
 Contact Name: KENNETH V. RICH  
 Telephone: 7148221617  
 Owner Name: VANGAS, INC.  
 Owner Address: 2171 N. FINE STREET  
 Owner City,St,Zip: FRESNO, CA 93727

**Actual:**  
**1069 ft.**

Tank Num: 001  
 Container Num: 1  
 Year Installed: 1982  
 Tank Capacity: 00012000  
 Tank Used for: PRODUCT  
 Type of Fuel: REGULAR  
 Tank Construction: 1/4 inches  
 Leak Detection: Stock Inventor

Tank Num: 002

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

VANGAS, INC. (Continued)

U001574918

Container Num: 2  
Year Installed: 1982  
Tank Capacity: 00012000  
Tank Used for: PRODUCT  
Type of Fuel: DIESEL  
Tank Construction: 1/4 inches  
Leak Detection: Stock Inventor

Tank Num: 003  
Container Num: 3  
Year Installed: 1982  
Tank Capacity: 00012000  
Tank Used for: PRODUCT  
Type of Fuel: UNLEADED  
Tank Construction: 1/4 inches  
Leak Detection: Stock Inventor

CHMIRS:

OES Incident Number: 00-2280  
OES notification: 05/23/2000  
OES Date: Not reported  
OES Time: Not reported  
Incident Date: Not reported  
**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  
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: Contractor  
Containment: Not reported  
What Happened: Not reported  
Type: Not reported  
Measure: Not reported  
Other: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

VANGAS, INC. (Continued)

U001574918

Date/Time: Not reported  
Year: 2000  
Agency: Vantage Tank Lines  
Incident Date: 5/23/200012:00:00 AM  
Admin Agency: San Bernardino County Health Department  
Amount: Not reported  
Contained: Yes  
Site Type: Road  
E Date: Not reported  
Substance: diesel  
Gallons: 200  
Unknown: 0  
Substance #2: Not reported  
Substance #3: Not reported  
Evacuations: 0  
Number of Injuries: 0  
Number of Fatalities: 0  
#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: Tank overfill. Being cleaned up.

OES Incident Number: '12-0141  
OES notification: 01/09/2012  
OES Date: Not reported  
OES Time: Not reported  
Incident Date: Not reported  
**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  
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

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VANGAS, INC. (Continued)**

**U001574918**

Report Date: Not reported  
Facility Telephone: Not reported  
Waterway Involved: No  
Waterway: Not reported  
Spill Site: Service Station  
Cleanup By: Reporting Party  
Containment: Not reported  
What Happened: Not reported  
Type: Not reported  
Measure: Gal(s)  
Other: Not reported  
Date/Time: 500  
Year: 2012  
Agency: Inland Petroleum Equipment and Repair  
Incident Date: 1/8/2012  
Admin Agency: San Bernardino County Health Department  
Amount: Not reported  
Contained: Yes  
Site Type: Not reported  
E Date: Not reported  
Substance: Diesel  
Quantity Released: 10  
Unknown: Not reported  
Substance #2: Not reported  
Substance #3: Not reported  
Evacuations: Not reported  
Number of Injuries: Not reported  
Number of Fatalities: Not reported  
#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  
Fataals: Not reported  
Comments: Not reported  
Description: A driver spilled the diesel while refueling his vehicle, the product spilled onto concrete and a gutter area. Clean up is complete.

San Bern. Co. Permit:

Region: SAN BERNARDINO  
Facility ID: FA0005360  
Owner: POMA AUTOMATED FUELING SY  
Permit Number: PT0012383  
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)  
Facility Status: ACTIVE  
Expiration Date: 10/31/2014

Region: SAN BERNARDINO  
Facility ID: FA0005360  
Owner: POMA AUTOMATED FUELING SY  
Permit Number: PT0012384  
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)  
Facility Status: ACTIVE  
Expiration Date: 10/31/2014

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VANGAS, INC. (Continued)**

**U001574918**

Region: SAN BERNARDINO  
Facility ID: FA0005360  
Owner: POMA AUTOMATED FUELING SY  
Permit Number: PT0012385  
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)  
Facility Status: ACTIVE  
Expiration Date: 10/31/2014

Region: SAN BERNARDINO  
Facility ID: FA0005360  
Owner: POMA AUTOMATED FUELING SY  
Permit Number: PT0001875  
Permit Category: HAZMAT HANDLER - UST ONLY  
Facility Status: ACTIVE  
Expiration Date: 10/31/2014

Region: SAN BERNARDINO  
Facility ID: FA0005360  
Owner: POMA AUTOMATED FUELING SY  
Permit Number: PT0023403  
Permit Category: WASTE INCIDENTAL UST OPERATION ONLY  
Facility Status: ACTIVE  
Expiration Date: 10/31/2014

Region: SAN BERNARDINO  
Facility ID: FA0000927  
Owner: UGI CORPORATION  
Permit Number: PT0021239  
Permit Category: SMALL QUANTITY GENERATOR  
Facility Status: ACTIVE  
Expiration Date: 11/30/2013

Region: SAN BERNARDINO  
Facility ID: FA0000927  
Owner: UGI CORPORATION  
Permit Number: PT0007440  
Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS  
Facility Status: ACTIVE  
Expiration Date: 11/30/2013

**H48  
NW  
1/8-1/4  
0.175 mi.  
924 ft.**

**VANGAS, INC.  
9808 CHERRY AVE  
FONTANA, CA 92335  
Site 6 of 7 in cluster H**

**CA FID UST S101629926  
CA SWEEPS UST N/A**

**Relative:  
Higher**

CA FID UST:  
Facility ID: 36007442  
Regulated By: UTNKA  
Regulated ID: 00029804  
Cortese Code: Not reported  
SIC Code: Not reported  
Facility Phone: Not reported  
Mail To: Not reported  
Mailing Address: 9808 CHERRY AVE  
Mailing Address 2: Not reported  
Mailing City, St, Zip: FONTANA 92335  
Contact: Not reported

**Actual:  
1069 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**VANGAS, INC. (Continued)**

**S101629926**

Contact Phone: Not reported  
DUNs Number: Not reported  
NPDES Number: Not reported  
EPA ID: Not reported  
Comments: Not reported  
Status: Active

**SWEEPS UST:**

Status: Active  
Comp Number: 29804  
Number: 9  
Board Of Equalization: 44-018837  
Referral Date: 07-28-92  
Action Date: 07-28-92  
Created Date: 02-29-88  
Owner Tank Id: 1  
SWRCB Tank Id: 36-000-029804-000001  
Tank Status: A  
Capacity: 12000  
Active Date: 07-08-88  
Tank Use: M.V. FUEL  
STG: P  
Content: LEADED  
Number Of Tanks: 3

Status: Active  
Comp Number: 29804  
Number: 9  
Board Of Equalization: 44-018837  
Referral Date: 07-28-92  
Action Date: 07-28-92  
Created Date: 02-29-88  
Owner Tank Id: 2  
SWRCB Tank Id: 36-000-029804-000002  
Tank Status: A  
Capacity: 12000  
Active Date: 07-08-88  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 29804  
Number: 9  
Board Of Equalization: 44-018837  
Referral Date: 07-28-92  
Action Date: 07-28-92  
Created Date: 02-29-88  
Owner Tank Id: 3  
SWRCB Tank Id: 36-000-029804-000003  
Tank Status: A  
Capacity: 12000  
Active Date: 07-08-88  
Tank Use: M.V. FUEL  
STG: P  
Content: REG UNLEADED

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**VANGAS, INC. (Continued)**

**S101629926**

Number Of Tanks: Not reported

**J49**  
**SW**  
 1/8-1/4  
 0.185 mi.  
 976 ft.

**TIME OUT L L C D B A AM PM 11**  
**10062 CHERRY AVE**  
**FONTANA, CA 92335**

**RCRA-SQG** 1006805158  
**FINDS** CAR000124107  
**CA HAZNET**

**Site 1 of 4 in cluster J**

**Relative:**  
**Lower**

**RCRA-SQG:**

Date form received by agency: 08/05/2002  
 Facility name: TIME OUT L L C D B A AM PM 11

**Actual:**  
**1046 ft.**

Facility address: 10062 CHERRY AVE  
 FONTANA, CA 92335

EPA ID: CAR000124107

Contact: TED AUSTIN

Contact address: 10062 CHERRY AVE  
 FONTANA, CA 92335

Contact country: US

Contact telephone: (909) 427-8055

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: JAMES BORBA  
 Owner/operator address: 2339 N EUCLID AVE  
 UPLAND, CA 91784

Owner/operator country: Not reported

Owner/operator telephone: (909) 947-4441

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

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TIME OUT L L C D B A AM PM 11 (Continued)**

**1006805158**

Hazardous Waste Summary:

Waste code: D000  
Waste name: Not Defined  
  
Waste code: D018  
Waste name: BENZENE  
  
Violation Status: No violations found

FINDS:

Registry ID: 110013309393

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.

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:

Year: 2013  
Gepaid: CAR000124107  
Contact: BEREKET AMARE/STORE MGR  
Telephone: 9094278055  
Mailing Name: Not reported  
Mailing Address: 10062 Cherry Ave  
Mailing City,St,Zip: Fontana, CA 923350000  
Gen County: San Bernardino  
TSD EPA ID: CAD028409019  
TSD County: Los Angeles  
Waste Category: Not reported  
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)  
Tons: 0.275  
Facility County: Not reported

Year: 2012  
Gepaid: CAR000124107  
Contact: Ted Austin  
Telephone: 9094278055  
Mailing Name: Not reported  
Mailing Address: 10062 Cherry Ave  
Mailing City,St,Zip: Fontana, CA 923350000  
Gen County: San Bernardino  
TSD EPA ID: CAD028409019  
TSD County: Los Angeles  
Waste Category: Not reported  
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TIME OUT L L C D B A AM PM 11 (Continued)**

**1006805158**

Tons: 0.2  
Facility County: San Bernardino

Year: 2012  
Gepaid: CAR000124107  
Contact: Ted Austin  
Telephone: 9094278055  
Mailing Name: Not reported  
Mailing Address: 10062 Cherry Ave  
Mailing City,St,Zip: Fontana, CA 923350000  
Gen County: San Bernardino  
TSD EPA ID: CAD028409019  
TSD County: Los Angeles  
Waste Category: Not reported  
Disposal Method: Discharge To Sewer/Potw Or Npdes(With Prior Storage--With Or Without Treatment)

Tons: 1.73055  
Facility County: San Bernardino

Year: 2010  
Gepaid: CAR000124107  
Contact: Ted Austin  
Telephone: 9094278055  
Mailing Name: Not reported  
Mailing Address: 10062 Cherry Ave  
Mailing City,St,Zip: Fontana, CA 923350000  
Gen County: Not reported  
TSD EPA ID: CAD028409019  
TSD County: Not reported  
Waste Category: Other organic solids  
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

Tons: 0.275  
Facility County: San Bernardino

Year: 2009  
Gepaid: CAR000124107  
Contact: Ted Austin  
Telephone: 9094278055  
Mailing Name: Not reported  
Mailing Address: 10062 Cherry Ave  
Mailing City,St,Zip: Fontana, CA 92335  
Gen County: Not reported  
TSD EPA ID: CAT080013352  
TSD County: Not reported  
Waste Category: Tank bottom waste  
Disposal Method: Other Recovery Of Reclamation For Reuse Including Acid Regeneration, Organics Recovery Ect

Tons: 1.0425  
Facility County: San Bernardino

[Click this hyperlink](#) while viewing on your computer to access 16 additional CA\_HAZNET: record(s) in the EDR Site Report.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**J50**  
**SW**  
**1/8-1/4**  
**0.185 mi.**  
**976 ft.**

**ARCO AM/PM**  
**10062 CHERRY AVE**  
**FONTANA, CA 92335**  
**Site 2 of 4 in cluster J**

**CA UST** **U003785465**  
**CA San Bern. Co. Permit** **N/A**

**Relative:**  
**Lower**

UST:  
Facility ID: 98046024  
Latitude: 34.0722166  
Longitude: -117.4882064  
Permitting Agency: SAN BERNARDINO COUNTY

**Actual:**  
**1046 ft.**

San Bern. Co. Permit:

Region: SAN BERNARDINO  
Facility ID: FA0001041  
Owner: BORBA, JAMES  
Permit Number: PT0010654  
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)  
Facility Status: ACTIVE  
Expiration Date: 10/31/2014

Region: SAN BERNARDINO  
Facility ID: FA0001041  
Owner: BORBA, JAMES  
Permit Number: PT0010655  
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)  
Facility Status: ACTIVE  
Expiration Date: 10/31/2014

Region: SAN BERNARDINO  
Facility ID: FA0001041  
Owner: BORBA, JAMES  
Permit Number: PT0010656  
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)  
Facility Status: ACTIVE  
Expiration Date: 10/31/2014

Region: SAN BERNARDINO  
Facility ID: FA0001041  
Owner: BORBA, JAMES  
Permit Number: PT0010657  
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)  
Facility Status: ACTIVE  
Expiration Date: 10/31/2014

Region: SAN BERNARDINO  
Facility ID: FA0001041  
Owner: BORBA, JAMES  
Permit Number: PT0009290  
Permit Category: HAZMAT HANDLER - UST ONLY  
Facility Status: ACTIVE  
Expiration Date: 10/31/2014

Region: SAN BERNARDINO  
Facility ID: FA0001041  
Owner: BORBA, JAMES  
Permit Number: PT0021789  
Permit Category: WASTE INCIDENTAL UST OPERATION ONLY  
Facility Status: ACTIVE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ARCO AM/PM (Continued)**

**U003785465**

Expiration Date: 10/31/2014

J51  
SW  
1/8-1/4  
0.185 mi.  
976 ft.

**10062 CHERRY AVE  
FONTANA, CA 92335**

**EDR US Hist Auto Stat 1015123090  
N/A**

**Site 3 of 4 in cluster J**

**Relative:  
Lower**

EDR Historical Auto Stations:

Name: ARCO

Year: 2010

**Actual:  
1046 ft.**

Address: 10062 CHERRY AVE

H52  
NW  
1/8-1/4  
0.185 mi.  
979 ft.

**AVILA AUTO BODY REPAIRS  
9823 CHERRY AVE  
FONTANA, CA 92335**

**CA San Bern. Co. Permit S104578759  
N/A**

**Site 7 of 7 in cluster H**

**Relative:  
Higher**

San Bern. Co. Permit:

Region: SAN BERNARDINO

Facility ID: FA0001257

Owner: AVILA AUTO BODY REPAIRS

Permit Number: PT0009914

Permit Category: HAZMAT HANDLER 0-10 EMPLOYEES (W/GEN PRMT)

Facility Status: INACTIVE

Expiration Date: 10/31/2013

Region: SAN BERNARDINO

Facility ID: FA0001257

Owner: AVILA AUTO BODY REPAIRS

Permit Number: PT0009915

Permit Category: HAZARDOUS WASTE GENERATOR - 0-10 EMPLOYEES

Facility Status: INACTIVE

Expiration Date: 10/31/2013

Region: SAN BERNARDINO

Facility ID: FA0015124

Owner: DIESEL TRUCK EXPORT INC

Permit Number: PT0026364

Permit Category: SMALL QUANTITY GENERATOR

Facility Status: ACTIVE

Expiration Date: 10/31/2014

Region: SAN BERNARDINO

Facility ID: FA0015124

Owner: DIESEL TRUCK EXPORT INC

Permit Number: PT0026365

Permit Category: HAZARDOUS MATERIALS 4-10 CHEMICALS

Facility Status: ACTIVE

Expiration Date: 10/31/2014

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

53  
SE  
1/8-1/4  
0.217 mi.  
1147 ft.

AMERICAN TRANSMISSION EX  
14765 VALLEY BLVD  
FONTANA, CA 92335

CA San Bern. Co. Permit

S108197588  
N/A

Relative:  
Lower

San Bern. Co. Permit:

Region: SAN BERNARDINO  
Facility ID: FA0000921  
Owner: JERRY WILCOX  
Permit Number: PT0022963  
Permit Category: APSA 1,320-10,000 GAL FAC CAPACITY  
Facility Status: INACTIVE  
Expiration Date: 08/31/2010

Actual:  
1050 ft.

Region: SAN BERNARDINO  
Facility ID: FA0000921  
Owner: JERRY WILCOX  
Permit Number: PT0003809  
Permit Category: HAZARDOUS MATERIALS 1-3 CHEMICALS  
Facility Status: ACTIVE  
Expiration Date: 08/31/2015

Region: SAN BERNARDINO  
Facility ID: FA0000921  
Owner: JERRY WILCOX  
Permit Number: PT0003810  
Permit Category: SMALL QUANTITY GENERATOR  
Facility Status: ACTIVE  
Expiration Date: 08/31/2015

K54  
NW  
1/8-1/4  
0.223 mi.  
1176 ft.

INLAND KENWORTH INC  
9730 CHERRY AVE  
FONTANA, CA 92335

RCRA-SQG  
FINDS  
CA AST  
CA CHMIRS  
CA HAZNET

1000151930  
CAD982500399

Site 1 of 5 in cluster K

CA San Bern. Co. Permit

Relative:  
Higher

RCRA-SQG:

Date form received by agency: 09/01/1996  
Facility name: INLAND KENWORTH INC  
Facility address: 9730 CHERRY AVE  
FONTANA, CA 92335  
EPA ID: CAD982500399  
Contact: Not reported  
Contact address: Not reported  
Contact country: Not reported  
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

Actual:  
1074 ft.

Owner/Operator Summary:

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**INLAND KENWORTH INC (Continued)**

**1000151930**

Owner/operator name: NOT REQUIRED  
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: Operator  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Owner/operator name: PARKER  
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

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: 03/06/1990  
Site name: INLAND KENWORTH INC  
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002833612

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.

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,

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**INLAND KENWORTH INC (Continued)**

**1000151930**

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.

**AST:**

Certified Unified Program Agencies: San Bernardino  
Owner: INLAND KENWORTH INC  
Total Gallons: 2,555

**CHMIRS:**

OES Incident Number: '13-6266  
OES notification: 10/07/2013  
OES Date: Not reported  
OES Time: Not reported  
Incident Date: Not reported  
**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  
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: Merchant/Business  
Cleanup By: Reporting Party  
Containment: Not reported  
What Happened: Not reported  
Type: Not reported  
Measure: Gal(s)  
Other: Not reported  
Date/Time: 1400  
Year: 2013  
Agency: Inland Kenworth  
Incident Date: 10/3/2013  
Admin Agency: San Bernardino County Fire Department  
Amount: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**INLAND KENWORTH INC (Continued)**

**1000151930**

Contained: Yes  
Site Type: Not reported  
E Date: Not reported  
Substance: Diesel Fuel  
Quantity Released: 20  
Unknown: Not reported  
Substance #2: Not reported  
Substance #3: Not reported  
Evacuations: Not reported  
Number of Injuries: Not reported  
Number of Fatalities: Not reported  
#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  
FataIs: Not reported  
Comments: Not reported  
Description: HISTORICAL: Per RP: A customer's ruptured fuel tank caused this release. RP advises his company performed clean up.

San Bern. Co. Permit:

Region: SAN BERNARDINO  
Facility ID: FA0003963  
Owner: INLAND KENWORTH INC  
Permit Number: PT0006812  
Permit Category: HAZARDOUS MATERIALS 11-30 CHEMICALS  
Facility Status: ACTIVE  
Expiration Date: 08/31/2014

Region: SAN BERNARDINO  
Facility ID: FA0003963  
Owner: INLAND KENWORTH INC  
Permit Number: PT0006813  
Permit Category: LARGE QUANTITY GENERATOR  
Facility Status: ACTIVE  
Expiration Date: 08/31/2014

Region: SAN BERNARDINO  
Facility ID: FA0003963  
Owner: INLAND KENWORTH INC  
Permit Number: PT0006814  
Permit Category: APSA 1,320-10,000 GAL FAC CAPACITY  
Facility Status: ACTIVE  
Expiration Date: 08/31/2014

HAZNET:

Year: 2013  
Gepaid: CAD982500399  
Contact: MARC MILLS/SERVICE MANAGER  
Telephone: 9098239955  
Mailing Name: Not reported  
Mailing Address: 9730 CHERRY AVE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**INLAND KENWORTH INC (Continued)**

**1000151930**

Mailing City,St,Zip: FONTANA, CA 923355285  
Gen County: San Bernardino  
TSD EPA ID: CAD028409019  
TSD County: Los Angeles  
Waste Category: Not reported  
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery  
(H010-H129) Or (H131-H135)  
Tons: 1.15  
Facility County: Not reported

Year: 2013  
Gepaid: CAD982500399  
Contact: MARC MILLS/SERVICE MANAGER  
Telephone: 9098239955  
Mailing Name: Not reported  
Mailing Address: 9730 CHERRY AVE  
Mailing City,St,Zip: FONTANA, CA 923355285  
Gen County: San Bernardino  
TSD EPA ID: CAD008302903  
TSD County: Los Angeles  
Waste Category: Not reported  
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery  
(H010-H129) Or (H131-H135)  
Tons: 0.45  
Facility County: Not reported

Year: 2013  
Gepaid: CAD982500399  
Contact: MARC MILLS/SERVICE MANAGER  
Telephone: 9098239955  
Mailing Name: Not reported  
Mailing Address: 9730 CHERRY AVE  
Mailing City,St,Zip: FONTANA, CA 923355285  
Gen County: San Bernardino  
TSD EPA ID: CAT000613927  
TSD County: San Bernardino  
Waste Category: Not reported  
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery  
(H010-H129) Or (H131-H135)  
Tons: 0.168  
Facility County: Not reported

Year: 2012  
Gepaid: CAD982500399  
Contact: MARC MILLS/SERVICE MANAGER  
Telephone: 9098239955  
Mailing Name: Not reported  
Mailing Address: 9730 CHERRY AVE  
Mailing City,St,Zip: FONTANA, CA 923355285  
Gen County: San Bernardino  
TSD EPA ID: CAD028409019  
TSD County: Los Angeles  
Waste Category: Not reported  
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery  
(H010-H129) Or (H131-H135)  
Tons: 0.494  
Facility County: San Bernardino

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**INLAND KENWORTH INC (Continued)**

**1000151930**

Year: 2012  
Gepaid: CAD982500399  
Contact: MARC MILLS/SERVICE MANAGER  
Telephone: 9098239955  
Mailing Name: Not reported  
Mailing Address: 9730 CHERRY AVE  
Mailing City,St,Zip: FONTANA, CA 923355285  
Gen County: San Bernardino  
TSD EPA ID: CAD008302903  
TSD County: Los Angeles  
Waste Category: Not reported  
Disposal Method: Other Recovery Of Reclamation For Reuse Including Acid Regeneration,  
Organics Recovery Ect  
Tons: 0.24  
Facility County: San Bernardino

[Click this hyperlink](#) while viewing on your computer to access  
118 additional CA\_HAZNET: record(s) in the EDR Site Report.

**55**  
**SW**  
**1/8-1/4**  
**0.227 mi.**  
**1201 ft.**

**TRANS WEST FORD TRUCK**  
**10150 CHERRY AVE**  
**FONTANA, CA 92335**

**CA FID UST 1000319643**  
**CA HIST UST N/A**  
**CA SWEEPS UST**  
**CA San Bern. Co. Permit**

**Relative:**  
**Lower**

CA FID UST:  
Facility ID: 36004792  
Regulated By: UTNKA  
Regulated ID: 00067785  
Cortese Code: Not reported  
SIC Code: Not reported  
Facility Phone: Not reported  
Mail To: Not reported  
Mailing Address: 10150 CHERRY ST  
Mailing Address 2: Not reported  
Mailing City,St,Zip: FONTANA 92335  
Contact: Not reported  
Contact Phone: Not reported  
DUNs Number: Not reported  
NPDES Number: Not reported  
EPA ID: Not reported  
Comments: Not reported  
Status: Active

**Actual:**  
**1040 ft.**

HIST UST:  
Region: STATE  
Facility ID: 00000067785  
Facility Type: Other  
Other Type: AUTO DEALERSHIP  
Total Tanks: 0001  
Contact Name: DICK TEXTURE  
Telephone: 7148298801  
Owner Name: FORD LEASING DEVELOPMENT CO.  
Owner Address: THE AMERICAN ROAD  
Owner City,St,Zip: DEARBORN, MI 48121

Tank Num: 001

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TRANS WEST FORD TRUCK (Continued)**

**1000319643**

Container Num: 1  
Year Installed: 1975  
Tank Capacity: 00001000  
Tank Used for: WASTE  
Type of Fuel: 5  
Tank Construction: Unkown centimeters  
Leak Detection: None

**SWEEPS UST:**

Status: Active  
Comp Number: 67785  
Number: 9  
Board Of Equalization: 44-021481  
Referral Date: 08-28-91  
Action Date: 08-28-91  
Created Date: 02-29-88  
Owner Tank Id: 1  
SWRCB Tank Id: 36-000-067785-000001  
Tank Status: A  
Capacity: 1000  
Active Date: 07-08-88  
Tank Use: OIL  
STG: W  
Content: WASTE OIL  
Number Of Tanks: 1

**San Bern. Co. Permit:**

Region: SAN BERNARDINO  
Facility ID: FA0006773  
Owner: TRANS-WEST TRUCK CENTER  
Permit Number: PT0002157  
Permit Category: LARGE QUANTITY GENERATOR  
Facility Status: ACTIVE  
Expiration Date: 05/31/2015

Region: SAN BERNARDINO  
Facility ID: FA0006773  
Owner: TRANS-WEST TRUCK CENTER  
Permit Number: PT0002156  
Permit Category: HAZARDOUS MATERIALS 4-10 CHEMICALS  
Facility Status: ACTIVE  
Expiration Date: 05/31/2015

**K56  
NW  
1/8-1/4  
0.230 mi.  
1212 ft.**

**GOODING ENTERPRISES  
9743 CHERRY AVE  
FONTANA, CA 92335**

**CA San Bern. Co. Permit S108208054  
N/A**

**Site 2 of 5 in cluster K**

**Relative:  
Higher**

San Bern. Co. Permit:  
Region: SAN BERNARDINO  
Facility ID: FA0003519  
Owner: GOODING, KEN  
Permit Number: PT0007737  
Permit Category: SPECIAL GENERATOR  
Facility Status: INACTIVE  
Expiration Date: 05/31/2007

**Actual:  
1076 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**GOODING ENTERPRISES (Continued)**

**S108208054**

Region: SAN BERNARDINO  
Facility ID: FA0003519  
Owner: GOODING, KEN  
Permit Number: PT0007736  
Permit Category: SPECIAL HANDLER  
Facility Status: INACTIVE  
Expiration Date: 05/31/2007

**K57  
NW  
1/8-1/4  
0.230 mi.  
1212 ft.**

**9743 CHERRY AVE  
FONTANA, CA 92335**

**EDR US Hist Auto Stat 1015687008  
N/A**

**Site 3 of 5 in cluster K**

**Relative:  
Higher**

EDR Historical Auto Stations:

Name: ANOTHER MOBILE FLEET SERVICE  
Year: 2009  
Address: 9743 CHERRY AVE

**Actual:  
1076 ft.**

Name: ANOTHER MOBILE FLEET SVC  
Year: 2010  
Address: 9743 CHERRY AVE

Name: ANOTHER MOBILE FLEET SERVICE  
Year: 2011  
Address: 9743 CHERRY AVE

Name: ANOTHER MOBILE FLEET SERVICE  
Year: 2012  
Address: 9743 CHERRY AVE

**L58  
ESE  
1/8-1/4  
0.232 mi.  
1227 ft.**

**G C S WESTERN POWER AND EQUIPMENT  
10062 LIVE OAK AVE  
FONTANA, CA 92335**

**RCRA NonGen / NLR 100111739  
FINDS CAR000012773**

**Site 1 of 2 in cluster L**

**Relative:  
Lower**

RCRA NonGen / NLR:

Date form received by agency: 06/21/2006  
Facility name: G C S WESTERN POWER AND EQUIPMENT  
Facility address: 10062 LIVE OAK AVE  
FONTANA, CA 92335

**Actual:  
1061 ft.**

EPA ID: CAR000012773  
Mailing address: PO BOX 6169  
LAFAYETTE, IN 47903  
Contact: MICHAEL CALLOWAY  
Contact address: PO BOX 6169  
LAFAYETTE, IN 47903

Contact country: US  
Contact telephone: 765-771-5732  
Contact email: MICHAEL.CALLOWAY@WABASHNATIONAL.COM  
EPA Region: 09  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**G C S WESTERN POWER AND EQUIPMENT (Continued)**

**100111739**

Owner/Operator Summary:

Owner/operator name: WESTERN POWER AND EQUIPMENT  
Owner/operator address: 4601 N E 77TH AVE STE 200  
VANCOUVER, WA 98662  
Owner/operator country: Not reported  
Owner/operator telephone: (800) 333-2346  
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

Historical Generators:

Date form received by agency: 09/01/2000  
Site name: G C S WESTERN POWER AND EQUIPMENT  
Classification: Small Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110002912331

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.

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

**L59**      **CASE POWER AND EQUIPMENT**      **CA San Bern. Co. Permit**      **S108746026**  
**ESE**      **10062 LIVE OAK AVE**           **N/A**  
**1/8-1/4**      **FONTANA, CA 92335**  
**0.232 mi.**  
**1227 ft.**      **Site 2 of 2 in cluster L**

**Relative:**      San Bern. Co. Permit:  
**Lower**      Region:      SAN BERNARDINO  
                  Facility ID:      FA0005068  
**Actual:**      Owner:      CASE DEALER HOLDING COMPANY, LLC  
**1061 ft.**      Permit Number:      PT0001005  
                  Permit Category:      SPECIAL HANDLER  
                  Facility Status:      INACTIVE  
                  Expiration Date:      09/30/2013

Region:      SAN BERNARDINO  
 Facility ID:      FA0005068  
 Owner:      CASE DEALER HOLDING COMPANY, LLC  
 Permit Number:      PT0001000  
 Permit Category:      SPECIAL GENERATOR  
 Facility Status:      INACTIVE  
 Expiration Date:      09/30/2013

**M60**      **PACIFIC SOUTHWEST LUMBER**      **CA San Bern. Co. Permit**      **S104768827**  
**NNE**      **9712 REDWOOD AVE**           **N/A**  
**1/8-1/4**      **FONTANA, CA 92335**  
**0.233 mi.**  
**1228 ft.**      **Site 1 of 3 in cluster M**

**Relative:**      San Bern. Co. Permit:  
**Higher**      Region:      SAN BERNARDINO  
                  Facility ID:      FA0005198  
**Actual:**      Owner:      TYRA, ROY  
**1086 ft.**      Permit Number:      PT0005379  
                  Permit Category:      CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR  
                  Facility Status:      INACTIVE  
                  Expiration Date:      09/30/2013

Region:      SAN BERNARDINO  
 Facility ID:      FA0005198  
 Owner:      TYRA, ROY  
 Permit Number:      PT0005378  
 Permit Category:      HAZARDOUS MATERIALS 1-3 CHEMICALS SPECIAL  
 Facility Status:      ACTIVE  
 Expiration Date:      09/30/2014

**J61**      **CARL'S JR #48**      **CA San Bern. Co. Permit**      **S109598479**  
**SW**      **14454 VALLEY BLVD**           **N/A**  
**1/8-1/4**      **FONTANA, CA 92335**  
**0.234 mi.**  
**1233 ft.**      **Site 4 of 4 in cluster J**

**Relative:**      San Bern. Co. Permit:  
**Lower**      Region:      SAN BERNARDINO  
                  Facility ID:      FA0012459  
**Actual:**      Owner:      CKE RESTAURANTS INC  
**1043 ft.**      Permit Number:      PT0021820  
                  Permit Category:      BULK CO2 AT RETAIL FOOD FACILITIES

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CARL'S JR #48 (Continued)**

**S109598479**

Facility Status: INACTIVE  
Expiration Date: 05/31/2010

**K62**  
**NNW**  
**1/8-1/4**  
**0.245 mi.**  
**1296 ft.**

**9727 CHERRY AVE**  
**FONTANA, CA 92335**

**EDR US Hist Auto Stat** **S1015686782**  
**N/A**

**Site 4 of 5 in cluster K**

**Relative:**  
**Higher**

EDR Historical Auto Stations:

Name: ANOTHER MOBILE FLEET SERVICE  
Year: 2004  
Address: 9727 CHERRY AVE

**Actual:**  
**1077 ft.**

Name: ANOTHER MOBILE FLEET SERVICE  
Year: 2007  
Address: 9727 CHERRY AVE

Name: ANOTHER MOBILE FLEET SERVICE  
Year: 2008  
Address: 9727 CHERRY AVE

**K63**  
**NNW**  
**1/8-1/4**  
**0.245 mi.**  
**1296 ft.**

**RUSH TRUCK LEASING**  
**9727 CHERRY AVE**  
**FONTANA, CA 92335**

**CA San Bern. Co. Permit** **S111084617**  
**N/A**

**Site 5 of 5 in cluster K**

**Relative:**  
**Higher**

San Bern. Co. Permit:

Region: SAN BERNARDINO  
Facility ID: FA0014068  
Owner: RUSH TRUCK LEASING  
Permit Number: PT0024777  
Permit Category: HAZARDOUS MATERIALS 11-30 CHEMICALS  
Facility Status: ACTIVE  
Expiration Date: 10/31/2014

**Actual:**  
**1077 ft.**

Region: SAN BERNARDINO  
Facility ID: FA0014068  
Owner: RUSH TRUCK LEASING  
Permit Number: PT0024778  
Permit Category: LARGE QUANTITY GENERATOR  
Facility Status: ACTIVE  
Expiration Date: 10/31/2014

Region: SAN BERNARDINO  
Facility ID: FA0014068  
Owner: RUSH TRUCK LEASING  
Permit Number: PT0034099  
Permit Category: APSA 1,320-10,000 GAL FAC CAPACITY  
Facility Status: ACTIVE  
Expiration Date: 10/31/2014

MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Site

Database(s)

EDR ID Number  
 EPA ID Number

**64**  
**NNW**  
**1/4-1/2**  
**0.260 mi.**  
**1372 ft.**

**AZ FUEL STOP**  
**14529 SAN BERNARDINO AVE**  
**FONTANA, CA 92335**

**CA HIST CORTESE**  
**CA LUST**  
**CA FID UST**  
**CA SWEEPS UST**

**S101591589**  
**N/A**

**Relative:**  
**Higher**

HIST CORTESE:  
 Region: CORTESE  
 Facility County Code: 36  
 Reg By: LTNKA  
 Reg Id: 083603646T

**Actual:**  
**1080 ft.**

LUST:  
 Region: STATE  
 Global Id: T0607100635  
 Latitude: 34.076405  
 Longitude: -117.487975  
 Case Type: LUST Cleanup Site  
 Status: Completed - Case Closed  
 Status Date: 10/27/2000  
 Lead Agency: SAN BERNARDINO COUNTY  
 Case Worker: CR2  
 Local Agency: SAN BERNARDINO COUNTY  
 RB Case Number: 083603646T  
 LOC Case Number: 99117  
 File Location: Local Agency  
 Potential Media Affect: Soil  
 Potential Contaminants of Concern: Diesel  
 Site History: Not reported

[Click here to access the California GeoTracker records for this facility:](#)

**Contact:**

Global Id: T0607100635  
 Contact Type: Local Agency Caseworker  
 Contact Name: CATHERINE RICHARDS  
 Organization Name: SAN BERNARDINO COUNTY  
 Address: 620 SOUTH E STREET  
 City: SAN BERNARDINO  
 Email: crichards@sbcfire.org  
 Phone Number: 9093868419

Global Id: T0607100635  
 Contact Type: Regional Board Caseworker  
 Contact Name: ROSE SCOTT  
 Organization Name: SANTA ANA RWQCB (REGION 8)  
 Address: 3737 MAIN STREET, SUITE 500  
 City: RIVERSIDE  
 Email: rscott@waterboards.ca.gov  
 Phone Number: 9513206375

**Status History:**

Global Id: T0607100635  
 Status: Completed - Case Closed  
 Status Date: 10/27/2000

Global Id: T0607100635  
 Status: Open - Case Begin Date  
 Status Date: 08/31/1999

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**AZ FUEL STOP (Continued)**

**S101591589**

Global Id: T0607100635  
Status: Open - Site Assessment  
Status Date: 08/31/1999

Regulatory Activities:

Global Id: T0607100635  
Action Type: Other  
Date: 08/31/1999  
Action: Leak Discovery

Global Id: T0607100635  
Action Type: Other  
Date: 09/23/1999  
Action: Leak Reported

Global Id: T0607100635  
Action Type: Other  
Date: 08/31/1999  
Action: Leak Stopped

LUST REG 8:

Region: 8  
County: San Bernardino  
Regional Board: Santa Ana Region  
Facility Status: Case Closed  
Case Number: 083603646T  
Local Case Num: 99117  
Case Type: Soil only  
Substance: Diesel  
Qty Leaked: Not reported  
Abate Method: Not reported  
Cross Street: CHERRY AVENUE  
Enf Type: Not reported  
Funding: Not reported  
How Discovered: Tank Closure  
How Stopped: Not reported  
Leak Cause: UNK  
Leak Source: Tank  
Global ID: T0607100635  
How Stopped Date: 8/31/1999  
Enter Date: 3/9/2000  
Date Confirmation of Leak Began: Not reported  
Date Preliminary Assessment Began: Not reported  
Discover Date: 8/31/1999  
Enforcement Date: Not reported  
Close Date: 10/27/2000  
Date Prelim Assessment Workplan Submitted: 8/31/1999  
Date Pollution Characterization Began: Not reported  
Date Remediation Plan Submitted: Not reported  
Date Remedial Action Underway: Not reported  
Date Post Remedial Action Monitoring: Not reported  
Enter Date: 3/9/2000  
GW Qualifies: Not reported  
Soil Qualifies: Not reported  
Operator: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**AZ FUEL STOP (Continued)**

**S101591589**

Facility Contact: Not reported  
Interim: Not reported  
Oversite Program: LUST  
Latitude: 34.077363  
Longitude: -117.489592  
MTBE Date: Not reported  
Max MTBE GW: Not reported  
MTBE Concentration: 0  
Max MTBE Soil: Not reported  
MTBE Fuel: 0  
MTBE Tested: Not Required to be Tested.  
MTBE Class: \*  
Staff: RS  
Staff Initials: CR2  
Lead Agency: Local Agency  
Local Agency: 36000L  
Hydr Basin #: UPPER SANTA ANA VALL  
Beneficial: Not reported  
Priority: Not reported  
Cleanup Fund Id: Not reported  
Work Suspended: No  
Summary: UNDER INVESTIGATION

**CA FID UST:**

Facility ID: 36008463  
Regulated By: UTNKA  
Regulated ID: Not reported  
Cortese Code: Not reported  
SIC Code: Not reported  
Facility Phone: Not reported  
Mail To: Not reported  
Mailing Address: 14529 SAN BERNARDINO AVE  
Mailing Address 2: Not reported  
Mailing City,St,Zip: FONTANA 92335  
Contact: Not reported  
Contact Phone: Not reported  
DUNs Number: Not reported  
NPDES Number: Not reported  
EPA ID: Not reported  
Comments: Not reported  
Status: Active

**SWEEPS UST:**

Status: Active  
Comp Number: 8757  
Number: 9  
Board Of Equalization: 44-020115  
Referral Date: 07-28-92  
Action Date: 07-28-92  
Created Date: 09-22-88  
Owner Tank Id: Not reported  
SWRCB Tank Id: 36-000-008757-000001  
Tank Status: A  
Capacity: 1  
Active Date: 09-22-88  
Tank Use: UNKNOWN

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**AZ FUEL STOP (Continued)**

**S101591589**

STG: P  
 Content: UNKNOWN  
 Number Of Tanks: 3

Status: Active  
 Comp Number: 8757  
 Number: 9  
 Board Of Equalization: 44-020115  
 Referral Date: 07-28-92  
 Action Date: 07-28-92  
 Created Date: 09-22-88  
 Owner Tank Id: Not reported  
 SWRCB Tank Id: 36-000-008757-000002  
 Tank Status: A  
 Capacity: 1  
 Active Date: 09-22-88  
 Tank Use: UNKNOWN  
 STG: P  
 Content: UNKNOWN  
 Number Of Tanks: Not reported

Status: Active  
 Comp Number: 8757  
 Number: 9  
 Board Of Equalization: 44-020115  
 Referral Date: 07-28-92  
 Action Date: 07-28-92  
 Created Date: 09-22-88  
 Owner Tank Id: Not reported  
 SWRCB Tank Id: 36-000-008757-000003  
 Tank Status: A  
 Capacity: 1  
 Active Date: 09-22-88  
 Tank Use: UNKNOWN  
 STG: P  
 Content: UNKNOWN  
 Number Of Tanks: Not reported

**M65**  
**NNE**  
**1/4-1/2**  
**0.286 mi.**  
**1512 ft.**

**SPEEDY FUEL**  
**9668 REDWOOD AVE**  
**FONTANA, CA 92335**

**Site 2 of 3 in cluster M**

**CA LUST U003785211**  
**CA UST N/A**  
**CA San Bern. Co. Permit**

**Relative:**  
**Higher**

LUST REG 8:  
 Region: 8  
 County: San Bernardino  
 Regional Board: Santa Ana Region  
 Facility Status: Case Closed  
 Case Number: 083603804T  
 Local Case Num: 2000024  
 Case Type: Soil only  
 Substance: Diesel  
 Qty Leaked: Not reported  
 Abate Method: Not reported  
 Cross Street: Not reported  
 Enf Type: Not reported  
 Funding: Not reported

**Actual:**  
**1090 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SPEEDY FUEL (Continued)**

**U003785211**

How Discovered:	Nuisance Conditions
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	UNK
Global ID:	T0607199294
How Stopped Date:	Not reported
Enter Date:	Not reported
Date Confirmation of Leak Began:	7/29/2000
Date Preliminary Assessment Began:	Not reported
Discover Date:	7/28/2000
Enforcement Date:	Not reported
Close Date:	2/28/2002
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.077826
Longitude:	-117.484465
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	RS
Staff Initials:	LH6
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Haz Mat incident report filed : DISCHARGE HAS NOT BEEN STOPPED

UST:

Facility ID:	90021653
Latitude:	34.079223
Longitude:	-117.483537
Permitting Agency:	SAN BERNARDINO COUNTY

San Bern. Co. Permit:

Region:	SAN BERNARDINO
Facility ID:	FA0005601
Owner:	RAY LARSEN TRANSPORTATION
Permit Number:	PT0005143
Permit Category:	SPECIAL HANDLER

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SPEEDY FUEL (Continued)**

**U003785211**

Facility Status: INACTIVE  
Expiration Date: 09/30/2003

Region: SAN BERNARDINO  
Facility ID: FA0005601  
Owner: RAY LARSEN TRANSPORTATION  
Permit Number: PT0005144  
Permit Category: SPECIAL GENERATOR  
Facility Status: INACTIVE  
Expiration Date: 09/30/2003

**M66**  
**NNE**  
**1/4-1/2**  
**0.286 mi.**  
**1512 ft.**

**SPEEDY FUEL**  
**9668 REDWOOD AVE**  
**FONTANA, CA 92335**  
**Site 3 of 3 in cluster M**

**CA LUST** **S103972797**  
**CA San Bern. Co. Permit** **N/A**

**Relative:**  
**Higher**

LUST:

**Actual:**  
**1090 ft.**

Region: STATE  
Global Id: T0607199294  
Latitude: 34.0778729  
Longitude: -117.484885  
Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 02/28/2002  
Lead Agency: SAN BERNARDINO COUNTY  
Case Worker: JC  
Local Agency: SAN BERNARDINO COUNTY  
RB Case Number: 083603804T  
LOC Case Number: 2000024  
File Location: Local Agency  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Diesel  
Site History: Not reported

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

Contact:

Global Id: T0607199294  
Contact Type: Local Agency Caseworker  
Contact Name: JACKSON CRUTSINGER  
Organization Name: SAN BERNARDINO COUNTY  
Address: 620 SOUTH E STREET  
City: SAN BERNARDINO  
Email: jcrutsinger@sbcfire.org  
Phone Number: Not reported

Global Id: T0607199294  
Contact Type: Regional Board Caseworker  
Contact Name: ROSE SCOTT  
Organization Name: SANTA ANA RWQCB (REGION 8)  
Address: 3737 MAIN STREET, SUITE 500  
City: RIVERSIDE  
Email: rscott@waterboards.ca.gov  
Phone Number: 9513206375

Status History:

Global Id: T0607199294

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SPEEDY FUEL (Continued)**

**S103972797**

Status: Open - Site Assessment  
Status Date: 07/29/2000  
  
Global Id: T0607199294  
Status: Completed - Case Closed  
Status Date: 02/28/2002  
  
Global Id: T0607199294  
Status: Open - Case Begin Date  
Status Date: 07/28/2000

Regulatory Activities:

Global Id: T0607199294  
Action Type: Other  
Date: 07/28/2000  
Action: Leak Discovery  
  
Global Id: T0607199294  
Action Type: Other  
Date: 09/26/2000  
Action: Leak Reported

San Bern. Co. Permit:

Region: SAN BERNARDINO  
Facility ID: FA0006342  
Owner: TERMENEZHIAN, LEVON  
Permit Number: PT0005142  
Permit Category: HAZMAT HANDLER - UST ONLY  
Facility Status: ACTIVE  
Expiration Date: 10/31/2014

Region: SAN BERNARDINO  
Facility ID: FA0006342  
Owner: TERMENEZHIAN, LEVON  
Permit Number: PT0028886  
Permit Category: WASTE INCIDENTAL UST OPERATION ONLY  
Facility Status: ACTIVE  
Expiration Date: 10/31/2014

Region: SAN BERNARDINO  
Facility ID: FA0006342  
Owner: TERMENEZHIAN, LEVON  
Permit Number: PT0010236  
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)  
Facility Status: ACTIVE  
Expiration Date: 10/31/2014

Region: SAN BERNARDINO  
Facility ID: FA0006342  
Owner: TERMENEZHIAN, LEVON  
Permit Number: PT0010237  
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)  
Facility Status: ACTIVE  
Expiration Date: 10/31/2014

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**67**  
**ESE**  
**1/4-1/2**  
**0.319 mi.**  
**1683 ft.**

**ALAMO RECYCLING INC**  
**14930 VALLEY BLVD**  
**FONTANA, CA 92335**

**CA NPDES S108240288**  
**CA SWRCY N/A**  
**CA San Bern. Co. Permit**

**Relative:**  
**Lower**

**NPDES:**

Npdes Number: CAS000001  
 Facility Status: Terminated  
 Agency Id: 0  
 Region: 8  
 Regulatory Measure Id: 402826  
 Order No: 97-03-DWQ  
 Regulatory Measure Type: Enrollee  
 Place Id: Not reported  
 WDID: 8 361022637  
 Program Type: Industrial  
 Adoption Date Of Regulatory Measure: Not reported  
 Effective Date Of Regulatory Measure: 05/13/2010  
 Expiration Date Of Regulatory Measure: Not reported  
 Termination Date Of Regulatory Measure: 06/15/2014  
 Discharge Name: Alamo Recycling Inc  
 Discharge Address: 14930 Valley Blvd  
 Discharge City: Fontana  
 Discharge State: California  
 Discharge Zip: 92335

**Actual:**  
**1061 ft.**

**SWRCY:**

Reg Id: 18784  
 Cert Id: RC13163  
 Mailing Address: 1510 Peppertree Dr  
 Mailing City: La Habra Hts  
 Mailing State: CA  
 Mailing Zip Code: 90631  
 Website: Not reported  
 Email: Not reported  
 Phone Number: (714) 366-1386  
 Grand Father: N  
 Rural: N  
 Operation Begin Date: 11/16/2006  
 Aluminium: Y  
 Glass: Y  
 Plastic: Y  
 Bimetal: Y  
 Agency: N/A  
 Monday Hours Of Operation: 8:30 am - 4:30 pm  
 Tuesday Hours Of Operation: 8:30 am - 4:30 pm  
 Wednesday Hours Of Operation: 8:30 am - 4:30 pm  
 Thursday Hours Of Operation: 8:30 am - 4:30 pm  
 Friday Hours Of Operation: 8:30 am - 4:30 pm  
 Saturday Hours Of Operation: 8:00 am - 4:00 pm  
 Sunday Hours Of Operation: CLOSED  
 Organization ID: 18784  
 Organization Name: Alamo Recycling LLC

**San Bern. Co. Permit:**

Region: SAN BERNARDINO  
 Facility ID: FA0013026

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ALAMO RECYCLING INC (Continued)**

**S108240288**

Owner: MENDONCA, MICHAEL  
Permit Number: PT0022881  
Permit Category: CONDITIONALLY EXEMPT SM QTY GENERATOR SPECIAL  
Facility Status: INACTIVE  
Expiration Date: 02/28/2014

Region: SAN BERNARDINO  
Facility ID: FA0013026  
Owner: MENDONCA, MICHAEL  
Permit Number: PT0022882  
Permit Category: HAZMAT HANDLER 11-25 EMPLOYEES (W/GEN PRMT)  
Facility Status: INACTIVE  
Expiration Date: 02/28/2014

**N68**  
**SSW**  
**1/4-1/2**  
**0.321 mi.**  
**1697 ft.**

**TRUCK TOWN**  
**10238 CHERRY AVE**  
**FONTANA, CA 92335**  
**Site 1 of 2 in cluster N**

**CA LUST** **S102039455**  
**CA SWEEPS UST** **N/A**  
**CA San Bern. Co. Permit**

**Relative:**  
**Lower**

LUST:

Region: STATE  
Global Id: T0607100455  
Latitude: 34.0684636  
Longitude: -117.488918  
Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 05/26/2011  
Lead Agency: SANTA ANA RWQCB (REGION 8)  
Case Worker: CAB  
Local Agency: SAN BERNARDINO COUNTY  
RB Case Number: 083603062T  
LOC Case Number: Not reported  
File Location: Local Agency  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Diesel, MTBE / TBA / Other Fuel Oxygenates  
Site History: Not reported

**Actual:**  
**1036 ft.**

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

Contact:

Global Id: T0607100455  
Contact Type: Local Agency Caseworker  
Contact Name: JACKSON CRUTSINGER  
Organization Name: SAN BERNARDINO COUNTY  
Address: 620 SOUTH E STREET  
City: SAN BERNARDINO  
Email: jcrutsinger@sbcfire.org  
Phone Number: Not reported

Global Id: T0607100455  
Contact Type: Regional Board Caseworker  
Contact Name: CARL BERNHARDT  
Organization Name: SANTA ANA RWQCB (REGION 8)  
Address: 3737 MAIN STREET, SUITE 500  
City: RIVERSIDE  
Email: cbernhardt@waterboards.ca.gov  
Phone Number: 9517824495

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TRUCK TOWN (Continued)**

**S102039455**

Status History:

Global Id: T0607100455  
Status: Open - Remediation  
Status Date: 04/15/2009

Global Id: T0607100455  
Status: Completed - Case Closed  
Status Date: 05/26/2011

Global Id: T0607100455  
Status: Open - Site Assessment  
Status Date: 08/01/1997

Global Id: T0607100455  
Status: Open - Case Begin Date  
Status Date: 08/01/1997

Regulatory Activities:

Global Id: T0607100455  
Action Type: RESPONSE  
Date: 04/30/2010  
Action: Remedial Progress Report

Global Id: T0607100455  
Action Type: ENFORCEMENT  
Date: 08/21/2009  
Action: Referral to Regional Board

Global Id: T0607100455  
Action Type: Other  
Date: 08/01/1997  
Action: Leak Discovery

Global Id: T0607100455  
Action Type: REMEDIATION  
Date: 04/07/2009  
Action: Soil Vapor Extraction (SVE)

Global Id: T0607100455  
Action Type: REMEDIATION  
Date: 03/07/2010  
Action: Soil Vapor Extraction (SVE)

Global Id: T0607100455  
Action Type: ENFORCEMENT  
Date: 03/11/2011  
Action: Notification - Public Notice of Case Closure

Global Id: T0607100455  
Action Type: ENFORCEMENT  
Date: 05/04/2011  
Action: Staff Letter

Global Id: T0607100455  
Action Type: REMEDIATION  
Date: 09/13/2010

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TRUCK TOWN (Continued)**

**S102039455**

Action: Soil Vapor Extraction (SVE)  
Global Id: T0607100455  
Action Type: ENFORCEMENT  
Date: 03/09/2009  
Action: Technical Correspondence / Assistance / Other

Global Id: T0607100455  
Action Type: ENFORCEMENT  
Date: 03/11/2010  
Action: Staff Letter

Global Id: T0607100455  
Action Type: ENFORCEMENT  
Date: 05/04/2010  
Action: Meeting

Global Id: T0607100455  
Action Type: Other  
Date: 08/28/1997  
Action: Leak Reported

Global Id: T0607100455  
Action Type: ENFORCEMENT  
Date: 01/06/2010  
Action: Verbal Enforcement

Global Id: T0607100455  
Action Type: ENFORCEMENT  
Date: 02/01/2010  
Action: Staff Letter

Global Id: T0607100455  
Action Type: ENFORCEMENT  
Date: 09/02/2010  
Action: Staff Letter

Global Id: T0607100455  
Action Type: ENFORCEMENT  
Date: 09/22/2008  
Action: Staff Letter

Global Id: T0607100455  
Action Type: ENFORCEMENT  
Date: 05/26/2011  
Action: Closure/No Further Action Letter

**LUST REG 8:**

Region: 8  
County: San Bernardino  
Regional Board: Santa Ana Region  
Facility Status: Preliminary site assessment workplan submitted  
Case Number: 083603062T  
Local Case Num: 97055  
Case Type: Soil only  
Substance: Diesel

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TRUCK TOWN (Continued)**

**S102039455**

Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	I-10
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Not reported
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	T0607100455
How Stopped Date:	Not reported
Enter Date:	9/19/1997
Date Confirmation of Leak Began:	8/1/1997
Date Preliminary Assessment Began:	Not reported
Discover Date:	8/1/1997
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	1/1/1965
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	9/19/1997
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.0684636
Longitude:	-117.488918
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	CAB
Staff Initials:	CB5
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

**SWEEPS UST:**

Status:	Active
Comp Number:	56226
Number:	9
Board Of Equalization:	44-021229
Referral Date:	08-28-91
Action Date:	08-28-91
Created Date:	02-29-88

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TRUCK TOWN (Continued)**

**S102039455**

Owner Tank Id: 1  
SWRCB Tank Id: 36-000-056226-000001  
Tank Status: A  
Capacity: 10000  
Active Date: 07-08-88  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: 8

Status: Active  
Comp Number: 56226  
Number: 9  
Board Of Equalization: 44-021229  
Referral Date: 08-28-91  
Action Date: 08-28-91  
Created Date: 02-29-88  
Owner Tank Id: 2  
SWRCB Tank Id: 36-000-056226-000002  
Tank Status: A  
Capacity: 1  
Active Date: 07-08-88  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 56226  
Number: 9  
Board Of Equalization: 44-021229  
Referral Date: 08-28-91  
Action Date: 08-28-91  
Created Date: 02-29-88  
Owner Tank Id: 3  
SWRCB Tank Id: 36-000-056226-000003  
Tank Status: A  
Capacity: 1  
Active Date: 07-08-88  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 56226  
Number: 9  
Board Of Equalization: 44-021229  
Referral Date: 08-28-91  
Action Date: 08-28-91  
Created Date: 02-29-88  
Owner Tank Id: 4  
SWRCB Tank Id: 36-000-056226-000004  
Tank Status: A  
Capacity: 1  
Active Date: 07-08-88  
Tank Use: M.V. FUEL

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

TRUCK TOWN (Continued)

S102039455

STG: P  
Content: DIESEL  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 56226  
Number: 9  
Board Of Equalization: 44-021229  
Referral Date: 08-28-91  
Action Date: 08-28-91  
Created Date: 02-29-88  
Owner Tank Id: 5  
SWRCB Tank Id: 36-000-056226-000005  
Tank Status: A  
Capacity: 1  
Active Date: 07-08-88  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 56226  
Number: 9  
Board Of Equalization: 44-021229  
Referral Date: 08-28-91  
Action Date: 08-28-91  
Created Date: 02-29-88  
Owner Tank Id: 6  
SWRCB Tank Id: 36-000-056226-000006  
Tank Status: A  
Capacity: 1  
Active Date: 07-08-88  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 56226  
Number: 9  
Board Of Equalization: 44-021229  
Referral Date: 08-28-91  
Action Date: 08-28-91  
Created Date: 02-29-88  
Owner Tank Id: 7  
SWRCB Tank Id: 36-000-056226-000007  
Tank Status: A  
Capacity: 1  
Active Date: 07-08-88  
Tank Use: M.V. FUEL  
STG: P  
Content: REG UNLEADED  
Number Of Tanks: Not reported

Status: Active  
Comp Number: 56226

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TRUCK TOWN (Continued)**

**S102039455**

Number: 9  
Board Of Equalization: 44-021229  
Referral Date: 08-28-91  
Action Date: 08-28-91  
Created Date: 02-29-88  
Owner Tank Id: 8  
SWRCB Tank Id: 36-000-056226-000008  
Tank Status: A  
Capacity: 1  
Active Date: 07-08-88  
Tank Use: M.V. FUEL  
STG: P  
Content: LEADED  
Number Of Tanks: Not reported

San Bern. Co. Permit:

Region: SAN BERNARDINO  
Facility ID: FA0006812  
Owner: CHERRY DEVELOPMENT CORP  
Permit Number: PT0012062  
Permit Category: UST OWNERSHIP/OPERATING PERMIT COMPLEX  
Facility Status: INACTIVE  
Expiration Date: 01/31/2014

Region: SAN BERNARDINO  
Facility ID: FA0006812  
Owner: CHERRY DEVELOPMENT CORP  
Permit Number: PT0012063  
Permit Category: UST OWNERSHIP/OPERATING PERMIT COMPLEX  
Facility Status: INACTIVE  
Expiration Date: 01/31/2014

Region: SAN BERNARDINO  
Facility ID: FA0006812  
Owner: CHERRY DEVELOPMENT CORP  
Permit Number: PT0012064  
Permit Category: UST OWNERSHIP/OPERATING PERMIT COMPLEX  
Facility Status: INACTIVE  
Expiration Date: 01/31/2014

Region: SAN BERNARDINO  
Facility ID: FA0006812  
Owner: CHERRY DEVELOPMENT CORP  
Permit Number: PT0012065  
Permit Category: UST OWNERSHIP/OPERATING PERMIT COMPLEX  
Facility Status: INACTIVE  
Expiration Date: 01/31/2014

Region: SAN BERNARDINO  
Facility ID: FA0006812  
Owner: CHERRY DEVELOPMENT CORP  
Permit Number: PT0002158  
Permit Category: HAZMAT HANDLER - UST ONLY  
Facility Status: INACTIVE  
Expiration Date: 01/31/2014

Region: SAN BERNARDINO

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TRUCK TOWN (Continued)**

**S102039455**

Facility ID: FA0006812  
Owner: CHERRY DEVELOPMENT CORP  
Permit Number: PT0019790  
Permit Category: WASTE INCIDENTAL UST OPERATION ONLY  
Facility Status: INACTIVE  
Expiration Date: 01/31/2014

**N69**  
**SSW**  
**1/4-1/2**  
**0.321 mi.**  
**1697 ft.**

**TRUCK TOWN**  
**10238 CHERRY AVE**  
**FONTANA, CA 92335**

**CA HIST CORTESE**  
**CA FID UST**

**S101619284**  
**N/A**

**Site 2 of 2 in cluster N**

**Relative:**  
**Lower**

HIST CORTESE:  
Region: CORTESE  
Facility County Code: 36  
Reg By: LTNKA  
Reg Id: 083603062T

**Actual:**  
**1036 ft.**

CA FID UST:  
Facility ID: 36002369  
Regulated By: UTNKA  
Regulated ID: 00056226  
Cortese Code: Not reported  
SIC Code: Not reported  
Facility Phone: Not reported  
Mail To: Not reported  
Mailing Address: 10238 CHERRY AVE  
Mailing Address 2: Not reported  
Mailing City,St,Zip: FONTANA 92335  
Contact: Not reported  
Contact Phone: Not reported  
DUNs Number: Not reported  
NPDES Number: Not reported  
EPA ID: Not reported  
Comments: Not reported  
Status: Active

**70**  
**West**  
**1/4-1/2**  
**0.380 mi.**  
**2008 ft.**

**BTE FUEL STOP**  
**10002 ALMOND AVE**  
**FONTANA, CA 92335**

**CA LUST**  
**CA UST**

**U003785222**  
**N/A**

**Relative:**  
**Lower**

LUST REG 8:  
Region: 8  
County: San Bernardino  
Regional Board: Santa Ana Region  
Facility Status: Pollution Characterization  
Case Number: Not reported  
Local Case Num: 2000031  
Case Type: Soil only  
Substance: Diesel  
Qty Leaked: Not reported  
Abate Method: Not reported  
Cross Street: VALLEY BOULEVARD

**Actual:**  
**1046 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BTE FUEL STOP (Continued)**

**U003785222**

Enf Type:	Not reported
Funding:	Not reported
How Discovered:	UM
How Stopped:	NPP
Leak Cause:	UNK
Leak Source:	UNK
Global ID:	T0607111670
How Stopped Date:	9/25/2000
Enter Date:	Not reported
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	9/25/2000
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	10/24/2000
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	Not reported
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.072009
Longitude:	-117.493365
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	0
MTBE Tested:	Not Required to be Tested.
MTBE Class:	*
Staff:	Not reported
Staff Initials:	CB5
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported
Summary:	Not reported

**UST:**

Facility ID:	90023017
Latitude:	34.07196
Longitude:	-117.49319
Permitting Agency:	SAN BERNARDINO COUNTY

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**O71** PIPELINE TRUCKING COMPANY  
**WNW** 9813 ALMOND AVE  
**1/4-1/2** FONTANA, CA 92335  
**0.392 mi.**  
**2071 ft.** Site 1 of 2 in cluster O

**CA LUST** S104405135  
**CA San Bern. Co. Permit** N/A

**Relative:**  
**Higher**

LUST:

**Actual:**  
**1063 ft.**

Region: STATE  
Global Id: T0607100609  
Latitude: 34.074674  
Longitude: -117.491825  
Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 03/09/2000  
Lead Agency: SAN BERNARDINO COUNTY  
Case Worker: JC  
Local Agency: SAN BERNARDINO COUNTY  
RB Case Number: 083603581T  
LOC Case Number: 99124  
File Location: Local Agency  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Diesel  
Site History: Not reported

[Click here to access the California GeoTracker records for this facility:](#)

Contact:

Global Id: T0607100609  
Contact Type: Local Agency Caseworker  
Contact Name: JACKSON CRUTSINGER  
Organization Name: SAN BERNARDINO COUNTY  
Address: 620 SOUTH E STREET  
City: SAN BERNARDINO  
Email: jcrutsinger@sbcfire.org  
Phone Number: Not reported

Global Id: T0607100609  
Contact Type: Regional Board Caseworker  
Contact Name: NANCY OLSON-MARTIN  
Organization Name: SANTA ANA RWQCB (REGION 8)  
Address: 3737 MAIN STREET, SUITE 500  
City: RIVERSIDE  
Email: nolson-martin@waterboards.ca.gov  
Phone Number: Not reported

Status History:

Global Id: T0607100609  
Status: Open - Case Begin Date  
Status Date: 09/22/1999

Global Id: T0607100609  
Status: Open - Site Assessment  
Status Date: 09/24/1999

Global Id: T0607100609  
Status: Completed - Case Closed  
Status Date: 03/09/2000

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

PIPELINE TRUCKING COMPANY (Continued)

S104405135

Regulatory Activities:

Global Id: T0607100609  
 Action Type: Other  
 Date: 09/22/1999  
 Action: Leak Discovery

Global Id: T0607100609  
 Action Type: Other  
 Date: 09/24/1999  
 Action: Leak Reported

Global Id: T0607100609  
 Action Type: ENFORCEMENT  
 Date: 03/09/2000  
 Action: Closure/No Further Action Letter

Global Id: T0607100609  
 Action Type: Other  
 Date: 09/22/1999  
 Action: Leak Stopped

San Bern. Co. Permit:

Region: SAN BERNARDINO  
 Facility ID: FA0005333  
 Owner: STAPLES, GARRICK D  
 Permit Number: PT0001860  
 Permit Category: SPECIAL GENERATOR  
 Facility Status: INACTIVE  
 Expiration Date: 05/31/2006

Region: SAN BERNARDINO  
 Facility ID: FA0005333  
 Owner: STAPLES, GARRICK D  
 Permit Number: PT0001861  
 Permit Category: SPECIAL HANDLER  
 Facility Status: INACTIVE  
 Expiration Date: 05/31/2006

O72  
WNW  
1/4-1/2  
0.392 mi.  
2071 ft.

PIPELINE TRUCKING COMPANY  
9813 ALMOND AVE  
FONTANA, CA 92335  
Site 2 of 2 in cluster O

CA HIST CORTESE  
CA LUST  
CA FID UST  
CA SWEEPS UST

S101591313  
N/A

Relative:  
Higher

HIST CORTESE:  
 Region: CORTESE  
 Facility County Code: 36  
 Reg By: LTNKA  
 Reg Id: 083603581T

Actual:  
1063 ft.

LUST REG 8:

Region: 8  
 County: San Bernardino  
 Regional Board: Santa Ana Region  
 Facility Status: Case Closed

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

PIPELINE TRUCKING COMPANY (Continued)

S101591313

Case Number: 083603581T  
Local Case Num: 99124  
Case Type: Soil only  
Substance: Diesel  
Qty Leaked: Not reported  
Abate Method: Not reported  
Cross Street: SAN BERNARDINO AVE  
Enf Type: CLOS  
Funding: Not reported  
How Discovered: Tank Closure  
How Stopped: Not reported  
Leak Cause: UNK  
Leak Source: UNK  
Global ID: T0607100609  
How Stopped Date: 9/22/1999  
Enter Date: 12/17/1999  
Date Confirmation of Leak Began: 9/24/1999  
Date Preliminary Assessment Began: Not reported  
Discover Date: 9/22/1999  
Enforcement Date: Not reported  
Close Date: 3/9/2000  
Date Prelim Assessment Workplan Submitted: Not reported  
Date Pollution Characterization Began: Not reported  
Date Remediation Plan Submitted: Not reported  
Date Remedial Action Underway: Not reported  
Date Post Remedial Action Monitoring: Not reported  
Enter Date: 12/17/1999  
GW Qualifies: Not reported  
Soil Qualifies: Not reported  
Operator: Not reported  
Facility Contact: Not reported  
Interim: Not reported  
Oversite Program: LUST  
Latitude: 34.075379  
Longitude: -117.493033  
MTBE Date: Not reported  
Max MTBE GW: Not reported  
MTBE Concentration: 0  
Max MTBE Soil: Not reported  
MTBE Fuel: 0  
MTBE Tested: Not Required to be Tested.  
MTBE Class: \*  
Staff: NOM  
Staff Initials: JC3  
Lead Agency: Local Agency  
Local Agency: 36000L  
Hydr Basin #: UPPER SANTA ANA VALL  
Beneficial: Not reported  
Priority: Not reported  
Cleanup Fund Id: Not reported  
Work Suspended: No  
Summary: Not reported

CA FID UST:

Facility ID: 36004445  
Regulated By: UTNKA  
Regulated ID: 00054953

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PIPELINE TRUCKING COMPANY (Continued)**

**S101591313**

Cortese Code: Not reported  
SIC Code: Not reported  
Facility Phone: Not reported  
Mail To: Not reported  
Mailing Address: 9813 ALMOND AVE  
Mailing Address 2: Not reported  
Mailing City,St,Zip: FONTANA 92335  
Contact: Not reported  
Contact Phone: Not reported  
DUNs Number: Not reported  
NPDES Number: Not reported  
EPA ID: Not reported  
Comments: Not reported  
Status: Active

**SWEEPS UST:**

Status: Active  
Comp Number: 54953  
Number: 9  
Board Of Equalization: 44-021220  
Referral Date: 08-28-91  
Action Date: 08-28-91  
Created Date: 02-29-88  
Owner Tank Id: 2  
SWRCB Tank Id: 36-000-054953-000001  
Tank Status: A  
Capacity: 4000  
Active Date: 07-01-85  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: 2

Status: Active  
Comp Number: 54953  
Number: 9  
Board Of Equalization: 44-021220  
Referral Date: 08-28-91  
Action Date: 08-28-91  
Created Date: 02-29-88  
Owner Tank Id: 1  
SWRCB Tank Id: 36-000-054953-000002  
Tank Status: A  
Capacity: Not reported  
Active Date: 07-01-85  
Tank Use: M.V. FUEL  
STG: P  
Content: DIESEL  
Number Of Tanks: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

73  
WSW  
1/4-1/2  
0.440 mi.  
2325 ft.

**LITTLE SISTER'S TRUCK WASH**  
14264 VALLEY BLVD  
FONTANA, CA 92335

CA LUST S108746742  
CA San Bern. Co. Permit N/A

**Relative:**  
**Lower**

LUST:

**Actual:**  
**1037 ft.**

Region: STATE  
Global Id: T0607111670  
Latitude: 34.072009  
Longitude: -117.493365  
Case Type: LUST Cleanup Site  
Status: Completed - Case Closed  
Status Date: 03/23/2012  
Lead Agency: SANTA ANA RWQCB (REGION 8)  
Case Worker: NOM  
Local Agency: SAN BERNARDINO COUNTY  
RB Case Number: Not reported  
LOC Case Number: 2000031  
File Location: Local Agency  
Potential Media Affect: Soil  
Potential Contaminants of Concern: Diesel  
Site History: .

[Click here to access the California GeoTracker records for this facility:](#)

Contact:

Global Id: T0607111670  
Contact Type: Local Agency Caseworker  
Contact Name: CATHERINE RICHARDS  
Organization Name: SAN BERNARDINO COUNTY  
Address: 620 SOUTH E STREET  
City: SAN BERNARDINO  
Email: crichards@sbcfire.org  
Phone Number: 9093868419

Global Id: T0607111670  
Contact Type: Regional Board Caseworker  
Contact Name: NANCY OLSON-MARTIN  
Organization Name: SANTA ANA RWQCB (REGION 8)  
Address: 3737 MAIN STREET, SUITE 500  
City: RIVERSIDE  
Email: nolson-martin@waterboards.ca.gov  
Phone Number: Not reported

Status History:

Global Id: T0607111670  
Status: Completed - Case Closed  
Status Date: 03/23/2012

Global Id: T0607111670  
Status: Open - Case Begin Date  
Status Date: 09/25/2000

Global Id: T0607111670  
Status: Open - Site Assessment  
Status Date: 10/24/2000

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LITTLE SISTER'S TRUCK WASH (Continued)**

**S108746742**

Regulatory Activities:

Global Id:	T0607111670
Action Type:	ENFORCEMENT
Date:	11/15/2011
Action:	Staff Letter
Global Id:	T0607111670
Action Type:	RESPONSE
Date:	02/26/2010
Action:	Verbal Communication
Global Id:	T0607111670
Action Type:	RESPONSE
Date:	08/10/2010
Action:	Sensitive Receptor Survey Report
Global Id:	T0607111670
Action Type:	RESPONSE
Date:	12/30/2011
Action:	Correspondence
Global Id:	T0607111670
Action Type:	ENFORCEMENT
Date:	01/05/2012
Action:	File Review - Closure
Global Id:	T0607111670
Action Type:	ENFORCEMENT
Date:	01/27/2012
Action:	Notification - Preclosure
Global Id:	T0607111670
Action Type:	ENFORCEMENT
Date:	01/28/2011
Action:	Staff Letter
Global Id:	T0607111670
Action Type:	RESPONSE
Date:	06/29/2012
Action:	Well Destruction Report
Global Id:	T0607111670
Action Type:	RESPONSE
Date:	07/30/2010
Action:	Correspondence
Global Id:	T0607111670
Action Type:	RESPONSE
Date:	05/06/2010
Action:	Correspondence
Global Id:	T0607111670
Action Type:	RESPONSE
Date:	07/07/2010
Action:	Correspondence
Global Id:	T0607111670

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LITTLE SISTER'S TRUCK WASH (Continued)**

**S108746742**

Action Type: RESPONSE  
Date: 01/24/2011  
Action: Other Report / Document

Global Id: T0607111670  
Action Type: ENFORCEMENT  
Date: 06/19/2009  
Action: Technical Correspondence / Assistance / Other

Global Id: T0607111670  
Action Type: ENFORCEMENT  
Date: 07/16/2009  
Action: File review

Global Id: T0607111670  
Action Type: ENFORCEMENT  
Date: 03/23/2012  
Action: Closure/No Further Action Letter

Global Id: T0607111670  
Action Type: RESPONSE  
Date: 08/05/2009  
Action: Correspondence

Global Id: T0607111670  
Action Type: RESPONSE  
Date: 08/05/2009  
Action: Correspondence

Global Id: T0607111670  
Action Type: Other  
Date: 09/25/2000  
Action: Leak Discovery

Global Id: T0607111670  
Action Type: RESPONSE  
Date: 07/16/2008  
Action: Correspondence

Global Id: T0607111670  
Action Type: RESPONSE  
Date: 08/05/2009  
Action: Verbal Communication

Global Id: T0607111670  
Action Type: REMEDIATION  
Date: 11/01/2006  
Action: Excavation

Global Id: T0607111670  
Action Type: RESPONSE  
Date: 01/13/2010  
Action: Verbal Communication

Global Id: T0607111670  
Action Type: RESPONSE  
Date: 08/09/2010

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LITTLE SISTER'S TRUCK WASH (Continued)**

**S108746742**

Action: Site Assessment Report

Global Id: T0607111670  
Action Type: RESPONSE  
Date: 07/15/2009  
Action: Correspondence

Global Id: T0607111670  
Action Type: RESPONSE  
Date: 07/15/2009  
Action: Correspondence

Global Id: T0607111670  
Action Type: RESPONSE  
Date: 11/11/2009  
Action: Preliminary Site Assessment Workplan

Global Id: T0607111670  
Action Type: ENFORCEMENT  
Date: 06/17/2011  
Action: Meeting

Global Id: T0607111670  
Action Type: RESPONSE  
Date: 12/22/2009  
Action: Verbal Communication

Global Id: T0607111670  
Action Type: Other  
Date: 09/25/2000  
Action: Leak Began

Global Id: T0607111670  
Action Type: ENFORCEMENT  
Date: 08/04/2009  
Action: Staff Letter

Global Id: T0607111670  
Action Type: ENFORCEMENT  
Date: 12/22/2009  
Action: Staff Letter

Global Id: T0607111670  
Action Type: RESPONSE  
Date: 04/15/2011  
Action: CAP/RAP - Feasibility Study Report

Global Id: T0607111670  
Action Type: Other  
Date: 09/25/2000  
Action: Leak Reported

Global Id: T0607111670  
Action Type: RESPONSE  
Date: 07/16/2008  
Action: Correspondence

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LITTLE SISTER'S TRUCK WASH (Continued)**

**S108746742**

Global Id:	T0607111670
Action Type:	RESPONSE
Date:	01/13/2010
Action:	Correspondence
Global Id:	T0607111670
Action Type:	RESPONSE
Date:	10/23/2009
Action:	Verbal Communication
Global Id:	T0607111670
Action Type:	ENFORCEMENT
Date:	08/30/2010
Action:	Staff Letter
Global Id:	T0607111670
Action Type:	ENFORCEMENT
Date:	07/30/2011
Action:	Staff Letter
Global Id:	T0607111670
Action Type:	RESPONSE
Date:	07/16/2009
Action:	Verbal Communication
Global Id:	T0607111670
Action Type:	RESPONSE
Date:	07/16/2008
Action:	Correspondence
Global Id:	T0607111670
Action Type:	Other
Date:	09/25/2000
Action:	Leak Stopped
Global Id:	T0607111670
Action Type:	RESPONSE
Date:	11/09/2011
Action:	Other Report / Document
Global Id:	T0607111670
Action Type:	RESPONSE
Date:	06/30/2011
Action:	Correspondence
Global Id:	T0607111670
Action Type:	RESPONSE
Date:	07/17/2011
Action:	Pilot Study / Treatability Workplan
Global Id:	T0607111670
Action Type:	RESPONSE
Date:	09/09/2011
Action:	Correspondence

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**LITTLE SISTER'S TRUCK WASH (Continued)**

**S108746742**

San Bern. Co. Permit:

Region: SAN BERNARDINO  
Facility ID: FA0001593  
Owner: TABBAA, YASSER  
Permit Number: PT0018958  
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)  
Facility Status: INACTIVE  
Expiration Date: 10/31/2007

Region: SAN BERNARDINO  
Facility ID: FA0013211  
Owner: LITTLE SISTER'S TRUCK WASH  
Permit Number: PT0023274  
Permit Category: HAZARDOUS MATERIALS 4-10 CHEMICALS  
Facility Status: ACTIVE  
Expiration Date: 05/31/2015

Region: SAN BERNARDINO  
Facility ID: FA0010879  
Owner: IRONMAN RENEWAL, LLC  
Permit Number: PT0023271  
Permit Category: APSA 1,320-10,000 GAL FAC CAPACITY  
Facility Status: ACTIVE  
Expiration Date: 03/31/2015

Region: SAN BERNARDINO  
Facility ID: FA0010879  
Owner: IRONMAN RENEWAL, LLC  
Permit Number: PT0023270  
Permit Category: HAZARDOUS MATERIALS 4-10 CHEMICALS  
Facility Status: ACTIVE  
Expiration Date: 03/31/2015

Region: SAN BERNARDINO  
Facility ID: FA0010879  
Owner: IRONMAN RENEWAL, LLC  
Permit Number: PT0023269  
Permit Category: SMALL QUANTITY GENERATOR  
Facility Status: ACTIVE  
Expiration Date: 03/31/2015

Region: SAN BERNARDINO  
Facility ID: FA0001593  
Owner: TABBAA, YASSER  
Permit Number: PT0005305  
Permit Category: HAZARDOUS MATERIALS 4-10 CHEMICALS  
Facility Status: ACTIVE  
Expiration Date: 10/31/2014

Region: SAN BERNARDINO  
Facility ID: FA0001593  
Owner: TABBAA, YASSER  
Permit Number: PT0024552  
Permit Category: SMALL QUANTITY GENERATOR  
Facility Status: ACTIVE  
Expiration Date: 10/31/2014

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**LITTLE SISTER'S TRUCK WASH (Continued)**

**S108746742**

Region: SAN BERNARDINO  
 Facility ID: FA0001593  
 Owner: TABBAA, YASSER  
 Permit Number: PT0018957  
 Permit Category: UST OWNERSHIP/OPERATING PERMIT COMPLEX  
 Facility Status: ACTIVE  
 Expiration Date: 10/31/2014

Region: SAN BERNARDINO  
 Facility ID: FA0001593  
 Owner: TABBAA, YASSER  
 Permit Number: PT0010357  
 Permit Category: UST OWNERSHIP/OPERATING PERMIT COMPLEX  
 Facility Status: ACTIVE  
 Expiration Date: 10/31/2014

Region: SAN BERNARDINO  
 Facility ID: FA0001593  
 Owner: TABBAA, YASSER  
 Permit Number: PT0017140  
 Permit Category: UST OWNERSHIP/OPERATING PERMIT COMPLEX  
 Facility Status: ACTIVE  
 Expiration Date: 10/31/2014

Region: SAN BERNARDINO  
 Facility ID: FA0001593  
 Owner: TABBAA, YASSER  
 Permit Number: PT0017141  
 Permit Category: UST OWNERSHIP/OPERATING PERMIT COMPLEX  
 Facility Status: ACTIVE  
 Expiration Date: 10/31/2014

Region: SAN BERNARDINO  
 Facility ID: FA0001593  
 Owner: TABBAA, YASSER  
 Permit Number: PT0026385  
 Permit Category: APSA 10,001-100,000 GAL FAC CAPACITY  
 Facility Status: ACTIVE  
 Expiration Date: 10/31/2014

**74**  
**ESE**  
**1/4-1/2**  
**0.470 mi.**  
**2482 ft.**

**BEST VALUE RECYCLING LLC**  
**15062 VALLEY BLVD**  
**FONTANA, CA 92335**

**CA SWRCY** **S106835305**  
**CA EMI** **N/A**

**Relative:**  
**Higher**

SWRCY:  
 Reg Id: 51214  
 Cert Id: RC14712  
 Mailing Address: 9110 Irvine Ctr Dr  
 Mailing City: Irvine  
 Mailing State: CA  
 Mailing Zip Code: 92618  
 Website: Not reported  
 Email: Not reported  
 Phone Number: (949) 477-2100  
 Grand Father: N  
 Rural: N

**Actual:**  
**1069 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BEST VALUE RECYCLING LLC (Continued)**

**S106835305**

Operation Begin Date: 03/01/2010  
Aluminium: Y  
Glass: Y  
Plastic: Y  
Bimetal: Y  
Agency: N/A  
Monday Hours Of Operation: 8:00 am - 5:00 pm  
Tuesday Hours Of Operation: 8:00 am - 5:00 pm  
Wednesday Hours Of Operation: 8:00 am - 5:00 pm  
Thursday Hours Of Operation: 8:00 am - 5:00 pm  
Friday Hours Of Operation: 8:00 am - 5:00 pm  
Saturday Hours Of Operation: 8:00 am - 5:00 pm  
Sunday Hours Of Operation: CLOSED  
Organization ID: 51214  
Organization Name: Best Value Recycling LLC

EMI:

Year: 1990  
County Code: 36  
Air Basin: SC  
Facility ID: 64757  
Air District Name: SC  
SIC Code: 5812  
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 & Smllr Tons/Yr: 0

**P75 KAISER VENTURES, INC.**  
**NNW 13429 SAN BERNARDINO AVE**  
**1/2-1 FONTANA, CA 92335**  
**0.673 mi.**  
**3551 ft. Site 1 of 5 in cluster P**

**Relative:**  
**Higher**

**Actual:**  
**1118 ft.**

**RCRA-TSDF 1000840761**  
**CERC-NFRAP CAD008274938**  
**CORRACTS**  
**RCRA NonGen / NLR**  
**CONSENT**  
**FINDS**  
**CA Financial Assurance**  
**2020 COR ACTION**  
**US FIN ASSUR**  
**CA HWP**

RCRA-TSDF:

Date form received by agency: 03/30/1994  
Facility name: KAISER VENTURES, INC.  
Site name: KAISER RESOURCES INC  
Facility address: 13429 SAN BERNARDINO AVE  
FONTANA, CA 923350000  
EPA ID: CAD008274938  
Mailing address: 8300 UTICA AVE, SUITE 301  
RANCHO CUCAMONGA, CA 917302249  
Contact: ROB J HARTMAN  
Contact address: Not reported  
Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER VENTURES, INC. (Continued)**

**1000840761**

Contact country: Not reported  
Contact telephone: (909) 944-4163  
Contact email: Not reported  
EPA Region: 09  
Land type: Private  
Classification: TSDF  
Description: Handler is engaged in the treatment, storage or disposal of hazardous waste  
  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

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: Yes  
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: 12/08/1992  
Site name: KAISER VENTURES, INC.  
Classification: Not a generator, verified  
  
Date form received by agency: 01/10/1992  
Site name: KAISER STEEL RESOURCES, INC.  
Classification: Small Quantity Generator  
  
Date form received by agency: 03/14/1990  
Site name: KAISER STEEL RESOURCES INC.  
Classification: Large Quantity Generator  
  
Date form received by agency: 08/15/1980  
Site name: KAISER VENTURES, INC.  
Classification: Large Quantity Generator

Corrective Action Summary:

Event date: 08/26/1988  
Event: RFI Imposition  
  
Event date: 08/26/1988  
Event: CMS Imposition  
  
Event date: 01/01/1989  
Event: RFA Completed  
  
Event date: 11/01/1989

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER VENTURES, INC. (Continued)**

**1000840761**

Event:	RFA Completed
Event date:	11/01/1989
Event:	RFA Completed, Assessment was an RFA.
Event date:	11/01/1989
Event:	CA029ST
Event date:	11/01/1989
Event:	CA Prioritization, Facility or area was assigned a high corrective action priority.
Event date:	11/01/1989
Event:	CA049PA
Event date:	11/01/1989
Event:	RFA Determination Of Need For An RFI, RFI is Necessary;
Event date:	05/31/1990
Event:	RFI Workplan Approved
Event date:	06/29/1990
Event:	RFA Completed, Assessment was an RFA.
Event date:	11/30/1990
Event:	CMS Workplan Approved
Event date:	01/28/1991
Event:	CA049SI
Event date:	02/28/1991
Event:	RFI Approved
Event date:	12/03/1992
Event:	CMS Approved
Event date:	01/07/1993
Event:	CA Prioritization, Facility or area was assigned a high corrective action priority.
Event date:	01/21/1993
Event:	Stabilization Measures Evaluation, This facility is not amenable to stabilization activity at the present time for reasons other than 1- it appears to be technically infeasible or inappropriate (NF) or 2- there is a lack of technical information (IN). Reasons for this conclusion may be the status of closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other administrative considerations.
Event date:	12/28/1993
Event:	Date For Remedy Selection (CM Imposed)
Event date:	10/01/1994
Event:	CMS Workplan Approved
Event date:	02/21/1995
Event:	CMS Approved

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER VENTURES, INC. (Continued)**

**1000840761**

Event date: 05/01/1995  
Event: Date For Remedy Selection (CM Imposed)

Event date: 09/16/1995  
Event: Corrective Measures Design Approved

Event date: 09/26/1995  
Event: CMI Workplan Approved

Event date: 10/23/1995  
Event: Certification Of Remedy Completion Or Construction Completion

Event date: 06/02/1998  
Event: CA Responsibility Referred To A Non-RCRA Federal Authority

Event date: 06/02/1998  
Event: Igration of Contaminated Groundwater under Control, More information is needed to make a determination.

Event date: 06/02/1998  
Event: Current Human Exposures under Control, More information is needed to make a determination.

Event date: 08/11/2000  
Event: Igration of Contaminated Groundwater under Control, More information is needed to make a determination.

Event date: 08/11/2000  
Event: Igration of Contaminated Groundwater under Control, More information is needed to make a determination.

Event date: 08/11/2000  
Event: Current Human Exposures under Control, More information is needed to make a determination.

Event date: 08/11/2000  
Event: Current Human Exposures under Control, More information is needed to make a determination.

Event date: 06/16/2005  
Event: Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

Event date: 06/16/2005  
Event: Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER VENTURES, INC. (Continued)**

**1000840761**

Event date: 11/19/2008  
Event: Date For Public Notice On Proposed Remedy

Event date: 02/13/2009  
Event: CMI Workplan Approved

Event date: 06/27/2013  
Event: Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

Event date: 06/27/2013  
Event: Igration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified. Based on a review of information contained in the EI determination, it has been determined that migration of contaminated groundwater is under control at the facility. Specifically, this determination indicates that the migration of contaminated groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the existing area of contaminated groundwater. This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

Event date: 06/27/2013  
Event: CA550RC

Event date: Not reported  
Event: CA03192

Facility Has Received Notices of Violations:

Regulation violated: F - 264.10-18.B  
Area of violation: TSD - General  
Date violation determined: 07/13/1994  
Date achieved compliance: 01/03/1995  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 07/13/1994  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: F - 264.140-150.H  
Area of violation: TSD - Financial Requirements  
Date violation determined: 07/13/1994  
Date achieved compliance: 01/03/1995  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 07/13/1994  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER VENTURES, INC. (Continued)**

**1000840761**

Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 264.140-150.H  
Area of violation: TSD - Financial Requirements  
Date violation determined: 10/16/1992  
Date achieved compliance: 04/17/1995  
Violation lead agency: State  
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY  
Enforcement action date: 01/03/1995  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: 100000  
Paid penalty amount: 100000

Regulation violated: FR - 270  
Area of violation: TSD - General  
Date violation determined: 03/22/1990  
Date achieved compliance: 03/22/1990  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 04/09/1990  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 270  
Area of violation: TSD - General  
Date violation determined: 03/22/1990  
Date achieved compliance: 03/22/1990  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 05/04/1990  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: F - 264.140-150.H  
Area of violation: TSD - Financial Requirements  
Date violation determined: 04/18/1989  
Date achieved compliance: 03/21/1990  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 06/15/1989  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER VENTURES, INC. (Continued)**

**1000840761**

Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 270  
Area of violation: TSD - General  
Date violation determined: 04/14/1989  
Date achieved compliance: 11/15/1989  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 05/31/1989  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

Regulation violated: FR - 268 ALL  
Area of violation: LDR - General  
Date violation determined: 04/14/1989  
Date achieved compliance: 11/15/1989  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 05/31/1989  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
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: 04/14/1989  
Date achieved compliance: 11/15/1989  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 05/31/1989  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: Not reported  
Final penalty amount: Not reported  
Paid penalty amount: Not reported

**Evaluation Action Summary:**

Evaluation date: 09/01/2011  
Evaluation: FINANCIAL RECORD REVIEW  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 06/02/1994  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - Financial Requirements  
Date achieved compliance: 01/03/1995

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER VENTURES, INC. (Continued)**

**1000840761**

Evaluation lead agency: State

Evaluation date: 06/02/1994  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - General  
Date achieved compliance: 01/03/1995  
Evaluation lead agency: State

Evaluation date: 09/28/1992  
Evaluation: FINANCIAL RECORD REVIEW  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 09/03/1992  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - Financial Requirements  
Date achieved compliance: 04/17/1995  
Evaluation lead agency: State

Evaluation date: 03/22/1990  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - General  
Date achieved compliance: 03/22/1990  
Evaluation lead agency: State

Evaluation date: 03/21/1990  
Evaluation: FINANCIAL RECORD REVIEW  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 04/18/1989  
Evaluation: FINANCIAL RECORD REVIEW  
Area of violation: TSD - Financial Requirements  
Date achieved compliance: 03/21/1990  
Evaluation lead agency: State

Evaluation date: 04/14/1989  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - General  
Date achieved compliance: 11/15/1989  
Evaluation lead agency: State

Evaluation date: 04/14/1989  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: LDR - General  
Date achieved compliance: 11/15/1989  
Evaluation lead agency: State

Evaluation date: 02/10/1988  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

CERC-NFRAP:  
Site ID: 0903631

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER VENTURES, INC. (Continued)**

**1000840761**

Federal Facility: Not a Federal Facility  
NPL Status: Removed from Proposed NPL  
Non NPL Status: Not reported

CERCLIS-NFRAP Site Contact Details:

Contact Sequence ID: 13285526.00000  
Person ID: 13003854.00000

Contact Sequence ID: 13291121.00000  
Person ID: 13003858.00000

Contact Sequence ID: 13296979.00000  
Person ID: 13004003.00000

CERCLIS-NFRAP Site Alias Name(s):

Alias Name: KAISER STEEL CORP SMG FONTANA WORKS  
Alias Address: 9400 CHERRY AVE  
FONTANA, CA 92325

Alias Name: KAISER STEEL CORP. (FONTANA PLANT)  
Alias Address: Not reported  
Not reported

Alias Name: KAISER STEEL CORP.(FONTANA PLANT)  
Alias Address: W END OF SPECIALTY RD  
SAN BERNARDINO, CA 92335

Alias Name: KAISER STEEL CORP. (FONTANA PLANT)  
Alias Address: Not reported  
FONTANA, CA 92335

CERCLIS-NFRAP Assessment History:

Action: DISCOVERY  
Date Started: / /  
Date Completed: 08/01/80  
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT  
Date Started: 03/01/85  
Date Completed: 08/01/85  
Priority Level: Low priority for further assessment

Action: HAZARD RANKING SYSTEM PACKAGE  
Date Started: / /  
Date Completed: 06/01/87  
Priority Level: Not reported

Action: SITE INSPECTION  
Date Started: / /  
Date Completed: 05/01/86  
Priority Level: Higher priority for further assessment

Action: REMOVAL ASSESSMENT  
Date Started: 08/04/89  
Date Completed: 08/04/89  
Priority Level: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER VENTURES, INC. (Continued)**

**1000840761**

Action: REMOVED FROM THE PROPOSED NATIONAL PRIORITIES LIST  
Date Started: / /  
Date Completed: 10/04/89  
Priority Level: Not reported

Action: ARCHIVE SITE  
Date Started: / /  
Date Completed: 01/23/96  
Priority Level: Not reported

Action: PROPOSAL TO NATIONAL PRIORITIES LIST  
Date Started: / /  
Date Completed: 06/24/88  
Priority Level: Not reported

Action: CLAIM IN BANKRUPTCY PROCEEDING  
Date Started: 01/01/88  
Date Completed: 09/25/88  
Priority Level: Not reported

Action: SITE INSPECTION  
Date Started: / /  
Date Completed: 01/28/91  
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

**CORRACTS:**

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19890101  
Action: CA050 - RFA Completed  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: 19890101  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: BYPRODUCTS PLANT / SPEEDWAY (OU2)  
Actual Date: 19950501  
Action: CA400 - Date For Remedy Selection (CM Imposed)  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19891101  
Action: CA070YE - RFA Determination Of Need For An RFI, RFI is Necessary  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: 19891101  
Schedule end date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER VENTURES, INC. (Continued)**

**1000840761**

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19891101  
Action: CA050RF - RFA Completed, Assessment was an RFA  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19891101  
Action: CA049PA  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19891101  
Action: CA029ST  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19891101  
Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19891101  
Action: CA050 - RFA Completed  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: 19891101  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: BYPRODUCTS PLANT / SPEEDWAY (OU2)  
Actual Date: 19941001  
Action: CA300 - CMS Workplan Approved  
NAICS Code(s): 562

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER VENTURES, INC. (Continued)**

**1000840761**

Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19980602  
Action: CA750IN - Migration of Contaminated Groundwater under Control, More information is needed to make a determination  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19980602  
Action: CA725IN - Current Human Exposures Under Control, More information is needed to make a determination  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19980602  
Action: CA210 - CA Responsibility Referred To A Non-RCRA Federal Authority  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: TAR PITS OPERABLE UNIT  
Actual Date: 19921203  
Action: CA350 - CMS Approved  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19930107  
Action: CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER VENTURES, INC. (Continued)**

**1000840761**

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 20000811  
Action: CA750IN - Migration of Contaminated Groundwater under Control, More information is needed to make a determination  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: 20000811  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 20000811  
Action: CA750IN - Migration of Contaminated Groundwater under Control, More information is needed to make a determination  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 20000811  
Action: CA725IN - Current Human Exposures Under Control, More information is needed to make a determination  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: 20000811  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 20000811  
Action: CA725IN - Current Human Exposures Under Control, More information is needed to make a determination  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 20090213  
Action: CA500 - CMI Workplan Approved  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: 20090228  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER VENTURES, INC. (Continued)**

**1000840761**

Actual Date: 20050616  
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: 20050616  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 20050616  
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: BYPRODUCTS PLANT / SPEEDWAY (OU2)  
Actual Date: 19950916  
Action: CA450 - Corrective Measures Design Approved  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 20081119  
Action: CA380 - Date For Public Notice On Proposed Remedy  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: BYPRODUCTS PLANT / SPEEDWAY (OU2)  
Actual Date: 19950221  
Action: CA350 - CMS Approved  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19930121  
Action: CA225NR - Stabilization Measures Evaluation, This facility is, not amenable to stabilization activity at the, present time for reasons other than (1) it appears to be technically, infeasible or inappropriate (NF) or (2) there is a lack of technical, information

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER VENTURES, INC. (Continued)**

**1000840761**

(IN). Reasons for this conclusion may be the status of, closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other, administrative considerations

NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: BYPRODUCTS PLANT / SPEEDWAY (OU2)  
Actual Date: 19951023  
Action: CA550 - Certification Of Remedy Completion Or Construction Completion  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19880826  
Action: CA250 - CMS Imposition  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19880826  
Action: CA100 - RFI Imposition  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: BYPRODUCTS PLANT / SPEEDWAY (OU2)  
Actual Date: 19950926  
Action: CA500 - CMI Workplan Approved  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 20130627  
Action: CA550RC  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: 20130726

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER VENTURES, INC. (Continued)**

**1000840761**

Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 20130627  
Action: CA750YE - Migration of Contaminated Groundwater under Control, Yes,  
Migration of Contaminated Groundwater Under Control has been verified

NAICS Code(s): 562  
Waste Management and Remediation Services

Original schedule date: 20130726

Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 20130627  
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human  
Exposures Under Control has been verified

NAICS Code(s): 562  
Waste Management and Remediation Services

Original schedule date: 20130726

Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: TAR PITS OPERABLE UNIT  
Actual Date: 19931228  
Action: CA400 - Date For Remedy Selection (CM Imposed)

NAICS Code(s): 562  
Waste Management and Remediation Services

Original schedule date: Not reported

Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19910228  
Action: CA200 - RFI Approved

NAICS Code(s): 562  
Waste Management and Remediation Services

Original schedule date: Not reported

Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19910128  
Action: CA049SI

NAICS Code(s): 562  
Waste Management and Remediation Services

Original schedule date: Not reported

Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER VENTURES, INC. (Continued)**

**1000840761**

Actual Date: 19900629  
Action: CA050RF - RFA Completed, Assessment was an RFA  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: TAR PITS OPERABLE UNIT  
Actual Date: 19901130  
Action: CA300 - CMS Workplan Approved  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: 19900531  
Action: CA150 - RFI Workplan Approved  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: Not reported  
Schedule end date: Not reported

EPA ID: CAD008274938  
EPA Region: 09  
Area Name: ENTIRE FACILITY  
Actual Date: Not reported  
Action: CA03192  
NAICS Code(s): 562  
Waste Management and Remediation Services  
Original schedule date: 19921001  
Schedule end date: Not reported

**CONSENT:**

EPA ID: CAD008274938  
Site ID: Not reported  
Case Title: IN RE: KAISER STEEL CORP., KAISER STEEL TUBING, INC., & KT REALTY, INC.  
Court Num: 87-01552  
District: Colorado  
Entered Date: 19881123  
Full-text of the consent decree for this site issued by the United States District Court is available from EDR. Contact your EDR Account Executive.

**FINDS:**

Registry ID: 110000609226

**Environmental Interest/Information System**

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER VENTURES, INC. (Continued)**

**1000840761**

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.

CA Financial Assurance 1:

EPA ID Number: CAD008274938/60001356  
Sudden Amount1: 2,000,000.00  
Non Sudden Amount1: Not reported  
Closure Mechanism: Not reported  
Closure Amount: Not reported  
Post Closure Mechanism: CG  
Post Closure Amount: \$4,166,885.00  
Corrective Action Mechanism: Not reported  
Corrective Action Amount: Not reported  
Sudden Mechanism Type: CG  
Sudden Mechanism Amount: 1,000,000.00  
Non Sudden Mechanism Type: Not reported  
Non Sudden Mechanism Amount: Not reported  
O&M Mechanism Type: CG  
O&M Amount: \$4,516,852.00

2020 COR ACTION:

EPA ID: CAD008274938  
Region: 9  
Action: Not reported

US FIN ASSUR:

EPA ID: CAD008274938  
Provider: PROLOGIS  
EPA region: 9  
County: SAN BERNARDINO  
Mechanism type: CORPORATE GUARANTEE  
Mechanism ID: CG001  
Cost estimate: 6500000  
Face value: 4166885  
Effective date: 2010-07-15 00:00:00

EPA ID: CAD008274938  
Provider: CATELLUS DEVELOPMENT CORP.  
EPA region: 9  
County: SAN BERNARDINO  
Mechanism type: FINANCIAL TEST  
Mechanism ID: FT001  
Cost estimate: 12604350  
Face value: 28000000  
Effective date: 1999-12-31 00:00:00

EPA ID: CAD008274938  
Provider: CATELLUS DEVELOPMENT CORP.  
EPA region: 9  
County: SAN BERNARDINO  
Mechanism type: FINANCIAL TEST  
Mechanism ID: FT001  
Cost estimate: 2000000

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER VENTURES, INC. (Continued)**

**1000840761**

Face value: 28000000  
Effective date: 1999-12-31 00:00:00

EPA ID: CAD008274938  
Provider: CATELLUS DEVELOPMENT CORP.  
EPA region: 9  
County: SAN BERNARDINO  
Mechanism type: FINANCIAL TEST  
Mechanism ID: FT001  
Cost estimate: 6000000  
Face value: 28000000  
Effective date: 1999-12-31 00:00:00

HWP:

EPA Id: CAD008274938  
Cleanup Status: POST CLOSURE PERMIT  
Latitude: 34.08335  
Longitude: -117.4889  
Facility Type: Post-Closure Permitted  
Facility Size: Not reported  
Team: EDWARD NIETO  
Supervisor: PETER BAILEY  
Site Code: 400081, TBD  
Assembly District: 52  
Senate District: 20  
Public Information Officer: Not reported

Activities:

EPA Id: CAD008274938  
Facility Type: Post-Closure Permitted  
Unit Names: Not reported  
Event Description: New Operating Permit - APPLICATION PART B RECEIVED  
Actual Date: 10/17/1985

EPA Id: CAD008274938  
Facility Type: Post-Closure Permitted  
Unit Names: Not reported  
Event Description: New Operating Permit - CALL-IN LETTER ISSUED  
Actual Date: 06/20/1983

EPA Id: CAD008274938  
Facility Type: Post-Closure Permitted  
Unit Names: Not reported  
Event Description: New Operating Permit - APPLICATION PART A RECEIVED  
Actual Date: 01/01/1990

Closure:

EPA Id: CAD008274938  
Facility Type: Post-Closure Permitted  
Unit Names: Unit 5.22, Unit 5.3  
Event Description: Closure - ISSUE CLOSURE VERIFICATION  
Actual Date: 06/07/2012

EPA Id: CAD008274938  
Facility Type: Post-Closure Permitted  
Unit Names: Unit 5.12, Unit 5.15, Unit 5.16, Unit 5.17, Unit 5.18, Unit 5.19  
Event Description: Closure - CLOSURE PLAN RECEIVED

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER VENTURES, INC. (Continued)**

**1000840761**

Actual Date: 02/28/1994

EPA Id: CAD008274938  
Facility Type: Post-Closure Permitted  
Unit Names: HWMU, Unit 5.1, Unit 5.13, Unit 5.14  
Event Description: New Post-Closure Permit - APPLICATION PART A RECEIVED  
Actual Date: 05/04/2011

EPA Id: CAD008274938  
Facility Type: Post-Closure Permitted  
Unit Names: Unit 5.12, Unit 5.15, Unit 5.16, Unit 5.17, Unit 5.18, Unit 5.19  
Event Description: Closure - CLOSURE PLAN APPROVED  
Actual Date: 06/30/1995

EPA Id: CAD008274938  
Facility Type: Post-Closure Permitted  
Unit Names: HWMU, Unit 5.1, Unit 5.13, Unit 5.14  
Event Description: New Post-Closure Permit - ADMINISTRATIVE REVIEW COMPLETE  
Actual Date: Not reported

EPA Id: CAD008274938  
Facility Type: Post-Closure Permitted  
Unit Names: HWMU, Unit 5.1, Unit 5.13, Unit 5.14  
Event Description: New Post-Closure Permit - APPLICATION PART B RECEIVED  
Actual Date: 06/07/2012

EPA Id: CAD008274938  
Facility Type: Post-Closure Permitted  
Unit Names: Unit 5.12, Unit 5.15, Unit 5.16, Unit 5.17, Unit 5.18, Unit 5.19  
Event Description: Closure - CLOSURE NOTICE RECEIVED  
Actual Date: 04/04/1995

EPA Id: CAD008274938  
Facility Type: Post-Closure Permitted  
Unit Names: Unit 5.12, Unit 5.15, Unit 5.16, Unit 5.17, Unit 5.18, Unit 5.19  
Event Description: Closure - CLOSURE PLAN REQUESTED  
Actual Date: 06/30/1995

EPA Id: CAD008274938  
Facility Type: Post-Closure Permitted  
Unit Names: Unit 5.12, Unit 5.15, Unit 5.16, Unit 5.17, Unit 5.18, Unit 5.19  
Event Description: Closure - ISSUE CLOSURE VERIFICATION  
Actual Date: 06/07/2012

EPA Id: CAD008274938  
Facility Type: Post-Closure Permitted  
Unit Names: HWMU, Unit 5.1, Unit 5.13, Unit 5.14  
Event Description: New Post-Closure Permit - APPLICANT HOLDS PUBLIC MEETING  
Actual Date: 04/15/2014

EPA Id: CAD008274938  
Facility Type: Post-Closure Permitted  
Unit Names: HWMU, Unit 5.1, Unit 5.13, Unit 5.14  
Event Description: New Post-Closure Permit - CEQA DETERMINATION  
Actual Date: 02/13/2009

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**KAISER VENTURES, INC. (Continued)**

**1000840761**

Alias:  
 EPA Id: CAD008274938  
 Facility Type: Post-Closure Permitted  
 Alias Type: Project Code (Site Code)  
 Alias: 400081

EPA Id: CAD008274938  
 Facility Type: Post-Closure Permitted  
 Alias Type: Project Code (Site Code)  
 Alias: TBD

EPA Id: CAD008274938  
 Facility Type: Post-Closure Permitted  
 Alias Type: Envirostor ID Number  
 Alias: 36330009

EPA Id: CAD008274938  
 Facility Type: Post-Closure Permitted  
 Alias Type: Envirostor ID Number  
 Alias: 36330048

EPA Id: CAD008274938  
 Facility Type: Post-Closure Permitted  
 Alias Type: Envirostor ID Number  
 Alias: 36330049

EPA Id: CAD008274938  
 Facility Type: Post-Closure Permitted  
 Alias Type: Envirostor ID Number  
 Alias: 36330047

EPA Id: CAD008274938  
 Facility Type: Post-Closure Permitted  
 Alias Type: FRS  
 Alias: 110010682289

**P76**  
**NNW**  
**1/2-1**  
**0.673 mi.**  
**3551 ft.**

**KAISER STEEL - CHEMWEST AREA**  
**9400 CHERRY AVENUE**  
**FONTANA, CA 92335**  
**Site 2 of 5 in cluster P**

**CA HIST Cal-Sites S101272832**  
**N/A**

**Relative:**  
**Higher**

Calsite:  
 Region: CYPRESS  
 Facility ID: 36330049  
 Facility Type: RP  
 Type: RESPONSIBLE PARTY  
 Branch: SB  
 Branch Name: SO CAL - CYPRESS  
 File Name: Not reported  
 State Senate District: 04221996  
 Status: ANNUAL WORKPLAN (AWP) - ACTIVE SITE  
 Status Name: ANNUAL WORKPLAN - ACTIVE SITE  
 Lead Agency: DEPT OF TOXIC SUBSTANCES CONTROL  
 NPL: Not Listed  
 SIC Code: 33

**Actual:**  
**1118 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL - CHEMWEST AREA (Continued)**

**S101272832**

SIC Name: MANU - PRIMARY METAL INDUSTRIES  
Access: Controlled  
Cortese: Not reported  
Hazardous Ranking Score: Not reported  
Date Site Hazard Ranked: Not reported  
Groundwater Contamination: Confirmed  
Staff Member Responsible for Site: YAREF  
Supervisor Responsible for Site: Not reported  
Region Water Control Board: SA  
Region Water Control Board Name: SANTA ANA  
Lat/Long Direction: Not reported  
Lat/Long (dms): 0 0 0 / 0 0 0  
Lat/long Method: Not reported  
Lat/Long Description: Not reported  
State Assembly District Code: 62  
State Senate District Code: 32  
Facility ID: 36330049  
Activity: RIFS  
Activity Name: REMEDIAL INVESTIGATION / FEASIBILITY STUDY  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 05121994  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330049  
Activity: CEQA  
Activity Name: CEQA INCLUDING NEGATIVE DECS  
AWP Code: NEGDK  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 03241995  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**KAISER STEEL - CHEMWEST AREA (Continued)**

**S101272832**

Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36330049
Activity:	RAW
Activity Name:	REMOVAL ACTION WORKPLAN
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	03291995
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36330049
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06281996
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	INVOLVED DISMANTLING AND DISPOSING OF OLD LINERS FROM FIVE SURFACE IM-POUNDMENTS, EXCAVATION AND DISPOSAL OF SOIL AFFECTED BY THE LEAKYSURFACE IMPOUNDMENTS, AND REMOVAL OF 1 ABOVE GROUND STORAGE TANK.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL - CHEMWEST AREA (Continued)**

**S101272832**

Facility ID: 36330049  
Activity: RAW  
Activity Name: REMOVAL ACTION WORKPLAN  
AWP Code: CAMU  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 02101998  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330049  
Activity: DES  
Activity Name: DESIGN  
AWP Code: CAMU  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 06261998  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330049  
Activity: CEQA  
Activity Name: CEQA INCLUDING NEGATIVE DECS  
AWP Code: CAMU  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 01231998  
Est Person-Yrs to complete: 0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL - CHEMWEST AREA (Continued)**

**S101272832**

Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330049  
Activity: OM  
Activity Name: OPERATION & MAINTENANCE  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: 06302032  
Revised Due Date: Not reported  
Comments Date: Not reported  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330049  
Activity: CERT  
Activity Name: CERTIFICATION  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: 06302006  
Revised Due Date: Not reported  
Comments Date: Not reported  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported



Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL - CHEMWEST AREA (Continued)**

**S101272832**

During bankruptcy proceedings, the Department and Kaiser Steel submitted a Consent Order for the investigation and mitigation of the site to the court for review and approval. Subsequent to the court's approval, the Department entered into a consent order in August 1988, with Kaiser Steel Resources. The Lusk Company, a land development company, has negotiated an agreement with Kaiser Steel Resources to fund the initial cleanup. Future work will be funded through the sale of the remediated portions of the site.

Not reported

In August 1988, and January 1989, Preliminary Assessment/ Site Inspection Reports (PA/SI) were completed in an effort to identify areas of contamination. Of the 32 areas investigated, 12 were identified as requiring no further action and 20 were recommended for remedial investigation.

Not reported

The remedial investigation at the site was conducted in two phases. Phase I, completed in April 1990, evaluated the 20 potential sites and concluded that three required further investigation and/or remediation. Of these three, two areas, the by-products plant and the east slag pile landfill, were recommended for further remedial investigation, and the third area, the tar pits, was recommended for remediation. Phase II, completed in October 1990, further sampled and analyzed the by-products plant and east slag pile landfill. Results concluded that these areas required remediation. Two smaller areas, the cooling tower sludge pit and the furnace dust and mills scale piles, were also investigated in Phase II. These areas were recommended for minor material removal. The two RI reports concluded that approximately five percent of the site needed remediation. The site has since been split into four separate sites: the Tar Pits area, the Byproducts area, the Chemwest area, and the Landfill area.

Not reported

Chemwest Area- This is approximately 50 acres located west and northwest of the east slag pile landfill. This area includes the five ferrous chloride ponds (Chemwest Upper Facility), two of which have had a history of releases of the ferrous chloride solutions, and the Chemwest lower facility. Past operations in this area involved the processing of the waste pickle liquor from the neighboring steel manufacturing facility to produce concentrated and marketable solutions of ferrous chloride. Later, when the steel manufacturing facility started recycling its waste pickle liquor, Chemwest was reported to resort to importing raw materials to manufacture ferrous chloride. This area is characterized by significant concentrations of metals in an acidic environment. Waste pickle liquor is an EPA listed hazardous waste K062.

Not reported

On two occasions, the pond linings failed. The first reported loss of liquid occurred from the southernmost pond in June 1978 and consisted of 1.3 million gallons. The second loss occurred from the northeasterly pond in May 1983

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL - CHEMWEST AREA (Continued)**

**S101272832**

and consisted of 300,000 gallons.  
Not reported  
Between the period of April 1995 and February 1996, iron hydroxide sludge affected by the leakage of waste ferrous chloride solution/hydrochloric acid was removed from the CWUP under the direction of the Department of Toxic Substances Control (DTSC). A total of 7,000 tons of affected sludge was removed until the remaining sludge was at a pH of 7.0 (neutral) or higher, and metals were below concentrations typical of iron hydroxide sludge. The affected iron hydroxide sludge was transported to a permitted offsite disposal facility (East Carbon Development Corporation environmental landfill in Utah). At that time the in-place pond liners were also removed, and affected soils from the berms separating the ponds were screened and sampled. A description of the removal activities and confirmation sampling is provided in "Report of Removal Action, Chemwest Upper Ponds Area, Kaiser Ventures Site, Fontana, CA" (SCS Engineers, June, 1996).

Not reported  
In March 2001, a field sampling plan was submitted for the Chemwest Lower Facility. The Department has responded with comments.

Comments Date: 01231998  
Comments: Completed the Neg. Dec. for the Corrective Action Management Unit  
Comments Date: 02101998  
Comments: Removal Action Workplan for CAMU was approved.  
Comments Date: 05311986  
Comments: This is the date the site was first listed pursuant to  
Comments Date: 05311986  
Comments: section 25356.  
Comments Date: 06261998  
Comments: Completion of Design for CAMU cover (cap).  
Comments Date: 07101996  
Comments: A Land Use Covenant was signed and recorded on 07/10/96 for the  
Comments Date: 07101996  
Comments: Chemwest Lower Facility.  
ID Name: EPA IDENTIFICATION NUMBER  
ID Value: CAD008274938  
ID Name: BEP DATABASE PCODE  
ID Value: P42070  
ID Name: CALSITES ID NUMBER  
ID Value: 36280140  
ID Name: CALSTARS CODE  
ID Value: 400081  
Alternate Name: KAISER STEEL - CHEMWEST AREA  
Special Programs Code: R3012  
Special Programs Name: RCRA 3012

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**P77**      **KAISER STEEL-EAST SLAG PILE/SEWAGE PLANT**      **CA HIST Cal-Sites**      **S100833424**  
**NNW**      **9400 CHERRY AVENUE**      **CA BOND EXP. PLAN**      **N/A**  
**1/2-1**      **FONTANA, CA 92335**  
**0.673 mi.**  
**3551 ft.**      **Site 3 of 5 in cluster P**

**Relative:**  
**Higher**

Calsite:

**Actual:**  
**1118 ft.**

Region: CYPRESS  
 Facility ID: 36330048  
 Facility Type: RP  
 Type: RESPONSIBLE PARTY  
 Branch: SB  
 Branch Name: SO CAL - CYPRESS  
 File Name: Not reported  
 State Senate District: 04221996  
 Status: ANNUAL WORKPLAN (AWP) - ACTIVE SITE  
 Status Name: ANNUAL WORKPLAN - ACTIVE SITE  
 Lead Agency: DEPT OF TOXIC SUBSTANCES CONTROL  
 NPL: Not Listed  
 SIC Code: 33  
 SIC Name: MANU - PRIMARY METAL INDUSTRIES  
 Access: Controlled  
 Cortese: Not reported  
 Hazardous Ranking Score: Not reported  
 Date Site Hazard Ranked: Not reported  
 Groundwater Contamination: Confirmed  
 Staff Member Responsible for Site: YAREF  
 Supervisor Responsible for Site: Not reported  
 Region Water Control Board: SA  
 Region Water Control Board Name: SANTA ANA  
 Lat/Long Direction: Not reported  
 Lat/Long (dms): 0 0 0 / 0 0 0  
 Lat/long Method: Not reported  
 Lat/Long Description: Not reported  
 State Assembly District Code: 62  
 State Senate District Code: 32  
 Facility ID: 36330048  
 Activity: RIFS  
 Activity Name: REMEDIAL INVESTIGATION / FEASIBILITY STUDY  
 AWP Code: WSP  
 Proposed Budget: 0  
 AWP Completion Date: Not reported  
 Revised Due Date: Not reported  
 Comments Date: 04071999  
 Est Person-Yrs to complete: 0  
 Estimated Size: Not reported  
 Request to Delete Activity: Not reported  
 Activity Status: AWP  
 Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
 Liquids Removed (Gals): 0  
 Liquids Treated (Gals): 0  
 Action Included Capping: Not reported  
 Well Decommissioned: Not reported  
 Action Included Fencing: Not reported  
 Removal Action Certification: Not reported  
 Activity Comments: Not reported  
 For Commercial Reuse: 0  
 For Industrial Reuse: 0  
 For Residential Reuse: 0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL-EAST SLAG PILE/SEWAGE PLANT (Continued)**

**S100833424**

Unknown Type: 0  
Facility ID: 36330048  
Activity: RIFS  
Activity Name: REMEDIAL INVESTIGATION / FEASIBILITY STUDY  
AWP Code: ESP  
Proposed Budget: 0  
AWP Completion Date: 12312004  
Revised Due Date: 06302005  
Comments Date: Not reported  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330048  
Activity: RAP  
Activity Name: REMEDIAL ACTION PLAN / RECORD OF DECISION  
AWP Code: ESP  
Proposed Budget: 0  
AWP Completion Date: 06302005  
Revised Due Date: Not reported  
Comments Date: Not reported  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330048  
Activity: PEA  
Activity Name: PRELIMINARY ENDANGERMENT ASSESSMENT  
AWP Code: SEW  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 05211999

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL-EAST SLAG PILE/SEWAGE PLANT (Continued)**

**S100833424**

Est Person-Yrs to complete: 0  
Estimated Size: S  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330048  
Activity: DES  
Activity Name: DESIGN  
AWP Code: ESP  
Proposed Budget: 0  
AWP Completion Date: 09302005  
Revised Due Date: Not reported  
Comments Date: Not reported  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330048  
Activity: RMDL  
Activity Name: REMEDIAL ACTION (RAP REQUIRED)  
AWP Code: ESP  
Proposed Budget: 0  
AWP Completion Date: 12312005  
Revised Due Date: Not reported  
Comments Date: Not reported  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL-EAST SLAG PILE/SEWAGE PLANT (Continued)**

**S100833424**

Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330048  
Activity: DEED  
Activity Name: DEED RESTRICTIONS  
AWP Code: WSLAG  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 04172002  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330048  
Activity: CERT  
Activity Name: CERTIFICATION  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: 06302006  
Revised Due Date: Not reported  
Comments Date: Not reported  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Alternate Address: 9400 CHERRY AVENUE  
Alternate City,St,Zip: FONTANA, CA 92335

MAP FINDINGS

**KAISER STEEL-EAST SLAG PILE/SEWAGE PLANT (Continued)**

**S100833424**

Alternate Address:  
Alternate City,St,Zip:  
Background Info:

WEST END OF SPECIALTY ROAD  
FONTANA, CA 92335

The Kaiser Steel Resources facility is located on approximately 880 acres in Fontana. The facility was a former integrated steel production plant that the Kaiser Steel Corporation owned and operated from 1942 to 1983. Following shutdown, portions of the original Kaiser property were sold or otherwise transferred. During this time, the Kaiser Steel Corporation entered bankruptcy proceedings. When the Corporation emerged from bankruptcy, their name changed to Kaiser Steel Resources.

The Department became aware of the potential presence of hazardous waste in 1985, when asbestos and liquids from a benzol production area were released during demolition of onsite structures. The asbestos was removed and is no longer of concern. Also in 1985, an environmental assessment was conducted by J.M. Montgomery at the Kaiser Steel Corporation's request. As a result of these actions, both the Department and U.S. EPA became involved with the site.

In 1988, U.S. EPA proposed listing the Kaiser Steel facility on the NPL. In October 1989, U.S. EPA decided not to list the site.

During the bankruptcy proceedings, the Department and Kaiser Steel submitted a Consent Order for the investigation and mitigation of the site to the court for review and approval. Subsequent to the court's approval, the Department entered into a consent order in August 1988, with Kaiser Steel Resources. The Lusk Company, a land development company, has negotiated an agreement with Kaiser Steel Resources to fund the initial cleanup. Future work will be funded through the sale of the remediated portions of the site.

In August 1988, and January 1989, Preliminary Assessment/Site Inspection Reports (PA/SI) were completed in an effort to identify areas of contamination. Of the 32 areas investigated, 12 were identified as requiring no further action and 20 were recommended for remedial investigation.

The remedial investigation at the site was conducted in two phases. Phase I, completed in April 1990, evaluated the 20 potential sites and concluded that three required further investigation and/or remediation. Of these three, two areas, the by-products plant and the east slag pile landfill, were recommended for further remedial investigation, and the third area, the tar pits, was recommended for remediation. Phase II, completed in October 1990, further sampled and analyzed the by-products plant and east slag pile landfill. Results concluded that these areas required remediation. Two smaller areas, the cooling tower sludge pit and the furnace dust and mills scale piles, were also investigated in Phase II. These areas were recommended for minor material removal. The two RI reports concluded that approximately five percent of the site needed remediation.

The site has since been split into four separate sites: the Tar Pits area, the By-products area, the Chemwest area, and the Landfill area.

East Slag Pile Landfill Area- Approximately 50 acres in

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL-EAST SLAG PILE/SEWAGE PLANT (Continued)**

**S100833424**

the eastern half of the southern part of Kaiser Steel Resources. This area consists of a mound of slag and solid wastes which received inert material, oily mill scale, and sludges, including those derived from the cooling tower, neutralized waste pickle liquor, and blast furnace gas washer water. North of the east slag pile landfill are five ferrous chloride ponds (part of the Chemwest area) and two chrome ponds (part of this area). Some of the sludges disposed in the landfill contain significant levels of heavy metals (lead and zinc).

Not reported

In March 2001, an RI was submitted for the East Slag Pile Landfill. This included a border determination of the extent of the landfill. Currently, slag mining operations are being conducted east of the landfill on the slag pile

Comments Date: 03171999  
Comments: Remedial Investigation/Feasibility Study completed for West Slag  
Comments Date: 03171999  
Comments: Pile Landfill. No further action appears necessary. However,  
Comments Date: 03171999  
Comments: further action could be required if hazardous substances are  
Comments Date: 03171999  
Comments: found during future construction and grading activities. DTSC is  
Comments Date: 03171999  
Comments: awaiting submittal of a Contingency Plan document to be used  
Comments Date: 03171999  
Comments: during future construction and grading.  
Comments Date: 04172002  
Comments: Completion and recording of Deed Restriction (Commercial/  
Comments Date: 04172002  
Comments: industrial Use) for the West Slag Pile.  
Comments Date: 05011986  
Comments: This is the date the site was first listed pursuant to  
Comments Date: 05011986  
Comments: section 25356.  
Comments Date: 05211999  
Comments: Preliminary Endangerment Assessment for the Sewage Treatment  
Comments Date: 05211999  
Comments: Plant. No further action determined except recording an  
Comments Date: 05211999  
Comments: industrial use only deed restriction.  
ID Name: CALSTARS CODE  
ID Value: 400081  
ID Name: CALSITES ID NUMBER  
ID Value: 36280140  
ID Name: EPA IDENTIFICATION NUMBER  
ID Value: CAD008274938  
ID Name: BEP DATABASE PCODE  
ID Value: P42070  
Alternate Name: KAISER STEEL - EAST SLAG PILE LANDFILL KAISER STEEL-EAST SLAG PILE/SEWAGE  
PLANT KAISER STEEL - SEWAGE PLANT  
Special Programs Code: R3012  
Special Programs Name: RCRA 3012

**CA BOND EXP. PLAN:**

Responsible Party: NPL SITE CLEANUP WORKPLAN  
Project Revenue Source Company: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**KAISER STEEL-EAST SLAG PILE/SEWAGE PLANT (Continued)**

**S100833424**

Project Revenue Source Addr: Not reported  
 Project Revenue Source City,St,Zip: Not reported  
 Project Revenue Source Desc: DHS and Kaiser Steel have submitted a consent order to the bankruptcy court for approval. Upon authorization by the court, Kaiser Steel will initiate remedial activities. Under this order, Kaiser Steel will pay for all remediation costs. The Company will also advance \$70,000 to DHS to pay for its direct costs, staff costs and overhead related to the Department's oversight activities. EPA has proposed this site for listing on the NPL.

Site Description: The Kaiser Steel facility is located on approximately four square miles in Fontana. The facility was a former integrated steel production plant that operated from 1942 to 1983. Parcels of the property have subsequently been leased to other private parties. Much of the site remains unoccupied and has areas which may contain hazardous wastes. These areas include unlined tar pits, chromium reduction ponds and slag piles.

Hazardous Waste Desc: The following hazardous substances were, among others, handled on the site during its years of operation: chromic acid, calcium carbide, polychlorinated biphenyls (PCBs), chromic hydroxide, asbestos, hydrochloric acid, ferric chloride and oily wastes. The following hazardous wastes, among others, were released on the site after the facility was closed: asbestos, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, chrysene, fluorene, fluoroanthene, phenanthrene, pyrene, biphenyl, dibenzofuran, indene and methyl naphthalene, n-zofuran, indene and methyl naphthalene.

Threat To Public Health & Env: The site overlies the Chino Water Basin, Which is a source of drinking water for approximately 500,000 people. An intermittent flow storm channel traverses the property and may receive contaminated runoff from the site. The channel ultimately flows into the Santa Ana River which recharges drinking water aquifers downgradient. Disturbance of contaminated soils may result in a release of adverse air emissions that could expose workers and the public. The demolition of structures insulated by asbestos has exposed workers to the hazardous substance.

Site Activity Status: Regulatory and enforcement efforts are being undertaken by DHS, the RWQCB, EPA and the San Bernardino County Environmental Health Department. The Department became aware of the presence of potential hazardous wastes in 1985 when asbestos and liquids from a benzol production area were released during demolition. Kaiser Steel will conduct a site investigation to identify all contaminated areas on the site. The company has filed for bankruptcy and may identify additional financing of remedial activities through partnerships with land developers.

**P78  
 NNW  
 1/2-1  
 0.673 mi.  
 3551 ft.**

**KAISER STEEL - BYPRODUCTS AREA  
 9400 CHERRY AVENUE  
 FONTANA, CA 92335  
 Site 4 of 5 in cluster P**

**CA HIST Cal-Sites S101272831  
 N/A**

**Relative:  
 Higher**

Calsite:  
 Region: CYPRESS  
 Facility ID: 36330047  
 Facility Type: RP  
 Type: RESPONSIBLE PARTY  
 Branch: SB  
 Branch Name: SO CAL - CYPRESS  
 File Name: Not reported  
 State Senate District: 10231995  
 Status: CERTIFIED OPERATION AND MAINTENANCE, ALL PLANNED ACTIVITIES IMPLEMENTED, REMEDIATION CONTINUES  
 Status Name: CERTIFIED / OPERATION & MAINTENANCE  
 Lead Agency: DEPT OF TOXIC SUBSTANCES CONTROL

**Actual:  
 1118 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL - BYPRODUCTS AREA (Continued)**

**S101272831**

NPL: Not Listed  
SIC Code: 33  
SIC Name: MANU - PRIMARY METAL INDUSTRIES  
Access: Controlled  
Cortese: Not reported  
Hazardous Ranking Score: Not reported  
Date Site Hazard Ranked: Not reported  
Groundwater Contamination: Confirmed  
Staff Member Responsible for Site: YAREF  
Supervisor Responsible for Site: Not reported  
Region Water Control Board: SA  
Region Water Control Board Name: SANTA ANA  
Lat/Long Direction: Not reported  
Lat/Long (dms): 0 0 0 / 0 0 0  
Lat/long Method: Not reported  
Lat/Long Description: Not reported  
State Assembly District Code: 63  
State Senate District Code: 32  
Facility ID: 36330047  
Activity: RIFS  
Activity Name: REMEDIAL INVESTIGATION / FEASIBILITY STUDY  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 02211995  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: COM  
Definition of Status: CERTIFIED / OPERATION & MAINTENANCE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330047  
Activity: RAP  
Activity Name: REMEDIAL ACTION PLAN / RECORD OF DECISION  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 05011995  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: COM  
Definition of Status: CERTIFIED / OPERATION & MAINTENANCE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL - BYPRODUCTS AREA (Continued)**

**S101272831**

Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330047  
Activity: CEQA  
Activity Name: CEQA INCLUDING NEGATIVE DECS  
AWP Code: NEGDK  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 05021995  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: COM  
Definition of Status: CERTIFIED / OPERATION & MAINTENANCE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330047  
Activity: DES  
Activity Name: DESIGN  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 09161995  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: COM  
Definition of Status: CERTIFIED / OPERATION & MAINTENANCE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL - BYPRODUCTS AREA (Continued)**

**S101272831**

Facility ID: 36330047  
Activity: DEED  
Activity Name: DEED RESTRICTIONS  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 11141995  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: COM  
Definition of Status: CERTIFIED / OPERATION & MAINTENANCE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330047  
Activity: ORDER  
Activity Name: I/SE, IORSE, FFA, FFSRA, VCA, EA  
AWP Code: O&M  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 09261995  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: COM  
Definition of Status: CERTIFIED / OPERATION & MAINTENANCE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330047  
Activity: RMDL  
Activity Name: REMEDIAL ACTION (RAP REQUIRED)  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 09261995  
Est Person-Yrs to complete: 0

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**KAISER STEEL - BYPRODUCTS AREA (Continued)**

**S101272831**

<p>Estimated Size:          Request to Delete Activity:          Activity Status:          Definition of Status:          Liquids Removed (Gals):          Liquids Treated (Gals):          Action Included Capping:          Well Decommissioned:          Action Included Fencing:          Removal Action Certification:          Activity Comments:</p> <p>For Commercial Reuse:          For Industrial Reuse:          For Residential Reuse:          Unknown Type:          Facility ID:          Activity:          Activity Name:          AWP Code:          Proposed Budget:          AWP Completion Date:          Revised Due Date:          Comments Date:          Est Person-Yrs to complete:          Estimated Size:          Request to Delete Activity:          Activity Status:          Definition of Status:          Liquids Removed (Gals):          Liquids Treated (Gals):          Action Included Capping:          Well Decommissioned:          Action Included Fencing:          Removal Action Certification:          Activity Comments:</p> <p>For Commercial Reuse:          For Industrial Reuse:          For Residential Reuse:          Unknown Type:          Facility ID:          Activity:          Activity Name:          AWP Code:          Proposed Budget:          AWP Completion Date:          Revised Due Date:          Comments Date:          Est Person-Yrs to complete:          Estimated Size:          Request to Delete Activity:          Activity Status:          Definition of Status:</p>	<p>Not reported          Not reported          COM          CERTIFIED / OPERATION &amp; MAINTENANCE          21200          9212          X          Not reported          Not reported          N          12.84 ACRE CAP OVER CONTAMINATED BYPRODUCT PLANT SOILS. 370 TONS OF COAL TAR WAS SHIPPED OFF SITE FOR RECYCLING. VAPOR EXTRACTION OF VOLATILE ORGANIC CONTAMINANTS IS CONTINUING WITHIN THE CAPPED AREA.</p> <p>0          0          0          0          36330047          CERT          CERTIFICATION          Not reported          0          Not reported          Not reported          10231995          0          Not reported          Not reported          COM          CERTIFIED / OPERATION &amp; MAINTENANCE          0          0          Not reported          Not reported          Not reported          N          DTSC CERTIFIES THAT IMPLEMENTATION OF ALL REMEDIAL WORK SPECIFIED IN THE "REMEDIAL ACTION PLAN FOR OPERABLE UNIT NO.2, MARCH 1995 (RAP)" HAS BEEN COMPLETED. THE SITE DOES REQUIRE ONGOING O&amp;M AND MONITORING.</p> <p>0          0          0          0          36330047          PEA          PRELIMINARY ENDANGERMENT ASSESSMENT          A &amp; C          0          Not reported          Not reported          12021996          0          M          Not reported          COM          CERTIFIED / OPERATION &amp; MAINTENANCE</p>
--	--

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL - BYPRODUCTS AREA (Continued)**

**S101272831**

Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36330047
Activity:	CHP65
Activity Name:	AMENDED ORDER/AGREEMENT, CHAPTER 6.5 TRANSITION
AWP Code:	ORDER
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	01111999
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36330047
Activity:	5YEAR
Activity Name:	FIVE-YEAR REVIEW REQUIRED BY CERCLA
AWP Code:	OU2
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	07292002
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	COM
Definition of Status:	CERTIFIED / OPERATION & MAINTENANCE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0

MAP FINDINGS

**KAISER STEEL - BYPRODUCTS AREA (Continued)**

**S101272831**

For Residential Reuse:

0

Unknown Type:

0

Alternate Address:

9400 CHERRY AVENUE

Alternate City,St,Zip:

FONTANA, CA 92335

Alternate Address:

WEST END OF SPECIALTY ROAD

Alternate City,St,Zip:

FONTANA, CA 92335

Background Info:

The Kaiser Steel Resources facility is located on approximately 880 acres in Fontana. The facility was a former integrated steel production plant that the Kaiser Steel Corporation owned and operated from 1942 to 1983. Following shutdown, portions of the original Kaiser property were sold or otherwise transferred. During this time, the Kaiser Steel Corporation entered bankruptcy proceedings. When the Corporation emerged from bankruptcy, their name changed to Kaiser Steel Resources. The Department became aware of the potential presence of hazardous waste in 1985, when asbestos and liquids from a benzol production area were released during demolition of onsite structures. The asbestos was removed and is no longer of concern. Also in 1985, an environmental assessment was conducted by J.M. Montgomery at the Kaiser Steel Corp.'s request. As a result of these actions, both the Department and EPA became involved with the site. In 1988, EPA proposed listing the Kaiser Steel facility on the NPL. In October 1989, EPA decided not to list the site. During the bankruptcy proceedings, the Department and Kaiser Steel submitted a Consent Order for the investigation and mitigation of the site to the court for review and approval. Subsequent to the court's approval, the Department entered into a consent order in August 1988, with Kaiser Steel Resources. The Lusk Company, a land development company, has negotiated an agreement with Kaiser Steel Resources to fund the initial cleanup. Future work will be funded through the sale of the remediated portions of the site. In August 1988, and January 1989, Preliminary Assessment/Site Inspection Reports (PA/SI) were completed in an effort to identify areas of contamination. Of the 32 areas investigated, 12 were identified as requiring no further action and 20 were recommended for remedial investigation. The remedial investigation at the site was conducted in two phases. Phase I, completed in April 1990, evaluated the 20 potential sites and concluded that three required further investigation and/or remediation. Of these three, two areas, the by-products plant and the east slag pile landfill, were recommended for further remedial investigation, and the third area, the tar pits, was recommended for remediation. Phase II, completed in October 1990, further sampled and analyzed the by-products plant and east slag pile landfill. Results concluded that these areas required remediation. Two smaller areas, the cooling tower sludge pit and the furnace dust and mills scale piles, were also investigated in Phase II. These areas were recommended for minor material removal. The two RI reports concluded that approximately five percent of the site needed remediation. The site has since been split into

Map ID  
Direction  
Distance  
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MAP FINDINGS

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**KAISER STEEL - BYPRODUCTS AREA (Continued)**

**S101272831**

four separate sites: the Tar Pits area, the Byproducts area, the Chemwest area, and the Landfill area. The Byproducts Area- Approximately 340 acres in the northern part of Kaiser Steel Resources. This area includes an approximated sixteen-acre portion in which volatile portions of the coking operations were processed to produce other materials of potential value. Numerous underground storage tanks which contained light oils, motor fuels, and various volatile aromatic hydrocarbons were also located in this portion. This area was found to contain elevated soil concentrations of PAHs and volatile aromatic hydrocarbons. Routes of exposure are through dermal contact and inhalation of volatiles. Possible receptors are workers onsite and residents of houses in the vicinity. DTSC applied RAP for the By Products Area and the RAP was implemented. The remedy included a 13 acre CAP, excavation and off-site disposal, and vapor extraction for VOCs.

Comments Date: 01111999  
Comments: Transition to Chapter 6.5 - Amendment to the existing Operation  
Comments Date: 01111999  
Comments: & Maintenance Agreement signed by the RP.  
Comments Date: 02211995  
Comments: DTSC completed its review of the Feasibility Study Report  
Comments Date: 02211995  
Comments: for the By-Procuts Plant area and has approved the Report  
Comments Date: 02211995  
Comments: as submitted.  
Comments Date: 05021995  
Comments: DTSC approved the final Remedial Action Plan and CEQA  
Comments Date: 05021995  
Comments: documents for the Kaiser Steel, By-Products Area site. The  
Comments Date: 05021995  
Comments: selected remedial alternative includes the installation of a  
Comments Date: 05021995  
Comments: low-permeability membrane cap with long term maintenance,  
Comments Date: 05021995  
Comments: groundwater monitoring, and deed restriction.  
Comments Date: 05311986  
Comments: This is the date the site was first listed pursuant to  
Comments Date: 05311986  
Comments: section 25356.  
Comments Date: 07292002  
Comments: Completion of 5-Year Review report on California Speedway (OU2)  
Comments Date: 07292002  
Comments: cap.  
Comments Date: 09161995  
Comments: The Design was completed in phases in order to expedite  
Comments Date: 09161995  
Comments: remediation. Areas in need of remediation were segregated  
Comments Date: 09161995  
Comments: and a design document was completed and approved for each  
Comments Date: 09161995  
Comments: segregated remedial unit. The final design document which  
Comments Date: 09161995  
Comments: included a compilation of all approved remedial unit  
Comments Date: 09161995

Map ID  
Direction  
Distance  
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MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL - BYPRODUCTS AREA (Continued)**

**S101272831**

Comments: design documents was submitted and approved shortly before  
Comments Date: 09161995  
Comments: site certification, although the majority of remedial  
Comments Date: 09161995  
Comments: work had already been completed.  
Comments Date: 09261995  
Comments: The Final Remedial Action consisted of the design and  
Comments Date: 09261995  
Comments: construction of a 12.84 acre cap over contaminated By-  
Comments Date: 09261995  
Comments: Products Plant soils. The cap is possibly the largest  
Comments Date: 09261995  
Comments: engineered remedial cap ever constructed in California.  
Comments Date: 09261995  
Comments: Excavation, treatment and removal of hazardous substances  
Comments Date: 09261995  
Comments: in the cooling tower sludge bed and the blast furnace gas  
Comments Date: 09261995  
Comments: washer water sludge beds was also performed. Approximately  
Comments Date: 09261995  
Comments: 9,212 tons of hazardous metals sludge waste was treated by  
Comments Date: 09261995  
Comments: chemical fixation; 21,200 tons of waste was removed and  
Comments Date: 09261995  
Comments: disposed of off-site primarily at East Carbon Development  
Comments Date: 09261995  
Comments: Corporation landfill in Utah; and 370 tons of coal tar  
Comments Date: 09261995  
Comments: was shipped off-site for recycling. Vapor extraction of  
Comments Date: 09261995  
Comments: volatile organic contaminants is continuing within the  
Comments Date: 09261995  
Comments: capped area at the former By-Products Plant. A system of  
Comments Date: 09261995  
Comments: extraction wells, including a thermal oxidation unit for  
Comments Date: 09261995  
Comments: destruction of extracted vapors is in place and operating.  
Comments Date: 09261995  
Comments: Not reported  
Comments Date: 09261995  
Comments: DTSC also entered into an O&M Agreement for the "capped  
Comments Date: 09261995  
Comments: property", the "restricted property", and limited areas in  
Comments Date: 09261995  
Comments: the remaining operable unit #2 property. Deed restrictions  
Comments Date: 09261995  
Comments: were also recorded for the "capped property" and  
Comments Date: 09261995  
Comments: "restricted property".  
Comments Date: 10231995  
Comments: DTSC certifies that Kaiser Ventures, Inc., (Kaiser) has  
Comments Date: 10231995  
Comments: completed implementation of all remedial work specified  
Comments Date: 10231995  
Comments: in the "Remedial Action Plan for Operable Unit No. 2, March  
Comments Date: 10231995  
Comments: 1995 (RAP)" and as specified in the final remedial action

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**KAISER STEEL - BYPRODUCTS AREA (Continued)**

**S101272831**

Comments Date: 10231995  
 Comments: report. The site does require ongoing O&M and monitoring  
 Comments Date: 10231995  
 Comments: efforts.  
 Comments Date: 11141995  
 Comments: Deed restrictions were recorded for the "capped property" and  
 Comments Date: 11141995  
 Comments: "restricted property".  
 Comments Date: 12181996  
 Comments: Excavated, sampled, and removed metals and PAH affected soil from  
 Comments Date: 12181996  
 Comments: a former scrap metal recycling facility located on the Kaiser  
 Comments Date: 12181996  
 Comments: Steel Site. The Site was closed when background levels for soils  
 Comments Date: 12181996  
 Comments: were achieved in accordance with PEA Guidance.  
 ID Name: CALSTARS CODE  
 ID Value: 400081  
 ID Name: EPA IDENTIFICATION NUMBER  
 ID Value: CAD008274938  
 ID Name: BEP DATABASE PCODE  
 ID Value: P42070  
 ID Name: CALSITES ID NUMBER  
 ID Value: 36280140  
 Alternate Name: KAISER STEEL - BYPRODUCTS AREA KAISER STEEL RESOURCES, INC.  
 Special Programs Code: R3012  
 Special Programs Name: RCRA 3012

**P79 KAISER STEEL**  
**NNW 9400 CHERRY AVENUE**  
**1/2-1 FONTANA, CA 92335**  
**0.673 mi.**  
**3551 ft. Site 5 of 5 in cluster P**

**CA HIST Cal-Sites S101272834**  
**CA SWF/LF N/A**  
**CA HIST CORTESE**  
**CA SLIC**  
**CA DEED**  
**CA VCP**  
**CA ENVIROSTOR**

**Relative:**  
**Higher**

**Actual:**  
**1118 ft.**

Calsite:  
 Region: CYPRESS  
 Facility ID: 36330009  
 Facility Type: RP  
 Type: RESPONSIBLE PARTY  
 Branch: SB  
 Branch Name: SO CAL - CYPRESS  
 File Name: Not reported  
 State Senate District: 04221996  
 Status: ANNUAL WORKPLAN (AWP) - ACTIVE SITE  
 Status Name: ANNUAL WORKPLAN - ACTIVE SITE  
 Lead Agency: DEPT OF TOXIC SUBSTANCES CONTROL  
 NPL: Not Listed  
 SIC Code: 33  
 SIC Name: MANU - PRIMARY METAL INDUSTRIES  
 Access: Controlled  
 Cortese: Not reported  
 Hazardous Ranking Score: Not reported  
 Date Site Hazard Ranked: Not reported  
 Groundwater Contamination: Confirmed  
 Staff Member Responsible for Site: YAREF  
 Supervisor Responsible for Site: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Region Water Control Board: SA  
Region Water Control Board Name: SANTA ANA  
Lat/Long Direction: Not reported  
Lat/Long (dms): 0 0 0 / 0 0 0  
Lat/long Method: Not reported  
Lat/Long Description: Not reported  
State Assembly District Code: 63  
State Senate District Code: 32  
Facility ID: 36330009  
Activity: DISC  
Activity Name: DISCOVERY  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 03011980  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330009  
Activity: ORDER  
Activity Name: I/SE, IORSE, FFA, FFSRA, VCA, EA  
AWP Code: CNSNT  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 08112000  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330009

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Activity: PPP  
Activity Name: PUBLIC PARTICIPATION PLAN  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 11301989  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330009  
Activity: SS  
Activity Name: SITE SCREENING  
AWP Code: EPASI  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 06061990  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330009  
Activity: RIFS  
Activity Name: REMEDIAL INVESTIGATION / FEASIBILITY STUDY  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 12031992  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330009  
Activity: CEQA  
Activity Name: CEQA INCLUDING NEGATIVE DECS  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 12281993  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330009  
Activity: RAP  
Activity Name: REMEDIAL ACTION PLAN / RECORD OF DECISION  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 12281993  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330009  
Activity: PEA  
Activity Name: PRELIMINARY ENDANGERMENT ASSESSMENT  
AWP Code: WEST  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 06281996  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330009  
Activity: DES  
Activity Name: DESIGN  
AWP Code: MRF  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 06121997  
Est Person-Yrs to complete: 0  
Estimated Size: L  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 23  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330009  
Activity: RMDL  
Activity Name: REMEDIAL ACTION (RAP REQUIRED)  
AWP Code: PITS

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 06052003  
Est Person-Yrs to complete: 0  
Estimated Size: X  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: X  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: N  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 5  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330009  
Activity: RAP  
Activity Name: REMEDIAL ACTION PLAN / RECORD OF DECISION  
AWP Code: MRF  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 05211997  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330009  
Activity: CEQA  
Activity Name: CEQA INCLUDING NEGATIVE DECS  
AWP Code: MRF  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 05211997  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330009  
Activity: RIFS  
Activity Name: REMEDIAL INVESTIGATION / FEASIBILITY STUDY  
AWP Code: PITS  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 04071999  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330009  
Activity: RAP  
Activity Name: REMEDIAL ACTION PLAN / RECORD OF DECISION  
AWP Code: PITS  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 12202001  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330009  
Activity: RAW  
Activity Name: REMOVAL ACTION WORKPLAN  
AWP Code: NAPA  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 06301998  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330009  
Activity: RMDL  
Activity Name: REMEDIAL ACTION (RAP REQUIRED)  
AWP Code: MRF  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 12081997  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 50000  
Liquids Treated (Gals): 10000  
Action Included Capping: X  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: N  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 22  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330009  
Activity: DEED  
Activity Name: DEED RESTRICTIONS  
AWP Code: MRF  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Comments Date:	06171997
Est Person-Yrs to complete:	0
Estimated Size:	L
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	23
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36330009
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	MRF
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06131997
Est Person-Yrs to complete:	0
Estimated Size:	L
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	23
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36330009
Activity:	CHP65
Activity Name:	AMENDED ORDER/AGREEMENT, CHAPTER 6.5 TRANSITION
AWP Code:	MRF
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	01111999
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported

Map ID  
 Direction  
 Distance  
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MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36330009
Activity:	CHP65
Activity Name:	AMENDED ORDER/AGREEMENT, CHAPTER 6.5 TRANSITION
AWP Code:	ORDER
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	01111999
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36330009
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	NAPA
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	04191999
Est Person-Yrs to complete:	0
Estimated Size:	S
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	1450
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	REMOVAL OF CONTAMINATED SOIL.
For Commercial Reuse:	0
For Industrial Reuse:	5.20000
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	36330009

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Activity: DEED  
Activity Name: DEED RESTRICTIONS  
AWP Code: NAPA  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 06041999  
Est Person-Yrs to complete: 0  
Estimated Size: M  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330009  
Activity: PEA  
Activity Name: PRELIMINARY ENDANGERMENT ASSESSMENT  
AWP Code: WEND  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 09132001  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 250  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330009  
Activity: RA  
Activity Name: REMOVAL ACTION  
AWP Code: HRP  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 12231999  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 2400  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: N  
Activity Comments: Not reported  
For Commercial Reuse: 3.10000  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330009  
Activity: DES  
Activity Name: DESIGN  
AWP Code: Not reported  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 06242002  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330009  
Activity: DEED  
Activity Name: DEED RESTRICTIONS  
AWP Code: WEND  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 08232001  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
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**KAISER STEEL (Continued)**

**S101272834**

Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Facility ID: 36330009  
Activity: CEQA  
Activity Name: CEQA INCLUDING NEGATIVE DECS  
AWP Code: PITS  
Proposed Budget: 0  
AWP Completion Date: Not reported  
Revised Due Date: Not reported  
Comments Date: 12202001  
Est Person-Yrs to complete: 0  
Estimated Size: Not reported  
Request to Delete Activity: Not reported  
Activity Status: AWP  
Definition of Status: ANNUAL WORKPLAN - ACTIVE SITE  
Liquids Removed (Gals): 0  
Liquids Treated (Gals): 0  
Action Included Capping: Not reported  
Well Decommissioned: Not reported  
Action Included Fencing: Not reported  
Removal Action Certification: Not reported  
Activity Comments: Not reported  
For Commercial Reuse: 0  
For Industrial Reuse: 0  
For Residential Reuse: 0  
Unknown Type: 0  
Alternate Address: WEST END OF SPECIALTY ROAD  
Alternate City,St,Zip: FONTANA, CA 92335  
Alternate Address: 9400 CHERRY AVENUE  
Alternate City,St,Zip: FONTANA, CA 92335  
Background Info: commended for minor material removal. The two RI reports concluded that approximately five percent of the site needed remediation. The site has since been split into four separate sites: the Tarpits area, the Byproducts area the Chemwest area, and the landfill area.  
Not reported  
The Tarpits area is consists of approximately 250 acres in the middle third of the northern part of Kaiser Steel Resources. This area includes three pits containing approximately 31,000 cubic yards of the heavier fractions of coal tar from a coking operation and associated contaminated soil. This decanter tank tar sludge is an EPA listed hazardous waste K087. Laboartory analyses indicated high concentrations of polynuclear aromatic hydrocarbons (PAHs), phenols, benzene, toluene, xylenes, and styrene.  
Not reported  
Routes of exposure are through dermal contact an inhalation of volatiles.  
Not reported  
A field test study was completed in June 2000 to determine the feasibility of solidification of the tar. A Remedial Action Plan was submitted in June 2001 and public participation activities were conducted in July 2001.  
The Kaiser Steel Resources facility is located on approximately

Map ID  
Direction  
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MAP FINDINGS

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**KAISER STEEL (Continued)**

**S101272834**

880 acres in Fontana. The facility was a former integrated steel production plant that the Kaiser Steel Corporation owned and operated from 1942 to 1983. Following shutdown, portions of the original Kaiser property were sold or otherwise transferred. During this time, the Kaiser Steel Corporation entered bankruptcy proceedings. When the Corporation emerged from bankruptcy, their name changed to Kaiser Steel Resources.

Not reported

The Department became aware of the potential presence of hazard waste in 1985, when asbestos and liquids from a benzol production area were released during demolition of onsite structures.

The asbestos was removed and is no longer of concern.

Also in 1985, an environmental assessment was conducted by J.M. Montgomery at the Kaiser Steel Corporation's request. As a result of these actions, both the Department and U.S. EPA became involved with the site.

Not reported

In 1988, U.S. EPA proposed listing the Kaiser Steel facility on the NPL. In October, U.S. EPA decided not to list the site.

Not reported

During the bankruptcy proceedings, the Department and Kaiser Steel submitted a Consent Order for the investigation and mitigation of the site to the court for review and approval. Subsequent to the court's approval, the Department entered into a consent order in August 1988, with Kaiser Steel Resources. The Lusk Company, a land development company, has negotiated an agreement with Kaiser Steel Resources to fund the initial cleanup. Future work will be funded through the sale of the remediated portions of the site.

Not reported

In August 1988, and January 1989, Preliminary Assessment/Site Inspection Reports (PA/SI) were completed in an effort to identify areas of contamination. Of the 32 areas investigated, 12 were identified as requiring no further action and 20 were recommended for remedial investigation.

Not reported

The remedial investigation at the site was conducted in two phases, phase I and Phase II. Phase I, completed in April 1990, evaluated the 20 potential sites and concluded that three required further investigation and/or remediation. Of these three, two areas, the by-products plant and the east slag pile landfill, were recommended for further remedial investigation, and the third area, the tar pits, was recommended for remediation. Phase II, completed in October 1990, further sampled and analyzed the by-products plant and east slag pile landfill. Results concluded that these areas required remediation. Two smaller areas, the cooling tower sludge pit and the furnace dust and mills scale piles, were also investigated in Phase II. These areas were re-

Comments Date:

06011984

Comments:

sold to CA Steel Inc (1400 San Bernardino Avenue, Fontana,

Comments Date:

06011984

Comments:

92335, (714)350-6207) in 1984. Kaiser still owns waste

Comments Date:

01011978

Comments:

State Inspection (TO 81 RWQCB): Many breaks in Cr Wst Line.

Comments Date:

01111999

Comments:

Transition to Chapter 6.5 - Amendment to the existing Operation

Comments Date:

01111999

Map ID  
Direction  
Distance  
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MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Comments: & Maintenance Agreement signed by the RP.  
Comments Date: 01111999  
Comments: ..  
Comments Date: 01111999  
Comments: Transition to Chapter 6.5 - Amendment to the existing Consent  
Comments Date: 01111999  
Comments: Order signed by the RP.  
Comments Date: 01151962  
Comments: Violation detected: Acid waste to flood control ditch.  
Comments Date: 01171983  
Comments: Records Search: Steel Foundry & Mfg Waste Survey -- pits  
Comments Date: 01171983  
Comments: onsite.  
Comments Date: 03011980  
Comments: Facility identified via Wade's Survey (1980).  
Comments Date: 03121976  
Comments: State Inspection (RWQCB): Reclamation Pond. Overflow to San  
Comments Date: 03121976  
Comments: Sevaine Flood Control Channel.  
Comments Date: 03121981  
Comments: State Inspection (RWQCB): Water going to mulberry ditch.  
Comments Date: 04011967  
Comments: Violation detected: Effluent discharge in San Sevaine Creek.  
Comments Date: 04071999  
Comments: RI/FS for the Tar Pits Parcel completed.  
Comments Date: 04191999  
Comments: Removal of soil contaminated from Napa Lot Parcel with poly-  
Comments Date: 04191999  
Comments: cyclic aromatic hydrocarbons (PAHs). Removed soils were placed  
Comments Date: 04191999  
Comments: in a Corrective Action Management Unit (CAMU) on site.  
Comments Date: 04201981  
Comments: Many breaks in chrome waste line causes spills on site.  
Comments Date: 05021977  
Comments: Notice and Order: Cease & Desist Order. Built Holding Pond.  
Comments Date: 05211997  
Comments: Completed Remedial Action Plan (RAP) amendment for Materials  
Comments Date: 05211997  
Comments: Recycling Facility (MRF) parcel of the Kaiser Steel site.  
Comments Date: 05211997  
Comments: Not reported  
Comments Date: 05211997  
Comments: Completed initial study and negative declaration for the Material  
Comments Date: 05211997  
Comments: Recycling Facility (MRF) parcel of the Kaiser Steel site.  
Comments Date: 05231979  
Comments: State Inspection (RWQCB): Non-Grp 3 wastes to Class III disp  
Comments Date: 05311986  
Comments: This is the date the site was first listed pursuant to  
Comments Date: 05311986  
Comments: section 25356.  
Comments Date: 06011984  
Comments: Telephone conversation with H. Rugge, Kaiser Steel, (714)  
Comments Date: 06011984  
Comments: 350-5448, 06/20/84: 1) Source Act: Steel production, 2) Fac  
Comments Date: 06011984  
Comments: Type: Slag Piles, Lined/Unlined Pond, 3) Waste Type:

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Comments Date: 06011984  
Comments: Phenols, FE, AL, ZN, Sulphates, Tar. South half of property  
Comments Date: 06011984  
Comments: treatment area & a service contract with CA Steel for trmt/  
Comments Date: 06011984  
Comments: disp of their waste. Two hazardous sites on Kaiser Steel  
Comments Date: 06011984  
Comments: Property -- Chemwest Ferrous Chloride Ponds (#36-28-0140) &  
Comments Date: 06011984  
Comments: emptied chrome ponds. RWQCB records searched. Submitted to  
Comments Date: 06011984  
Comments: U.S. EPA.  
Comments Date: 06021982  
Comments: State Inspection (RWQCB): Oily sewage sludge may not be  
Comments Date: 06021982  
Comments: acceptable at Class II Site.  
Comments Date: 06041999  
Comments: Industrial use deed restriction completed for 5.2 acres of Napa  
Comments Date: 06041999  
Comments: Lot Parcel. This follows a removal action of 1,450 cubic yards  
Comments Date: 06041999  
Comments: of PAH contaminated soil in October 1998. Soil placed in CAMU.  
Comments Date: 06061990  
Comments: Region 4 staff reviewed Expanded SI. Data was collected to  
Comments Date: 06061990  
Comments: show release of metals downgradient. Since site is being  
Comments Date: 06061990  
Comments: addressed under DTSC oversight, report was sent to file.  
Comments Date: 06091989  
Comments: EPA prepared CERCLA Expanded SI Report.  
Comments Date: 06121997  
Comments: A Remedial Design for two caps was completed for Operable Unit  
Comments Date: 06121997  
Comments: No. 1.  
Comments Date: 06151983  
Comments: Facility drive-by: Active large facility. No abandoned haz  
Comments Date: 06151983  
Comments: waste product.  
Comments Date: 06171997  
Comments: A Deed Restriction was placed on approximately 23 acres of land  
Comments Date: 06171997  
Comments: to restrict land-use to industrial types of activities. A  
Comments Date: 06171997  
Comments: materials recycling facility will be developed on the remediated  
Comments Date: 06171997  
Comments: property. An Operation and Maintenance Agreement including an  
Comments Date: 06171997  
Comments: Operation and Maintenance Plan were completed for the two  
Comments Date: 06171997  
Comments: remedial caps that were designed.  
Comments Date: 06242002  
Comments: Design for cap for Tar Pits area of OU1.  
Comments Date: 06301998  
Comments: Approval of Removal Action Workplan for removal of approximately  
Comments Date: 06301998  
Comments: 10,000 yds of PAH/metal affected soil.  
Comments Date: 07011975

Map ID  
Direction  
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MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Comments: Notice and Order: Clean-up Order.  
Comments Date: 07021980  
Comments: Federal Inspection (RCRA): Landfill Inspection. Non-compliance. Unfenced perimeter, inter-m groundwater quality.  
Comments Date: 07021980  
Comments: Former integrated steel production plant. Contaminants include petroleum hydrocarbons, heavy metals, PNAs, VOCs, naphthalene, Pb, Cd, Ni, and Zn.  
Comments Date: 07251991  
Comments: The Kaiser Steel Site broken into four separate sites (Kaiser Steel - Tar pits Area; Kaiser Steel - Byproducts Area; Kaiser Steel - Chemwest Area; and Kaiser Steel - Landfill Area) in July, 1992.  
Comments Date: 07301992  
Comments: Consent Order with CCG Ontario, LLC.  
Comments Date: 07301992  
Comments: Removal of soil contaminated with PAHs from Household Recycling Parcel completed. Removed soil placed in Corrective Action Management Unit on site.  
Comments Date: 0812000  
Comments: Deed Restriction on West End Property to complete PEA.  
Comments Date: 08121999  
Comments: Completion and approval of PEA with Deed Restriction. No Further action.  
Comments Date: 08232001  
Comments: Violation Detected (RWQCB): Chem sludge not to CI III disp.  
Comments Date: 09132001  
Comments: Hazard Ranking Score 27.13; Sent to EPA; HQ received 7/7/87.  
Comments Date: 11071979  
Comments: Inspection (Consulting Engineers, Inc.): 28 waste areas with haz wastes.  
Comments Date: 11251987  
Comments: Remediated a 22 acre parcel of the Kaiser Steel site by treating metal and PAH contaminated soils, and capping. The site has been developed into the West Valley Materials Recycling Facility.  
Comments Date: 12011983  
Comments: State Inspection (RWQCB): Discharge of industrial waste in violation of req. Oil skimming sludge bed overflowing to ditch. Recommend file to NPDES appl.  
Comments Date: 12081997  
Comments: Completed field work for second solidification field test at the Tar Pits  
Comments Date: 12141973  
Comments Date: 12141973  
Comments Date: 12151999  
Comments Date: 12151999

Map ID  
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MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Comments Date: 12161981  
Comments: Enforcement Letter: Oil discharge to storm drain. Outlined  
Comments Date: 12161981  
Comments: remedial act.  
Comments Date: 12202001  
Comments: A negative declaration was approved for the Tar Pits portion of  
Comments Date: 12202001  
Comments: OU1, Remedial Action Plan. The Second Amendment to the Remedial  
Comments Date: 12202001  
Comments: Action Plan for Kaiser Steel, Operable Unit Number 1, Tar Pits  
Comments Date: 12202001  
Comments: Area was approved.  
Comments Date: 12231999  
Comments: An industrial use deed restriction completed for 3.1 acres of  
Comments Date: 12231999  
Comments: the Household Recycling Parcel. This follows a removal action  
Comments Date: 12231999  
Comments: of 2.400 cubic yards of contaminated soil.  
ID Name: CALSTARS CODE  
ID Value: 400081  
ID Name: CALSITES ID NUMBER  
ID Value: 36280140  
ID Name: BEP DATABASE PCODE  
ID Value: P42070  
ID Name: EPA IDENTIFICATION NUMBER  
ID Value: CAD008274938  
Alternate Name: KAISER STEEL RESOURCESKAISER STEEL - TAR PITS AREACCG ONTARIO LLC  
Special Programs Code: R3012  
Special Programs Name: RCRA 3012

**SWF/LF (SWIS):**

Region: STATE  
Facility ID: 36-AA-0018  
Lat/Long: 34.0833299 / -117.48999  
Owner Name: Resources  
Owner Telephone: Not reported  
Owner Address: Not reported  
Owner Address2: 8300 Utica Avenue, Suite 301  
Owner City,St,Zip: Rancho Cucamonga, CA 91730  
Operational Status: Closed  
Operator: Resources  
Operator Phone: Not reported  
Operator Address: Not reported  
Operator Address2: 8300 Utica Avenue, Suite 301  
Operator City,St,Zip: Rancho Cucamonga, CA 91730  
Permit Date: Not reported  
Permit Status: Not reported  
Permitted Acreage: Not reported  
Activity: Solid Waste Disposal Site  
Regulation Status: Not Currently Regulated  
Landuse Name: Not reported  
GIS Source: Map  
Category: Disposal  
Unit Number: 01  
Inspection Frequency: None  
Accepted Waste: Not reported  
Closure Date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Closure Type: Not reported  
Disposal Acreage: Not reported  
SWIS Num: 36-AA-0018  
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: 34.0833299 / -117.48999

**HIST CORTESE:**

Region: CORTESE  
Facility County Code: 36  
Reg By: CALSI  
Reg Id: 36330009

Region: CORTESE  
Facility County Code: 36  
Reg By: CALSI  
Reg Id: 36330047

Region: CORTESE  
Facility County Code: 36  
Reg By: CALSI  
Reg Id: 36330048

Region: CORTESE  
Facility County Code: 36  
Reg By: CALSI  
Reg Id: 36330049

**SLIC:**

Region: STATE  
**Facility Status: Completed - Case Closed**  
Status Date: 06/23/2009  
Global Id: SLT8R1484121  
Lead Agency: SANTA ANA RWQCB (REGION 8)  
Lead Agency Case Number: Not reported  
Latitude: 34.142786  
Longitude: -117.487645  
Case Type: Cleanup Program Site  
Case Worker: KDP  
Local Agency: Not reported  
RB Case Number: SLT8R148  
File Location: Not reported  
Potential Media Affected: Other Groundwater (uses other than drinking water)  
Potential Contaminants of Concern: Other inorganic / salt  
Site History: CONTAMINANTS IN THE GROUNDWATER INCLUDE: DISSOLVED MINERALS, AND ORGANICS. REMEDIATION ALTERNATIVES BEING DEVELOPED

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

**DEED:**

Area: PROJECT WIDE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Sub Area: Not reported  
Site Type: CORRECTIVE ACTION  
Status: CERTIFIED / OPERATION & MAINTENANCE  
Agency: Not reported  
Covenant Uploaded: Not reported  
Deed Date(s): 12/13/2010  
EDR Link ID: 80001542

Area: OU-1  
Sub Area: WEST END PROPERTY AREA  
Site Type: VOLUNTARY CLEANUP  
Status: ACTIVE  
Agency: Not reported  
Covenant Uploaded: Not reported  
Deed Date(s): 08/23/2001  
EDR Link ID: 60001356

Area: OU-1  
Sub Area: HOUSEHOLD RECYCLING PARCEL  
Site Type: VOLUNTARY CLEANUP  
Status: ACTIVE  
Agency: Not reported  
Covenant Uploaded: Not reported  
Deed Date(s): 01/06/2000  
EDR Link ID: 60001356

Area: OU-3  
Sub Area: EAST SLAG PILE LANDFILL AREA (ESPLA)  
Site Type: VOLUNTARY CLEANUP  
Status: ACTIVE  
Agency: Not reported  
Covenant Uploaded: Not reported  
Deed Date(s): 12/13/2010  
EDR Link ID: 60001356

Area: OU-4  
Sub Area: CHEMWEST LOWER AREA  
Site Type: VOLUNTARY CLEANUP  
Status: ACTIVE  
Agency: Not reported  
Covenant Uploaded: Not reported  
Deed Date(s): 12/22/2010  
EDR Link ID: 60001356

Area: OU-1  
Sub Area: TAR PITS AREA  
Site Type: VOLUNTARY CLEANUP  
Status: ACTIVE  
Agency: Not reported  
Covenant Uploaded: Not reported  
Deed Date(s): 12/13/2010  
EDR Link ID: 60001356

Area: OU-3  
Sub Area: OILY SLUDGE BEDS  
Site Type: VOLUNTARY CLEANUP  
Status: ACTIVE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Agency: Not reported  
Covenant Uploaded: Not reported  
Deed Date(s): 12/13/2010  
EDR Link ID: 60001356

Area: OU-4  
Sub Area: CHEMWEST UPPER AREA  
Site Type: VOLUNTARY CLEANUP  
Status: ACTIVE  
Agency: Not reported  
Covenant Uploaded: Not reported  
Deed Date(s): 12/13/2010  
EDR Link ID: 60001356

Area: OU-3  
Sub Area: MULBERRY DITCH  
Site Type: VOLUNTARY CLEANUP  
Status: ACTIVE  
Agency: Not reported  
Covenant Uploaded: Not reported  
Deed Date(s): 12/13/2010  
EDR Link ID: 60001356

Area: OU-3  
Sub Area: SEWAGE TREATMENT PLANT AREA  
Site Type: VOLUNTARY CLEANUP  
Status: ACTIVE  
Agency: Not reported  
Covenant Uploaded: Not reported  
Deed Date(s): 12/13/2010  
EDR Link ID: 60001356

Area: OU-1  
Sub Area: MATERIALS RECOVERY FACILITY (MRF) AREA  
Site Type: VOLUNTARY CLEANUP  
Status: ACTIVE  
Agency: Not reported  
Covenant Uploaded: Not reported  
Deed Date(s): 06/17/1997  
EDR Link ID: 60001356

Area: OU-1  
Sub Area: NAPA LOTS AREA  
Site Type: VOLUNTARY CLEANUP  
Status: ACTIVE  
Agency: Not reported  
Covenant Uploaded: Not reported  
Deed Date(s): 06/04/1999  
EDR Link ID: 60001356

Area: OU-3  
Sub Area: WEST SLAG PILE AREA  
Site Type: VOLUNTARY CLEANUP  
Status: ACTIVE  
Agency: Not reported  
Covenant Uploaded: Not reported  
Deed Date(s): 04/17/2002

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

EDR Link ID: 60001356

Area: OU-2  
Sub Area: CAPPED PROPERTY  
Site Type: VOLUNTARY CLEANUP  
Status: ACTIVE  
Agency: Not reported  
Covenant Uploaded: Not reported  
Deed Date(s): 11/14/1995  
EDR Link ID: 60001356

Area: OU-2  
Sub Area: RESTRICTED PROPERTY  
Site Type: VOLUNTARY CLEANUP  
Status: ACTIVE  
Agency: Not reported  
Covenant Uploaded: Not reported  
Deed Date(s): 11/14/1995  
EDR Link ID: 60001356

Area: OU-4  
Sub Area: CHEMWEST LOWER AREA  
Site Type: VOLUNTARY CLEANUP  
Status: ACTIVE  
Agency: Not reported  
Covenant Uploaded: Not reported  
Deed Date(s): 07/10/1996  
EDR Link ID: 60001356

VCP:

Facility ID: 60001356  
Site Type: Voluntary Cleanup  
Site Type Detail: Voluntary Cleanup  
Site Mgmt. Req.: NONE SPECIFIED  
Acres: 862  
National Priorities List: NO  
Cleanup Oversight Agencies: SMBRP, IWMB, RWQCB 8 - Santa Ana, SAN BERNARDINO COUNTY  
Lead Agency: SMBRP  
Lead Agency Description: DTSC - Site Cleanup Program  
Project Manager: Tayseer Mahmoud  
Supervisor: Eileen Mananian  
Division Branch: Cleanup Cypress  
Site Code: 401621  
Assembly: 52  
Senate: 32  
Special Programs Code: Voluntary Cleanup Program  
Status: Active  
Status Date: 02/27/2012  
Restricted Use: YES  
Funding: Responsible Party  
Lat/Long: 34.08714 / -117.5141  
APN: 0231-011-09, 0231-011-10, 0231-011-11, 0231-011-12, 0231-111-17, 0231-111-18, 0231-111-19, 0231-111-20, 0238-031-32, 0238-031-33, 0238-031-34, 0238-031-35, 0238-031-37, 0238-031-38, 0238-031-38, 229-291-33, 238-031-36  
Past Use: MANUFACTURING - METAL, MANUFACTURING - METAL, LANDFILL - CONSTRUCTION, LANDFILL - HAZARDOUS WASTE, MANUFACTURING - METAL,

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

LANDFILL - HAZARDOUS WASTE, MANUFACTURING - METAL, HAZARDOUS WASTE TREATMENT, MANUFACTURING - METAL, METAL PLATING - CHROME, MANUFACTURING - METAL, WASTE - SEWAGE TREATMENT PLANT, WASTE - SEWAGE TREATMENT PONDS, MANUFACTURING - METAL, WASTE - INDUSTRIAL TREATMENT FACILITY, WASTE - INDUSTRIAL WASTE LINE, WASTE - SEWAGE TREATMENT PLANT, WASTE - SEWAGE TREATMENT PONDS, WASTE WATER PONDS

Potential COC: 30001, 30003, 30013, 30018, 30019, 30022, 30024, 30025, 30152, 30153, 30160, 30001, 30013, 30152, 30594, 30001, 40001, 30003, 30013, 30015, 30018, 30019, 30020, 30022, 30024, 30025, 3002502, 30027, 30152, 30153, 30160, 30594, 30003, 30019, 30005, 30019, 3002502, 30013, 30335, 30019, 30019, 30058, 30080, 30108, 30152, 30154, 30156, 30402, 30407, 30542, 30587, 30594, 30019, 30058, 30080, 30108, 30152, 30154, 30156, 30402, 30407, 30542, 30587, 30594, 30019, 30080, 30108, 30152, 30154, 30156, 30402, 30407, 30542, 30594, 31001, 30001, 30003, 30013, 30018, 30019, 30022, 30024, 30025, 3002502, 30027, 30152, 30153, 30160, 30594, 31001, 30001, 30005, 30019, 30024, 3002502, 30548, 30594, 31001, 30003, 30019, 3002502, 31001, 30003, 30019, 3002502, 31001, 30153

Confirmed COC: 30018,30019,30022,30024,30025,30152,30153,30160,30001,30003,30013,, ,30152,30001,30013,30594,, ,40001,30018,30019,30020,30022,30024,30025,30027,30152,30153,30160, 30001,30003,30013,30015,3002502,30594,, ,30019,30003,, ,30005,30019,3002502,, ,30013,30335,, ,30019,, ,30542,30019,30058,30080,30108,30152,30154,30156,30402,30407,30587, 30594,, ,30542,30019,30058,30080,30108,30152,30154,30156,30402,30407,30587, 30594,, ,30542,30019,30080,30108,30152,30154,30156,30402,30407,30594,, ,31000,, ,30001,30003,30013,30019,30022,30024,30025,30152,30153,30160,3002502, 30594,30018,30027,31001,, ,31001,30548,30019,30024,30001,30005,3002502,30594,, ,30003,30019,3002502,31001,, ,30003,30019,3002502,31001,, ,30153,31001-NO

Potential Description: AQUI, OTH, SOIL, SV, IA, SOIL, AQUI, OTH, SOIL, SV, IA, SOIL, SV, SOIL, SV, OTH

Alias Name: CCG Ontario LLC  
Alias Type: Alternate Name  
Alias Name: California Speedway (Penske)  
Alias Type: Alternate Name  
Alias Name: KAISER VENTURES LLC  
Alias Type: Alternate Name  
Alias Name: Kaiser Steel Resources  
Alias Type: Alternate Name  
Alias Name: Kaiser Steel Resources, Inc.  
Alias Type: Alternate Name  
Alias Name: Kaiser Steel-East Slag Pile Landfill  
Alias Type: Alternate Name  
Alias Name: Kaiser Steel-Sewage Plant  
Alias Type: Alternate Name  
Alias Name: Kaiser Ventures LLC  
Alias Type: Alternate Name  
Alias Name: Prologis

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Alias Type:	Alternate Name
Alias Name:	0231-011-09
Alias Type:	APN
Alias Name:	0231-011-10
Alias Type:	APN
Alias Name:	0231-011-11
Alias Type:	APN
Alias Name:	0231-011-12
Alias Type:	APN
Alias Name:	0231-111-17
Alias Type:	APN
Alias Name:	0231-111-18
Alias Type:	APN
Alias Name:	0231-111-19
Alias Type:	APN
Alias Name:	0231-111-20
Alias Type:	APN
Alias Name:	0238-031-32
Alias Type:	APN
Alias Name:	0238-031-33
Alias Type:	APN
Alias Name:	0238-031-34
Alias Type:	APN
Alias Name:	0238-031-35
Alias Type:	APN
Alias Name:	0238-031-37
Alias Type:	APN
Alias Name:	0238-031-38
Alias Type:	APN
Alias Name:	0238-031-38
Alias Type:	APN
Alias Name:	229-291-33
Alias Type:	APN
Alias Name:	238-031-36
Alias Type:	APN
Alias Name:	CAD008274938
Alias Type:	EPA Identification Number
Alias Name:	110010682289
Alias Type:	EPA (FRS #)
Alias Name:	P42070
Alias Type:	PCode
Alias Name:	400081
Alias Type:	Project Code (Site Code)
Alias Name:	401621
Alias Type:	Project Code (Site Code)
Alias Name:	36280140
Alias Type:	Envirostor ID Number
Alias Name:	36330009
Alias Type:	Envirostor ID Number
Alias Name:	36330047
Alias Type:	Envirostor ID Number
Alias Name:	36330048
Alias Type:	Envirostor ID Number
Alias Name:	36330049
Alias Type:	Envirostor ID Number
Alias Name:	60001356
Alias Type:	Envirostor ID Number

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Info:

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/05/2010  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/05/2010  
Comments: .

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Consent Order  
Completed Date: 08/11/2000  
Comments: Consent Order with CCG Ontario, LLC

Completed Area Name: OU-1  
Completed Sub Area Name: Former Heckett Slag Processing Area  
Completed Document Type: Certification  
Completed Date: 03/18/1996  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Southwest Corner Parcel  
Completed Document Type: Certification  
Completed Date: 04/10/1996  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Napa Lots Area  
Completed Document Type: Certification  
Completed Date: 04/19/1999  
Comments: DTSC approved Removal Action Report on April 19, 1999. No further action is necessary for the site subject to the recording of a DTSC approved land use restriction with the County of San Bernardino.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Certification  
Completed Date: 12/08/1997  
Comments: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Certification  
Completed Date: 08/12/1999  
Comments: DTSC concurs that no further remedial action is necessary, subject to the recording of a DTSC approved land use restriction with County of San Bernardino.

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/16/2009  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/16/2009  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Letter - Demand  
Completed Date: 01/20/2011  
Comments: Reminder about unpaid invoice sent.

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: CEQA - Initial Study/ Neg. Declaration  
Completed Date: 10/15/2007  
Comments: Final CEQA package (Neg.Dec., NOD) approved.

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Certification  
Completed Date: 10/23/1995  
Comments: DTSC certifies that Kaiser Ventures, Inc., (Kaiser) has completed implementation of all remedial work specified in the "Remedial Action Plan for Operable Unit No. 2, March 1995 (RAP)" and as specified in the final remedial action report. The site does require ongoing O&M and monitoring efforts.

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Land Use Restriction  
Completed Date: 11/14/1995  
Comments: Deed restriction recorded for the "capped property".

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: CEQA - Initial Study/ Neg. Declaration  
Completed Date: 05/02/1995  
Comments: DTSC approved the final Remedial Action Plan and CEQA documents for the Kaiser Steel, By-Products Area site. The selected remedial alternative includes the installation of a low-permeability membrane cap with long term maintenance, groundwater monitoring, and deed restriction.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Area Name: OU-3  
Completed Sub Area Name: West Slag Pile Area  
Completed Document Type: Land Use Restriction  
Completed Date: 04/17/2002  
Comments: Completion and recording of Deed Restriction (Commercial/ industrial Use) for the West Slag Pile.

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: CEQA - Initial Study/ Neg. Declaration  
Completed Date: 01/23/1998  
Comments: Completed the Neg. Declaration for the Corrective Action Management Unit

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: CEQA - Initial Study/ Neg. Declaration  
Completed Date: 03/24/1995  
Comments: Neg. Declaration

Completed Area Name: OU-1  
Completed Sub Area Name: Not reported  
Completed Document Type: CEQA - Initial Study/ Neg. Declaration  
Completed Date: 12/28/1993  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Reimbursement Agreement  
Completed Date: 01/08/2014  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 10/16/2014  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Correspondence  
Completed Date: 07/22/2014  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: West Slag Pile Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Oily Sludge Beds  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-1

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Sewage Treatment Plant Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Napa Lots Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Mulberry Ditch  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 02/02/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Oily Sludge Beds  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Sewage Treatment Plant Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Restricted Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Oily Sludge Beds  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Napa Lots Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Mulberry Ditch  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Cost Recovery Closeout Memo  
Completed Date: 10/19/2012  
Comments: Project Activities for this OU under Reimbursement Agreement #10-T1049 are completed. Closeout Memo prepared and sent to CRU and Fiscal.

MAP FINDINGS

**KAISER STEEL (Continued)**

**S101272834**

Completed Area Name: PROJECT WIDE  
 Completed Sub Area Name: Not reported  
 Completed Document Type: Annual Oversight Cost Estimate  
 Completed Date: 10/06/2009  
 Comments: Not reported

Completed Area Name: OU-2  
 Completed Sub Area Name: Restricted Property  
 Completed Document Type: Land Use Restriction - Site Inspection/Visit  
 Completed Date: 08/25/2009  
 Comments: Not reported

Completed Area Name: OU-3  
 Completed Sub Area Name: West Slag Pile Area  
 Completed Document Type: Land Use Restriction - Site Inspection/Visit  
 Completed Date: 09/16/2009  
 Comments: Not reported

Completed Area Name: OU-1  
 Completed Sub Area Name: Napa Lots Area  
 Completed Document Type: Land Use Restriction - Site Inspection/Visit  
 Completed Date: 07/27/2006  
 Comments: Not reported

Completed Area Name: OU-1  
 Completed Sub Area Name: West End Property Area  
 Completed Document Type: Land Use Restriction - Site Inspection/Visit  
 Completed Date: 07/27/2006  
 Comments: Not reported

Completed Area Name: OU-1  
 Completed Sub Area Name: Tar Pits Area  
 Completed Document Type: CEQA - Initial Study/ Neg. Declaration  
 Completed Date: 12/20/2001  
 Comments: Complete Notice of Determination for the Tar Pits Area.

Completed Area Name: OU-1  
 Completed Sub Area Name: Napa Lots Area  
 Completed Document Type: Land Use Restriction  
 Completed Date: 06/04/1999  
 Comments: Industrial use deed restriction completed for 5.2 acres of Napa Lot Parcel. This follows a removal action of 1,450 cubic yards of PAH contaminated soil in October 1998. Soil placed in CAMU.

Completed Area Name: OU-1  
 Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
 Completed Document Type: Land Use Restriction  
 Completed Date: 06/17/1997  
 Comments: A Deed Restriction was placed on approximately 23 acres of land to restrict land-use to industrial types of activities. A materials recovery facility (MRF) will be developed on the remediated property. An Operation and Maintenance Agreement including an Operation and Maintenance Plan were completed for the two remedial caps that were designed.

Completed Area Name: OU-1  
 Completed Sub Area Name: Materials Recovery Facility (MRF) Area

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**KAISER STEEL (Continued)**

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Completed Document Type: CEQA - Initial Study/ Neg. Declaration  
Completed Date: 05/21/1997  
Comments: Complete Notice of Determination for the Materials Recovery Facility (MRF).

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/01/2007  
Comments: Annual Inspection Report for Deed Restriction.

Completed Area Name: OU-2  
Completed Sub Area Name: Restricted Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/01/2007  
Comments: Annual Inspection Report for Deed Restriction.

Completed Area Name: OU-3  
Completed Sub Area Name: West Slag Pile Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/02/2007  
Comments: Annual Inspection Report for Deed Restriction.

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Mulberry Ditch  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: West Slag Pile Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Oily Sludge Beds  
Completed Document Type: CEQA - Notice of Exemption  
Completed Date: 07/28/2010

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**KAISER STEEL (Continued)**

**S101272834**

Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Land Use Restriction  
Completed Date: 08/23/2001  
Comments: Deed Restriction on approximately 208 acres for the West End Property to complete PEA.

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Certification  
Completed Date: 12/22/2010  
Comments: The Land Use Covenant and Certification is issued for Tar Pit Parcel a 5.04 acre which includes capped three (3) former coal Tar Pits, encompassing a total of approximately 1.6 acres.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 11/01/2012  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012

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**KAISER STEEL (Continued)**

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Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/13/2012  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: West Slag Pile Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Consent Order  
Completed Date: 10/05/1987  
Comments: Consent Order with Kaiser Steel Corporation.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Consent Order  
Completed Date: 08/22/1988  
Comments: Consent Order to "reorganized" Kaiser Steel Corporation following bankruptcy proceeding.

Completed Area Name: OU-3  
Completed Sub Area Name: West Slag Pile Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 07/27/2006  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/01/2007  
Comments: Annual Inspection Report for Deed Restriction.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/02/2007  
Comments: Annual Inspection Report for Deed Restriction.

Completed Area Name: OU-1  
Completed Sub Area Name: Napa Lots Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/02/2007  
Comments: Annual Inspection Report for Deed Restriction.

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**KAISER STEEL (Continued)**

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Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Operation & Maintenance Order/Agreement  
Completed Date: 09/26/1995  
Comments: O & M Agreement executed.

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/02/2007  
Comments: Annual Inspection Report for Deed Restriction.

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Land Use Restriction  
Completed Date: 12/13/2010  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Land Use Restriction - Amendment  
Completed Date: 12/22/2010  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Design/Implementation Workplan  
Completed Date: 06/24/2002  
Comments: Approved the design for cap for Tar Pits parcel.

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Preliminary Endangerment Assessment Report  
Completed Date: 09/13/2001  
Comments: Completion and approval of supplemental PEA for West End Property requiring Deed Restriction. No Further Action and required Land Use Restrictions.

Completed Area Name: OU-1  
Completed Sub Area Name: Napa Lots Area  
Completed Document Type: Removal Action Completion Report  
Completed Date: 04/19/1999  
Comments: Removal of soil contaminated from Napa Lot Parcel with polycyclic aromatic hydrocarbons (PAHs). Removed soils were placed in the Corrective Action Management Unit (CAMU) (ChemWest Upper Facility -

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**KAISER STEEL (Continued)**

**S101272834**

Consolidated Waste Cell).

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Remedial Action Completion Report  
Completed Date: 12/08/1997  
Comments: Remediated a 22 acre parcel of the Kaiser Steel site by treating metal and PAH contaminated soils, and capping. The site has been developed into the West Valley Materials Recovery Facility (MRF).

Completed Area Name: OU-1  
Completed Sub Area Name: Napa Lots Area  
Completed Document Type: Removal Action Workplan  
Completed Date: 06/30/1998  
Comments: Approval of Removal Action Workplan for NAPA Lots involving the removal of approximately 10,000 yds of PAH and metal impacted soil.

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Remedial Action Plan Amendment  
Completed Date: 12/20/2001  
Comments: The Second Amendment to the Remedial Action Plan for Kaiser Steel, Operable Unit Number 1, Tar Pits Area was approved.

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Remedial Investigation / Feasibility Study  
Completed Date: 04/07/1999  
Comments: RI/FS for the Tar Pits Parcel completed.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Remedial Action Plan  
Completed Date: 05/14/1997  
Comments: Completed Remedial Action Plan (RAP) amendment for Materials Recovery Facility (MRF) parcel of the Kaiser Steel site.

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Remedial Action Completion Report  
Completed Date: 06/05/2003  
Comments: Remediation of the tar pits was determined to be complete.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Design/Implementation Workplan  
Completed Date: 06/12/1997  
Comments: Remedial Design Report for two caps at the materials recovery facility (MRF) was approved.

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Preliminary Endangerment Assessment Report  
Completed Date: 06/28/1996  
Comments: Preliminary Endangerment Assessment Report approved with further action required.

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**KAISER STEEL (Continued)**

**S101272834**

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: 5 Year Review Reports  
Completed Date: 07/29/2002  
Comments: Completion of 5-Year Review report on California Speedway (OU2) cap.

Completed Area Name: OU-2  
Completed Sub Area Name: A&C Recycling  
Completed Document Type: Preliminary Endangerment Assessment Report  
Completed Date: 12/02/1996  
Comments: A & C Recycling - Preliminary Endangerment Assessment Report. Excavated, sampled, and removed metals and PAH affected soil from a former scrap metal recycling facility located on the Kaiser Steel Site. The Site was closed when background levels for soils were achieved in accordance with PEA Guidance.

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedial Action Completion Report  
Completed Date: 09/26/1995  
Comments: The Final Remedial Action consisted of the design and construction of a 12.84 acre cap over contaminated By- Products Plant soils. The cap is possibly the largest engineered remedial cap ever constructed in California. Excavation, treatment and removal of hazardous substances in the cooling tower sludge bed and the blast furnace gas washer water sludge beds was also performed. Approximately 9,212 tons of hazardous metals sludge waste was treated by chemical fixation; 21,200 tons of waste was removed and disposed of off-site primarily at East Carbon Development Corporation landfill in Utah; and 370 tons of coal tar was shipped off-site for recycling. Vapor extraction of volatile organic contaminants is continuing within the capped area at the former By-Products Plant. A system of extraction wells, including a thermal oxidation unit for destruction of extracted vapors is in place and operating. DTSC also entered into an O&M Agreement for the "capped property", the "restricted property", and limited areas in the remaining operable unit #2 property. Deed restrictions were also recorded for the "capped property" and "restricted property".

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Design/Implementation Workplan  
Completed Date: 08/09/1995  
Comments: The Design was completed in phases in order to expedite remediation. Areas in need of remediation were segregated and a design document was completed and approved for each segregated remedial unit. The final design document which included a compilation of all approved remedial unit design documents was submitted and approved shortly before site certification, although the majority of remedial work had already been completed.

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedial Action Plan  
Completed Date: 05/01/1995  
Comments: Not reported

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**KAISER STEEL (Continued)**

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Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedial Investigation / Feasibility Study  
Completed Date: 02/21/1995  
Comments: DTSC completed its review of the Feasibility Study Report for the By-Procuts Plant area and has approved the Report as submitted.

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Remedial Action Completion Report  
Completed Date: 05/17/2010  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Design/Implementation Workplan  
Completed Date: 08/18/2008  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Sewage Treatment Plant Area  
Completed Document Type: Preliminary Endangerment Assessment Report  
Completed Date: 05/21/1999  
Comments: Preliminary Endangerment Assessment for the Sewage Treatment Plant. No further action determined except recording an industrial use only deed restriction.

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Remedial Investigation / Feasibility Study  
Completed Date: 04/20/2006  
Comments: Approval letter completed.

Completed Area Name: OU-3  
Completed Sub Area Name: West Slag Pile Area  
Completed Document Type: Remedial Investigation / Feasibility Study  
Completed Date: 03/17/1999  
Comments: Approval of RI/FS for West Slag Pile.

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Preliminary Endangerment Assessment Report  
Completed Date: 11/29/2005  
Comments: Certified O&M.

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Design/Implementation Workplan  
Completed Date: 06/26/1998  
Comments: Completion of Design for CAMU cover (cap).

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Removal Action Workplan  
Completed Date: 02/10/1998  
Comments: Removal Action Workplan for CAMU was approved.

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**KAISER STEEL (Continued)**

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Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Removal Action Completion Report  
Completed Date: 06/28/1996  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Removal Action Workplan  
Completed Date: 03/29/1995  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Remedial Investigation / Feasibility Study  
Completed Date: 05/11/1994  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedial Action Plan  
Completed Date: 12/28/1993  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedial Investigation / Feasibility Study  
Completed Date: 12/03/1992  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Assessment Report  
Completed Date: 06/06/1990  
Comments: Region 4 staff reviewed Expanded SI. Data was collected to show release of metals. Site is being addressed under DTSC oversight.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Public Participation Plan / Community Relations Plan  
Completed Date: 11/30/1989  
Comments: Public Participation Plan/Community Relations Plan.

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Remedial Action Plan  
Completed Date: 10/31/2007  
Comments: Approval of Final RAP.

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Removal Action Workplan  
Completed Date: 06/30/1998  
Comments: Approval of Removal Action Workplan for Household Recycling Parcel.

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel

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**KAISER STEEL (Continued)**

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Completed Document Type: Removal Action Completion Report  
Completed Date: 08/12/1999  
Comments: Approval of Removal Action Completion Report for the Household Recycling Parcel. Impacted soil taken to Consolidated Waste Cell (aka ChemWest Upper Facility). Deed Restriction needed for residual soil.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 11/01/1989  
Comments: Fact Sheet #1 - Kaiser Steel Mill Site Assessment and Remediation

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 07/01/1990  
Comments: Fact Sheet #2 - "Kaiser Steel Mill Site Assessment and Remediation".

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 11/01/1990  
Comments: Fact Sheet #3 - "Kaiser Steel Mill Site Remediation".

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 02/01/1992  
Comments: Fact Sheet #4 - "Kaiser Steel Mill Site Remediation".

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 10/01/1993  
Comments: Fact Sheet #5 - "Kaiser Steel Mill Site Remediation Update".

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 02/01/1995  
Comments: Fact Sheet #6 - "Kaiser Steel Mill ChemWest Upper Facility Removal Action is Proposed".

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 03/01/1995  
Comments: Fact Sheet #7 - "Kaiser Steel Mill By-Products Plant Area Cleanup Proposal".

Completed Area Name: OU-3  
Completed Sub Area Name: Sewage Treatment Plant Area  
Completed Document Type: Fact Sheets  
Completed Date: 04/01/1995  
Comments: Fact Sheet #8 - "Kaiser Steel Mill Waste Water Treatment Plant Draft Closure Plan".

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**KAISER STEEL (Continued)**

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Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Fact Sheets  
Completed Date: 01/01/1998  
Comments: Fact Sheet #10 - "Kaiser Steel Mill ChemWest Upper Facility Draft Removal Action Workplan".

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 10/03/2005  
Comments: Fact Sheet #12 - DTSC Brownfield Revitalization Success Story

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 11/01/2006  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Monitoring Report  
Completed Date: 09/08/2006  
Comments: Submission of 2nd quarter groundwater monitoring report. DTSC had no comments on the report.

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 06/08/2006  
Comments: Submission of 1st quarter groundwater monitoring report. DTSC had no comments on the report.

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 06/06/2006  
Comments: Submission of 4th quarter groundwater monitoring report. DTSC had no comments on the report.

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 03/27/2006  
Comments: Submission of Annual Inspection Report for Synthetic Membrane Cover.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Fact Sheets  
Completed Date: 03/01/1997  
Comments: Fact Sheet #9 - Materials Recovery Facility - Amended Remedial Action Plan is Proposed

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Fact Sheets  
Completed Date: 06/01/2001

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**KAISER STEEL (Continued)**

**S101272834**

Comments: Fact Sheet #11

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Public Notice  
Completed Date: 01/11/2007  
Comments: Public Notice

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Public Participation Plan / Community Relations Plan  
Completed Date: 01/16/2007  
Comments: Public Participation Plan / Community Relations Plan

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Fact Sheets  
Completed Date: 01/11/2007  
Comments: Fact Sheet #13

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 03/06/2007  
Comments: Submission of 4th quarter groundwater monitoring report for 2006.

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 05/08/2007  
Comments: Approval letter for Annual Inspection Report.

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 05/14/2007  
Comments: Approval of Semi-Annual Inspection and Monitoring Report - Tar Pits Cap.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 05/14/2007  
Comments: Approval of Semi-Annual Inspection & Monitoring Report for MRF Building Floor Cap and Soil Cement Cap.

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 06/11/2007  
Comments: Approval of 1st quarter groundwater monitoring report for 2007.

Completed Area Name: OU-1  
Completed Sub Area Name: Southwest Corner Parcel  
Completed Document Type: Remedial Action Completion Report  
Completed Date: 04/10/1996  
Comments: Project wide Remedial Action Plan requirements have been satisfied.

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**KAISER STEEL (Continued)**

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Further remedial work is not required.

Completed Area Name: OU-1  
Completed Sub Area Name: Former Heckett Slag Processing Area  
Completed Document Type: Remedial Action Completion Report  
Completed Date: 03/18/1996  
Comments: Remedial Action Completion approval letter.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Operations and Maintenance Plan  
Completed Date: 06/11/1997  
Comments: O&M Plan part of O&M Agreement.

Completed Area Name: OU-3  
Completed Sub Area Name: Valley Boulevard Parcel  
Completed Document Type: Preliminary Endangerment Assessment Report  
Completed Date: 06/28/1996  
Comments: Approved PEA Report with no further action and Land Use Restrictions required.

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Other Report  
Completed Date: 06/06/1997  
Comments: Vapor Extraction Closure Report approved.

Completed Area Name: OU-3  
Completed Sub Area Name: Sewage Treatment Plant Area  
Completed Document Type: Other Report  
Completed Date: 09/23/1996  
Comments: Closure Certification accepted for RCRA unit (Industrial Wastewater Treatment Plant).

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: 5 Year Review Workplan  
Completed Date: 08/17/2007  
Comments: Five-year review work plan approved. Need fact sheet for public notification prior to implementation.

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: 5 Year Review Reports  
Completed Date: 07/01/2008  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Risk Assessment Report  
Completed Date: 03/14/1995  
Comments: Baseline Health Risk Assessment approved.

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Operations and Maintenance Plan  
Completed Date: 09/26/1995

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

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**KAISER STEEL (Continued)**

**S101272834**

Comments: O & M Plan included as an exhibit to the O & M Agreement.

Completed Area Name: OU-3  
Completed Sub Area Name: Mulberry Ditch  
Completed Document Type: Site Characterization Workplan  
Completed Date: 08/17/2007  
Comments: Conditionally approved the Work Plan Addendum.

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Site Characterization Workplan  
Completed Date: 08/17/2007  
Comments: Conditionally approved the Work Plan 2nd Addendum.

Completed Area Name: OU-3  
Completed Sub Area Name: Oily Sludge Beds  
Completed Document Type: Site Characterization Workplan  
Completed Date: 08/17/2007  
Comments: Conditionally approved the Work Plan addendum.

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: 5 Year Review Reports  
Completed Date: 08/27/2014  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Remedial Action Plan  
Completed Date: 02/13/2009  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Remedial Action Completion Report  
Completed Date: 07/08/2010  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 09/20/2007  
Comments: Approval of Semi-Annual Inspection & Monitoring Report.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 09/20/2007  
Comments: Approval of Semi-Annual Inspection & Monitoring Report.

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 10/19/2007  
Comments: Fact Sheet #14 approved for distribution.

Completed Area Name: OU-1

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

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**KAISER STEEL (Continued)**

**S101272834**

Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 03/10/2008  
Comments: Conditionally approved report.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 04/13/2009  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 10/19/2007  
Comments: Approval (with comment) of Quarterly Groundwater Monitoring Report.

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 04/07/2008  
Comments: Acceptance of proposed modifications to report.

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 03/10/2008  
Comments: Conditional approval of report.

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Technical Workplan  
Completed Date: 03/28/2008  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Monitoring Report  
Completed Date: 06/25/2008  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Technical Workplan  
Completed Date: 05/07/2009  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 07/01/2008  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Remedial Investigation Workplan  
Completed Date: 06/25/2008

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

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**KAISER STEEL (Continued)**

**S101272834**

Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Monitoring Report  
Completed Date: 09/05/2008  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 07/31/2008  
Comments: Not reported

Completed Area Name: OU-5  
Completed Sub Area Name: Site-Wide Groundwater  
Completed Document Type: Remedial Investigation Workplan  
Completed Date: 11/03/2008  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Public Notice  
Completed Date: 11/19/2008  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Fact Sheets  
Completed Date: 11/19/2008  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Public Participation Plan / Community Relations Plan  
Completed Date: 11/21/2008  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/24/2009  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Technical Workplan  
Completed Date: 04/15/2009  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Characterization Workplan  
Completed Date: 08/04/2009  
Comments: .

Completed Area Name: OU-1

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

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**KAISER STEEL (Continued)**

**S101272834**

Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Site Characterization Workplan  
Completed Date: 07/28/2009  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/08/2005  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 10/01/2009  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Operations and Maintenance Plan  
Completed Date: 06/14/2010  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 02/24/2010  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 10/01/2009  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Oily Sludge Beds  
Completed Document Type: Remedial Investigation / Feasibility Study  
Completed Date: 05/19/2010  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 03/29/2010  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Oily Sludge Beds  
Completed Document Type: Remedial Action Plan  
Completed Date: 07/28/2010  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Mulberry Ditch  
Completed Document Type: Remedial Investigation / Feasibility Study  
Completed Date: 05/24/2010

Map ID  
Direction  
Distance  
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**KAISER STEEL (Continued)**

**S101272834**

Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: .

Completed Area Name: OU-3  
Completed Sub Area Name: Mulberry Ditch  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Restricted Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Oily Sludge Beds  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-1

Map ID  
Direction  
Distance  
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MAP FINDINGS

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**KAISER STEEL (Continued)**

**S101272834**

Completed Sub Area Name: Napa Lots Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: West Slag Pile Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Sewage Treatment Plant Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 01/24/2005  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Restricted Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 07/27/2006  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/16/2006  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Napa Lots Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/16/2009  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Napa Lots Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/05/2010

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

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**KAISER STEEL (Continued)**

**S101272834**

Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/25/2009  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Sewage Treatment Plant Area  
Completed Document Type: Land Use Restriction  
Completed Date: 12/13/2010  
Comments: Combined Land Use Covenant for Sewage Treatment Plant and Oil Sludge Beds.

Completed Area Name: OU-3  
Completed Sub Area Name: Mulberry Ditch  
Completed Document Type: Land Use Restriction  
Completed Date: 12/13/2010  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Mulberry Ditch  
Completed Document Type: CEQA - Notice of Exemption  
Completed Date: 07/27/2010  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Land Use Restriction  
Completed Date: 12/13/2010  
Comments: Not reported

Completed Area Name: OU-5  
Completed Sub Area Name: Site-Wide Groundwater  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 03/29/2010  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/09/2010  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Operations and Maintenance Plan  
Completed Date: 07/08/2010  
Comments: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

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Database(s)

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**KAISER STEEL (Continued)**

**S101272834**

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/29/2010  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Operations and Maintenance Plan  
Completed Date: 06/28/2010  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Mulberry Ditch  
Completed Document Type: Remedial Action Plan  
Completed Date: 07/27/2010  
Comments: Not reported

Completed Area Name: OU-5  
Completed Sub Area Name: Not reported  
Completed Document Type: Monitoring Report  
Completed Date: 06/21/2010  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 05/24/2010  
Comments: Not reported

Completed Area Name: OU-5  
Completed Sub Area Name: Site-Wide Groundwater  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 10/04/2010  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/10/2011  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 09/01/2010  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/29/2010  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

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**KAISER STEEL (Continued)**

**S101272834**

Completed Date: 08/31/2010  
Comments: Not reported

Completed Area Name: OU-5  
Completed Sub Area Name: Site-Wide Groundwater  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 07/20/2010  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 10/18/2010  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 10/04/2010  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 11/08/2010  
Comments: Not reported

Completed Area Name: OU-5  
Completed Sub Area Name: Site-Wide Groundwater  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 11/22/2010  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 11/08/2010  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/10/2011  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/10/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 01/24/2011  
Comments: Not reported

Map ID  
Direction  
Distance  
Elevation

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**KAISER STEEL (Continued)**

**S101272834**

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/10/2011  
Comments: Not reported

Completed Area Name: OU-5  
Completed Sub Area Name: Site-Wide Groundwater  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 04/04/2011  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 04/04/2011  
Comments: Not reported

Completed Area Name: OU-5  
Completed Sub Area Name: Site-Wide Groundwater  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 03/15/2011  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 03/15/2011  
Comments: Not reported

Completed Area Name: OU-5  
Completed Sub Area Name: Site-Wide Groundwater  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 05/17/2011  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 05/17/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: 5 Year Review Reports  
Completed Date: 10/05/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: 5 Year Review Reports  
Completed Date: 10/06/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report

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Direction  
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**KAISER STEEL (Continued)**

**S101272834**

Completed Date: 03/23/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 03/23/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 04/28/2011  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Other Report  
Completed Date: 02/14/1990  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/02/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 07/25/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/23/2011  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 12/13/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 12/13/2011  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 07/25/2011  
Comments: Not reported

Map ID  
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**KAISER STEEL (Continued)**

**S101272834**

Completed Area Name: OU-5  
Completed Sub Area Name: Site-Wide Groundwater  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 08/02/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 08/02/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Public Notice  
Completed Date: 10/17/2011  
Comments: The public notice was published in the SAN BERNARDINO SUN.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Public Notice  
Completed Date: 10/17/2011  
Comments: The public notice was published in the SAN BERNARDINO SUN.

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Fact Sheets  
Completed Date: 10/17/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Fact Sheets  
Completed Date: 10/17/2011  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Technical Workplan  
Completed Date: 08/01/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Technical Report  
Completed Date: 11/17/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 10/04/2011  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report

Map ID  
Direction  
Distance  
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**KAISER STEEL (Continued)**

**S101272834**

Completed Date: 10/27/2011  
Comments: Not reported

Completed Area Name: OU-5  
Completed Sub Area Name: Site-Wide Groundwater  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 10/27/2011  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedy Constructed: Operating Properly & Successfully  
Completed Date: 06/07/2012  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Financial Assurance Documentation  
Completed Date: 09/01/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 01/05/2012  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 01/17/2012  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 01/17/2012  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/09/2012  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 01/31/2012  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 01/31/2012  
Comments: Not reported

Map ID  
Direction  
Distance  
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**KAISER STEEL (Continued)**

**S101272834**

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/29/2012  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 07/20/2012  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 04/11/2012  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 03/08/2012  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/18/2012  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/13/2012  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/13/2012  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Newsletter  
Completed Date: 06/07/2012  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Technical Report  
Completed Date: 09/20/2012  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

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EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Date: 10/03/2012  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 10/03/2012  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 06/14/2012  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 08/27/2012  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 09/12/2012  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 09/12/2012  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 10/09/2012  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 10/09/2012  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 11/14/2012  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 11/14/2012  
Comments: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 01/03/2013  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 11/29/2012  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/07/2013  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/07/2013  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/11/2013  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/11/2013  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Technical Workplan  
Completed Date: 03/25/2013  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/11/2013  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/11/2013  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Date: 06/11/2013  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 08/01/2013  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 08/01/2013  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 08/01/2013  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 08/19/2013  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 11/12/2013  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 12/03/2013  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/10/2014  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Fact Sheets  
Completed Date: 06/20/2014  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/10/2014  
Comments: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/24/2014  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/24/2014  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Plan Amendment  
Completed Date: 05/22/2014  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/11/2014  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 08/28/2014  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 08/28/2014  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 09/29/2010  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Valley Boulevard Parcel  
Completed Document Type: Certification  
Completed Date: 06/28/1996  
Comments: Certified O&M.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: CEQA - Notice of Exemption  
Completed Date: 06/07/2012  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Reimbursement Agreement

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Date: 09/15/2010  
Comments: .

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 10/13/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Oily Sludge Beds  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Oily Sludge Beds  
Completed Document Type: Certification  
Completed Date: 12/22/2010  
Comments: Combined certification for Sewage Treatment Plant and Oily Sludge Beds.

Completed Area Name: OU-2  
Completed Sub Area Name: Restricted Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Letter - Demand  
Completed Date: 06/14/2011  
Comments: Collection Reminder letter sent.

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Certification  
Completed Date: 12/22/2010  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Certification  
Completed Date: 12/22/2010  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Land Use Restriction  
Completed Date: 12/13/2010  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Area Name: OU-3  
Completed Sub Area Name: West Slag Pile Area  
Completed Document Type: Certification  
Completed Date: 03/17/1999  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Napa Lots Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/11/2014  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 05/22/2014  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 05/22/2014  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Operations and Maintenance Plan Amendment  
Completed Date: 09/15/2014  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 07/30/2014  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 07/31/2014  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 07/31/2014  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Long Term Monitoring Report

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Date: 07/30/2014  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 08/04/2014  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Public Notice  
Completed Date: 06/21/2014  
Comments: The Public Notice was published in the San Bernardino County Sun on June 21 and 22, 2014

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Technical Report  
Completed Date: 06/17/2014  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/04/2010  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Mulberry Ditch  
Completed Document Type: Certification  
Completed Date: 12/22/2010  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Sewage Treatment Plant Area  
Completed Document Type: Certification  
Completed Date: 12/22/2010  
Comments: Combined Land Use Covenant and Certification for Sewage Treatment Plant and Oily Sludge Beds.

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Reimbursement Agreement  
Completed Date: 09/28/2011  
Comments: Reimbursement Agreement for consultation on the the capped property surface drainage was amended to extend the term of the agreement,for a minor addition to the scope of work and the addition funds to the contract.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Amendment - Order/Agreement  
Completed Date: 01/11/1999  
Comments: Amended O&M Agreement for MRF.

Completed Area Name: OU-1

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Consultative Service Agreement  
Completed Date: 09/06/2007  
Comments: Fully executed agreement.

Completed Area Name: OU-2  
Completed Sub Area Name: Restricted Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/01/2008  
Comments: Annual Inspection Report for Deed Restriction.

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/01/2008  
Comments: Annual Inspection Report for Deed Restriction.

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/01/2008  
Comments: Annual Site Inspection for Deed Restriction.

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/01/2008  
Comments: Annual Site Inspection for Deed Restriction.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/01/2008  
Comments: Annual Site Inspection for Deed Restriction.

Completed Area Name: OU-1  
Completed Sub Area Name: Napa Lots Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/01/2008  
Comments: Annual Site Inspection for Deed Restriction.

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/01/2008  
Comments: Annual Site Inspection for Deed Restriction.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: \* Discovery  
Completed Date: 03/01/1980  
Comments: Facility identified via Wade's Survey (1980).

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/02/2007

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Comments: Annual Inspection Report for Deed Restriction.

Completed Area Name: OU-3  
Completed Sub Area Name: West Slag Pile Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/01/2008  
Comments: Annual Site Inspection for Deed Restriction.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 11/21/2013  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Amendment - Order/Agreement  
Completed Date: 07/24/2000  
Comments: DTSC considered termination of Kaiser Ventures Inc.'s Consent Order with the execution of a new Consent Order by DTSC and a prospective purchaser of the Site (CCG Ontario, LLC).

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Correspondence  
Completed Date: 05/04/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Operation & Maintenance Order/Agreement  
Completed Date: 06/13/1997  
Comments: MRF O&M Agreement becomes effective.

Completed Area Name: OU-1  
Completed Sub Area Name: Not reported  
Completed Document Type: Amendment - Order/Agreement  
Completed Date: 01/11/1999  
Comments: Transition to Chapter 6.5 - Amendment to the existing Consent Order signed by the RP.

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Operation & Maintenance Order/Agreement  
Completed Date: 01/11/1999  
Comments: Transition to Chapter 6.5 - Amendment to the existing Operation & Maintenance Agreement signed by the RP.

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 07/27/2006  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Date: 07/27/2006  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 07/27/2006  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Land Use Restriction  
Completed Date: 01/06/2000  
Comments: Industrial use deed restriction completed for approximately 3.1 acres.  
Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: CEQA - Initial Study/ Neg. Declaration  
Completed Date: 06/30/1998  
Comments: Completed Notice of Determination for the Household Recycling Parcel.

Completed Area Name: OU-3  
Completed Sub Area Name: Oily Sludge Beds  
Completed Document Type: Land Use Restriction  
Completed Date: 12/13/2010  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Certification  
Completed Date: 09/13/2001  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: West Slag Pile Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 01/05/2011  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Not reported  
Completed Document Type: CEQA - Initial Study/ Neg. Declaration  
Completed Date: 02/13/2009  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Land Use Restriction  
Completed Date: 07/10/1996  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Restricted Property  
Completed Document Type: Land Use Restriction  
Completed Date: 11/14/1995  
Comments: Deed restriction recorded for the "restricted property".

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/05/2010  
Comments: .

Completed Area Name: OU-2  
Completed Sub Area Name: Restricted Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/05/2010  
Comments: .

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/04/2010  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/25/2009  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Certification  
Completed Date: 11/29/2005  
Comments: Certified O&M.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/16/2009  
Comments: Not reported

Future Area Name: OU-5  
Future Sub Area Name: Site-Wide Groundwater  
Future Document Type: Remedial Investigation Report  
Future Due Date: 2015  
Future Area Name: OU-4  
Future Sub Area Name: Chemwest Upper Area  
Future Document Type: Public Notice  
Future Due Date: 2015  
Future Area Name: OU-5  
Future Sub Area Name: Site-Wide Groundwater  
Future Document Type: Remedial Action Plan  
Future Due Date: 2015  
Future Area Name: OU-5  
Future Sub Area Name: Site-Wide Groundwater  
Future Document Type: Fact Sheets  
Future Due Date: 2015  
Future Area Name: OU-4  
Future Sub Area Name: Chemwest Upper Area  
Future Document Type: 5 Year Review Reports  
Future Due Date: 2015  
Future Area Name: OU-2

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Future Sub Area Name: Capped Property  
Future Document Type: 5 Year Review Reports  
Future Due Date: 2019  
Future Area Name: OU-1  
Future Sub Area Name: Materials Recovery Facility (MRF) Area  
Future Document Type: 5 Year Review Reports  
Future Due Date: 2017  
Future Area Name: OU-4  
Future Sub Area Name: Chemwest Upper Area  
Future Document Type: Fact Sheets  
Future Due Date: 2015  
Future Area Name: OU-1  
Future Sub Area Name: Tar Pits Area  
Future Document Type: 5 Year Review Reports  
Future Due Date: 2017  
Future Area Name: OU-3  
Future Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Future Document Type: 5 Year Review Reports  
Future Due Date: 2015  
Future Area Name: OU-5  
Future Sub Area Name: Site-Wide Groundwater  
Future Document Type: Public Notice  
Future Due Date: 2015  
Future Area Name: OU-5  
Future Sub Area Name: Site-Wide Groundwater  
Future Document Type: CEQA - Notice of Exemption  
Future Due Date: 2015  
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

**ENVIROSTOR:**

Facility ID: 60001356  
Status: Active  
Status Date: 02/27/2012  
Site Code: 401621  
Site Type: Voluntary Cleanup  
Site Type Detailed: Voluntary Cleanup  
Acres: 862  
NPL: NO  
Regulatory Agencies: SMBRP, IWMB, RWQCB 8 - Santa Ana, SAN BERNARDINO COUNTY  
Lead Agency: SMBRP  
Program Manager: Tayseer Mahmoud  
Supervisor: Eileen Mananian  
Division Branch: Cleanup Cypress  
Assembly: 52  
Senate: 32  
Special Program: Voluntary Cleanup Program  
Restricted Use: YES  
Site Mgmt Req: NONE SPECIFIED  
Funding: Responsible Party  
Latitude: 34.08714  
Longitude: -117.5141  
APN: 0231-011-09, 0231-011-10, 0231-011-11, 0231-011-12, 0231-111-17,  
0231-111-18, 0231-111-19, 0231-111-20, 0238-031-32, 0238-031-33,

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

0238-031-34, 0238-031-35, 0238-031-37, 0238-031-38, 0238-031-38,  
229-291-33, 238-031-36

Past Use: MANUFACTURING - METAL, MANUFACTURING - METAL, LANDFILL -  
CONSTRUCTION, LANDFILL - HAZARDOUS WASTE, MANUFACTURING - METAL,  
LANDFILL - HAZARDOUS WASTE, MANUFACTURING - METAL, MANUFACTURING -  
METAL, MANUFACTURING - METAL, MANUFACTURING - METAL, MANUFACTURING -  
METAL, MANUFACTURING - METAL, MANUFACTURING - METAL, MANUFACTURING -  
METAL, HAZARDOUS WASTE TREATMENT, MANUFACTURING - METAL, METAL  
PLATING - CHROME, MANUFACTURING - METAL, WASTE - SEWAGE TREATMENT  
PLANT, WASTE - SEWAGE TREATMENT PONDS, MANUFACTURING - METAL, WASTE -  
INDUSTRIAL TREATMENT FACILITY, WASTE - INDUSTRIAL WASTE LINE, WASTE -  
SEWAGE TREATMENT PLANT, WASTE - SEWAGE TREATMENT PONDS, WASTE WATER  
PONDS

Potential COC: Arsenic Benzene Lead Polychlorinated biphenyls (PCBs Polynuclear  
aromatic hydrocarbons (PAHs Tetrachloroethylene (PCE TPH-diesel  
TPH-gas Chromium III Chromium VI Cyanide (free Arsenic Lead Chromium  
III Zinc Arsenic Asbestos Containing Materials (ACM Benzene Lead  
Methane Polychlorinated biphenyls (PCBs Polynuclear aromatic  
hydrocarbons (PAHs Radioactive Isotopes Tetrachloroethylene (PCE  
TPH-diesel TPH-gas TPH-MOTOR OIL Trichloroethylene (TCE Chromium III  
Chromium VI Cyanide (free Zinc Benzene Polynuclear aromatic  
hydrocarbons (PAHs Total Chromium (1:6 ratio Cr VI:Cr III Polynuclear  
aromatic hydrocarbons (PAHs TPH-MOTOR OIL Lead Iron Polynuclear  
aromatic hydrocarbons (PAHs Polynuclear aromatic hydrocarbons (PAHs  
Antimony and compounds Beryllium and compounds Cadmium and compounds  
Chromium III Cobalt Copper and compounds Molybdenum Nickel Thallium  
and compounds Vanadium and compounds Zinc Polynuclear aromatic  
hydrocarbons (PAHs Antimony and compounds Beryllium and compounds  
Cadmium and compounds Chromium III Cobalt Copper and compounds  
Molybdenum Nickel Thallium and compounds Vanadium and compounds Zinc  
Polynuclear aromatic hydrocarbons (PAHs Beryllium and compounds  
Cadmium and compounds Chromium III Cobalt Copper and compounds  
Molybdenum Nickel Thallium and compounds Zinc Under Investigation  
Arsenic Benzene Lead Polychlorinated biphenyls (PCBs Polynuclear  
aromatic hydrocarbons (PAHs Tetrachloroethylene (PCE TPH-diesel  
TPH-gas TPH-MOTOR OIL Trichloroethylene (TCE Chromium III Chromium VI  
Cyanide (free Zinc Under Investigation Arsenic Total Chromium (1:6  
ratio Cr VI:Cr III Polynuclear aromatic hydrocarbons (PAHs TPH-diesel  
TPH-MOTOR OIL Tin Zinc Under Investigation Benzene Polynuclear  
aromatic hydrocarbons (PAHs TPH-MOTOR OIL Under Investigation Benzene  
Polynuclear aromatic hydrocarbons (PAHs TPH-MOTOR OIL Under  
Investigation Chromium VI

Confirmed COC: Polychlorinated biphenyls (PCBs Polynuclear aromatic hydrocarbons  
(PAHs Tetrachloroethylene (PCE TPH-diesel TPH-gas Chromium III  
Chromium VI Cyanide (free Arsenic Benzene Lead Chromium III Arsenic  
Lead Zinc Asbestos Containing Materials (ACM Polychlorinated  
biphenyls (PCBs Polynuclear aromatic hydrocarbons (PAHs Radioactive  
Isotopes Tetrachloroethylene (PCE TPH-diesel TPH-gas  
Trichloroethylene (TCE Chromium III Chromium VI Cyanide (free Arsenic  
Benzene Lead Methane TPH-MOTOR OIL Zinc Polynuclear aromatic  
hydrocarbons (PAHs Benzene Total Chromium (1:6 ratio Cr VI:Cr III  
Polynuclear aromatic hydrocarbons (PAHs TPH-MOTOR OIL Lead Iron  
Polynuclear aromatic hydrocarbons (PAHs Thallium and compounds  
Polynuclear aromatic hydrocarbons (PAHs Antimony and compounds  
Beryllium and compounds Cadmium and compounds Chromium III Cobalt  
Copper and compounds Molybdenum Nickel Vanadium and compounds Zinc  
Thallium and compounds Polynuclear aromatic hydrocarbons (PAHs

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KAISER STEEL (Continued)

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Antimony and compounds Beryllium and compounds Cadmium and compounds Chromium III Cobalt Copper and compounds Molybdenum Nickel Vanadium and compounds Zinc Thallium and compounds Polynuclear aromatic hydrocarbons (PAHs Beryllium and compounds Cadmium and compounds Chromium III Cobalt Copper and compounds Molybdenum Nickel Zinc No Contaminants found Arsenic Benzene Lead Polynuclear aromatic hydrocarbons (PAHs Tetrachloroethylene (PCE TPH-diesel TPH-gas Chromium III Chromium VI Cyanide (free TPH-MOTOR OIL Zinc Polychlorinated biphenyls (PCBs Trichloroethylene (TCE Under Investigation Under Investigation Tin Polynuclear aromatic hydrocarbons (PAHs TPH-diesel Arsenic Total Chromium (1:6 ratio Cr VI:Cr III TPH-MOTOR OIL Zinc Benzene Polynuclear aromatic hydrocarbons (PAHs TPH-MOTOR OIL Under Investigation Benzene Polynuclear aromatic hydrocarbons (PAHs TPH-MOTOR OIL Under Investigation Chromium VI 31001-NO

Potential Description:

AQUI, OTH, SOIL, SV, IA, SOIL, AQUI, OTH, SOIL, SV, IA, SOIL, SOIL, SOIL, SOIL, SOIL, SOIL, SOIL, SOIL, AQUI, OTH, SOIL, SOIL, SOIL, SV, SOIL, SV, OTH

- Alias Name: CCG Ontario LLC
- Alias Type: Alternate Name
- Alias Name: California Speedway (Penske)
- Alias Type: Alternate Name
- Alias Name: KAISER VENTURES LLC
- Alias Type: Alternate Name
- Alias Name: Kaiser Steel Resources
- Alias Type: Alternate Name
- Alias Name: Kaiser Steel Resources, Inc.
- Alias Type: Alternate Name
- Alias Name: Kaiser Steel-East Slag Pile Landfill
- Alias Type: Alternate Name
- Alias Name: Kaiser Steel-Sewage Plant
- Alias Type: Alternate Name
- Alias Name: Kaiser Ventures LLC
- Alias Type: Alternate Name
- Alias Name: Prologis
- Alias Type: Alternate Name
- Alias Name: 0231-011-09
- Alias Type: APN
- Alias Name: 0231-011-10
- Alias Type: APN
- Alias Name: 0231-011-11
- Alias Type: APN
- Alias Name: 0231-011-12
- Alias Type: APN
- Alias Name: 0231-111-17
- Alias Type: APN
- Alias Name: 0231-111-18
- Alias Type: APN
- Alias Name: 0231-111-19
- Alias Type: APN
- Alias Name: 0231-111-20
- Alias Type: APN
- Alias Name: 0238-031-32
- Alias Type: APN
- Alias Name: 0238-031-33
- Alias Type: APN
- Alias Name: 0238-031-34

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**KAISER STEEL (Continued)**

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Alias Type: APN  
Alias Name: 0238-031-35  
Alias Type: APN  
Alias Name: 0238-031-37  
Alias Type: APN  
Alias Name: 0238-031-38  
Alias Type: APN  
Alias Name: 0238-031-38  
Alias Type: APN  
Alias Name: 229-291-33  
Alias Type: APN  
Alias Name: 238-031-36  
Alias Type: APN  
Alias Name: CAD008274938  
Alias Type: EPA Identification Number  
Alias Name: 110010682289  
Alias Type: EPA (FRS #)  
Alias Name: P42070  
Alias Type: PCode  
Alias Name: 400081  
Alias Type: Project Code (Site Code)  
Alias Name: 401621  
Alias Type: Project Code (Site Code)  
Alias Name: 36280140  
Alias Type: Envirostor ID Number  
Alias Name: 36330009  
Alias Type: Envirostor ID Number  
Alias Name: 36330047  
Alias Type: Envirostor ID Number  
Alias Name: 36330048  
Alias Type: Envirostor ID Number  
Alias Name: 36330049  
Alias Type: Envirostor ID Number  
Alias Name: 60001356  
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/05/2010  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Land Use Restriction - Site Inspection/Visit

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**KAISER STEEL (Continued)**

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Completed Date: 08/05/2010  
Comments: .

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Consent Order  
Completed Date: 08/11/2000  
Comments: Consent Order with CCG Ontario, LLC

Completed Area Name: OU-1  
Completed Sub Area Name: Former Heckett Slag Processing Area  
Completed Document Type: Certification  
Completed Date: 03/18/1996  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Southwest Corner Parcel  
Completed Document Type: Certification  
Completed Date: 04/10/1996  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Napa Lots Area  
Completed Document Type: Certification  
Completed Date: 04/19/1999  
Comments: DTSC approved Removal Action Report on April 19, 1999. No further action is necessary for the site subject to the recording of a DTSC approved land use restriction with the County of San Bernardino.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Certification  
Completed Date: 12/08/1997  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Certification  
Completed Date: 08/12/1999  
Comments: DTSC concurs that no further remedial action is necessary, subject to the recording of a DTSC approved land use restriction with County of San Bernardino.

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/16/2009  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/16/2009  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported

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**KAISER STEEL (Continued)**

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Completed Document Type: Letter - Demand  
Completed Date: 01/20/2011  
Comments: Reminder about unpaid invoice sent.

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: CEQA - Initial Study/ Neg. Declaration  
Completed Date: 10/15/2007  
Comments: Final CEQA package (Neg.Dec., NOD) approved.

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Certification  
Completed Date: 10/23/1995  
Comments: DTSC certifies that Kaiser Ventures, Inc., (Kaiser) has completed implementation of all remedial work specified in the "Remedial Action Plan for Operable Unit No. 2, March 1995 (RAP)" and as specified in the final remedial action report. The site does require ongoing O&M and monitoring efforts.

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Land Use Restriction  
Completed Date: 11/14/1995  
Comments: Deed restriction recorded for the "capped property".

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: CEQA - Initial Study/ Neg. Declaration  
Completed Date: 05/02/1995  
Comments: DTSC approved the final Remedial Action Plan and CEQA documents for the Kaiser Steel, By-Products Area site. The selected remedial alternative includes the installation of a low-permeability membrane cap with long term maintenance, groundwater monitoring, and deed restriction.

Completed Area Name: OU-3  
Completed Sub Area Name: West Slag Pile Area  
Completed Document Type: Land Use Restriction  
Completed Date: 04/17/2002  
Comments: Completion and recording of Deed Restriction (Commercial/ industrial Use) for the West Slag Pile.

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: CEQA - Initial Study/ Neg. Declaration  
Completed Date: 01/23/1998  
Comments: Completed the Neg. Declaration for the Corrective Action Management Unit

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: CEQA - Initial Study/ Neg. Declaration  
Completed Date: 03/24/1995  
Comments: Neg. Declaration

Completed Area Name: OU-1

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**KAISER STEEL (Continued)**

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Completed Sub Area Name: Not reported  
Completed Document Type: CEQA - Initial Study/ Neg. Declaration  
Completed Date: 12/28/1993  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Reimbursement Agreement  
Completed Date: 01/08/2014  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 10/16/2014  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Correspondence  
Completed Date: 07/22/2014  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: West Slag Pile Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Oily Sludge Beds  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Sewage Treatment Plant Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014

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**KAISER STEEL (Continued)**

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Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Napa Lots Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Mulberry Ditch  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 02/02/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Oily Sludge Beds  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Sewage Treatment Plant Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Restricted Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

Completed Area Name: OU-1

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**KAISER STEEL (Continued)**

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Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Oily Sludge Beds  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Napa Lots Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Mulberry Ditch  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Cost Recovery Closeout Memo  
Completed Date: 10/19/2012  
Comments: Project Activities for this OU under Reimbursement Agreement #10-T1049 are completed. Closeout Memo prepared and sent to CRU and Fiscal.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 10/06/2009  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Restricted Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/25/2009  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: West Slag Pile Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/16/2009  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Napa Lots Area

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**KAISER STEEL (Continued)**

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Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 07/27/2006  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 07/27/2006  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: CEQA - Initial Study/ Neg. Declaration  
Completed Date: 12/20/2001  
Comments: Complete Notice of Determination for the Tar Pits Area.

Completed Area Name: OU-1  
Completed Sub Area Name: Napa Lots Area  
Completed Document Type: Land Use Restriction  
Completed Date: 06/04/1999  
Comments: Industrial use deed restriction completed for 5.2 acres of Napa Lot Parcel. This follows a removal action of 1,450 cubic yards of PAH contaminated soil in October 1998. Soil placed in CAMU.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Land Use Restriction  
Completed Date: 06/17/1997  
Comments: A Deed Restriction was placed on approximately 23 acres of land to restrict land-use to industrial types of activities. A materials recovery facility (MRF) will be developed on the remediated property. An Operation and Maintenance Agreement including an Operation and Maintenance Plan were completed for the two remedial caps that were designed.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: CEQA - Initial Study/ Neg. Declaration  
Completed Date: 05/21/1997  
Comments: Complete Notice of Determination for the Materials Recovery Facility (MRF).

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/01/2007  
Comments: Annual Inspection Report for Deed Restriction.

Completed Area Name: OU-2  
Completed Sub Area Name: Restricted Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/01/2007  
Comments: Annual Inspection Report for Deed Restriction.

Completed Area Name: OU-3  
Completed Sub Area Name: West Slag Pile Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit

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**KAISER STEEL (Continued)**

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Completed Date: 08/02/2007  
Comments: Annual Inspection Report for Deed Restriction.

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Mulberry Ditch  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: West Slag Pile Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Oily Sludge Beds  
Completed Document Type: CEQA - Notice of Exemption  
Completed Date: 07/28/2010  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Land Use Restriction  
Completed Date: 08/23/2001  
Comments: Deed Restriction on approximately 208 acres for the West End Property to complete PEA.

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Certification  
Completed Date: 12/22/2010  
Comments: The Land Use Covenant and Certification is issued for Tar Pit Parcel a 5.04 acre which includes capped three (3) former coal Tar Pits, encompassing a total of approximately 1.6 acres.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Land Use Restriction - Site Inspection/Visit

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**KAISER STEEL (Continued)**

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Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/14/2014  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 11/01/2012  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/13/2012  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: West Slag Pile Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/22/2012  
Comments: Not reported

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**KAISER STEEL (Continued)**

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Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Consent Order  
Completed Date: 10/05/1987  
Comments: Consent Order with Kaiser Steel Corporation.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Consent Order  
Completed Date: 08/22/1988  
Comments: Consent Order to "reorganized" Kaiser Steel Corporation following bankruptcy proceeding.

Completed Area Name: OU-3  
Completed Sub Area Name: West Slag Pile Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 07/27/2006  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/01/2007  
Comments: Annual Inspection Report for Deed Restriction.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/02/2007  
Comments: Annual Inspection Report for Deed Restriction.

Completed Area Name: OU-1  
Completed Sub Area Name: Napa Lots Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/02/2007  
Comments: Annual Inspection Report for Deed Restriction.

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Operation & Maintenance Order/Agreement  
Completed Date: 09/26/1995  
Comments: O & M Agreement executed.

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/02/2007  
Comments: Annual Inspection Report for Deed Restriction.

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area

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**KAISER STEEL (Continued)**

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Completed Document Type: Land Use Restriction  
Completed Date: 12/13/2010  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Land Use Restriction - Amendment  
Completed Date: 12/22/2010  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Design/Implementation Workplan  
Completed Date: 06/24/2002  
Comments: Approved the design for cap for Tar Pits parcel.

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Preliminary Endangerment Assessment Report  
Completed Date: 09/13/2001  
Comments: Completion and approval of supplemental PEA for West End Property requiring Deed Restriction. No Further Action and required Land Use Restrictions.

Completed Area Name: OU-1  
Completed Sub Area Name: Napa Lots Area  
Completed Document Type: Removal Action Completion Report  
Completed Date: 04/19/1999  
Comments: Removal of soil contaminated from Napa Lot Parcel with polycyclic aromatic hydrocarbons (PAHs). Removed soils were placed in the Corrective Action Management Unit (CAMU) (ChemWest Upper Facility - Consolidated Waste Cell).

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Remedial Action Completion Report  
Completed Date: 12/08/1997  
Comments: Remediated a 22 acre parcel of the Kaiser Steel site by treating metal and PAH contaminated soils, and capping. The site has been developed into the West Valley Materials Recovery Facility (MRF).

Completed Area Name: OU-1  
Completed Sub Area Name: Napa Lots Area  
Completed Document Type: Removal Action Workplan  
Completed Date: 06/30/1998  
Comments: Approval of Removal Action Workplan for NAPA Lots involving the removal of approximately 10,000 yds of PAH and metal impacted soil.

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Remedial Action Plan Amendment

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**KAISER STEEL (Continued)**

**S101272834**

Completed Date: 12/20/2001  
Comments: The Second Amendment to the Remedial Action Plan for Kaiser Steel, Operable Unit Number 1, Tar Pits Area was approved.

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Remedial Investigation / Feasibility Study  
Completed Date: 04/07/1999  
Comments: RI/FS for the Tar Pits Parcel completed.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Remedial Action Plan  
Completed Date: 05/14/1997  
Comments: Completed Remedial Action Plan (RAP) amendment for Materials Recovery Facility (MRF) parcel of the Kaiser Steel site.

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Remedial Action Completion Report  
Completed Date: 06/05/2003  
Comments: Remediation of the tar pits was determined to be complete.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Design/Implementation Workplan  
Completed Date: 06/12/1997  
Comments: Remedial Design Report for two caps at the materials recovery facility (MRF) was approved.

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Preliminary Endangerment Assessment Report  
Completed Date: 06/28/1996  
Comments: Preliminary Endangerment Assessment Report approved with further action required.

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: 5 Year Review Reports  
Completed Date: 07/29/2002  
Comments: Completion of 5-Year Review report on California Speedway (OU2) cap.

Completed Area Name: OU-2  
Completed Sub Area Name: A&C Recycling  
Completed Document Type: Preliminary Endangerment Assessment Report  
Completed Date: 12/02/1996  
Comments: A & C Recycling - Preliminary Endangerment Assessment Report. Excavated, sampled, and removed metals and PAH affected soil from a former scrap metal recycling facility located on the Kaiser Steel Site. The Site was closed when background levels for soils were achieved in accordance with PEA Guidance.

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedial Action Completion Report  
Completed Date: 09/26/1995

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**KAISER STEEL (Continued)**

**S101272834**

Comments: The Final Remedial Action consisted of the design and construction of a 12.84 acre cap over contaminated By- Products Plant soils. The cap is possibly the largest engineered remedial cap ever constructed in California. Excavation, treatment and removal of hazardous substances in the cooling tower sludge bed and the blast furnace gas washer water sludge beds was also performed. Approximately 9,212 tons of hazardous metals sludge waste was treated by chemical fixation; 21,200 tons of waste was removed and disposed of off-site primarily at East Carbon Development Corporation landfill in Utah; and 370 tons of coal tar was shipped off-site for recycling. Vapor extraction of volatile organic contaminants is continuing within the capped area at the former By-Products Plant. A system of extraction wells, including a thermal oxidation unit for destruction of extracted vapors is in place and operating. DTSC also entered into an O&M Agreement for the "capped property", the "restricted property", and limited areas in the remaining operable unit #2 property. Deed restrictions were also recorded for the "capped property" and "restricted property".

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Design/Implementation Workplan  
Completed Date: 08/09/1995  
Comments: The Design was completed in phases in order to expedite remediation. Areas in need of remediation were segregated and a design document was completed and approved for each segregated remedial unit. The final design document which included a compilation of all approved remedial unit design documents was submitted and approved shortly before site certification, although the majority of remedial work had already been completed.

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedial Action Plan  
Completed Date: 05/01/1995  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedial Investigation / Feasibility Study  
Completed Date: 02/21/1995  
Comments: DTSC completed its review of the Feasibility Study Report for the By-Procuts Plant area and has approved the Report as submitted.

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Remedial Action Completion Report  
Completed Date: 05/17/2010  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Design/Implementation Workplan  
Completed Date: 08/18/2008  
Comments: Not reported

Completed Area Name: OU-3

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**KAISER STEEL (Continued)**

**S101272834**

Completed Sub Area Name: Sewage Treatment Plant Area  
Completed Document Type: Preliminary Endangerment Assessment Report  
Completed Date: 05/21/1999  
Comments: Preliminary Endangerment Assessment for the Sewage Treatment Plant.  
No further action determined except recording an industrial use only deed restriction.

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Remedial Investigation / Feasibility Study  
Completed Date: 04/20/2006  
Comments: Approval letter completed.

Completed Area Name: OU-3  
Completed Sub Area Name: West Slag Pile Area  
Completed Document Type: Remedial Investigation / Feasibility Study  
Completed Date: 03/17/1999  
Comments: Approval of RI/FS for West Slag Pile.

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Preliminary Endangerment Assessment Report  
Completed Date: 11/29/2005  
Comments: Certified O&M.

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Design/Implementation Workplan  
Completed Date: 06/26/1998  
Comments: Completion of Design for CAMU cover (cap).

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Removal Action Workplan  
Completed Date: 02/10/1998  
Comments: Removal Action Workplan for CAMU was approved.

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Removal Action Completion Report  
Completed Date: 06/28/1996  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Removal Action Workplan  
Completed Date: 03/29/1995  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Remedial Investigation / Feasibility Study  
Completed Date: 05/11/1994  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Not reported

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**KAISER STEEL (Continued)**

**S101272834**

Completed Document Type: Remedial Action Plan  
Completed Date: 12/28/1993  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedial Investigation / Feasibility Study  
Completed Date: 12/03/1992  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Assessment Report  
Completed Date: 06/06/1990  
Comments: Region 4 staff reviewed Expanded SI. Data was collected to show release of metals. Site is being addressed under DTSC oversight.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Public Participation Plan / Community Relations Plan  
Completed Date: 11/30/1989  
Comments: Public Participation Plan/Community Relations Plan.

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Remedial Action Plan  
Completed Date: 10/31/2007  
Comments: Approval of Final RAP.

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Removal Action Workplan  
Completed Date: 06/30/1998  
Comments: Approval of Removal Action Workplan for Household Recycling Parcel.

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Removal Action Completion Report  
Completed Date: 08/12/1999  
Comments: Approval of Removal Action Completion Report for the Household Recycling Parcel. Impacted soil taken to Consolidated Waste Cell (aka ChemWest Upper Facility). Deed Restriction needed for residual soil.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 11/01/1989  
Comments: Fact Sheet #1 - Kaiser Steel Mill Site Assessment and Remediation

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 07/01/1990  
Comments: Fact Sheet #2 - "Kaiser Steel Mill Site Assessment and Remediation".

Completed Area Name: PROJECT WIDE

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**KAISER STEEL (Continued)**

**S101272834**

Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 11/01/1990  
Comments: Fact Sheet #3 - "Kaiser Steel Mill Site Remediation".

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 02/01/1992  
Comments: Fact Sheet #4 - "Kaiser Steel Mill Site Remediation".

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 10/01/1993  
Comments: Fact Sheet #5 - "Kaiser Steel Mill Site Remediation Update".

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 02/01/1995  
Comments: Fact Sheet #6 - "Kaiser Steel Mill ChemWest Upper Facility Removal Action is Proposed".

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 03/01/1995  
Comments: Fact Sheet #7 - "Kaiser Steel Mill By-Products Plant Area Cleanup Proposal".

Completed Area Name: OU-3  
Completed Sub Area Name: Sewage Treatment Plant Area  
Completed Document Type: Fact Sheets  
Completed Date: 04/01/1995  
Comments: Fact Sheet #8 - "Kaiser Steel Mill Waste Water Treatment Plant Draft Closure Plan".

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Fact Sheets  
Completed Date: 01/01/1998  
Comments: Fact Sheet #10 - "Kaiser Steel Mill ChemWest Upper Facility Draft Removal Action Workplan".

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 10/03/2005  
Comments: Fact Sheet #12 - DTSC Brownfield Revitalization Success Story

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 11/01/2006  
Comments: Not reported

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**KAISER STEEL (Continued)**

**S101272834**

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Monitoring Report  
Completed Date: 09/08/2006  
Comments: Submission of 2nd quarter groundwater monitoring report. DTSC had no comments on the report.

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 06/08/2006  
Comments: Submission of 1st quarter groundwater monitoring report. DTSC had no comments on the report.

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 06/06/2006  
Comments: Submission of 4th quarter groundwater monitoring report. DTSC had no comments on the report.

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 03/27/2006  
Comments: Submission of Annual Inspection Report for Synthetic Membrane Cover.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Fact Sheets  
Completed Date: 03/01/1997  
Comments: Fact Sheet #9 - Materials Recovery Facility - Amended Remedial Action Plan is Proposed

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Fact Sheets  
Completed Date: 06/01/2001  
Comments: Fact Sheet #11

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Public Notice  
Completed Date: 01/11/2007  
Comments: Public Notice

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Public Participation Plan / Community Relations Plan  
Completed Date: 01/16/2007  
Comments: Public Participation Plan / Community Relations Plan

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Fact Sheets  
Completed Date: 01/11/2007  
Comments: Fact Sheet #13

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**KAISER STEEL (Continued)**

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Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 03/06/2007  
Comments: Submission of 4th quarter groundwater monitoring report for 2006.

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 05/08/2007  
Comments: Approval letter for Annual Inspection Report.

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 05/14/2007  
Comments: Approval of Semi-Annual Inspection and Monitoring Report - Tar Pits Cap.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 05/14/2007  
Comments: Approval of Semi-Annual Inspection & Monitoring Report for MRF Building Floor Cap and Soil Cement Cap.

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 06/11/2007  
Comments: Approval of 1st quarter groundwater monitoring report for 2007.

Completed Area Name: OU-1  
Completed Sub Area Name: Southwest Corner Parcel  
Completed Document Type: Remedial Action Completion Report  
Completed Date: 04/10/1996  
Comments: Project wide Remedial Action Plan requirements have been satisfied. Further remedial work is not required.

Completed Area Name: OU-1  
Completed Sub Area Name: Former Heckett Slag Processing Area  
Completed Document Type: Remedial Action Completion Report  
Completed Date: 03/18/1996  
Comments: Remedial Action Completion approval letter.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Operations and Maintenance Plan  
Completed Date: 06/11/1997  
Comments: O&M Plan part of O&M Agreement.

Completed Area Name: OU-3  
Completed Sub Area Name: Valley Boulevard Parcel  
Completed Document Type: Preliminary Endangerment Assessment Report  
Completed Date: 06/28/1996  
Comments: Approved PEA Report with no further action and Land Use Restrictions required.

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**KAISER STEEL (Continued)**

**S101272834**

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Other Report  
Completed Date: 06/06/1997  
Comments: Vapor Extraction Closure Report approved.

Completed Area Name: OU-3  
Completed Sub Area Name: Sewage Treatment Plant Area  
Completed Document Type: Other Report  
Completed Date: 09/23/1996  
Comments: Closure Certification accepted for RCRA unit (Industrial Wastewater Treatment Plant).

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: 5 Year Review Workplan  
Completed Date: 08/17/2007  
Comments: Five-year review work plan approved. Need fact sheet for public notification prior to implementation.

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: 5 Year Review Reports  
Completed Date: 07/01/2008  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Risk Assessment Report  
Completed Date: 03/14/1995  
Comments: Baseline Health Risk Assessment approved.

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Operations and Maintenance Plan  
Completed Date: 09/26/1995  
Comments: O & M Plan included as an exhibit to the O & M Agreement.

Completed Area Name: OU-3  
Completed Sub Area Name: Mulberry Ditch  
Completed Document Type: Site Characterization Workplan  
Completed Date: 08/17/2007  
Comments: Conditionally approved the Work Plan Addendum.

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Site Characterization Workplan  
Completed Date: 08/17/2007  
Comments: Conditionally approved the Work Plan 2nd Addendum.

Completed Area Name: OU-3  
Completed Sub Area Name: Oily Sludge Beds  
Completed Document Type: Site Characterization Workplan  
Completed Date: 08/17/2007  
Comments: Conditionally approved the Work Plan addendum.

Completed Area Name: OU-2

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**KAISER STEEL (Continued)**

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Completed Sub Area Name: Capped Property  
Completed Document Type: 5 Year Review Reports  
Completed Date: 08/27/2014  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Remedial Action Plan  
Completed Date: 02/13/2009  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Remedial Action Completion Report  
Completed Date: 07/08/2010  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 09/20/2007  
Comments: Approval of Semi-Annual Inspection & Monitoring Report.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 09/20/2007  
Comments: Approval of Semi-Annual Inspection & Monitoring Report.

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 10/19/2007  
Comments: Fact Sheet #14 approved for distribution.

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 03/10/2008  
Comments: Conditionally approved report.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 04/13/2009  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 10/19/2007  
Comments: Approval (with comment) of Quarterly Groundwater Monitoring Report.

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 04/07/2008

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**KAISER STEEL (Continued)**

**S101272834**

Comments: Acceptance of proposed modifications to report.

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 03/10/2008  
Comments: Conditional approval of report.

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Technical Workplan  
Completed Date: 03/28/2008  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Monitoring Report  
Completed Date: 06/25/2008  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Technical Workplan  
Completed Date: 05/07/2009  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 07/01/2008  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Remedial Investigation Workplan  
Completed Date: 06/25/2008  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Monitoring Report  
Completed Date: 09/05/2008  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 07/31/2008  
Comments: Not reported

Completed Area Name: OU-5  
Completed Sub Area Name: Site-Wide Groundwater  
Completed Document Type: Remedial Investigation Workplan  
Completed Date: 11/03/2008  
Comments: Not reported

Completed Area Name: OU-4

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**KAISER STEEL (Continued)**

**S101272834**

Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Public Notice  
Completed Date: 11/19/2008  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Fact Sheets  
Completed Date: 11/19/2008  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Public Participation Plan / Community Relations Plan  
Completed Date: 11/21/2008  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/24/2009  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Technical Workplan  
Completed Date: 04/15/2009  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Site Characterization Workplan  
Completed Date: 08/04/2009  
Comments: .

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Site Characterization Workplan  
Completed Date: 07/28/2009  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/08/2005  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 10/01/2009  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Operations and Maintenance Plan  
Completed Date: 06/14/2010

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**KAISER STEEL (Continued)**

**S101272834**

Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 02/24/2010  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 10/01/2009  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Oily Sludge Beds  
Completed Document Type: Remedial Investigation / Feasibility Study  
Completed Date: 05/19/2010  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 03/29/2010  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Oily Sludge Beds  
Completed Document Type: Remedial Action Plan  
Completed Date: 07/28/2010  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Mulberry Ditch  
Completed Document Type: Remedial Investigation / Feasibility Study  
Completed Date: 05/24/2010  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-3

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**KAISER STEEL (Continued)**

**S101272834**

Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: .

Completed Area Name: OU-3  
Completed Sub Area Name: Mulberry Ditch  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Restricted Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Oily Sludge Beds  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Napa Lots Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: West Slag Pile Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Sewage Treatment Plant Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013

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Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 01/24/2005  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Restricted Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 07/27/2006  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/16/2006  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/10/2013  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Napa Lots Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/16/2009  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Napa Lots Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/05/2010  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/25/2009  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Sewage Treatment Plant Area  
Completed Document Type: Land Use Restriction  
Completed Date: 12/13/2010  
Comments: Combined Land Use Covenant for Sewage Treatment Plant and Oil Sludge Beds.

Completed Area Name: OU-3  
Completed Sub Area Name: Mulberry Ditch  
Completed Document Type: Land Use Restriction  
Completed Date: 12/13/2010  
Comments: Not reported

Map ID  
Direction  
Distance  
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MAP FINDINGS

Site

Database(s)

EDR ID Number  
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**KAISER STEEL (Continued)**

**S101272834**

Completed Area Name: OU-3  
Completed Sub Area Name: Mulberry Ditch  
Completed Document Type: CEQA - Notice of Exemption  
Completed Date: 07/27/2010  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Land Use Restriction  
Completed Date: 12/13/2010  
Comments: Not reported

Completed Area Name: OU-5  
Completed Sub Area Name: Site-Wide Groundwater  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 03/29/2010  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/09/2010  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Operations and Maintenance Plan  
Completed Date: 07/08/2010  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/29/2010  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Operations and Maintenance Plan  
Completed Date: 06/28/2010  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Mulberry Ditch  
Completed Document Type: Remedial Action Plan  
Completed Date: 07/27/2010  
Comments: Not reported

Completed Area Name: OU-5  
Completed Sub Area Name: Not reported  
Completed Document Type: Monitoring Report

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Date: 06/21/2010  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 05/24/2010  
Comments: Not reported

Completed Area Name: OU-5  
Completed Sub Area Name: Site-Wide Groundwater  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 10/04/2010  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/10/2011  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 09/01/2010  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/29/2010  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 08/31/2010  
Comments: Not reported

Completed Area Name: OU-5  
Completed Sub Area Name: Site-Wide Groundwater  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 07/20/2010  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 10/18/2010  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 10/04/2010  
Comments: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 11/08/2010  
Comments: Not reported

Completed Area Name: OU-5  
Completed Sub Area Name: Site-Wide Groundwater  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 11/22/2010  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 11/08/2010  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/10/2011  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/10/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 01/24/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/10/2011  
Comments: Not reported

Completed Area Name: OU-5  
Completed Sub Area Name: Site-Wide Groundwater  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 04/04/2011  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 04/04/2011  
Comments: Not reported

Completed Area Name: OU-5  
Completed Sub Area Name: Site-Wide Groundwater  
Completed Document Type: Long Term Monitoring Report

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Date: 03/15/2011  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 03/15/2011  
Comments: Not reported

Completed Area Name: OU-5  
Completed Sub Area Name: Site-Wide Groundwater  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 05/17/2011  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 05/17/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: 5 Year Review Reports  
Completed Date: 10/05/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: 5 Year Review Reports  
Completed Date: 10/06/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 03/23/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 03/23/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 04/28/2011  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Other Report  
Completed Date: 02/14/1990  
Comments: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/02/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 07/25/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/23/2011  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 12/13/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 12/13/2011  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 07/25/2011  
Comments: Not reported

Completed Area Name: OU-5  
Completed Sub Area Name: Site-Wide Groundwater  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 08/02/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 08/02/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Public Notice  
Completed Date: 10/17/2011  
Comments: The public notice was published in the SAN BERNARDINO SUN.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Public Notice

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
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**KAISER STEEL (Continued)**

**S101272834**

Completed Date: 10/17/2011  
Comments: The public notice was published in the SAN BERNARDINO SUN.

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Fact Sheets  
Completed Date: 10/17/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Fact Sheets  
Completed Date: 10/17/2011  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Technical Workplan  
Completed Date: 08/01/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Technical Report  
Completed Date: 11/17/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 10/04/2011  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 10/27/2011  
Comments: Not reported

Completed Area Name: OU-5  
Completed Sub Area Name: Site-Wide Groundwater  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 10/27/2011  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedy Constructed: Operating Properly & Successfully  
Completed Date: 06/07/2012  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Financial Assurance Documentation  
Completed Date: 09/01/2011  
Comments: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 01/05/2012  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 01/17/2012  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 01/17/2012  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/09/2012  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 01/31/2012  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 01/31/2012  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/29/2012  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 07/20/2012  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 04/11/2012  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Date: 03/08/2012  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/18/2012  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/13/2012  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/13/2012  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Newsletter  
Completed Date: 06/07/2012  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Technical Report  
Completed Date: 09/20/2012  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 10/03/2012  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 10/03/2012  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Operations and Maintenance Report  
Completed Date: 06/14/2012  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 08/27/2012  
Comments: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 09/12/2012  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 09/12/2012  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 10/09/2012  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 10/09/2012  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 11/14/2012  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 11/14/2012  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 01/03/2013  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 11/29/2012  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/07/2013  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Date: 02/07/2013  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/11/2013  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/11/2013  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Technical Workplan  
Completed Date: 03/25/2013  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/11/2013  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/11/2013  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/11/2013  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 08/01/2013  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 08/01/2013  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 08/01/2013  
Comments: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 08/19/2013  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 11/12/2013  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 12/03/2013  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/10/2014  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Fact Sheets  
Completed Date: 06/20/2014  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/10/2014  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/24/2014  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 02/24/2014  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Operations and Maintenance Plan Amendment  
Completed Date: 05/22/2014  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Date: 06/11/2014  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 08/28/2014  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 08/28/2014  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 09/29/2010  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Valley Boulevard Parcel  
Completed Document Type: Certification  
Completed Date: 06/28/1996  
Comments: Certified O&M.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: CEQA - Notice of Exemption  
Completed Date: 06/07/2012  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Reimbursement Agreement  
Completed Date: 09/15/2010  
Comments: .

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 10/13/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Oily Sludge Beds  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Oily Sludge Beds  
Completed Document Type: Certification  
Completed Date: 12/22/2010  
Comments: Combined certification for Sewage Treatment Plant and Oily Sludge Beds.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Area Name: OU-2  
Completed Sub Area Name: Restricted Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Letter - Demand  
Completed Date: 06/14/2011  
Comments: Collection Reminder letter sent.

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Certification  
Completed Date: 12/22/2010  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Certification  
Completed Date: 12/22/2010  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Land Use Restriction  
Completed Date: 12/13/2010  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: West Slag Pile Area  
Completed Document Type: Certification  
Completed Date: 03/17/1999  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Napa Lots Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/28/2011  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 06/11/2014  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Date: 05/22/2014  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 05/22/2014  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Operations and Maintenance Plan Amendment  
Completed Date: 09/15/2014  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 07/30/2014  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 07/31/2014  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 07/31/2014  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 07/30/2014  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Long Term Monitoring Report  
Completed Date: 08/04/2014  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Public Notice  
Completed Date: 06/21/2014  
Comments: The Public Notice was published in the San Bernardino County Sun on June 21 and 22, 2014

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Technical Report  
Completed Date: 06/17/2014  
Comments: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/04/2010  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Mulberry Ditch  
Completed Document Type: Certification  
Completed Date: 12/22/2010  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: Sewage Treatment Plant Area  
Completed Document Type: Certification  
Completed Date: 12/22/2010  
Comments: Combined Land Use Covenant and Certification for Sewage Treatment Plant and Oily Sludge Beds.

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Reimbursement Agreement  
Completed Date: 09/28/2011  
Comments: Reimbursement Agreement for consultation on the the capped property surface drainage was amended to extend the term of the agreement,for a minor addition to the scope of work and the addition funds to the contract.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Amendment - Order/Agreement  
Completed Date: 01/11/1999  
Comments: Amended O&M Agreement for MRF.

Completed Area Name: OU-1  
Completed Sub Area Name: Tar Pits Area  
Completed Document Type: Consultative Service Agreement  
Completed Date: 09/06/2007  
Comments: Fully executed agreement.

Completed Area Name: OU-2  
Completed Sub Area Name: Restricted Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/01/2008  
Comments: Annual Inspection Report for Deed Restriction.

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/01/2008  
Comments: Annual Inspection Report for Deed Restriction.

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/01/2008  
Comments: Annual Site Inspection for Deed Restriction.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/01/2008  
Comments: Annual Site Inspection for Deed Restriction.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/01/2008  
Comments: Annual Site Inspection for Deed Restriction.

Completed Area Name: OU-1  
Completed Sub Area Name: Napa Lots Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/01/2008  
Comments: Annual Site Inspection for Deed Restriction.

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/01/2008  
Comments: Annual Site Inspection for Deed Restriction.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: \* Discovery  
Completed Date: 03/01/1980  
Comments: Facility identified via Wade's Survey (1980).

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/02/2007  
Comments: Annual Inspection Report for Deed Restriction.

Completed Area Name: OU-3  
Completed Sub Area Name: West Slag Pile Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/01/2008  
Comments: Annual Site Inspection for Deed Restriction.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Annual Oversight Cost Estimate  
Completed Date: 11/21/2013  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Amendment - Order/Agreement  
Completed Date: 07/24/2000  
Comments: DTSC considered termination of Kaiser Ventures Inc.'s Consent Order with the execution of a new Consent Order by DTSC and a prospective purchaser of the Site (CCG Ontario, LLC).

Completed Area Name: OU-4

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Sub Area Name: Chemwest Upper Area  
Completed Document Type: Correspondence  
Completed Date: 05/04/2011  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Operation & Maintenance Order/Agreement  
Completed Date: 06/13/1997  
Comments: MRF O&M Agreement becomes effective.

Completed Area Name: OU-1  
Completed Sub Area Name: Not reported  
Completed Document Type: Amendment - Order/Agreement  
Completed Date: 01/11/1999  
Comments: Transition to Chapter 6.5 - Amendment to the existing Consent Order signed by the RP.

Completed Area Name: OU-2  
Completed Sub Area Name: Not reported  
Completed Document Type: Operation & Maintenance Order/Agreement  
Completed Date: 01/11/1999  
Comments: Transition to Chapter 6.5 - Amendment to the existing Operation & Maintenance Agreement signed by the RP.

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 07/27/2006  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 07/27/2006  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 07/27/2006  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: Land Use Restriction  
Completed Date: 01/06/2000  
Comments: Industrial use deed restriction completed for approximately 3.1 acres.  
Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: Household Recycling Parcel  
Completed Document Type: CEQA - Initial Study/ Neg. Declaration  
Completed Date: 06/30/1998  
Comments: Completed Notice of Determination for the Household Recycling Parcel.

Completed Area Name: OU-3

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Sub Area Name: Oily Sludge Beds  
Completed Document Type: Land Use Restriction  
Completed Date: 12/13/2010  
Comments: Not reported

Completed Area Name: OU-1  
Completed Sub Area Name: West End Property Area  
Completed Document Type: Certification  
Completed Date: 09/13/2001  
Comments: Not reported

Completed Area Name: OU-3  
Completed Sub Area Name: West Slag Pile Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 01/05/2011  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Not reported  
Completed Document Type: CEQA - Initial Study/ Neg. Declaration  
Completed Date: 02/13/2009  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Land Use Restriction  
Completed Date: 07/10/1996  
Comments: Not reported

Completed Area Name: OU-2  
Completed Sub Area Name: Restricted Property  
Completed Document Type: Land Use Restriction  
Completed Date: 11/14/1995  
Comments: Deed restriction recorded for the "restricted property".

Completed Area Name: OU-2  
Completed Sub Area Name: Capped Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/05/2010  
Comments: .

Completed Area Name: OU-2  
Completed Sub Area Name: Restricted Property  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/05/2010  
Comments: .

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 10/04/2010  
Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 08/25/2009

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Comments: Not reported

Completed Area Name: OU-4  
Completed Sub Area Name: Chemwest Lower Area  
Completed Document Type: Certification  
Completed Date: 11/29/2005  
Comments: Certified O&M.

Completed Area Name: OU-1  
Completed Sub Area Name: Materials Recovery Facility (MRF) Area  
Completed Document Type: Land Use Restriction - Site Inspection/Visit  
Completed Date: 09/16/2009  
Comments: Not reported

Future Area Name: OU-5  
Future Sub Area Name: Site-Wide Groundwater  
Future Document Type: Remedial Investigation Report  
Future Due Date: 2015  
Future Area Name: OU-4  
Future Sub Area Name: Chemwest Upper Area  
Future Document Type: Public Notice  
Future Due Date: 2015  
Future Area Name: OU-5  
Future Sub Area Name: Site-Wide Groundwater  
Future Document Type: Remedial Action Plan  
Future Due Date: 2015  
Future Area Name: OU-5  
Future Sub Area Name: Site-Wide Groundwater  
Future Document Type: Fact Sheets  
Future Due Date: 2015  
Future Area Name: OU-4  
Future Sub Area Name: Chemwest Upper Area  
Future Document Type: 5 Year Review Reports  
Future Due Date: 2015  
Future Area Name: OU-2  
Future Sub Area Name: Capped Property  
Future Document Type: 5 Year Review Reports  
Future Due Date: 2019  
Future Area Name: OU-1  
Future Sub Area Name: Materials Recovery Facility (MRF) Area  
Future Document Type: 5 Year Review Reports  
Future Due Date: 2017  
Future Area Name: OU-4  
Future Sub Area Name: Chemwest Upper Area  
Future Document Type: Fact Sheets  
Future Due Date: 2015  
Future Area Name: OU-1  
Future Sub Area Name: Tar Pits Area  
Future Document Type: 5 Year Review Reports  
Future Due Date: 2017  
Future Area Name: OU-3  
Future Sub Area Name: East Slag Pile Landfill Area (ESPLA)  
Future Document Type: 5 Year Review Reports  
Future Due Date: 2015  
Future Area Name: OU-5  
Future Sub Area Name: Site-Wide Groundwater  
Future Document Type: Public Notice

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Future Due Date: 2015  
Future Area Name: OU-5  
Future Sub Area Name: Site-Wide Groundwater  
Future Document Type: CEQA - Notice of Exemption  
Future Due Date: 2015  
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

Facility ID: 80001542  
Status: Certified / Operation & Maintenance  
Status Date: 02/26/2014  
Site Code: 400081  
Site Type: Corrective Action  
Site Type Detailed: Corrective Action  
Acres: 1200  
NPL: NO  
Regulatory Agencies: SMBRP  
Lead Agency: MBR  
Program Manager: Tayseer Mahmoud  
Supervisor: Eileen Mananian  
Division Branch: Cleanup Cypress  
Assembly: 52  
Senate: 32  
Special Program: Not reported  
Restricted Use: YES  
Site Mgmt Req: NONE SPECIFIED  
Funding: Not reported  
Latitude: 34.07519  
Longitude: -117.5083  
APN: NONE SPECIFIED  
Past Use: MANUFACTURING - METAL  
Potential COC: Arsenic Benzene Total Chromium (1:6 ratio Cr VI:Cr III Lead Methane  
TPH-diesel TPH-MOTOR OIL Antimony and compounds Barium and compounds  
Beryllium and compounds Chromium III Chromium VI Cobalt Copper and  
compounds Ethylbenzene Iron Molybdenum Nickel Selenium Toluene  
Vanadium and compounds Xylenes Zinc

Confirmed COC: NONE SPECIFIED  
Potential Description: OTH, SOIL, SV  
Alias Name: Kaiser Steel  
Alias Type: Alternate Name  
Alias Name: CAD008274938  
Alias Type: EPA Identification Number  
Alias Name: 110010682289  
Alias Type: EPA (FRS #)  
Alias Name: 400081  
Alias Type: Project Code (Site Code)  
Alias Name: 36330009  
Alias Type: Envirostor ID Number  
Alias Name: 36330047  
Alias Type: Envirostor ID Number  
Alias Name: 36330048  
Alias Type: Envirostor ID Number  
Alias Name: 36330049  
Alias Type: Envirostor ID Number

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Alias Name: 80001542  
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: RCRA Facility Assessment Report  
Completed Date: 11/01/1989  
Comments: RFA dated 11/89 by E.Vallesteros. Per 4/10/00 memo.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Consent Agreement  
Completed Date: 08/26/1988  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: \* Historical Operating Permit Authority  
Completed Date: 10/15/1989  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: RCRA Facility Assessment Report  
Completed Date: 11/01/1989  
Comments: EPA ID No. CAD008274938. Prepared by Edwardo Vallesteros, DHS, Toxic Substances Control, Region 4, Long Beach.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: RCRA Facility Assessment Report  
Completed Date: 01/01/1989  
Comments: RFA by completed by James M. Montgomery. Jan 89. No specific date found.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Groundwater Migration Controlled  
Completed Date: 08/11/2000  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: CEQA - Initial Study/ Neg. Declaration  
Completed Date: 02/13/2009  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Certification  
Completed Date: 12/22/2010  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Land Use Restriction  
Completed Date: 12/13/2010

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Human Exposure Controlled  
Completed Date: 08/11/2000  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Groundwater Migration Controlled  
Completed Date: 06/27/2013  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedy Constructed  
Completed Date: 06/27/2013  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Assessment Report  
Completed Date: 01/28/1991  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Preliminary Assessment Report  
Completed Date: 11/01/1989  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 05/24/2010  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedy Constructed: Operating Properly & Successfully  
Completed Date: 06/07/2012  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Human Exposure Controlled  
Completed Date: 06/16/2005  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Fact Sheets  
Completed Date: 11/19/2008  
Comments: Not reported

Completed Area Name: PROJECT WIDE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAISER STEEL (Continued)**

**S101272834**

Completed Sub Area Name: Not reported  
Completed Document Type: Public Notice  
Completed Date: 11/19/2008  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Operations and Maintenance Plan  
Completed Date: 07/08/2010  
Comments: Completed on 7/8/2010

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Remedial Action Completion Report  
Completed Date: 07/08/2010  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Corrective Measure Implementation Workplan  
Completed Date: 02/13/2009  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Other Report  
Completed Date: 07/16/2013  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Human Exposure Controlled  
Completed Date: 06/27/2013  
Comments: Not reported

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: CEQA - Notice of Exemption  
Completed Date: 06/07/2012  
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

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

80  
South  
1/2-1  
0.832 mi.  
4393 ft.

TREON STEEL FABRICATORS INC  
10665 REDWOOD AV  
FONTANA, CA 92335

CA San Bern. Co. Permit  
CA EMI  
CA ENVIROSTOR

S105047779  
N/A

Relative:  
Lower

San Bern. Co. Permit:

Region: SAN BERNARDINO  
Facility ID: FA0002482  
Owner: ROUBEN P. BAGATOURIAN  
Permit Number: PT0000807  
Permit Category: HAZMAT HANDLER 11-25 EMPLOYEES  
Facility Status: INACTIVE  
Expiration Date: 05/31/2012

Actual:  
1002 ft.

EMI:

Year: 1987  
County Code: 36  
Air Basin: SC  
Facility ID: 52534  
Air District Name: SC  
SIC Code: 3441  
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: 5  
Reactive Organic Gases Tons/Yr: 5  
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 & Smlr Tons/Yr: 0

Year: 1990  
County Code: 36  
Air Basin: SC  
Facility ID: 52534  
Air District Name: SC  
SIC Code: 3441  
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: 3  
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 & Smlr Tons/Yr: 0

ENVIROSTOR:

Facility ID: 36340068  
Status: Refer: 1248 Local Agency  
Status Date: 07/03/2000  
Site Code: Not reported  
Site Type: Evaluation  
Site Type Detailed: Evaluation  
Acres: 0

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TREON STEEL FABRICATORS INC (Continued)**

**S105047779**

NPL: NO  
Regulatory Agencies: SAN BERNARDINO COUNTY  
Lead Agency: SAN BERNARDINO COUNTY  
Program Manager: Not reported  
Supervisor: Referred - Not Assigned  
Division Branch: Cleanup Cypress  
Assembly: 47  
Senate: 32  
Special Program: Not reported  
Restricted Use: NO  
Site Mgmt Req: NONE SPECIFIED  
Funding: Not Applicable  
Latitude: 34.05972  
Longitude: -117.4833  
APN: 236141180000  
Past Use: NONE SPECIFIED  
Potential COC: NONE SPECIFIED  
Confirmed COC: NONE SPECIFIED  
Potential Description: NONE SPECIFIED  
Alias Name: 236141180000  
Alias Type: APN  
Alias Name: 36340068  
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: SB 1248 Notification  
Completed Date: 06/26/2000  
Comments: SB 1248 SAN BERNARDINO COUNTY

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

**Q81**  
**North**  
**1/2-1**  
**0.972 mi.**  
**5133 ft.**

**MASTER HALCO**  
**9125 CHERRY AVE.**  
**FONTANA, CA 92335**

**Site 1 of 2 in cluster Q**

**RCRA-LQG 1000401489**  
**CA UST CAD982012965**  
**CA ENVIROSTOR**

**Relative:**  
**Higher**

RCRA-LQG:  
Date form received by agency: 04/29/2010  
Facility name: MASTER HALCO  
Facility address: 9125 CHERRY AVE.  
FONTANA, CA 92335  
EPA ID: CAD982012965  
Mailing address: CHERRY AVE.  
FONTANA, CA 92335  
Contact: OLEG BORODULIN  
Contact address: CHERRY AVE.  
FONTANA, CA 92335

**Actual:**  
**1137 ft.**

MAP FINDINGS

**MASTER HALCO (Continued)**

**1000401489**

Contact country: US  
Contact telephone: (909) 350-4740  
Contact email: OBORODULIN@FENCEONLINE.COM  
EPA Region: 09  
Land type: Private  
Classification: Large Quantity Generator  
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name: MASTER HALCO  
Owner/operator address: 4000 METROPOLITAN DRIVE #400  
ORANGE, CA 92868

Owner/operator country: US  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 01/01/1987  
Owner/Op end date: Not reported

Owner/operator name: MASTER HALCO, INC  
Owner/operator address: ONE CITY BLVD, SUITE 900  
ORANGE, CA 92868

Owner/operator country: US  
Owner/operator telephone: (714) 385-0091  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 01/01/1987  
Owner/Op end date: Not reported

Owner/operator name: MASTER HALCO INC  
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: MASTER HALCO  
Owner/operator address: Not reported  
Not reported

Owner/operator country: US  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MASTER HALCO (Continued)**

**1000401489**

Owner/Op start date: 01/01/1987  
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  
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

Owner/operator name: MASTER HALCO INC  
Owner/operator address: Not reported  
Not reported

Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 01/01/1987  
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: 02/26/2008  
Site name: MASTER HALCO  
Classification: Large Quantity Generator

Date form received by agency: 09/01/1996  
Site name: MASTER HALCO INC  
Classification: Large Quantity Generator

Date form received by agency: 09/01/1996  
Site name: MASTER HALCO INC  
Classification: Small Quantity Generator

Date form received by agency: 07/13/1987  
Site name: MASTER HALCO INC  
Classification: Small Quantity Generator

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MASTER HALCO (Continued)**

**1000401489**

Hazardous Waste Summary:

Waste code: 132  
Waste name: 132

Waste code: 134  
Waste name: 134

Waste code: 135  
Waste name: 135

Waste code: 171  
Waste name: 171

Waste code: 181  
Waste name: 181

Waste code: D002  
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D007  
Waste name: CHROMIUM

Waste code: D002  
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D007  
Waste name: CHROMIUM

Facility Has Received Notices of Violations:

Regulation violated: Not reported  
Area of violation: Generators - General  
Date violation determined: 03/20/2008  
Date achieved compliance: Not reported  
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

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MASTER HALCO (Continued)**

**1000401489**

Evaluation Action Summary:

Evaluation date: 03/20/2008  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - General  
Date achieved compliance: Not reported  
Evaluation lead agency: State

UST:

Facility ID: 87013223  
Latitude: 34.08765  
Longitude: -117.48872  
Permitting Agency: SAN BERNARDINO COUNTY

ENVIROSTOR:

Facility ID: 71002958  
Status: Inactive - Action Required  
Status Date: 12/20/2013  
Site Code: 550018  
Site Type: Tiered Permit  
Site Type Detailed: Tiered Permit  
Acres: 5  
NPL: NO  
Regulatory Agencies: NONE SPECIFIED  
Lead Agency: NONE SPECIFIED  
Program Manager: Poonam Acharya  
Supervisor: Emad Yemut  
Division Branch: Southern California Schools & Brownfields Outreach  
Assembly: 52  
Senate: 32  
Special Program: Not reported  
Restricted Use: NO  
Site Mgmt Req: NONE SPECIFIED  
Funding: Not reported  
Latitude: 34.08778  
Longitude: -117.4887  
APN: NONE SPECIFIED  
Past Use: MANUFACTURING - METAL, METAL FINISHING  
Potential COC: Zinc  
Confirmed COC: Zinc  
Potential Description: SOIL  
Alias Name: CAD982012965  
Alias Type: EPA Identification Number  
Alias Name: 110002776210  
Alias Type: EPA (FRS #)  
Alias Name: 540091  
Alias Type: Project Code (Site Code)  
Alias Name: 550018  
Alias Type: Project Code (Site Code)  
Alias Name: 71002958  
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Consent Agreement  
Completed Date: 12/31/2006  
Comments: Not reported

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**MASTER HALCO (Continued)**

**1000401489**

Completed Area Name: PROJECT WIDE  
 Completed Sub Area Name: Not reported  
 Completed Document Type: Remedy Selection and Statement of Basis  
 Completed Date: 06/30/2007  
 Comments: Not reported

Completed Area Name: PROJECT WIDE  
 Completed Sub Area Name: Not reported  
 Completed Document Type: \* CEQA  
 Completed Date: 03/31/2007  
 Comments: Not reported

Completed Area Name: PROJECT WIDE  
 Completed Sub Area Name: Not reported  
 Completed Document Type: Phase 1  
 Completed Date: 06/30/2006  
 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

**Q82**  
**North**  
**1/2-1**  
**0.977 mi.**  
**5158 ft.**

**MASTER HALCO, INC.**  
**9125 CHERRY AVENUE**  
**FONTANA, CA 92335**  
**Site 2 of 2 in cluster Q**

**CA NPDES 1005452065**  
**CA VCP N/A**  
**CA San Bern. Co. Permit**  
**CA ENVIROSTOR**  
**CA WDS**

**Relative:**  
**Higher**

NPDES:  
 Npdes Number: CAS000001  
 Facility Status: Active  
 Agency Id: 0  
 Region: 8  
 Regulatory Measure Id: 213076  
 Order No: 97-03-DWQ  
 Regulatory Measure Type: Enrollee  
 Place Id: Not reported  
 WDID: 8 361000213  
 Program Type: Industrial  
 Adoption Date Of Regulatory Measure: Not reported  
 Effective Date Of Regulatory Measure: 03/02/1992  
 Expiration Date Of Regulatory Measure: Not reported  
 Termination Date Of Regulatory Measure: Not reported  
 Discharge Name: Master Halco Inc  
 Discharge Address: 9125 Cherry Avenue  
 Discharge City: Fontana  
 Discharge State: California  
 Discharge Zip: 92335

**Actual:**  
**1137 ft.**

VCP:  
 Facility ID: 36500011

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MASTER HALCO, INC. (Continued)**

**1005452065**

Site Type: Voluntary Cleanup  
Site Type Detail: Voluntary Cleanup  
Site Mgmt. Req.: NONE SPECIFIED  
Acres: 17.6  
National Priorities List: NO  
Cleanup Oversight Agencies: DTSC  
Lead Agency: DTSC  
Lead Agency Description: \* DTSC  
Project Manager: Not reported  
Supervisor: Emad Yemut  
Division Branch: Cleanup Cypress  
Site Code: Not reported  
Assembly: 63  
Senate: Not reported  
Special Programs Code: Voluntary Cleanup Program  
Status: Refer: RCRA  
Status Date: 08/23/2005  
Restricted Use: NO  
Funding: Responsible Party  
Lat/Long: 0 / 0  
APN: NONE SPECIFIED  
Past Use: NONE SPECIFIED  
Potential COC: NONE SPECIFIED  
Confirmed COC: NONE SPECIFIED  
Potential Description: NONE SPECIFIED  
Alias Name: 110021082004  
Alias Type: EPA (FRS #)  
Alias Name: 36500011  
Alias Type: Envirostor ID Number

**Completed Info:**

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Voluntary Cleanup Agreement  
Completed Date: 05/03/2005  
Comments: DTSC entered into A Voluntary Cleanup Agreement (VCA) Docket number HSA-A 04/05-147. The purpose of this Agreement is for DTSC to conduct an evaluation of existing reports and data provided by the Proponent. The focus of the review would be to determine if enough information is available to determine whether or not further action is necessary at the Site.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Cost Recovery Closeout Memo  
Completed Date: 03/15/2006  
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

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MASTER HALCO, INC. (Continued)**

**1005452065**

San Bern. Co. Permit:

Region: SAN BERNARDINO  
Facility ID: FA0004609  
Owner: MASTER HALCO INC  
Permit Number: PT0003284  
Permit Category: HAZARDOUS MATERIALS 11-30 CHEMICALS  
Facility Status: INACTIVE  
Expiration Date: 09/30/2013

Region: SAN BERNARDINO  
Facility ID: FA0004609  
Owner: MASTER HALCO INC  
Permit Number: PT0003283  
Permit Category: LARGE QUANTITY GENERATOR  
Facility Status: INACTIVE  
Expiration Date: 09/30/2013

Region: SAN BERNARDINO  
Facility ID: FA0004609  
Owner: MASTER HALCO INC  
Permit Number: PT0003282  
Permit Category: PBR ANNUAL FEE  
Facility Status: INACTIVE  
Expiration Date: 09/30/2012

Region: SAN BERNARDINO  
Facility ID: FA0004609  
Owner: MASTER HALCO INC  
Permit Number: PT0017478  
Permit Category: EPCRA FACILITY  
Facility Status: INACTIVE  
Expiration Date: 09/30/2012

Region: SAN BERNARDINO  
Facility ID: FA0004609  
Owner: MASTER HALCO INC  
Permit Number: PT0013162  
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)  
Facility Status: INACTIVE  
Expiration Date: 09/30/2003

ENVIROSTOR:

Facility ID: 36500011  
Status: Refer: RCRA  
Status Date: 08/23/2005  
Site Code: Not reported  
Site Type: Voluntary Cleanup  
Site Type Detailed: Voluntary Cleanup  
Acres: 17.6  
NPL: NO  
Regulatory Agencies: DTSC  
Lead Agency: DTSC  
Program Manager: Not reported  
Supervisor: Emad Yemut  
Division Branch: Cleanup Cypress  
Assembly: 63

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MASTER HALCO, INC. (Continued)**

**1005452065**

Senate: Not reported  
Special Program: Voluntary Cleanup Program  
Restricted Use: NO  
Site Mgmt Req: NONE SPECIFIED  
Funding: Responsible Party  
Latitude: 0  
Longitude: 0  
APN: NONE SPECIFIED  
Past Use: NONE SPECIFIED  
Potential COC: NONE SPECIFIED  
Confirmed COC: NONE SPECIFIED  
Potential Description: NONE SPECIFIED  
Alias Name: 110021082004  
Alias Type: EPA (FRS #)  
Alias Name: 36500011  
Alias Type: Envirostor ID Number

**Completed Info:**

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Voluntary Cleanup Agreement  
Completed Date: 05/03/2005  
Comments: DTSC entered into A Voluntary Cleanup Agreement (VCA) Docket number HSA-A 04/05-147. The purpose of this Agreement is for DTSC to conduct an evaluation of existing reports and data provided by the Proponent. The focus of the review would be to determine if enough information is available to determine whether or not further action is necessary at the Site.

Completed Area Name: PROJECT WIDE  
Completed Sub Area Name: Not reported  
Completed Document Type: Cost Recovery Closeout Memo  
Completed Date: 03/15/2006  
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

**CA WDS:**

Facility ID: Santa Ana River 36I000213  
Facility Type: Not reported  
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: 8  
Facility Telephone: Not reported  
Facility Contact: Not reported  
Agency Name: MASTER-HALCO INC  
Agency Address: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MASTER HALCO, INC. (Continued)**

**1005452065**

Agency City,St,Zip: 0  
Agency Contact: Not reported  
Agency Telephone: Not reported  
Agency Type: Not reported  
SIC Code: 0  
SIC Code 2: Not reported  
Primary Waste Type: Not reported  
Primary Waste: Not reported  
Waste Type2: Not reported  
Waste2: Not reported  
Primary Waste Type: Not reported  
Secondary Waste: Not reported  
Secondary Waste Type: Not reported  
Design Flow: 0  
Baseline Flow: 0  
Reclamation: Not reported  
POTW: Not reported  
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 those who 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.

Count: 2 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
FONTANA	S107540385		REDWOOD ST, 1/2 BLOCK OF NJURU	92337	CA CDL
FONTANA	S107537003		9133 REDWOOD CST	92335	CA CDL

# 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: 09/29/2014	Source: EPA
Date Data Arrived at EDR: 10/08/2014	Telephone: N/A
Date Made Active in Reports: 11/17/2014	Last EDR Contact: 10/08/2014
Number of Days to Update: 40	Next Scheduled EDR Contact: 01/19/2015
	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: 09/29/2014	Source: EPA
Date Data Arrived at EDR: 10/08/2014	Telephone: N/A
Date Made Active in Reports: 11/17/2014	Last EDR Contact: 10/08/2014
Number of Days to Update: 40	Next Scheduled EDR Contact: 01/19/2015
	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	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	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: 09/29/2014	Source: EPA
Date Data Arrived at EDR: 10/08/2014	Telephone: N/A
Date Made Active in Reports: 11/17/2014	Last EDR Contact: 10/08/2014
Number of Days to Update: 40	Next Scheduled EDR Contact: 01/19/2015
	Data Release Frequency: Quarterly

## ***Federal CERCLIS list***

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS 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). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: 703-412-9810
Date Made Active in Reports: 02/13/2014	Last EDR Contact: 11/24/2014
Number of Days to Update: 94	Next Scheduled EDR Contact: 03/09/2015
	Data Release Frequency: Quarterly

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: 07/21/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/07/2014	Telephone: 703-603-8704
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 10/07/2014
Number of Days to Update: 13	Next Scheduled EDR Contact: 01/19/2015
	Data Release Frequency: Varies

## ***Federal CERCLIS NFRAP site List***

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS 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 this 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. This 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 a potential NPL site.

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: 703-412-9810
Date Made Active in Reports: 02/13/2014	Last EDR Contact: 11/24/2014
Number of Days to Update: 94	Next Scheduled EDR Contact: 03/09/2015
	Data Release Frequency: Quarterly

## ***Federal RCRA CORRACTS facilities list***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/10/2014  
Date Data Arrived at EDR: 07/02/2014  
Date Made Active in Reports: 09/18/2014  
Number of Days to Update: 78

Source: EPA  
Telephone: 800-424-9346  
Last EDR Contact: 11/07/2014  
Next Scheduled EDR Contact: 01/12/2015  
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: 06/10/2014  
Date Data Arrived at EDR: 07/02/2014  
Date Made Active in Reports: 09/18/2014  
Number of Days to Update: 78

Source: Environmental Protection Agency  
Telephone: (415) 495-8895  
Last EDR Contact: 11/07/2014  
Next Scheduled EDR Contact: 01/12/2015  
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: 06/10/2014  
Date Data Arrived at EDR: 07/02/2014  
Date Made Active in Reports: 09/18/2014  
Number of Days to Update: 78

Source: Environmental Protection Agency  
Telephone: (415) 495-8895  
Last EDR Contact: 11/07/2014  
Next Scheduled EDR Contact: 01/12/2015  
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: 06/10/2014  
Date Data Arrived at EDR: 07/02/2014  
Date Made Active in Reports: 09/18/2014  
Number of Days to Update: 78

Source: Environmental Protection Agency  
Telephone: (415) 495-8895  
Last EDR Contact: 11/07/2014  
Next Scheduled EDR Contact: 01/12/2015  
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: 06/10/2014  
Date Data Arrived at EDR: 07/02/2014  
Date Made Active in Reports: 09/18/2014  
Number of Days to Update: 78

Source: Environmental Protection Agency  
Telephone: (415) 495-8895  
Last EDR Contact: 11/07/2014  
Next Scheduled EDR Contact: 01/12/2015  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

### 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: 09/18/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/19/2014	Telephone: 703-603-0695
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 12/03/2014
Number of Days to Update: 31	Next Scheduled EDR Contact: 03/16/2015
	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: 09/18/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/19/2014	Telephone: 703-603-0695
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 12/03/2014
Number of Days to Update: 31	Next Scheduled EDR Contact: 03/16/2015
	Data Release Frequency: Varies

### 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: 08/29/2014	Source: Department of the Navy
Date Data Arrived at EDR: 10/09/2014	Telephone: 843-820-7326
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 11/17/2014
Number of Days to Update: 11	Next Scheduled EDR Contact: 03/02/2015
	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: 09/29/2014	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 09/30/2014	Telephone: 202-267-2180
Date Made Active in Reports: 11/06/2014	Last EDR Contact: 09/30/2014
Number of Days to Update: 37	Next Scheduled EDR Contact: 01/12/2015
	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: 11/03/2014	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 11/04/2014	Telephone: 916-323-3400
Date Made Active in Reports: 12/12/2014	Last EDR Contact: 11/04/2014
Number of Days to Update: 38	Next Scheduled EDR Contact: 02/16/2015
	Data Release Frequency: Quarterly

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

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP'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 (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: 11/03/2014	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 11/04/2014	Telephone: 916-323-3400
Date Made Active in Reports: 12/12/2014	Last EDR Contact: 11/04/2014
Number of Days to Update: 38	Next Scheduled EDR Contact: 02/16/2015
	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 inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/18/2014	Source: Department of Resources Recycling and Recovery
Date Data Arrived at EDR: 08/18/2014	Telephone: 916-341-6320
Date Made Active in Reports: 10/03/2014	Last EDR Contact: 11/19/2014
Number of Days to Update: 46	Next Scheduled EDR Contact: 03/02/2015
	Data Release Frequency: Quarterly

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

### 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	Source: California Regional Water Quality Control Board Santa Ana Region (8)
Date Data Arrived at EDR: 02/15/2005	Telephone: 909-782-4496
Date Made Active in Reports: 03/28/2005	Last EDR Contact: 08/15/2011
Number of Days to Update: 41	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: Varies

### 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	Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Date Data Arrived at EDR: 10/20/2004	Telephone: 510-622-2433
Date Made Active in Reports: 11/19/2004	Last EDR Contact: 09/19/2011
Number of Days to Update: 30	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	Source: California Regional Water Quality Control Board North Coast (1)
Date Data Arrived at EDR: 02/28/2001	Telephone: 707-570-3769
Date Made Active in Reports: 03/29/2001	Last EDR Contact: 08/01/2011
Number of Days to Update: 29	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 10/28/2014	Source: State Water Resources Control Board
Date Data Arrived at EDR: 10/30/2014	Telephone: see region list
Date Made Active in Reports: 12/12/2014	Last EDR Contact: 12/15/2014
Number of Days to Update: 43	Next Scheduled EDR Contact: 03/30/2015
	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	Source: California Regional Water Quality Control Board Los Angeles Region (4)
Date Data Arrived at EDR: 09/07/2004	Telephone: 213-576-6710
Date Made Active in Reports: 10/12/2004	Last EDR Contact: 09/06/2011
Number of Days to Update: 35	Next Scheduled EDR Contact: 12/19/2011
	Data Release Frequency: No Update Planned

## 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	Source: California Regional Water Quality Control Board Central Valley Region (5)
Date Data Arrived at EDR: 07/22/2008	Telephone: 916-464-4834
Date Made Active in Reports: 07/31/2008	Last EDR Contact: 07/01/2011
Number of Days to Update: 9	Next Scheduled EDR Contact: 10/17/2011
	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	Source: California Regional Water Quality Control Board Lahontan Region (6)
Date Data Arrived at EDR: 09/10/2003	Telephone: 530-542-5572
Date Made Active in Reports: 10/07/2003	Last EDR Contact: 09/12/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/26/2011
	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	Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Date Data Arrived at EDR: 06/07/2005	Telephone: 760-241-7365
Date Made Active in Reports: 06/29/2005	Last EDR Contact: 09/12/2011
Number of Days to Update: 22	Next Scheduled EDR Contact: 12/26/2011
	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	Source: California Regional Water Quality Control Board San Diego Region (9)
Date Data Arrived at EDR: 04/23/2001	Telephone: 858-637-5595
Date Made Active in Reports: 05/21/2001	Last EDR Contact: 09/26/2011
Number of Days to Update: 28	Next Scheduled EDR Contact: 01/09/2012
	Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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	Source: California Regional Water Quality Control Board Central Coast Region (3)
Date Data Arrived at EDR: 05/19/2003	Telephone: 805-542-4786
Date Made Active in Reports: 06/02/2003	Last EDR Contact: 07/18/2011
Number of Days to Update: 14	Next Scheduled EDR Contact: 10/31/2011
	Data Release Frequency: No Update Planned

## 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	Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Date Data Arrived at EDR: 02/26/2004	Telephone: 760-776-8943
Date Made Active in Reports: 03/24/2004	Last EDR Contact: 08/01/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

## 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: 10/28/2014	Source: State Water Resources Control Board
Date Data Arrived at EDR: 10/30/2014	Telephone: 866-480-1028
Date Made Active in Reports: 12/15/2014	Last EDR Contact: 12/15/2014
Number of Days to Update: 46	Next Scheduled EDR Contact: 03/30/2015
	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	Source: California Regional Water Quality Control Board, North Coast Region (1)
Date Data Arrived at EDR: 04/07/2003	Telephone: 707-576-2220
Date Made Active in Reports: 04/25/2003	Last EDR Contact: 08/01/2011
Number of Days to Update: 18	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	Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Date Data Arrived at EDR: 10/20/2004	Telephone: 510-286-0457
Date Made Active in Reports: 11/19/2004	Last EDR Contact: 09/19/2011
Number of Days to Update: 30	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	Source: California Regional Water Quality Control Board Central Coast Region (3)
Date Data Arrived at EDR: 05/18/2006	Telephone: 805-549-3147
Date Made Active in Reports: 06/15/2006	Last EDR Contact: 07/18/2011
Number of Days to Update: 28	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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

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: 11/04/2014  
Date Data Arrived at EDR: 11/07/2014  
Date Made Active in Reports: 11/17/2014  
Number of Days to Update: 10

Source: EPA Region 8  
Telephone: 303-312-6271  
Last EDR Contact: 10/27/2014  
Next Scheduled EDR Contact: 02/09/2015  
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 05/22/2014  
Date Data Arrived at EDR: 08/22/2014  
Date Made Active in Reports: 09/18/2014  
Number of Days to Update: 27

Source: EPA Region 7  
Telephone: 913-551-7003  
Last EDR Contact: 10/27/2014  
Next Scheduled EDR Contact: 02/09/2015  
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/06/2014  
Date Data Arrived at EDR: 10/29/2014  
Date Made Active in Reports: 11/17/2014  
Number of Days to Update: 19

Source: EPA Region 6  
Telephone: 214-665-6597  
Last EDR Contact: 10/27/2014  
Next Scheduled EDR Contact: 02/09/2015  
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: 07/30/2014  
Date Data Arrived at EDR: 08/12/2014  
Date Made Active in Reports: 08/22/2014  
Number of Days to Update: 10

Source: EPA Region 4  
Telephone: 404-562-8677  
Last EDR Contact: 10/27/2014  
Next Scheduled EDR Contact: 02/09/2015  
Data Release Frequency: Semi-Annually

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: 02/01/2013  
Date Data Arrived at EDR: 05/01/2013  
Date Made Active in Reports: 11/01/2013  
Number of Days to Update: 184

Source: EPA Region 1  
Telephone: 617-918-1313  
Last EDR Contact: 10/31/2014  
Next Scheduled EDR Contact: 02/09/2015  
Data Release Frequency: Varies

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: 03/01/2013  
Date Data Arrived at EDR: 03/01/2013  
Date Made Active in Reports: 04/12/2013  
Number of Days to Update: 42

Source: Environmental Protection Agency  
Telephone: 415-972-3372  
Last EDR Contact: 10/27/2014  
Next Scheduled EDR Contact: 02/09/2015  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 05/20/2014	Source: EPA Region 10
Date Data Arrived at EDR: 06/10/2014	Telephone: 206-553-2857
Date Made Active in Reports: 08/22/2014	Last EDR Contact: 10/27/2014
Number of Days to Update: 73	Next Scheduled EDR Contact: 02/09/2015
	Data Release Frequency: Quarterly

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: 11/03/2014	Source: EPA, Region 5
Date Data Arrived at EDR: 11/05/2014	Telephone: 312-886-7439
Date Made Active in Reports: 11/17/2014	Last EDR Contact: 10/27/2014
Number of Days to Update: 12	Next Scheduled EDR Contact: 02/09/2015
	Data Release Frequency: Varies

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

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 09/17/2014	Source: SWRCB
Date Data Arrived at EDR: 09/17/2014	Telephone: 916-341-5851
Date Made Active in Reports: 10/24/2014	Last EDR Contact: 12/15/2014
Number of Days to Update: 37	Next Scheduled EDR Contact: 03/30/2015
	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: 08/01/2009	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2009	Telephone: 916-327-5092
Date Made Active in Reports: 10/01/2009	Last EDR Contact: 10/03/2014
Number of Days to Update: 21	Next Scheduled EDR Contact: 01/12/2015
	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: 02/01/2013	Source: EPA, Region 1
Date Data Arrived at EDR: 05/01/2013	Telephone: 617-918-1313
Date Made Active in Reports: 01/27/2014	Last EDR Contact: 10/31/2014
Number of Days to Update: 271	Next Scheduled EDR Contact: 02/09/2015
	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: 07/30/2014	Source: EPA Region 4
Date Data Arrived at EDR: 08/12/2014	Telephone: 404-562-9424
Date Made Active in Reports: 08/22/2014	Last EDR Contact: 10/27/2014
Number of Days to Update: 10	Next Scheduled EDR Contact: 02/09/2015
	Data Release Frequency: Semi-Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 11/03/2014	Source: EPA Region 5
Date Data Arrived at EDR: 11/05/2014	Telephone: 312-886-6136
Date Made Active in Reports: 11/17/2014	Last EDR Contact: 10/27/2014
Number of Days to Update: 12	Next Scheduled EDR Contact: 02/09/2015
	Data Release Frequency: Varies

## 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: 10/06/2014	Source: EPA Region 6
Date Data Arrived at EDR: 10/29/2014	Telephone: 214-665-7591
Date Made Active in Reports: 11/06/2014	Last EDR Contact: 10/27/2014
Number of Days to Update: 8	Next Scheduled EDR Contact: 02/09/2015
	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: 08/20/2014	Source: EPA Region 7
Date Data Arrived at EDR: 08/22/2014	Telephone: 913-551-7003
Date Made Active in Reports: 09/18/2014	Last EDR Contact: 10/27/2014
Number of Days to Update: 27	Next Scheduled EDR Contact: 02/09/2015
	Data Release Frequency: Varies

## 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: 11/04/2014	Source: EPA Region 8
Date Data Arrived at EDR: 11/07/2014	Telephone: 303-312-6137
Date Made Active in Reports: 11/17/2014	Last EDR Contact: 10/27/2014
Number of Days to Update: 10	Next Scheduled EDR Contact: 02/09/2015
	Data Release Frequency: Quarterly

## 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: 05/20/2014	Source: EPA Region 10
Date Data Arrived at EDR: 06/10/2014	Telephone: 206-553-2857
Date Made Active in Reports: 08/15/2014	Last EDR Contact: 10/27/2014
Number of Days to Update: 66	Next Scheduled EDR Contact: 02/09/2015
	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: 08/14/2014	Source: EPA Region 9
Date Data Arrived at EDR: 08/15/2014	Telephone: 415-972-3368
Date Made Active in Reports: 08/22/2014	Last EDR Contact: 10/27/2014
Number of Days to Update: 7	Next Scheduled EDR Contact: 02/09/2015
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010	Source: FEMA
Date Data Arrived at EDR: 02/16/2010	Telephone: 202-646-5797
Date Made Active in Reports: 04/12/2010	Last EDR Contact: 10/10/2014
Number of Days to Update: 55	Next Scheduled EDR Contact: 01/26/2015
	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: 09/29/2014	Source: EPA, Region 1
Date Data Arrived at EDR: 10/01/2014	Telephone: 617-918-1102
Date Made Active in Reports: 11/06/2014	Last EDR Contact: 10/01/2014
Number of Days to Update: 36	Next Scheduled EDR Contact: 01/12/2015
	Data Release Frequency: Varies

### INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	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: 11/03/2014	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 11/04/2014	Telephone: 916-323-3400
Date Made Active in Reports: 12/12/2014	Last EDR Contact: 11/04/2014
Number of Days to Update: 38	Next Scheduled EDR Contact: 02/16/2015
	Data Release Frequency: Quarterly

## **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: 09/22/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/23/2014	Telephone: 202-566-2777
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 11/07/2014
Number of Days to Update: 27	Next Scheduled EDR Contact: 01/05/2015
	Data Release Frequency: Semi-Annually

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

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 10/24/2014  
Next Scheduled EDR Contact: 02/09/2015  
Data Release Frequency: No Update Planned

## SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 09/16/2014  
Date Data Arrived at EDR: 09/17/2014  
Date Made Active in Reports: 10/23/2014  
Number of Days to Update: 36

Source: Department of Conservation  
Telephone: 916-323-3836  
Last EDR Contact: 12/15/2014  
Next Scheduled EDR Contact: 03/30/2015  
Data Release Frequency: Quarterly

## HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 09/08/2014  
Date Data Arrived at EDR: 09/09/2014  
Date Made Active in Reports: 10/22/2014  
Number of Days to Update: 43

Source: Integrated Waste Management Board  
Telephone: 916-341-6422  
Last EDR Contact: 11/12/2014  
Next Scheduled EDR Contact: 03/02/2015  
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: 10/29/2014  
Next Scheduled EDR Contact: 02/16/2015  
Data Release Frequency: Varies

## 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: 11/05/2014  
Next Scheduled EDR Contact: 02/23/2015  
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

### **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: 07/25/2014	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 09/09/2014	Telephone: 202-307-1000
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 11/25/2014
Number of Days to Update: 41	Next Scheduled EDR Contact: 03/16/2015
	Data Release Frequency: Quarterly

### **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	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 08/03/2006	Telephone: 916-323-3400
Date Made Active in Reports: 08/24/2006	Last EDR Contact: 02/23/2009
Number of Days to Update: 21	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: 11/03/2014	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 11/04/2014	Telephone: 916-323-3400
Date Made Active in Reports: 12/12/2014	Last EDR Contact: 11/04/2014
Number of Days to Update: 38	Next Scheduled EDR Contact: 02/16/2015
	Data Release Frequency: Quarterly

### **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	Source: State Water Resources Control Board
Date Data Arrived at EDR: 08/30/1995	Telephone: 916-227-4364
Date Made Active in Reports: 09/26/1995	Last EDR Contact: 01/26/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 04/27/2009
	Data Release Frequency: No Update Planned

### **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: 06/30/2014	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 09/02/2014	Telephone: 916-255-6504
Date Made Active in Reports: 09/24/2014	Last EDR Contact: 10/10/2014
Number of Days to Update: 22	Next Scheduled EDR Contact: 01/19/2015
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## US HIST CDL: National Clandestine Laboratory Register

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: 07/25/2014	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 09/09/2014	Telephone: 202-307-1000
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 11/25/2014
Number of Days to Update: 41	Next Scheduled EDR Contact: 03/16/2015
	Data Release Frequency: No Update Planned

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

### 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	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 09/05/1995	Telephone: 916-341-5851
Date Made Active in Reports: 09/29/1995	Last EDR Contact: 12/28/1998
Number of Days to Update: 24	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: 09/23/2009	Source: Department of Public Health
Date Data Arrived at EDR: 09/23/2009	Telephone: 707-463-4466
Date Made Active in Reports: 10/01/2009	Last EDR Contact: 12/11/2014
Number of Days to Update: 8	Next Scheduled EDR Contact: 03/16/2015
	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	Source: State Water Resources Control Board
Date Data Arrived at EDR: 01/25/1991	Telephone: 916-341-5851
Date Made Active in Reports: 02/12/1991	Last EDR Contact: 07/26/2001
Number of Days to Update: 18	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

### 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	Source: State Water Resources Control Board
Date Data Arrived at EDR: 07/07/2005	Telephone: N/A
Date Made Active in Reports: 08/11/2005	Last EDR Contact: 06/03/2005
Number of Days to Update: 35	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## **Local Land Records**

### 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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 10/27/2014  
Next Scheduled EDR Contact: 02/09/2015  
Data Release Frequency: Varies

## LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 10/02/2014  
Date Data Arrived at EDR: 10/03/2014  
Date Made Active in Reports: 11/20/2014  
Number of Days to Update: 48

Source: Department of Toxic Substances Control  
Telephone: 916-323-3400  
Last EDR Contact: 12/05/2014  
Next Scheduled EDR Contact: 03/23/2015  
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: 09/08/2014  
Date Data Arrived at EDR: 09/10/2014  
Date Made Active in Reports: 10/22/2014  
Number of Days to Update: 42

Source: DTSC and SWRCB  
Telephone: 916-323-3400  
Last EDR Contact: 12/09/2014  
Next Scheduled EDR Contact: 03/23/2015  
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: 09/30/2014  
Date Data Arrived at EDR: 10/01/2014  
Date Made Active in Reports: 11/06/2014  
Number of Days to Update: 36

Source: U.S. Department of Transportation  
Telephone: 202-366-4555  
Last EDR Contact: 10/01/2014  
Next Scheduled EDR Contact: 01/12/2015  
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: 10/27/2014  
Date Data Arrived at EDR: 10/29/2014  
Date Made Active in Reports: 12/10/2014  
Number of Days to Update: 42

Source: Office of Emergency Services  
Telephone: 916-845-8400  
Last EDR Contact: 10/29/2014  
Next Scheduled EDR Contact: 02/09/2015  
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: 10/28/2014  
Date Data Arrived at EDR: 10/30/2014  
Date Made Active in Reports: 12/12/2014  
Number of Days to Update: 43

Source: State Water Quality Control Board  
Telephone: 866-480-1028  
Last EDR Contact: 12/15/2014  
Next Scheduled EDR Contact: 03/30/2015  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 10/28/2014	Source: State Water Resources Control Board
Date Data Arrived at EDR: 10/30/2014	Telephone: 866-480-1028
Date Made Active in Reports: 12/12/2014	Last EDR Contact: 12/15/2014
Number of Days to Update: 43	Next Scheduled EDR Contact: 03/30/2015
	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	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/22/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 50	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## **Other Ascertainable Records**

### RCRA NonGen / NLR: RCRA - Non 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). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/10/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/02/2014	Telephone: (415) 495-8895
Date Made Active in Reports: 09/18/2014	Last EDR Contact: 11/07/2014
Number of Days to Update: 78	Next Scheduled EDR Contact: 01/12/2015
	Data Release Frequency: Varies

### DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 08/07/2012	Telephone: 202-366-4595
Date Made Active in Reports: 09/18/2012	Last EDR Contact: 11/04/2014
Number of Days to Update: 42	Next Scheduled EDR Contact: 02/16/2015
	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	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 11/07/2014
Number of Days to Update: 62	Next Scheduled EDR Contact: 01/26/2015
	Data Release Frequency: Semi-Annually

### 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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/06/2014  
Date Data Arrived at EDR: 09/10/2014  
Date Made Active in Reports: 09/18/2014  
Number of Days to Update: 8

Source: U.S. Army Corps of Engineers  
Telephone: 202-528-4285  
Last EDR Contact: 12/12/2014  
Next Scheduled EDR Contact: 03/23/2015  
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: 12/31/2013  
Date Data Arrived at EDR: 01/24/2014  
Date Made Active in Reports: 02/24/2014  
Number of Days to Update: 31

Source: Department of Justice, Consent Decree Library  
Telephone: Varies  
Last EDR Contact: 09/30/2014  
Next Scheduled EDR Contact: 01/12/2015  
Data Release Frequency: Varies

## 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: 12/12/2014  
Next Scheduled EDR Contact: 03/23/2015  
Data Release Frequency: Annually

## 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: 11/26/2014  
Next Scheduled EDR Contact: 03/09/2015  
Data Release Frequency: Varies

## 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: 08/05/2014  
Date Data Arrived at EDR: 09/04/2014  
Date Made Active in Reports: 11/17/2014  
Number of Days to Update: 74

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959  
Last EDR Contact: 12/03/2014  
Next Scheduled EDR Contact: 03/16/2015  
Data Release Frequency: Semi-Annually

## 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: 12/31/2011  
Date Data Arrived at EDR: 07/31/2013  
Date Made Active in Reports: 09/13/2013  
Number of Days to Update: 44

Source: EPA  
Telephone: 202-566-0250  
Last EDR Contact: 11/26/2014  
Next Scheduled EDR Contact: 03/09/2015  
Data Release Frequency: Annually

## 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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2006  
Date Data Arrived at EDR: 09/29/2010  
Date Made Active in Reports: 12/02/2010  
Number of Days to Update: 64

Source: EPA  
Telephone: 202-260-5521  
Last EDR Contact: 09/26/2014  
Next Scheduled EDR Contact: 01/05/2015  
Data Release Frequency: Every 4 Years

**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: 11/19/2014  
Next Scheduled EDR Contact: 03/09/2015  
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: 11/19/2014  
Next Scheduled EDR Contact: 03/09/2015  
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

**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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 10/27/2014  
Next Scheduled EDR Contact: 02/09/2015  
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: 07/31/2014  
Date Data Arrived at EDR: 10/29/2014  
Date Made Active in Reports: 11/06/2014  
Number of Days to Update: 8

Source: Environmental Protection Agency  
Telephone: 202-564-5088  
Last EDR Contact: 10/10/2014  
Next Scheduled EDR Contact: 01/26/2015  
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: 07/01/2014  
Date Data Arrived at EDR: 10/15/2014  
Date Made Active in Reports: 11/17/2014  
Number of Days to Update: 33

Source: EPA  
Telephone: 202-566-0500  
Last EDR Contact: 10/15/2014  
Next Scheduled EDR Contact: 01/26/2015  
Data Release Frequency: Annually

## 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: 07/22/2013  
Date Data Arrived at EDR: 08/02/2013  
Date Made Active in Reports: 11/01/2013  
Number of Days to Update: 91

Source: Nuclear Regulatory Commission  
Telephone: 301-415-7169  
Last EDR Contact: 12/04/2014  
Next Scheduled EDR Contact: 03/23/2015  
Data Release Frequency: Quarterly

## 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: 10/07/2014  
Date Data Arrived at EDR: 10/08/2014  
Date Made Active in Reports: 10/20/2014  
Number of Days to Update: 12

Source: Environmental Protection Agency  
Telephone: 202-343-9775  
Last EDR Contact: 10/08/2014  
Next Scheduled EDR Contact: 01/19/2015  
Data Release Frequency: Quarterly

## 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: 08/16/2014  
Date Data Arrived at EDR: 09/10/2014  
Date Made Active in Reports: 10/20/2014  
Number of Days to Update: 40

Source: EPA  
Telephone: (415) 947-8000  
Last EDR Contact: 12/09/2014  
Next Scheduled EDR Contact: 03/23/2015  
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

## 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: 08/01/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/12/2014	Telephone: 202-564-8600
Date Made Active in Reports: 11/06/2014	Last EDR Contact: 10/27/2014
Number of Days to Update: 86	Next Scheduled EDR Contact: 02/09/2015
	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: 12/31/2011	Source: EPA/NTIS
Date Data Arrived at EDR: 02/26/2013	Telephone: 800-424-9346
Date Made Active in Reports: 04/19/2013	Last EDR Contact: 11/26/2014
Number of Days to Update: 52	Next Scheduled EDR Contact: 03/09/2015
	Data Release Frequency: Biennially

## 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	Source: Department of Health Services
Date Data Arrived at EDR: 07/27/1994	Telephone: 916-255-2118
Date Made Active in Reports: 08/02/1994	Last EDR Contact: 05/31/1994
Number of Days to Update: 6	Next Scheduled EDR Contact: N/A
	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: 07/14/2014	Source: Department of Conservation
Date Data Arrived at EDR: 09/17/2014	Telephone: 916-445-2408
Date Made Active in Reports: 10/23/2014	Last EDR Contact: 12/15/2014
Number of Days to Update: 36	Next Scheduled EDR Contact: 03/30/2015
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 08/18/2014	Source: State Water Resources Control Board
Date Data Arrived at EDR: 08/18/2014	Telephone: 916-445-9379
Date Made Active in Reports: 10/06/2014	Last EDR Contact: 11/19/2014
Number of Days to Update: 49	Next Scheduled EDR Contact: 03/02/2015
	Data Release Frequency: Quarterly

## 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: 09/29/2014	Source: CAL EPA/Office of Emergency Information
Date Data Arrived at EDR: 09/30/2014	Telephone: 916-323-3400
Date Made Active in Reports: 11/19/2014	Last EDR Contact: 09/30/2014
Number of Days to Update: 50	Next Scheduled EDR Contact: 01/12/2015
	Data Release Frequency: Quarterly

## 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 [CAL SITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 01/22/2009	Telephone: 916-323-3400
Date Made Active in Reports: 04/08/2009	Last EDR Contact: 01/22/2009
Number of Days to Update: 76	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## 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: 10/21/1993	Source: State Water Resources Control Board
Date Data Arrived at EDR: 11/01/1993	Telephone: 916-445-3846
Date Made Active in Reports: 11/19/1993	Last EDR Contact: 09/22/2014
Number of Days to Update: 18	Next Scheduled EDR Contact: 01/05/2015
	Data Release Frequency: No Update Planned

## 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: 06/28/2014	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 07/03/2014	Telephone: 916-327-4498
Date Made Active in Reports: 08/21/2014	Last EDR Contact: 12/05/2014
Number of Days to Update: 49	Next Scheduled EDR Contact: 03/23/2015
	Data Release Frequency: Annually

## 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	Source: Los Angeles Water Quality Control Board
Date Data Arrived at EDR: 07/21/2009	Telephone: 213-576-6726
Date Made Active in Reports: 08/03/2009	Last EDR Contact: 09/29/2014
Number of Days to Update: 13	Next Scheduled EDR Contact: 01/12/2015
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 11/10/2014	Source: State Water Resources Control Board
Date Data Arrived at EDR: 11/12/2014	Telephone: 916-445-9379
Date Made Active in Reports: 12/12/2014	Last EDR Contact: 11/07/2014
Number of Days to Update: 30	Next Scheduled EDR Contact: 02/09/2015
	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.

Date of Government Version: 12/31/2013	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 10/15/2014	Telephone: 916-255-1136
Date Made Active in Reports: 11/19/2014	Last EDR Contact: 10/15/2014
Number of Days to Update: 35	Next Scheduled EDR Contact: 01/26/2015
	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: 12/31/2012	Source: California Air Resources Board
Date Data Arrived at EDR: 03/25/2014	Telephone: 916-322-2990
Date Made Active in Reports: 04/28/2014	Last EDR Contact: 09/26/2014
Number of Days to Update: 34	Next Scheduled EDR Contact: 01/05/2015
	Data Release Frequency: Varies

## 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	Source: USGS
Date Data Arrived at EDR: 12/08/2006	Telephone: 202-208-3710
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 11/07/2014
Number of Days to Update: 34	Next Scheduled EDR Contact: 01/26/2015
	Data Release Frequency: Semi-Annually

## 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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/09/2011	Telephone: 615-532-8599
Date Made Active in Reports: 05/02/2011	Last EDR Contact: 11/18/2014
Number of Days to Update: 54	Next Scheduled EDR Contact: 02/02/2015
	Data Release Frequency: Varies

## WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/20/2007	Telephone: 916-341-5227
Date Made Active in Reports: 06/29/2007	Last EDR Contact: 11/19/2014
Number of Days to Update: 9	Next Scheduled EDR Contact: 03/09/2015
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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	Source: U.S. Geological Survey
Date Data Arrived at EDR: 02/06/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 11/07/2014
Number of Days to Update: 339	Next Scheduled EDR Contact: 01/26/2015
	Data Release Frequency: N/A

## PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 10/17/2014	Telephone: 202-564-6023
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 09/30/2014
Number of Days to Update: 3	Next Scheduled EDR Contact: 01/12/2015
	Data Release Frequency: Quarterly

## LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 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	Source: American Journal of Public Health
Date Data Arrived at EDR: 10/27/2010	Telephone: 703-305-6451
Date Made Active in Reports: 12/02/2010	Last EDR Contact: 12/02/2009
Number of Days to Update: 36	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 06/04/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/12/2014	Telephone: 703-603-8787
Date Made Active in Reports: 07/28/2014	Last EDR Contact: 10/06/2014
Number of Days to Update: 46	Next Scheduled EDR Contact: 01/19/2015
	Data Release Frequency: Varies

## 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: 11/11/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/18/2012	Telephone: 703-308-4044
Date Made Active in Reports: 05/25/2012	Last EDR Contact: 11/14/2014
Number of Days to Update: 7	Next Scheduled EDR Contact: 02/23/2015
	Data Release Frequency: Varies

## PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 09/16/2014	Source: Department of Conservation
Date Data Arrived at EDR: 09/17/2014	Telephone: 916-323-3836
Date Made Active in Reports: 10/23/2014	Last EDR Contact: 12/15/2014
Number of Days to Update: 36	Next Scheduled EDR Contact: 03/30/2015
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2014	Telephone: 617-520-3000
Date Made Active in Reports: 06/17/2014	Last EDR Contact: 11/14/2014
Number of Days to Update: 88	Next Scheduled EDR Contact: 02/23/2015
	Data Release Frequency: Quarterly

## Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 10/28/2014	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 10/30/2014	Telephone: 916-255-3628
Date Made Active in Reports: 12/10/2014	Last EDR Contact: 10/27/2014
Number of Days to Update: 41	Next Scheduled EDR Contact: 02/09/2015
	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: 08/14/2014	Source: California Integrated Waste Management Board
Date Data Arrived at EDR: 08/18/2014	Telephone: 916-341-6066
Date Made Active in Reports: 10/06/2014	Last EDR Contact: 11/26/2014
Number of Days to Update: 49	Next Scheduled EDR Contact: 03/02/2015
	Data Release Frequency: Varies

## HWP: EnviroStor Permitted Facilities Listing

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

Date of Government Version: 08/26/2014	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 08/26/2014	Telephone: 916-323-3400
Date Made Active in Reports: 10/06/2014	Last EDR Contact: 11/25/2014
Number of Days to Update: 41	Next Scheduled EDR Contact: 03/09/2015
	Data Release Frequency: Quarterly

## 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: 09/04/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/04/2014	Telephone: 202-566-1917
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 11/11/2014
Number of Days to Update: 46	Next Scheduled EDR Contact: 03/02/2015
	Data Release Frequency: Quarterly

## 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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2014	Telephone: N/A
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 12/12/2014
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/23/2015
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/19/2011	Telephone: 202-566-0517
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 10/31/2014
Number of Days to Update: 83	Next Scheduled EDR Contact: 02/09/2015
	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: 08/20/2014	Source: Department of Public Health
Date Data Arrived at EDR: 09/10/2014	Telephone: 916-558-1784
Date Made Active in Reports: 10/23/2014	Last EDR Contact: 12/09/2014
Number of Days to Update: 43	Next Scheduled EDR Contact: 03/23/2015
	Data Release Frequency: Varies

## COAL ASH DOE: Sleam-Electric Plan Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 10/17/2014
Number of Days to Update: 76	Next Scheduled EDR Contact: 01/26/2015
	Data Release Frequency: Varies

## 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: 10/14/2014	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 10/15/2014	Telephone: 916-440-7145
Date Made Active in Reports: 11/19/2014	Last EDR Contact: 10/15/2014
Number of Days to Update: 35	Next Scheduled EDR Contact: 01/26/2015
	Data Release Frequency: Quarterly

## 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: 10/16/2014	Source: EPA
Date Data Arrived at EDR: 10/31/2014	Telephone: 202-564-2496
Date Made Active in Reports: 11/17/2014	Last EDR Contact: 09/29/2014
Number of Days to Update: 17	Next Scheduled EDR Contact: 01/12/2015
	Data Release Frequency: Annually

## US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/16/2014	Source: EPA
Date Data Arrived at EDR: 10/31/2014	Telephone: 202-564-2496
Date Made Active in Reports: 11/17/2014	Last EDR Contact: 09/29/2014
Number of Days to Update: 17	Next Scheduled EDR Contact: 01/12/2015
	Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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 US Hist Auto Stat: 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 US Hist Cleaners: 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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 10/21/2014  
Date Data Arrived at EDR: 11/07/2014  
Date Made Active in Reports: 12/12/2014  
Number of Days to Update: 35

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 09/29/2014  
Next Scheduled EDR Contact: 01/12/2015  
Data Release Frequency: Semi-Annually

#### Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 10/21/2014  
Date Data Arrived at EDR: 11/07/2014  
Date Made Active in Reports: 12/15/2014  
Number of Days to Update: 38

Source: Alameda County Environmental Health Services  
Telephone: 510-567-6700  
Last EDR Contact: 09/29/2014  
Next Scheduled EDR Contact: 01/12/2015  
Data Release Frequency: Semi-Annually

### AMADOR COUNTY:

#### CUPA Facility List

Cupa Facility List

Date of Government Version: 09/08/2014  
Date Data Arrived at EDR: 09/09/2014  
Date Made Active in Reports: 09/24/2014  
Number of Days to Update: 15

Source: Amador County Environmental Health  
Telephone: 209-223-6439  
Last EDR Contact: 12/05/2014  
Next Scheduled EDR Contact: 03/23/2015  
Data Release Frequency: Varies

### BUTTE COUNTY:

#### CUPA Facility Listing

Cupa facility list.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/01/2013  
Date Data Arrived at EDR: 08/02/2013  
Date Made Active in Reports: 08/22/2013  
Number of Days to Update: 20

Source: Public Health Department  
Telephone: 530-538-7149  
Last EDR Contact: 11/06/2014  
Next Scheduled EDR Contact: 01/26/2015  
Data Release Frequency: No Update Planned

## CALVERAS COUNTY:

### CUPA Facility Listing Cupa Facility Listing

Date of Government Version: 10/06/2014  
Date Data Arrived at EDR: 10/07/2014  
Date Made Active in Reports: 11/19/2014  
Number of Days to Update: 43

Source: Calveras County Environmental Health  
Telephone: 209-754-6399  
Last EDR Contact: 09/29/2014  
Next Scheduled EDR Contact: 01/12/2015  
Data Release Frequency: Quarterly

## COLUSA COUNTY:

### CUPA Facility List Cupa facility list.

Date of Government Version: 06/11/2014  
Date Data Arrived at EDR: 06/13/2014  
Date Made Active in Reports: 07/07/2014  
Number of Days to Update: 24

Source: Health & Human Services  
Telephone: 530-458-0396  
Last EDR Contact: 11/07/2014  
Next Scheduled EDR Contact: 02/23/2015  
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: 08/11/2014  
Date Data Arrived at EDR: 08/14/2014  
Date Made Active in Reports: 10/09/2014  
Number of Days to Update: 56

Source: Contra Costa Health Services Department  
Telephone: 925-646-2286  
Last EDR Contact: 11/03/2014  
Next Scheduled EDR Contact: 02/16/2015  
Data Release Frequency: Semi-Annually

## DEL NORTE COUNTY:

### CUPA Facility List Cupa Facility list

Date of Government Version: 11/03/2014  
Date Data Arrived at EDR: 11/04/2014  
Date Made Active in Reports: 12/12/2014  
Number of Days to Update: 38

Source: Del Norte County Environmental Health Division  
Telephone: 707-465-0426  
Last EDR Contact: 11/03/2014  
Next Scheduled EDR Contact: 02/16/2015  
Data Release Frequency: Varies

## EL DORADO COUNTY:

### CUPA Facility List CUPA facility list.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/25/2014  
Date Data Arrived at EDR: 08/26/2014  
Date Made Active in Reports: 09/29/2014  
Number of Days to Update: 34

Source: El Dorado County Environmental Management Department  
Telephone: 530-621-6623  
Last EDR Contact: 11/03/2014  
Next Scheduled EDR Contact: 02/16/2015  
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: 09/30/2014  
Date Data Arrived at EDR: 10/14/2014  
Date Made Active in Reports: 11/19/2014  
Number of Days to Update: 36

Source: Dept. of Community Health  
Telephone: 559-445-3271  
Last EDR Contact: 10/10/2014  
Next Scheduled EDR Contact: 01/19/2015  
Data Release Frequency: Semi-Annually

## HUMBOLDT COUNTY:

### CUPA Facility List

CUPA facility list.

Date of Government Version: 09/10/2014  
Date Data Arrived at EDR: 09/11/2014  
Date Made Active in Reports: 09/25/2014  
Number of Days to Update: 14

Source: Humboldt County Environmental Health  
Telephone: N/A  
Last EDR Contact: 11/26/2014  
Next Scheduled EDR Contact: 03/09/2015  
Data Release Frequency: Varies

## IMPERIAL COUNTY:

### CUPA Facility List

Cupa facility list.

Date of Government Version: 11/03/2014  
Date Data Arrived at EDR: 11/04/2014  
Date Made Active in Reports: 12/12/2014  
Number of Days to Update: 38

Source: San Diego Border Field Office  
Telephone: 760-339-2777  
Last EDR Contact: 10/27/2014  
Next Scheduled EDR Contact: 02/09/2015  
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: 11/19/2014  
Next Scheduled EDR Contact: 03/09/2015  
Data Release Frequency: Varies

## KERN COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 08/31/2010  
Date Data Arrived at EDR: 09/01/2010  
Date Made Active in Reports: 09/30/2010  
Number of Days to Update: 29

Source: Kern County Environment Health Services Department  
Telephone: 661-862-8700  
Last EDR Contact: 11/05/2014  
Next Scheduled EDR Contact: 02/23/2015  
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: 08/21/2014  
Date Data Arrived at EDR: 08/26/2014  
Date Made Active in Reports: 09/29/2014  
Number of Days to Update: 34

Source: Kings County Department of Public Health  
Telephone: 559-584-1411  
Last EDR Contact: 11/21/2014  
Next Scheduled EDR Contact: 03/09/2015  
Data Release Frequency: Varies

## LAKE COUNTY:

### CUPA Facility List

Cupa facility list

Date of Government Version: 07/23/2014  
Date Data Arrived at EDR: 07/25/2014  
Date Made Active in Reports: 08/22/2014  
Number of Days to Update: 28

Source: Lake County Environmental Health  
Telephone: 707-263-1164  
Last EDR Contact: 10/20/2014  
Next Scheduled EDR Contact: 02/02/2015  
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: 09/22/2014  
Next Scheduled EDR Contact: 01/05/2015  
Data Release Frequency: No Update Planned

### HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 03/31/2014  
Date Data Arrived at EDR: 06/06/2014  
Date Made Active in Reports: 07/17/2014  
Number of Days to Update: 41

Source: Department of Public Works  
Telephone: 626-458-3517  
Last EDR Contact: 10/14/2014  
Next Scheduled EDR Contact: 01/26/2015  
Data Release Frequency: Semi-Annually

### List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/20/2014  
Date Data Arrived at EDR: 10/22/2014  
Date Made Active in Reports: 12/12/2014  
Number of Days to Update: 51

Source: La County Department of Public Works  
Telephone: 818-458-5185  
Last EDR Contact: 10/22/2014  
Next Scheduled EDR Contact: 02/02/2015  
Data Release Frequency: Varies

## City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009  
Date Data Arrived at EDR: 03/10/2009  
Date Made Active in Reports: 04/08/2009  
Number of Days to Update: 29

Source: Engineering & Construction Division  
Telephone: 213-473-7869  
Last EDR Contact: 10/17/2014  
Next Scheduled EDR Contact: 02/02/2015  
Data Release Frequency: Varies

## Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/07/2014  
Date Data Arrived at EDR: 02/25/2014  
Date Made Active in Reports: 03/25/2014  
Number of Days to Update: 28

Source: Community Health Services  
Telephone: 323-890-7806  
Last EDR Contact: 10/17/2014  
Next Scheduled EDR Contact: 02/02/2015  
Data Release Frequency: Annually

## City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 10/20/2014  
Date Data Arrived at EDR: 10/22/2014  
Date Made Active in Reports: 12/15/2014  
Number of Days to Update: 54

Source: City of El Segundo Fire Department  
Telephone: 310-524-2236  
Last EDR Contact: 10/20/2014  
Next Scheduled EDR Contact: 02/02/2015  
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: 07/28/2014  
Date Data Arrived at EDR: 07/28/2014  
Date Made Active in Reports: 08/20/2014  
Number of Days to Update: 23

Source: City of Long Beach Fire Department  
Telephone: 562-570-2563  
Last EDR Contact: 10/27/2014  
Next Scheduled EDR Contact: 02/09/2015  
Data Release Frequency: Annually

## City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 01/13/2014  
Date Data Arrived at EDR: 03/27/2014  
Date Made Active in Reports: 04/28/2014  
Number of Days to Update: 32

Source: City of Torrance Fire Department  
Telephone: 310-618-2973  
Last EDR Contact: 10/10/2014  
Next Scheduled EDR Contact: 01/26/2015  
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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/02/2014  
Date Data Arrived at EDR: 10/03/2014  
Date Made Active in Reports: 11/20/2014  
Number of Days to Update: 48

Source: Madera County Environmental Health  
Telephone: 559-675-7823  
Last EDR Contact: 11/26/2014  
Next Scheduled EDR Contact: 03/09/2015  
Data Release Frequency: Varies

## MARIN COUNTY:

### Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 10/08/2014  
Date Data Arrived at EDR: 10/22/2014  
Date Made Active in Reports: 12/15/2014  
Number of Days to Update: 54

Source: Public Works Department Waste Management  
Telephone: 415-499-6647  
Last EDR Contact: 10/20/2014  
Next Scheduled EDR Contact: 01/19/2015  
Data Release Frequency: Semi-Annually

## MERCED COUNTY:

### CUPA Facility List

CUPA facility list.

Date of Government Version: 08/20/2014  
Date Data Arrived at EDR: 08/26/2014  
Date Made Active in Reports: 09/30/2014  
Number of Days to Update: 35

Source: Merced County Environmental Health  
Telephone: 209-381-1094  
Last EDR Contact: 11/21/2014  
Next Scheduled EDR Contact: 03/09/2015  
Data Release Frequency: Varies

## MONO COUNTY:

### CUPA Facility List

CUPA Facility List

Date of Government Version: 09/02/2014  
Date Data Arrived at EDR: 09/05/2014  
Date Made Active in Reports: 09/24/2014  
Number of Days to Update: 19

Source: Mono County Health Department  
Telephone: 760-932-5580  
Last EDR Contact: 11/26/2014  
Next Scheduled EDR Contact: 03/16/2015  
Data Release Frequency: Varies

## MONTEREY COUNTY:

### CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/09/2014  
Date Data Arrived at EDR: 06/11/2014  
Date Made Active in Reports: 07/09/2014  
Number of Days to Update: 28

Source: Monterey County Health Department  
Telephone: 831-796-1297  
Last EDR Contact: 11/26/2014  
Next Scheduled EDR Contact: 03/09/2015  
Data Release Frequency: Varies

## NAPA COUNTY:

### Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 11/25/2014  
Next Scheduled EDR Contact: 03/16/2015  
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: 11/25/2014  
Next Scheduled EDR Contact: 03/16/2015  
Data Release Frequency: No Update Planned

## NEVADA COUNTY:

### CUPA Facility List

CUPA facility list.

Date of Government Version: 09/16/2014  
Date Data Arrived at EDR: 09/18/2014  
Date Made Active in Reports: 09/25/2014  
Number of Days to Update: 7

Source: Community Development Agency  
Telephone: 530-265-1467  
Last EDR Contact: 12/15/2014  
Next Scheduled EDR Contact: 02/16/2015  
Data Release Frequency: Varies

## ORANGE COUNTY:

### List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 11/01/2014  
Date Data Arrived at EDR: 11/12/2014  
Date Made Active in Reports: 12/12/2014  
Number of Days to Update: 30

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 11/05/2014  
Next Scheduled EDR Contact: 02/23/2015  
Data Release Frequency: Annually

### List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 11/01/2014  
Date Data Arrived at EDR: 11/12/2014  
Date Made Active in Reports: 12/12/2014  
Number of Days to Update: 30

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 11/05/2014  
Next Scheduled EDR Contact: 02/23/2015  
Data Release Frequency: Quarterly

### List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 11/01/2014  
Date Data Arrived at EDR: 11/10/2014  
Date Made Active in Reports: 12/15/2014  
Number of Days to Update: 35

Source: Health Care Agency  
Telephone: 714-834-3446  
Last EDR Contact: 11/10/2014  
Next Scheduled EDR Contact: 02/23/2015  
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: 09/22/2014  
Date Data Arrived at EDR: 09/23/2014  
Date Made Active in Reports: 11/21/2014  
Number of Days to Update: 59

Source: Placer County Health and Human Services  
Telephone: 530-745-2363  
Last EDR Contact: 12/05/2014  
Next Scheduled EDR Contact: 03/23/2015  
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: 10/08/2014  
Date Data Arrived at EDR: 10/10/2014  
Date Made Active in Reports: 11/20/2014  
Number of Days to Update: 41

Source: Department of Environmental Health  
Telephone: 951-358-5055  
Last EDR Contact: 09/22/2014  
Next Scheduled EDR Contact: 01/05/2015  
Data Release Frequency: Quarterly

### Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 10/08/2014  
Date Data Arrived at EDR: 10/10/2014  
Date Made Active in Reports: 11/25/2014  
Number of Days to Update: 46

Source: Department of Environmental Health  
Telephone: 951-358-5055  
Last EDR Contact: 09/22/2014  
Next Scheduled EDR Contact: 01/05/2015  
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: 02/06/2014  
Date Data Arrived at EDR: 04/08/2014  
Date Made Active in Reports: 04/29/2014  
Number of Days to Update: 21

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 10/06/2014  
Next Scheduled EDR Contact: 01/19/2015  
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: 10/21/2014  
Date Data Arrived at EDR: 10/28/2014  
Date Made Active in Reports: 12/15/2014  
Number of Days to Update: 48

Source: Sacramento County Environmental Management  
Telephone: 916-875-8406  
Last EDR Contact: 10/21/2014  
Next Scheduled EDR Contact: 01/19/2015  
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.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/06/2014  
Date Data Arrived at EDR: 08/07/2014  
Date Made Active in Reports: 09/30/2014  
Number of Days to Update: 54

Source: San Bernardino County Fire Department Hazardous Materials Division  
Telephone: 909-387-3041  
Last EDR Contact: 11/10/2014  
Next Scheduled EDR Contact: 02/23/2015  
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: 12/04/2014  
Next Scheduled EDR Contact: 03/23/2015  
Data Release Frequency: Quarterly

### Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2013  
Date Data Arrived at EDR: 11/19/2013  
Date Made Active in Reports: 12/31/2013  
Number of Days to Update: 42

Source: Department of Health Services  
Telephone: 619-338-2209  
Last EDR Contact: 10/27/2014  
Next Scheduled EDR Contact: 02/09/2015  
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: 12/04/2014  
Next Scheduled EDR Contact: 03/23/2015  
Data Release Frequency: No Update Planned

## SAN FRANCISCO COUNTY:

### Local Oversight 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: 11/05/2014  
Next Scheduled EDR Contact: 02/23/2015  
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: 11/05/2014  
Next Scheduled EDR Contact: 02/23/2015  
Data Release Frequency: Quarterly

## SAN JOAQUIN COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/20/2014  
Date Data Arrived at EDR: 06/23/2014  
Date Made Active in Reports: 07/11/2014  
Number of Days to Update: 18

Source: Environmental Health Department  
Telephone: N/A  
Last EDR Contact: 09/22/2014  
Next Scheduled EDR Contact: 01/05/2015  
Data Release Frequency: Semi-Annually

## SAN LUIS OBISPO COUNTY:

### CUPA Facility List

Cupa Facility List.

Date of Government Version: 08/22/2014  
Date Data Arrived at EDR: 08/26/2014  
Date Made Active in Reports: 10/01/2014  
Number of Days to Update: 36

Source: San Luis Obispo County Public Health Department  
Telephone: 805-781-5596  
Last EDR Contact: 11/21/2014  
Next Scheduled EDR Contact: 03/09/2015  
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: 10/06/2014  
Date Data Arrived at EDR: 10/10/2014  
Date Made Active in Reports: 11/19/2014  
Number of Days to Update: 40

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921  
Last EDR Contact: 12/15/2014  
Next Scheduled EDR Contact: 03/30/2015  
Data Release Frequency: Annually

### Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 09/15/2014  
Date Data Arrived at EDR: 09/16/2014  
Date Made Active in Reports: 10/22/2014  
Number of Days to Update: 36

Source: San Mateo County Environmental Health Services Division  
Telephone: 650-363-1921  
Last EDR Contact: 12/11/2014  
Next Scheduled EDR Contact: 03/30/2015  
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: 11/19/2014  
Next Scheduled EDR Contact: 03/09/2015  
Data Release Frequency: Varies

## SANTA CLARA COUNTY:

### Cupa Facility List

Cupa facility list

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/22/2014  
Date Data Arrived at EDR: 08/26/2014  
Date Made Active in Reports: 10/03/2014  
Number of Days to Update: 38

Source: Department of Environmental Health  
Telephone: 408-918-1973  
Last EDR Contact: 11/21/2014  
Next Scheduled EDR Contact: 03/09/2015  
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: 11/25/2014  
Next Scheduled EDR Contact: 03/16/2015  
Data Release Frequency: Annually

## Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/10/2014  
Date Data Arrived at EDR: 11/10/2014  
Date Made Active in Reports: 12/15/2014  
Number of Days to Update: 35

Source: City of San Jose Fire Department  
Telephone: 408-535-7694  
Last EDR Contact: 11/07/2014  
Next Scheduled EDR Contact: 02/23/2015  
Data Release Frequency: Annually

## SANTA CRUZ COUNTY:

### CUPA Facility List

CUPA facility listing.

Date of Government Version: 09/09/2014  
Date Data Arrived at EDR: 09/11/2014  
Date Made Active in Reports: 09/25/2014  
Number of Days to Update: 34

Source: Santa Cruz County Environmental Health  
Telephone: 831-464-2761  
Last EDR Contact: 11/21/2014  
Next Scheduled EDR Contact: 03/09/2015  
Data Release Frequency: Varies

## SHASTA COUNTY:

### CUPA Facility List

Cupa Facility List.

Date of Government Version: 09/16/2014  
Date Data Arrived at EDR: 09/18/2014  
Date Made Active in Reports: 10/22/2014  
Number of Days to Update: 34

Source: Shasta County Department of Resource Management  
Telephone: 530-225-5789  
Last EDR Contact: 11/26/2014  
Next Scheduled EDR Contact: 03/09/2015  
Data Release Frequency: Varies

## SOLANO COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/19/2014  
Date Data Arrived at EDR: 06/26/2014  
Date Made Active in Reports: 07/25/2014  
Number of Days to Update: 29

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 12/11/2014  
Next Scheduled EDR Contact: 03/30/2015  
Data Release Frequency: Quarterly

## Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 06/19/2014  
Date Data Arrived at EDR: 06/26/2014  
Date Made Active in Reports: 07/25/2014  
Number of Days to Update: 29

Source: Solano County Department of Environmental Management  
Telephone: 707-784-6770  
Last EDR Contact: 12/11/2014  
Next Scheduled EDR Contact: 03/30/2015  
Data Release Frequency: Quarterly

## SONOMA COUNTY:

### Cupa Facility List

Cupa Facility list

Date of Government Version: 09/30/2014  
Date Data Arrived at EDR: 10/02/2014  
Date Made Active in Reports: 11/20/2014  
Number of Days to Update: 49

Source: County of Sonoma Fire & Emergency Services Department  
Telephone: 707-565-1174  
Last EDR Contact: 09/29/2014  
Next Scheduled EDR Contact: 01/12/2015  
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: 10/01/2014  
Date Data Arrived at EDR: 10/03/2014  
Date Made Active in Reports: 11/20/2014  
Number of Days to Update: 48

Source: Department of Health Services  
Telephone: 707-565-6565  
Last EDR Contact: 09/29/2014  
Next Scheduled EDR Contact: 01/12/2015  
Data Release Frequency: Quarterly

## SUTTER COUNTY:

### Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 09/08/2014  
Date Data Arrived at EDR: 09/09/2014  
Date Made Active in Reports: 10/24/2014  
Number of Days to Update: 45

Source: Sutter County Department of Agriculture  
Telephone: 530-822-7500  
Last EDR Contact: 12/05/2014  
Next Scheduled EDR Contact: 03/23/2015  
Data Release Frequency: Semi-Annually

## TUOLUMNE COUNTY:

### CUPA Facility List

Cupa facility list

Date of Government Version: 10/28/2014  
Date Data Arrived at EDR: 10/29/2014  
Date Made Active in Reports: 12/12/2014  
Number of Days to Update: 44

Source: Division of Environmental Health  
Telephone: 209-533-5633  
Last EDR Contact: 10/27/2014  
Next Scheduled EDR Contact: 02/09/2015  
Data Release Frequency: Varies

## VENTURA COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## 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: 07/28/2014	Source: Ventura County Environmental Health Division
Date Data Arrived at EDR: 08/18/2014	Telephone: 805-654-2813
Date Made Active in Reports: 09/26/2014	Last EDR Contact: 11/17/2014
Number of Days to Update: 39	Next Scheduled EDR Contact: 03/02/2015
	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	Source: Environmental Health Division
Date Data Arrived at EDR: 12/01/2011	Telephone: 805-654-2813
Date Made Active in Reports: 01/19/2012	Last EDR Contact: 10/03/2014
Number of Days to Update: 49	Next Scheduled EDR Contact: 01/12/2015
	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	Source: Environmental Health Division
Date Data Arrived at EDR: 06/24/2008	Telephone: 805-654-2813
Date Made Active in Reports: 07/31/2008	Last EDR Contact: 11/17/2014
Number of Days to Update: 37	Next Scheduled EDR Contact: 03/02/2015
	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: 09/26/2014	Source: Ventura County Resource Management Agency
Date Data Arrived at EDR: 10/29/2014	Telephone: 805-654-2813
Date Made Active in Reports: 12/12/2014	Last EDR Contact: 10/27/2014
Number of Days to Update: 44	Next Scheduled EDR Contact: 02/09/2015
	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: 08/26/2014	Source: Environmental Health Division
Date Data Arrived at EDR: 09/17/2014	Telephone: 805-654-2813
Date Made Active in Reports: 10/28/2014	Last EDR Contact: 12/15/2014
Number of Days to Update: 41	Next Scheduled EDR Contact: 03/30/2015
	Data Release Frequency: Quarterly

## YOLO COUNTY:

### Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 09/23/2014	Source: Yolo County Department of Health
Date Data Arrived at EDR: 09/30/2014	Telephone: 530-666-8646
Date Made Active in Reports: 11/25/2014	Last EDR Contact: 09/22/2014
Number of Days to Update: 56	Next Scheduled EDR Contact: 01/05/2015
	Data Release Frequency: Annually

## YUBA COUNTY:

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 08/05/2014  
Date Data Arrived at EDR: 08/07/2014  
Date Made Active in Reports: 10/06/2014  
Number of Days to Update: 60

Source: Yuba County Environmental Health Department  
Telephone: 530-749-7523  
Last EDR Contact: 11/17/2014  
Next Scheduled EDR Contact: 02/16/2015  
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: 11/17/2014  
Next Scheduled EDR Contact: 03/02/2015  
Data Release Frequency: No Update Planned

### NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2011  
Date Data Arrived at EDR: 07/19/2012  
Date Made Active in Reports: 08/28/2012  
Number of Days to Update: 40

Source: Department of Environmental Protection  
Telephone: N/A  
Last EDR Contact: 10/10/2014  
Next Scheduled EDR Contact: 01/26/2015  
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: 11/01/2014  
Date Data Arrived at EDR: 11/05/2014  
Date Made Active in Reports: 11/24/2014  
Number of Days to Update: 19

Source: Department of Environmental Conservation  
Telephone: 518-402-8651  
Last EDR Contact: 11/05/2014  
Next Scheduled EDR Contact: 02/16/2015  
Data Release Frequency: Annually

### PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2013  
Date Data Arrived at EDR: 07/21/2014  
Date Made Active in Reports: 08/25/2014  
Number of Days to Update: 35

Source: Department of Environmental Protection  
Telephone: 717-783-8990  
Last EDR Contact: 10/20/2014  
Next Scheduled EDR Contact: 02/02/2015  
Data Release Frequency: Annually

### RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2013  
Date Data Arrived at EDR: 07/15/2014  
Date Made Active in Reports: 08/13/2014  
Number of Days to Update: 29

Source: Department of Environmental Management  
Telephone: 401-222-2797  
Last EDR Contact: 11/26/2014  
Next Scheduled EDR Contact: 03/09/2015  
Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2013

Date Data Arrived at EDR: 06/20/2014

Date Made Active in Reports: 08/07/2014

Number of Days to Update: 48

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 12/12/2014

Next Scheduled EDR Contact: 03/30/2015

Data Release Frequency: Annually

**Oil/Gas Pipelines:** This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

**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, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**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.

### Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## STREET AND ADDRESS INFORMATION

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## GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM

### TARGET PROPERTY ADDRESS

KALLISTO GREENHOUSES  
9988 REDWOOD AVENUE  
FONTANA, CA 92335

### TARGET PROPERTY COORDINATES

Latitude (North):	34.0729 - 34° 4' 22.44"
Longitude (West):	117.4857 - 117° 29' 8.52"
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	455183.8
UTM Y (Meters):	3770150.8
Elevation:	1062 ft. above sea level

### USGS TOPOGRAPHIC MAP

Target Property Map:	34117-A4 FONTANA, CA
Most Recent Revision:	1980
West Map:	34117-A5 GUASTI, CA
Most Recent Revision:	1981

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).

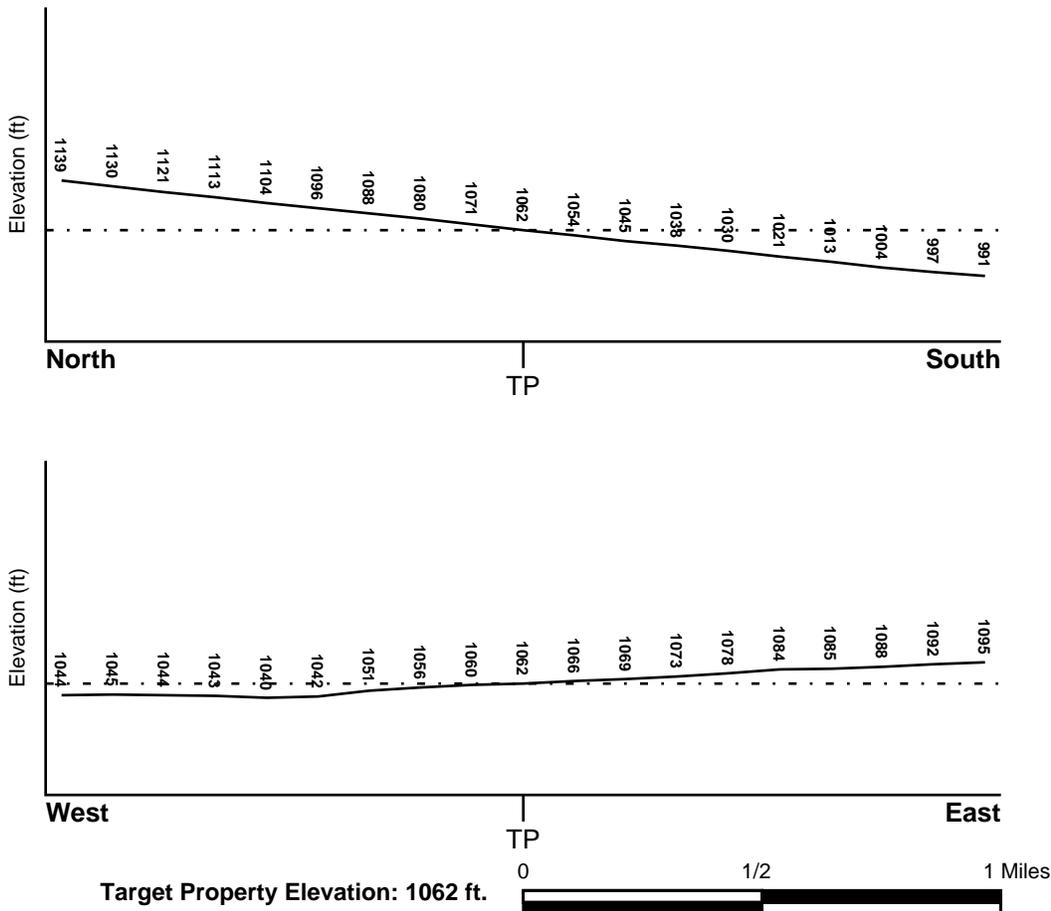
## TOPOGRAPHIC INFORMATION

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 SSW

## 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

<u>Target Property County</u> SAN BERNARDINO, CA	FEMA Flood <u>Electronic Data</u> YES - refer to the Overview Map and Detail Map
---	--

Flood Plain Panel at Target Property: 06071C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

## NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u> FONTANA	NWI Electronic <u>Data Coverage</u> YES - refer to the Overview Map and Detail Map
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## 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
Location Relative to TP:	1/2 - 1 Mile SW
Site Name:	Western States Refining
Site EPA ID Number:	CAD076080563
Groundwater Flow Direction:	Southwest
Inferred Depth to Water:	approximately 280 feet.
Hydraulic Connection:	Permeable soils are present above the identified ground water.
Sole Source Aquifer:	No information about a sole source aquifer is available
Data Quality:	Information is inferred in the CERCLIS investigation report(s)

## 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.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
7	1/2 - 1 Mile WNW	SSW

For additional site information, refer to Physical Setting Source Map Findings.

## 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**

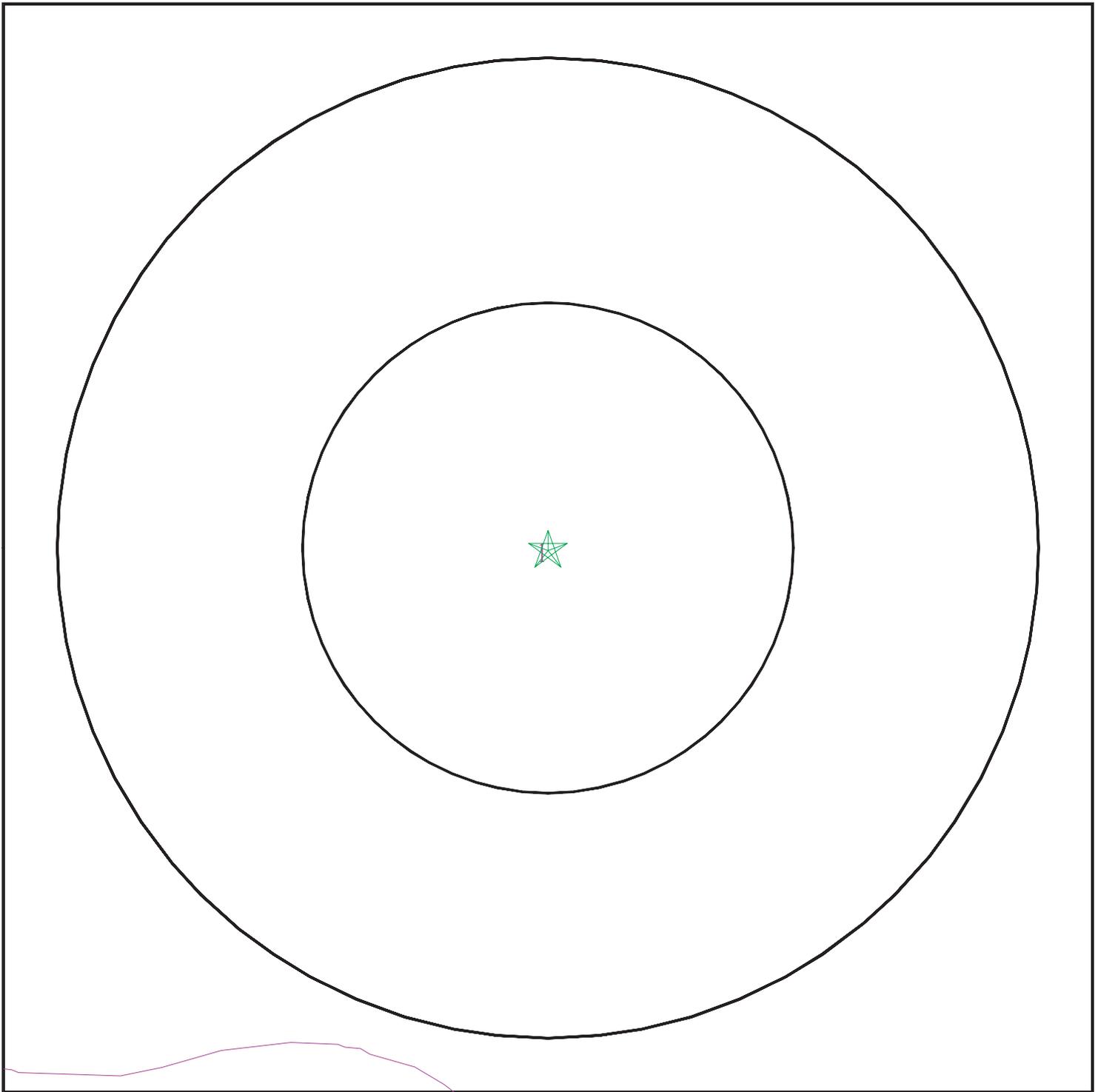
Era: Cenozoic  
System: Quaternary  
Series: Quaternary  
Code: Q (*decoded above as Era, System & Series*)

#### **GEOLOGIC AGE IDENTIFICATION**

Category: Stratified 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).

# SSURGO SOIL MAP - 4163658.2s



- ★ Target Property
- ∩ SSURGO Soil
- ∩ Water



SITE NAME: Kallisto Greenhouses  
ADDRESS: 9988 Redwood Avenue  
Fontana CA 92335  
LAT/LONG: 34.0729 / 117.4857

CLIENT: Blackstone Consulting, LLC  
CONTACT: Amy Stanton  
INQUIRY #: 4163658.2s  
DATE: December 17, 2014 12:01 pm

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## 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. The following information is based on Soil Conservation Service SSURGO data.

### Soil Map ID: 1

Soil Component Name: TUJUNGA

Soil Surface Texture: gravelly loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	35 inches	gravelly loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.1
2	35 inches	59 inches	gravelly sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.3 Min: 6.1

# 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

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

## FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
3	USGS40000140669	1/4 - 1/2 Mile NNW

## FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

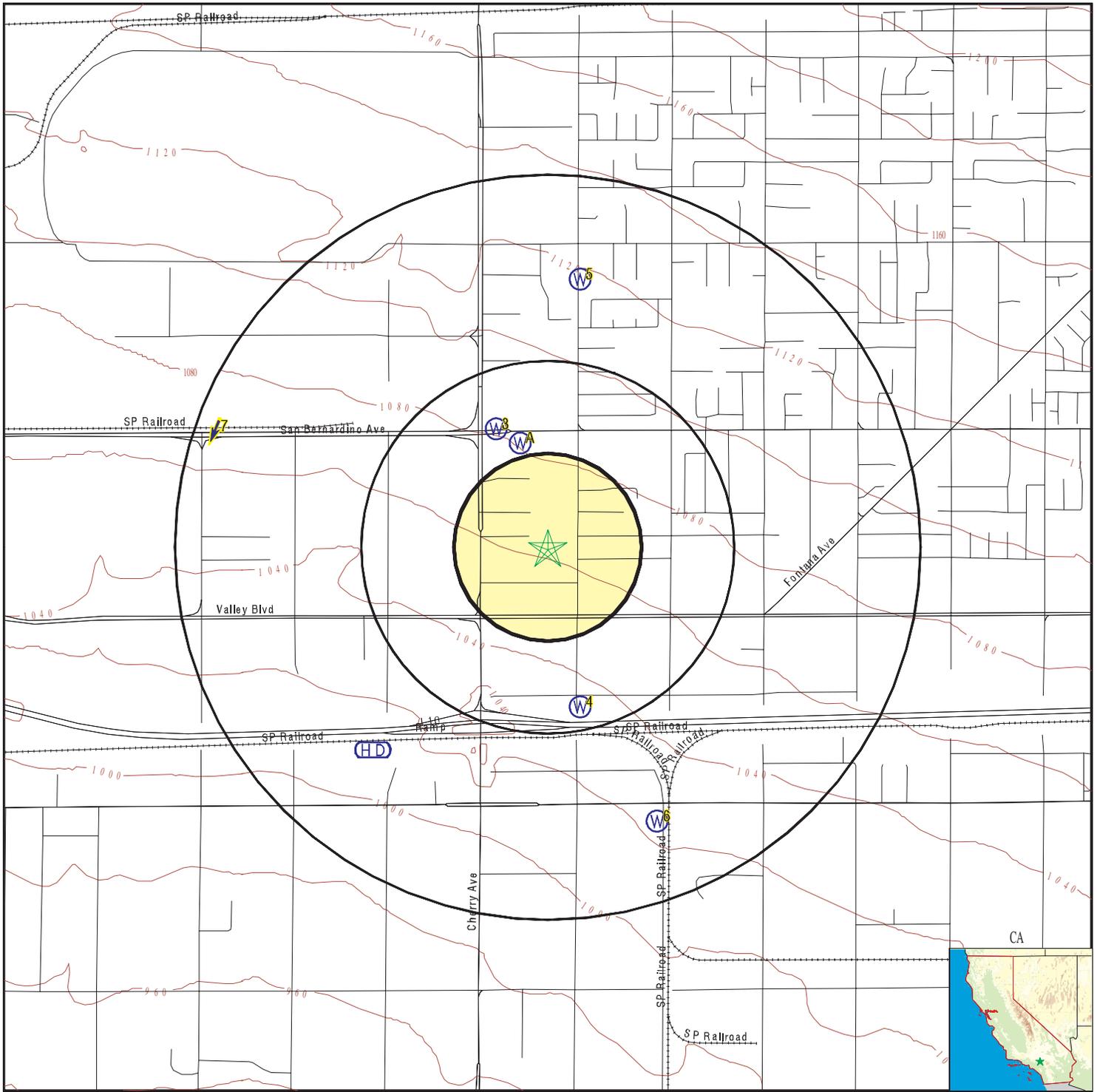
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

## STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A1	18807	1/4 - 1/2 Mile NNW
A2	1041	1/4 - 1/2 Mile NNW
4	1040	1/4 - 1/2 Mile SSE
5	1035	1/2 - 1 Mile North
6	1042	1/2 - 1 Mile SSE

# PHYSICAL SETTING SOURCE MAP - 4163658.2s



- 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
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells



<p>SITE NAME: Kallisto Greenhouses          ADDRESS: 9988 Redwood Avenue          Fontana CA 92335          LAT/LONG: 34.0729 / 117.4857</p>	<p>CLIENT: Blackstone Consulting, LLC          CONTACT: Amy Stanton          INQUIRY #: 4163658.2s          DATE: December 17, 2014 12:01 pm</p>
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# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
 Direction  
 Distance  
 Elevation

Database      EDR ID Number

**A1**  
**NNW**  
**1/4 - 1/2 Mile**  
**Higher**

**CA WELLS      18807**

**Water System Information:**

Prime Station Code:	3610041-042	User ID:	TAN
FRDS Number:	3610041042	County:	San Bernardino
District Number:	13	Station Type:	WELL/AMBNT
Water Type:	Well/Groundwater	Well Status:	Active Untreated
Source Lat/Long:	340436.5 1172910.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	WELL F-17C		
System Number:	3610041		
System Name:	SAN GABRIEL VALLEY WC - FONTANA		
Organization That Operates System:	P.O. BOX 987 FONTANA, CA 92334		
Pop Served:	102599	Connections:	29314
Area Served:	FONTANA		
Sample Collected:	07-MAR-11	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-MAR-11	Findings:	9.4 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	11-APR-11	Findings:	38. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11-APR-11	Findings:	9.2 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	13-JUL-11	Findings:	430. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	13-JUL-11	Findings:	7.75
Chemical:	PH, LABORATORY		
Sample Collected:	13-JUL-11	Findings:	160. MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	13-JUL-11	Findings:	190. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	13-JUL-11	Findings:	190. MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	13-JUL-11	Findings:	56. MG/L
Chemical:	CALCIUM		
Sample Collected:	13-JUL-11	Findings:	12. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	13-JUL-11	Findings:	22. MG/L
Chemical:	SODIUM		
Sample Collected:	13-JUL-11	Findings:	2.1 MG/L
Chemical:	POTASSIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	13-JUL-11	Findings:	13. MG/L
Chemical:	CHLORIDE		
Sample Collected:	13-JUL-11	Findings:	0.13 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	13-JUL-11	Findings:	270. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	13-JUL-11	Findings:	0.802
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	13-JUL-11	Findings:	35. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-JUL-11	Findings:	12.1
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	13-JUL-11	Findings:	7800. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	13-JUL-11	Findings:	9.4 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	12-OCT-11	Findings:	33. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-OCT-11	Findings:	8.3 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	17-JAN-12	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	17-JAN-12	Findings:	8.8 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	16-APR-12	Findings:	8.7 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	16-APR-12	Findings:	27. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-JUN-12	Findings:	370. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	13-JUN-12	Findings:	7.46
Chemical:	PH, LABORATORY		
Sample Collected:	13-JUN-12	Findings:	170. MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	13-JUN-12	Findings:	200. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	13-JUN-12	Findings:	150. MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	13-JUN-12	Findings:	44. MG/L
Chemical:	CALCIUM		
Sample Collected:	13-JUN-12	Findings:	8.8 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	13-JUN-12	Findings:	21. MG/L
Chemical:	SODIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	13-JUN-12	Findings:	1.8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	13-JUN-12	Findings:	9.7 MG/L
Chemical:	CHLORIDE		
Sample Collected:	13-JUN-12	Findings:	0.15 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	13-JUN-12	Findings:	0.667 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	13-JUN-12	Findings:	290. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	13-JUN-12	Findings:	0.428
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	13-JUN-12	Findings:	19. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-JUN-12	Findings:	11.7
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	13-JUN-12	Findings:	4300. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	13-JUN-12	Findings:	1. PCI/L
Chemical:	GROSS ALPHA MDA95		
Sample Collected:	09-JUL-12	Findings:	20. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-JUL-12	Findings:	6.7 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	09-OCT-12	Findings:	34. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-OCT-12	Findings:	7.9 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	08-JAN-13	Findings:	34. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JAN-13	Findings:	11. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	09-APR-13	Findings:	32. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-APR-13	Findings:	11. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	03-JUL-13	Findings:	7.6 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	03-JUL-13	Findings:	26. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	18-JUL-13	Findings:	410. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	18-JUL-13	Findings:	7.92
Chemical:	PH, LABORATORY		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	18-JUL-13	Findings:	170. MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	18-JUL-13	Findings:	200. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	18-JUL-13	Findings:	170. MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO <sub>3</sub>		
Sample Collected:	18-JUL-13	Findings:	50.4 MG/L
Chemical:	CALCIUM		
Sample Collected:	18-JUL-13	Findings:	10.2 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	18-JUL-13	Findings:	21. MG/L
Chemical:	SODIUM		
Sample Collected:	18-JUL-13	Findings:	1.8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	18-JUL-13	Findings:	13. MG/L
Chemical:	CHLORIDE		
Sample Collected:	18-JUL-13	Findings:	0.21 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	18-JUL-13	Findings:	250. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	18-JUL-13	Findings:	0.968
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	18-JUL-13	Findings:	0.491
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	18-JUL-13	Findings:	31. MG/L
Chemical:	NITRATE (AS NO <sub>3</sub> )		
Sample Collected:	18-JUL-13	Findings:	6900. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	18-JUL-13	Findings:	9. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	02-OCT-13	Findings:	34. MG/L
Chemical:	NITRATE (AS NO <sub>3</sub> )		
Sample Collected:	02-OCT-13	Findings:	6.3 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	21-JAN-14	Findings:	37. MG/L
Chemical:	NITRATE (AS NO <sub>3</sub> )		
Sample Collected:	21-JAN-14	Findings:	6.7 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	07-APR-14	Findings:	. 30. MG/L
Chemical:	NITRATE (AS NO <sub>3</sub> )		
Sample Collected:	07-APR-14	Findings:	. 7. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	24-JUN-14	Findings:	. 410. US
Chemical:	SPECIFIC CONDUCTANCE		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	24-JUN-14	Findings:	. 7.91
Chemical:	PH, LABORATORY		
Sample Collected:	24-JUN-14	Findings:	. 170. MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	24-JUN-14	Findings:	. 200. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	24-JUN-14	Findings:	. 150. MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	24-JUN-14	Findings:	. 45.3 MG/L
Chemical:	CALCIUM		
Sample Collected:	24-JUN-14	Findings:	. 9.09 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	24-JUN-14	Findings:	. 23. MG/L
Chemical:	SODIUM		
Sample Collected:	24-JUN-14	Findings:	. 1.8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	24-JUN-14	Findings:	. 12. MG/L
Chemical:	CHLORIDE		
Sample Collected:	24-JUN-14	Findings:	. 0.15 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	24-JUN-14	Findings:	. 3.1 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	24-JUN-14	Findings:	. 0.55 UG/L
Chemical:	DICHLOROMETHANE		
Sample Collected:	24-JUN-14	Findings:	. 240. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	24-JUN-14	Findings:	. 0.916
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	24-JUN-14	Findings:	. 0.424
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	24-JUN-14	Findings:	. 28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	24-JUN-14	Findings:	. 12.2
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	24-JUN-14	Findings:	. 6200. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	24-JUN-14	Findings:	. 6.8 UG/L
Chemical:	PERCHLORATE		

**A2  
NNW  
1/4 - 1/2 Mile  
Higher**

**CA WELLS 1041**

**Water System Information:**

Prime Station Code:	01S/06W-23D02 S	User ID:	TAN
FRDS Number:	3610041033	County:	San Beernardino
District Number:	13	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Untreated
Source Lat/Long:	340438.0 1172910.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	WELL F-17B (39)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

System Number:	3610041		
System Name:	SAN GABRIEL VALLEY WC - FONTANA		
Organization That Operates System:	P.O. BOX 987 FONTANA, CA 92334		
Pop Served:	102599	Connections:	29314
Area Served:	FONTANA		
Sample Collected:	07-MAR-11	Findings:	41. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-MAR-11	Findings:	8.1 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	11-APR-11	Findings:	27. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11-APR-11	Findings:	10. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	13-JUL-11	Findings:	380. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	13-JUL-11	Findings:	7.74
Chemical:	PH, LABORATORY		
Sample Collected:	13-JUL-11	Findings:	150. MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	13-JUL-11	Findings:	180. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	13-JUL-11	Findings:	150. MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	13-JUL-11	Findings:	45. MG/L
Chemical:	CALCIUM		
Sample Collected:	13-JUL-11	Findings:	9.5 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	13-JUL-11	Findings:	25. MG/L
Chemical:	SODIUM		
Sample Collected:	13-JUL-11	Findings:	2. MG/L
Chemical:	POTASSIUM		
Sample Collected:	13-JUL-11	Findings:	9.7 MG/L
Chemical:	CHLORIDE		
Sample Collected:	13-JUL-11	Findings:	0.17 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	13-JUL-11	Findings:	240. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	13-JUL-11	Findings:	0.679
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	13-JUL-11	Findings:	23. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-JUL-11	Findings:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	13-JUL-11	Findings:	5200. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	13-JUL-11	Findings:	7.6 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	12-OCT-11	Findings:	18. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	17-JAN-12	Findings:	14. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	17-JAN-12	Findings:	5.2 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	16-APR-12	Findings:	4.6 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	16-APR-12	Findings:	13. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-JUN-12	Findings:	360. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	13-JUN-12	Findings:	7.56
Chemical:	PH, LABORATORY		
Sample Collected:	13-JUN-12	Findings:	160. MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	13-JUN-12	Findings:	200. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	13-JUN-12	Findings:	130. MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	13-JUN-12	Findings:	40. MG/L
Chemical:	CALCIUM		
Sample Collected:	13-JUN-12	Findings:	7.7 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	13-JUN-12	Findings:	24. MG/L
Chemical:	SODIUM		
Sample Collected:	13-JUN-12	Findings:	1.8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	13-JUN-12	Findings:	9.2 MG/L
Chemical:	CHLORIDE		
Sample Collected:	13-JUN-12	Findings:	0.16 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	13-JUN-12	Findings:	0.615 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	13-JUN-12	Findings:	260. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	13-JUN-12	Findings:	0.47
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	13-JUN-12	Findings:	15. MG/L
Chemical:	NITRATE (AS NO3)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	13-JUN-12	Findings:	11.8
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	13-JUN-12	Findings:	3300. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	13-JUN-12	Findings:	5.3 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	13-JUN-12	Findings:	1. PCI/L
Chemical:	GROSS ALPHA MDA95		
Sample Collected:	09-JUL-12	Findings:	16. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-JUL-12	Findings:	6.3 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	09-OCT-12	Findings:	29. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-OCT-12	Findings:	9.2 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	08-JAN-13	Findings:	29. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JAN-13	Findings:	12. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	09-APR-13	Findings:	27. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-APR-13	Findings:	11. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	03-JUL-13	Findings:	23. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-JUL-13	Findings:	8.6 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	17-JUL-13	Findings:	380. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	17-JUL-13	Findings:	7.88
Chemical:	PH, LABORATORY		
Sample Collected:	17-JUL-13	Findings:	160. MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	17-JUL-13	Findings:	200. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	17-JUL-13	Findings:	140. MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	17-JUL-13	Findings:	42.8 MG/L
Chemical:	CALCIUM		
Sample Collected:	17-JUL-13	Findings:	8.15 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	17-JUL-13	Findings:	25. MG/L
Chemical:	SODIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	17-JUL-13	Findings:	1.7 MG/L
Chemical:	POTASSIUM		
Sample Collected:	17-JUL-13	Findings:	10. MG/L
Chemical:	CHLORIDE		
Sample Collected:	17-JUL-13	Findings:	0.23 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	17-JUL-13	Findings:	230. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	17-JUL-13	Findings:	0.838
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	17-JUL-13	Findings:	0.361
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	17-JUL-13	Findings:	25. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	17-JUL-13	Findings:	5600. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	17-JUL-13	Findings:	8.8 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	02-OCT-13	Findings:	34. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02-OCT-13	Findings:	12. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	21-JAN-14	Findings:	9.6 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	21-JAN-14	Findings:	37. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-APR-14	Findings:	. 33. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-APR-14	Findings:	. 10. UG/L
Chemical:	PERCHLORATE		
Sample Collected:	24-JUN-14	Findings:	. 400. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	24-JUN-14	Findings:	. 7.69
Chemical:	PH, LABORATORY		
Sample Collected:	24-JUN-14	Findings:	. 160. MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	24-JUN-14	Findings:	. 200. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	24-JUN-14	Findings:	. 140. MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	24-JUN-14	Findings:	. 44.1 MG/L
Chemical:	CALCIUM		
Sample Collected:	24-JUN-14	Findings:	. 8.29 MG/L
Chemical:	MAGNESIUM		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	24-JUN-14	Findings:	. 24. MG/L
Chemical:	SODIUM		
Sample Collected:	24-JUN-14	Findings:	. 1.8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	24-JUN-14	Findings:	. 10. MG/L
Chemical:	CHLORIDE		
Sample Collected:	24-JUN-14	Findings:	. 0.18 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	24-JUN-14	Findings:	. 3.2 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	24-JUN-14	Findings:	. 6.7e-002 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	24-JUN-14	Findings:	. 250. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	24-JUN-14	Findings:	. 0.655
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	24-JUN-14	Findings:	. 0.163
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	24-JUN-14	Findings:	. 28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	24-JUN-14	Findings:	. 11.9
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	24-JUN-14	Findings:	. 6300. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	24-JUN-14	Findings:	. 9.2 UG/L
Chemical:	PERCHLORATE		

**3  
NNW  
1/4 - 1/2 Mile  
Higher**

**FED USGS      USGS40000140669**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340438117291401		
Monloc name:	001S006W23D001S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	34.0775114
Longitude:	-117.4881052	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		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	712
Construction date:	Not Reported	Wellholedepth:	Not Reported
Welldepth units:	ft		
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

**4**  
**SSE** **CA WELLS 1040**  
**1/4 - 1/2 Mile**  
**Lower**

**Water System Information:**

Prime Station Code:	01S/06W-23D01 S	User ID:	TAN
FRDS Number:	3610041017	County:	San Beernardino
District Number:	13	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Untreated
Source Lat/Long:	340400.0 1172900.0	Precision:	Undefined
Source Name:	WELL F-17A (20)		
System Number:	3610041		
System Name:	SAN GABRIEL VALLEY WC - FONTANA		
Organization That Operates System:	P.O. BOX 987		
	FONTANA, CA 92334		
Pop Served:	102599	Connections:	29314
Area Served:	FONTANA		

**5**  
**North** **CA WELLS 1035**  
**1/2 - 1 Mile**  
**Higher**

**Water System Information:**

Prime Station Code:	01S/06W-11N01 S	User ID:	TAN
FRDS Number:	3610041014	County:	San Beernardino
District Number:	13	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Untreated
Source Lat/Long:	340500.0 1172900.0	Precision:	Undefined
Source Name:	WELL F-37A (17)		
System Number:	3610041		
System Name:	SAN GABRIEL VALLEY WC - FONTANA		
Organization That Operates System:	P.O. BOX 987		
	FONTANA, CA 92334		
Pop Served:	102599	Connections:	29314
Area Served:	FONTANA		
Sample Collected:	17-APR-14	Findings:	. 0.15 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	17-APR-14	Findings:	. 3.8 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	17-APR-14	Findings:	. 330. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	17-APR-14	Findings:	. 0.534
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	17-APR-14	Findings:	. 3.1e-002
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	17-APR-14	Findings:	. 51. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	17-APR-14	Findings:	. 0.33 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	17-APR-14	Findings:	. 11000. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	17-APR-14	Findings:	. 4.3 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	02-FEB-11	Findings:	470. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	02-FEB-11	Findings:	7.53
Chemical:	PH, LABORATORY		
Sample Collected:	02-FEB-11	Findings:	170. MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	02-FEB-11	Findings:	210. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	02-FEB-11	Findings:	200. MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	02-FEB-11	Findings:	65. MG/L
Chemical:	CALCIUM		
Sample Collected:	02-FEB-11	Findings:	8.9 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	02-FEB-11	Findings:	18. MG/L
Chemical:	SODIUM		
Sample Collected:	02-FEB-11	Findings:	2.1 MG/L
Chemical:	POTASSIUM		
Sample Collected:	02-FEB-11	Findings:	17. MG/L
Chemical:	CHLORIDE		
Sample Collected:	02-FEB-11	Findings:	0.2 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	02-FEB-11	Findings:	140. UG/L
Chemical:	IRON		
Sample Collected:	02-FEB-11	Findings:	300. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	02-FEB-11	Findings:	0.664
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	02-FEB-11	Findings:	44. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02-FEB-11	Findings:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	02-FEB-11	Findings:	9800. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	14-APR-11	Findings:	42. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	26-JUL-11	Findings:	43. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-OCT-11	Findings:	45. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02-FEB-12	Findings:	21.1 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	02-FEB-12	Findings:	480. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	02-FEB-12	Findings:	7.9
Chemical:	PH, FIELD		
Sample Collected:	02-FEB-12	Findings:	7.58
Chemical:	PH, LABORATORY		
Sample Collected:	02-FEB-12	Findings:	170. MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	02-FEB-12	Findings:	200. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	02-FEB-12	Findings:	200. MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	02-FEB-12	Findings:	66. MG/L
Chemical:	CALCIUM		
Sample Collected:	02-FEB-12	Findings:	9.5 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	02-FEB-12	Findings:	18. MG/L
Chemical:	SODIUM		
Sample Collected:	02-FEB-12	Findings:	2. MG/L
Chemical:	POTASSIUM		
Sample Collected:	02-FEB-12	Findings:	21. MG/L
Chemical:	CHLORIDE		
Sample Collected:	02-FEB-12	Findings:	0.21 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	02-FEB-12	Findings:	0.648 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	02-FEB-12	Findings:	280. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	02-FEB-12	Findings:	0.727
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	02-FEB-12	Findings:	0.223
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	02-FEB-12	Findings:	45. MG/L
Chemical:	NITRATE (AS NO3)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	02-FEB-12	Findings:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	02-FEB-12	Findings:	10000. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	02-FEB-12	Findings:	1. PCI/L
Chemical:	GROSS ALPHA MDA95		
Sample Collected:	18-APR-12	Findings:	45. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11-JUL-12	Findings:	48. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	24-OCT-12	Findings:	47. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	30-JAN-13	Findings:	45. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	29-APR-13	Findings:	490. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	29-APR-13	Findings:	7.92
Chemical:	PH, LABORATORY		
Sample Collected:	29-APR-13	Findings:	160. MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	29-APR-13	Findings:	200. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	29-APR-13	Findings:	220. MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	29-APR-13	Findings:	71.3 MG/L
Chemical:	CALCIUM		
Sample Collected:	29-APR-13	Findings:	9.85 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	29-APR-13	Findings:	18. MG/L
Chemical:	SODIUM		
Sample Collected:	29-APR-13	Findings:	1.9 MG/L
Chemical:	POTASSIUM		
Sample Collected:	29-APR-13	Findings:	22. MG/L
Chemical:	CHLORIDE		
Sample Collected:	29-APR-13	Findings:	0.19 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	29-APR-13	Findings:	320. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	29-APR-13	Findings:	1.07
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	29-APR-13	Findings:	43. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	29-APR-13	Findings:	0.9 NTU
Chemical:	TURBIDITY, LABORATORY		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	29-APR-13	Findings:	12.4
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	29-APR-13	Findings:	9700. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	31-JUL-13	Findings:	47. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	24-OCT-13	Findings:	52. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	28-JAN-14	Findings:	49. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	28-JAN-14	Findings:	5.2 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	17-APR-14	Findings:	. 520. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	17-APR-14	Findings:	. 7.36
Chemical:	PH, LABORATORY		
Sample Collected:	17-APR-14	Findings:	. 170. MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	17-APR-14	Findings:	. 200. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	17-APR-14	Findings:	. 220. MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	17-APR-14	Findings:	. 71.1 MG/L
Chemical:	CALCIUM		
Sample Collected:	17-APR-14	Findings:	. 9. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	17-APR-14	Findings:	. 18. MG/L
Chemical:	SODIUM		
Sample Collected:	17-APR-14	Findings:	. 1.9 MG/L
Chemical:	POTASSIUM		
Sample Collected:	17-APR-14	Findings:	. 24. MG/L
Chemical:	CHLORIDE		

**6**  
**SSE**  
**1/2 - 1 Mile**  
**Lower**

**CA WELLS 1042**

**Water System Information:**

Prime Station Code:	01S/06W-26C01 S	User ID:	TAN
FRDS Number:	3610041016	County:	San Beernardino
District Number:	13	Station Type:	WELL/AMBNT
Water Type:	Well/Groundwater	Well Status:	Active Untreated
Source Lat/Long:	340344.0 1172847.1	Precision:	100 Feet (one Second)
Source Name:	WELL 18		
System Number:	3610041		
System Name:	SAN GABRIEL VALLEY WC - FONTANA		
Organization That Operates System:	P.O. BOX 987		
	FONTANA, CA 92334		
Pop Served:	102599	Connections:	29314
Area Served:	FONTANA		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06-NOV-13	Findings:	0.31 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	06-NOV-13	Findings:	8500. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	06-NOV-13	Findings:	4.1 UG/L
Chemical:	PERCHLORATE		
Sample Collected:	14-JAN-14	Findings:	32. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	24-APR-14	Findings:	. 31. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	27-MAY-14	Findings:	. 390. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	27-MAY-14	Findings:	. 7.86
Chemical:	PH, LABORATORY		
Sample Collected:	27-MAY-14	Findings:	. 140. MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	27-MAY-14	Findings:	. 170. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	27-MAY-14	Findings:	. 150. MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	27-MAY-14	Findings:	. 50.1 MG/L
Chemical:	CALCIUM		
Sample Collected:	27-MAY-14	Findings:	. 6.15 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	27-MAY-14	Findings:	. 18. MG/L
Chemical:	SODIUM		
Sample Collected:	27-MAY-14	Findings:	. 2.3 MG/L
Chemical:	POTASSIUM		
Sample Collected:	27-MAY-14	Findings:	. 15. MG/L
Chemical:	CHLORIDE		
Sample Collected:	27-MAY-14	Findings:	. 0.13 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	27-MAY-14	Findings:	. 3.1 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	27-MAY-14	Findings:	. 230. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	27-MAY-14	Findings:	. 0.829
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	27-MAY-14	Findings:	. 0.322
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	27-MAY-14	Findings:	. 26. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	27-MAY-14	Findings:	. 0.14 NTU
Chemical:	TURBIDITY, LABORATORY		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	27-MAY-14	Findings:	. 12.1
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	27-MAY-14	Findings:	. 5900. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	10-JAN-11	Findings:	20. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JUN-11	Findings:	310. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	08-JUN-11	Findings:	7.78
Chemical:	PH, LABORATORY		
Sample Collected:	08-JUN-11	Findings:	140. MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	08-JUN-11	Findings:	170. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	08-JUN-11	Findings:	140. MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	08-JUN-11	Findings:	47. MG/L
Chemical:	CALCIUM		
Sample Collected:	08-JUN-11	Findings:	5.7 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	08-JUN-11	Findings:	18. MG/L
Chemical:	SODIUM		
Sample Collected:	08-JUN-11	Findings:	2. MG/L
Chemical:	POTASSIUM		
Sample Collected:	08-JUN-11	Findings:	14. MG/L
Chemical:	CHLORIDE		
Sample Collected:	08-JUN-11	Findings:	0.19 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08-JUN-11	Findings:	57. UG/L
Chemical:	ZINC		
Sample Collected:	08-JUN-11	Findings:	220. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08-JUN-11	Findings:	0.716
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	08-JUN-11	Findings:	21. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JUN-11	Findings:	12.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	08-JUN-11	Findings:	4800. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	13-JUN-11	Findings:	18. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	11-JUL-11	Findings:	34. MG/L
Chemical:	NITRATE (AS NO3)		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	11-OCT-11	Findings:	19. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-JAN-12	Findings:	24. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-APR-12	Findings:	21. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	23-MAY-12	Findings:	420. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	23-MAY-12	Findings:	7.72
Chemical:	PH, LABORATORY		
Sample Collected:	23-MAY-12	Findings:	160. MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	23-MAY-12	Findings:	190. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	23-MAY-12	Findings:	160. MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	23-MAY-12	Findings:	56. MG/L
Chemical:	CALCIUM		
Sample Collected:	23-MAY-12	Findings:	4.9 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	23-MAY-12	Findings:	18. MG/L
Chemical:	SODIUM		
Sample Collected:	23-MAY-12	Findings:	2.2 MG/L
Chemical:	POTASSIUM		
Sample Collected:	23-MAY-12	Findings:	17. MG/L
Chemical:	CHLORIDE		
Sample Collected:	23-MAY-12	Findings:	0.23 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	23-MAY-12	Findings:	5.5 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	23-MAY-12	Findings:	0.743 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	23-MAY-12	Findings:	290. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	23-MAY-12	Findings:	0.766
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	23-MAY-12	Findings:	37. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	23-MAY-12	Findings:	12.1
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	23-MAY-12	Findings:	8200. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	23-MAY-12	Findings:	0.808 PCI/L
Chemical:	GROSS ALPHA MDA95		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	09-JUL-12	Findings:	36. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-OCT-12	Findings:	38. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	31-JAN-13	Findings:	31. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	22-MAY-13	Findings:	33. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	23-MAY-13	Findings:	420. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	23-MAY-13	Findings:	7.83
Chemical:	PH, LABORATORY		
Sample Collected:	23-MAY-13	Findings:	150. MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	23-MAY-13	Findings:	190. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	23-MAY-13	Findings:	160. MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	23-MAY-13	Findings:	56.8 MG/L
Chemical:	CALCIUM		
Sample Collected:	23-MAY-13	Findings:	5.21 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	23-MAY-13	Findings:	20. MG/L
Chemical:	SODIUM		
Sample Collected:	23-MAY-13	Findings:	2.2 MG/L
Chemical:	POTASSIUM		
Sample Collected:	23-MAY-13	Findings:	18. MG/L
Chemical:	CHLORIDE		
Sample Collected:	23-MAY-13	Findings:	0.22 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	23-MAY-13	Findings:	260. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	23-MAY-13	Findings:	0.873
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	23-MAY-13	Findings:	35. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	23-MAY-13	Findings:	8000. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	03-JUL-13	Findings:	31. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-NOV-13	Findings:	430. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06-NOV-13	Findings:	7.78
Chemical:	PH, LABORATORY		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Sample Collected:	06-NOV-13	Findings:	150. MG/L
Chemical:	ALKALINITY (TOTAL) AS CaCO3		
Sample Collected:	06-NOV-13	Findings:	190. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	06-NOV-13	Findings:	170. MG/L
Chemical:	HARDNESS (TOTAL) AS CaCO3		
Sample Collected:	06-NOV-13	Findings:	57.6 MG/L
Chemical:	CALCIUM		
Sample Collected:	06-NOV-13	Findings:	5.73 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06-NOV-13	Findings:	19. MG/L
Chemical:	SODIUM		
Sample Collected:	06-NOV-13	Findings:	2.1 MG/L
Chemical:	POTASSIUM		
Sample Collected:	06-NOV-13	Findings:	19. MG/L
Chemical:	CHLORIDE		
Sample Collected:	06-NOV-13	Findings:	0.23 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06-NOV-13	Findings:	4.8 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	06-NOV-13	Findings:	280. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	06-NOV-13	Findings:	0.822
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	06-NOV-13	Findings:	38. MG/L
Chemical:	NITRATE (AS NO3)		

**7  
WNW  
1/2 - 1 Mile  
Higher**

Site ID: 083600079T  
 Groundwater Flow: SSW  
 Shallow Water Depth: 18 ft  
 Deep Water Depth: Not Reported  
 Average Water Depth: Not Reported  
 Date: 05/25/1995

**AQUIFLOW 50256**

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: CA Radon

### Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
92335	56	0

Federal EPA Radon Zone for SAN BERNARDINO 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.

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### Federal Area Radon Information for SAN BERNARDINO COUNTY, CA

Number of sites tested: 18

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.678 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.

### Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

## HYDROLOGIC INFORMATION

**Flood Zone Data:** This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**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.

## HYDROGEOLOGIC INFORMATION

### AQUIFLOW<sup>R</sup> 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 Services

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 Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, 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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**Phase I Environmental Site Assessment (ESA)**
**ASTM E 1527-13 User Questionnaire**

In order to qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "*Brownfields Amendments*"), the *user* must conduct the following inquiries required by 40 CFR 312.25, 312.28, 312.29, 312.30, and 312.31. These inquiries must also be conducted by EPA Brownfield Assessment and Characterization grantees. The *user* should provide the following information (if available) to the *environmental professional*. Failure to conduct these inquiries could result in a determination that "*all appropriate inquiries*" is not complete.

**Environmental liens that are filed or recorded against the site (40 CFR 312.25).** Are you aware of any environmental liens against the *property* that are filed or recorded under federal, tribal, state or local law? Did a search of recorded land title records identify any environmental liens filed or recorded against the *property*?  YES  NO  UNK

**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).** Are you aware of any AULs, such as *engineering controls*, *land use restrictions* or *institutional controls* that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law? Did a search of recorded land title records identify any AULs?  YES  NO  UNK

**Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28).** As the *user* of this *ESA* do you have any specialized knowledge or experience related to 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  UNK

**Relationship of the purchase price to the fair market value of the *property* if it were not contaminated (40 CFR 312.29).** Does the purchase price being paid for this *property* reasonably reflect the fair market value of the *property*? 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  UNK

**Commonly known or reasonably 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*,  YES  NO  UNK

- (a.) Do you know the past uses of the *property*?  YES  NO  UNK
- (b.) Do you know of specific chemicals that are present or once were present at the *property*?  YES  NO  UNK
- (c.) Do you know of spills or other chemical releases that have taken place at the *property*?  YES  NO  UNK
- (d.) Do you know of any environmental cleanups that have taken place at the *property*?  YES  NO  UNK

Describe:

**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).** As the *user* of this *ESA*, 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  UNK

Property Name: Redwood Ave  
 User Name/Title (Printed): Nicholas Hovden  
 Company: Carlyle Investment Management, LLC



ALLAN S. COFFEE  
Associate

**PROFESSIONAL SUMMARY:**

---

Mr. Coffee has over 25 years of experience assisting clients in their relationship with the built environment. He has expertise in all aspects of environmental oversight, regulation, and liability associated with property acquisition, management, and disposition. He also specializes in team leadership and oversight of Due Diligence activities, Phase I ESAs, Building Surveys, Subsurface Soil and Groundwater Sampling, Soil and Groundwater Remediation and Monitoring, as well as Regulatory Closure.

**SELECTED PROJECT EXPERIENCE:**

---

- Managed and directed technical and financial aspects of all operations in the Western United States Division for a national full-service environmental consulting company, including environmental services (Phase I ESAs, soil and groundwater, etc.), construction services (asbestos, lead, and other regulated building materials), industrial hygiene services (occupational monitoring, negative exposure assessments), and indoor air quality (moisture, microbial growth).
- Directed all aspects of environmental geology services for an environmental consulting company, including the oversight and management of technical approach, project budgeting and accounting for Due Diligence, Phase I ESAs, and soil and groundwater remediation.
- Performed Phase I ESAs, Soil and Groundwater Assessments, and regulatory communication for a variety of property owners, environmental consulting companies, and government projects.

**EDUCATION AND PROFESSIONAL AFFILIATIONS**

---

University of California at Los Angeles, CA, Bachelor of Science

OSHA 40-Hour HAZWOPER (Hazardous Waste Operator and Emergency Response)

NIOSH 582 Analyst Equivalent Certification

Indoor Air Quality Specialist/Inspector

California Registered Environmental Assessor I (REA I)



**RUSSELL K. BALDERSON**  
Associate

**PROFESSIONAL SUMMARY:**

---

Russell Balderson is an Environmental Professional with more than 24 years of experience in the environmental due diligence industry. Mr. Balderson has proven expertise in all facets of environmental assessment projects including Phase I and Phase II environmental site assessments, vapor intrusion assessments, environmental compliance investigations, and solid and hazardous waste investigations. He manages large environmental projects for industry and government clients that effectively address due diligence requirements for property transfer.

**SELECTED PROJECT EXPERIENCE:**

---

- Phase I Environmental Site Assessments throughout the United States providing professional opinions on property specific risk.
- Soil vapor and sub-slab vapor investigations for vapor intrusion risk analysis at multi-family residential and commercial properties.
- Subsurface investigations including dry cleaners and LUST sites.
- Preparation and implementation of RCRA Corrective Action Work Plans.
- Completion of Voluntary Remediation Program projects in Virginia and Texas.
- Compliance Audits and file reviews

**EDUCATION AND PROFESSIONAL AFFILIATIONS:**

---

B.S., Environmental Science, Ferrum College

M.S., Biology, Baylor University



STEPHEN E. MANELIS  
Principal and Co-Founder

**PROFESSIONAL SUMMARY:**

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Mr. Manelis is co-founder of Blackstone and has over 18 years of experience with Environmental Site Assessments (ESAs) and other Due Diligence consulting during Real Estate Transactions and Mergers/Acquisitions. Specific experience includes Phase I and II ESAs, Environmental Compliance/Audit, and Asbestos, Lead-based paint, Radon gas, and Mold/IAQ consulting, and Property Condition Assessments. Additional experience includes soil/groundwater contamination assessments and regulatory agency coordination, remedial-action planning and management, pre-construction soil and groundwater characterization for urban redevelopment site/Brownfields, NPDES permitting and storm water management; wetland delineation and permitting; and threatened and endangered species studies.

In addition to leading Blackstone's Real Estate and Due Diligence business unit, Mr. Manelis is responsible for developing and maintaining Blackstone's national client accounts program.

**SELECTED PROJECT EXPERIENCE:**

---

Managed over 3300 Phase I Environmental Site Assessments (ESAs) for corporate real estate departments, real estate investment trusts (REITs), Fannie Mae/Freddie Mac underwriters, large national and regional banks, private/public investment groups and equity sponsors, and industrial/commercial facilities throughout the United States. In addition to site visit experience on numerous types of real estate, experiences include organization of project staff for single projects and/or portfolios, management of field activities and accurate interpretation of data, and final report QA/QC.

Third party review coordinator and project manager during industrial facility mergers/acquisitions throughout the continental U.S. As consultant to equity partners, provided capital expenditure and annual operating budgets associated with environmental compliance, waste management and disposal, and permitting.

Provided technical support and project management for wetland delineation and habitat assessment studies in the Southeast. Work involved reviewed of wetland field survey activities, surveying and map preparation, and the research of Federal and State databases concerning known occurrences of threatened and endangered species followed by field verification.

Program Manager for due diligence team associated industrial park acquisition by a publicly-traded REIT. Environmental issues included past manufacturing operations,

underground storage tanks usage, various hazardous materials storage, and adjoining property with known groundwater contamination migrating onto the site. Past on-site use and contamination triggered New Jersey ISRA reporting and coordination with the NJDEP. Phase I ESA and Phase II subsurface investigation work completed within 21-days and evaluation of risk and potential remediation cost defined. Quick response and resolution allowed transaction to occur and assigned liability to the appropriate parties protecting the buyer.

Program Manager for redevelopment of industrial property formerly consisting of vehicle repair facility, furniture stripper, machine shop, and light manufacturer. Client was publicly-traded REIT and project included mid-rise 200-unit multi-family housing development with subterranean parking. Contamination identified during due diligence required notification to state regulatory agency with potential to stall acquisition and development approvals. Remediation risk and cost defined during due diligence allowing transaction to occur before regulatory closure achieved. Remediation activities of soil and groundwater performed in conjunction with construction providing savings and fast-tracking regulatory closure with state agency. Project was completed and remains in client portfolio.

Program Manager for environmental due diligence and redevelopment consulting services for privately-held nationwide student housing developer. Project included acquisition and redevelopment of a high profile student housing project in Philadelphia, PA. Work included initial environmental due diligence, identification and resolution of asbestos and underground storage tank risk via sampling, and proper permitting prior to demolition of over 200,000 square feet of building space. Project construction proceeded as planned.

#### **EDUCATION AND PROFESSIONAL AFFILIATIONS:**

University of Rhode Island - Bachelor of Science, Natural Resource Development  
ASTM E-50 Committee for Environmental Assessment  
National Registry of Environmental Professionals (NREP)  
AHERA/EPA Asbestos in Buildings Inspector  
Liability Design for Environmental Professionals (DPIC Companies)  
40-Hour OSHA Training

# Redwood Avenue Warehouse

## Noise Study

November 2015 (13419)

**Prepared for:**

Oakmont Industrial Group  
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**Prepared by:**

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Hogle-Ireland

This document is formatted for double-sided printing to conserve natural resources.

# Redwood Avenue Warehouse Noise Study

November 2015

San Bernardino County



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Appendix A Noise Measurement Data  
Appendix B Construction Noise Output Data  
Appendix C SoundPLAN Output Data

# 1 EXECUTIVE SUMMARY

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Construction-related and operational noise impacts were modeled and analyzed for the proposed warehouse building located at 9988 Redwood Avenue, San Bernardino County, California. This noise impact analysis contains documentation of existing noise levels as well as analysis of the impacts generated by project operation and traffic and analysis of vibration impacts. This report analyzes the project's consistency with applicable federal, State, and local regulations. The results of this report find construction-related and operational noise levels are consistent with applicable regulations.

## 1.1 Project Description

The project includes the demolition of the existing no-site structures and the development of a 215,000-square foot warehouse building located at 9988 Redwood Avenue, San Bernardino, California. The project site will be bounded by an eight-foot concrete screening wall along the northern, western, and southern boundaries. The project includes 160 parking stalls, 27 trailer docks, 31 trailer parking spaces, and 70,450 square feet of landscaping.

## 1.2 Construction-Related Noise

Temporary noise increases will be greatest during the demolition and grading phases of construction. Demolition and grading equipment can expose the single family residence located approximately 355 feet to the west of the center of the project site to a combined noise level of 72.6 dBA  $L_{max}$ . Construction equipment could expose the single family residences located 410 feet, 413 feet, and 470 feet to the east of the center of the project site to a combined noise level of 71.3 dBA  $L_{max}$ , 71.2 dBA  $L_{max}$ , and 70.1 dBA  $L_{max}$ , respectively. Although construction noise is exempt pursuant to the municipal code, Mitigation Measures N-1 through N-6 has been incorporated to reduce the impact to neighboring uses during construction. Construction activity will not exceed the County's exterior noise standard for stationary sources; however, noise from construction activity is exempt pursuant to Section 83.01.080(g) of the Municipal Code. With incorporation of the Mitigation Measure N-1, described herein, no substantial impacts will occur.

## 1.3 Operational Noise

The increase in vehicular traffic on area roadways will not result in noise levels exceeding the 60 dBA CNEL mobile source standard established by the County for residential uses. Operation of the proposed warehouse will not exceed allowable stationary noise levels established by the County at neighboring uses. Therefore, no substantial impacts will occur.

## 1.4 Vibration

Based on the threshold criteria established by the Federal Transit Administration (FTA) and the California Department of Transportation (Caltrans), vibration from use of heavy construction equipment to construct the proposed project would be below the thresholds to cause damage to nearby structures and result in less than *barely perceptible* vibration at the receptors analyzed in the report. Should roadway improvements be required, implementation of Mitigation Measure N-2 will ensure that no substantial impacts will occur.

## 1.5 Airport Noise

The project site is located with two miles of a public or private use airport or helipad. Therefore, no substantial impacts will occur.

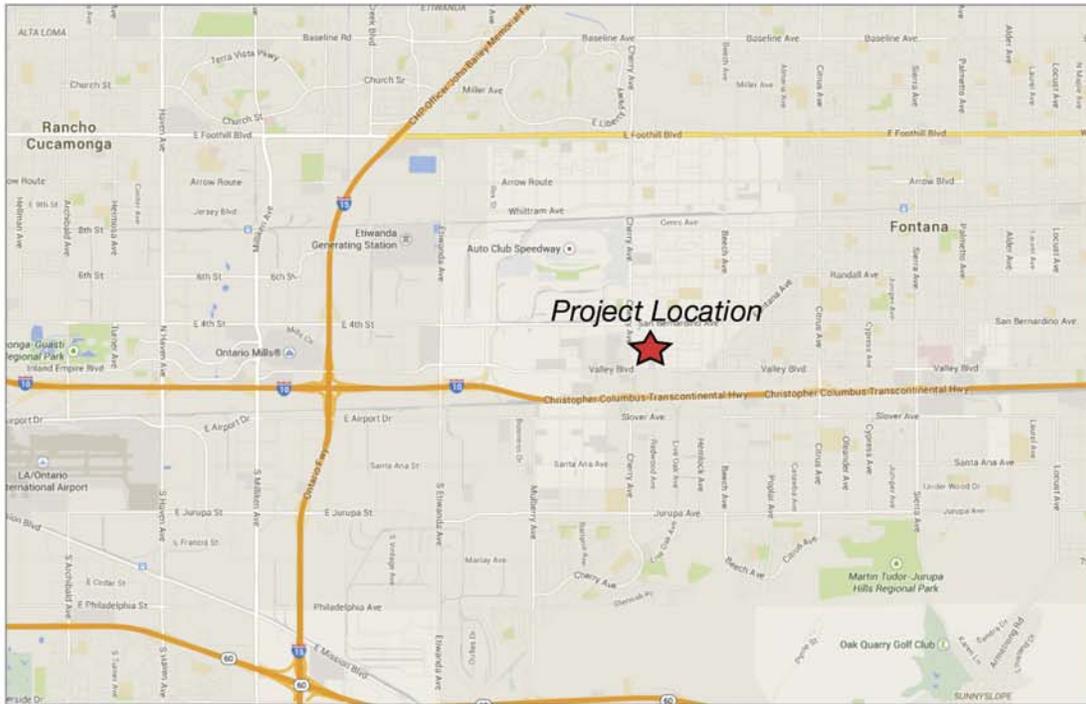
## 1.6 Mitigation Measures

The following mitigation measures are required to ensure that project-related short- and long-term noise levels are consistent with applicable federal, State, and local regulations.

- N-1 Prior to issuance of grading permits, the Applicant shall submit a mitigation plan prepared by a qualified engineer or other acoustical expert for review and approval by the Planning Division that identifies noise control measures that achieve a minimum 20 dBA reduction in construction-related noise levels at the residential uses to the west, south, and east of the project site. The mitigation plan may include use of vibratory pile drivers or other pile

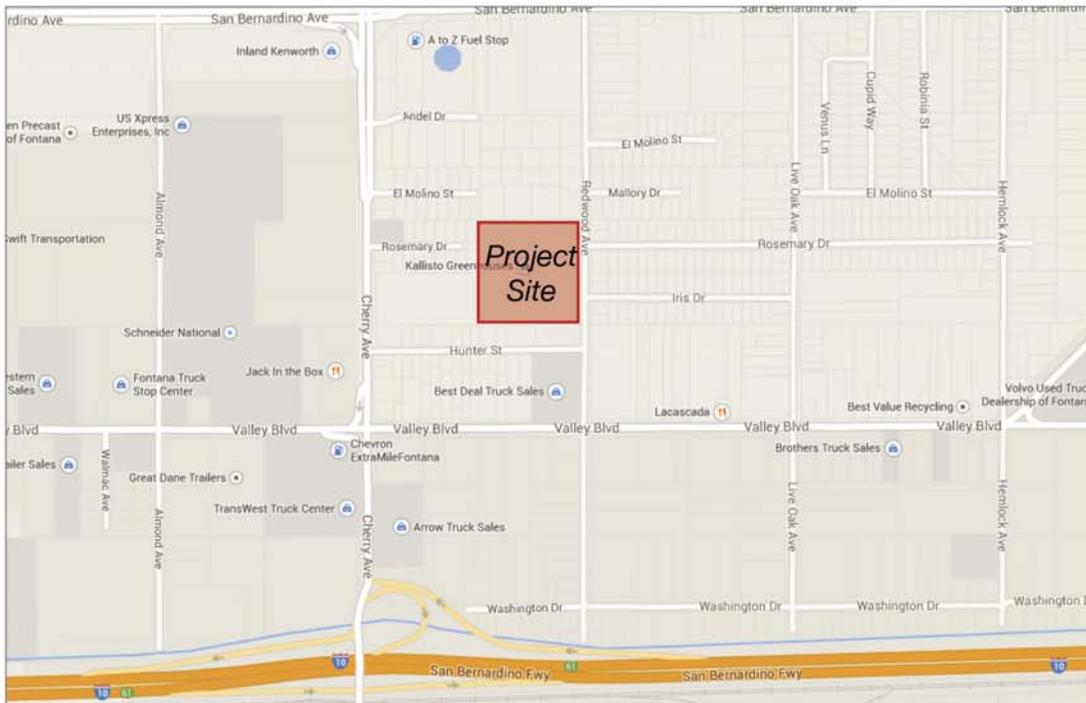
driving noise controls, sound curtains, engineered equipment controls, or other methods. Noise control requirements shall be noted on project construction drawings and verified by the Building Department during standard inspection procedures.

- N-2** In the event that roadway improvements are necessary, the Applicant shall ensure that vibration associated with the use of a vibratory roller will not exceed the vibration damage potential for older residential structures of 0.30 PPV and the vibration annoyance potential of 0.04 PPV (distinctly perceptible) established by Caltrans. Supplemental analysis shall be performed and submitted for the review and approval of the Planning Division prior to the start of construction activities.



Source: Google Maps 2014

Regional



Source: Google Maps 2014

Vicinity



## Exhibit 1 Regional and Vicinity Map

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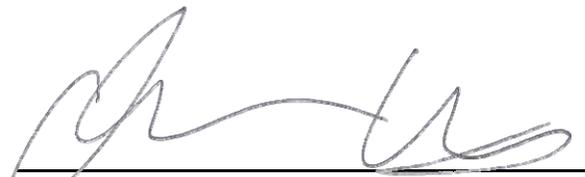
## 2 INTRODUCTION

This report includes modeling and analysis of construction- and operation-related noise generated from the proposed project on surrounding land uses. Vibration effects and airport noise are also discussed herein. The project includes construction of a 215,000-square foot warehouse building on 9.89 gross acres in unincorporated San Bernardino County, California.

This report has been prepared utilizing project-specific characteristics where available. In those instances where project-specific data is not available, the analysis has been supplemented by model defaults or other standardized sources of comparable data. In any case where non-project defaults or other data have been used, a "worst-case" scenario was developed to ensure a conservative estimate of noise impacts.

This report has been prepared for use by the Lead Agency to assess potential project-related noise impacts to the environment in compliance with federal, State, or local guidelines, particularly with respect to the noise issues identified in Appendix G of the State CEQA Guidelines. This report does not make determinations of significance pursuant to CEQA because such determinations are required to be made solely in the purview of the Lead Agency.

This report has been prepared by Christopher Brown (Director of Environmental Services) and Olivia Chan (Project Associate) of MIG | Hogle-Ireland, Inc. under contract to CRP Oakmont Redwood Avenue, LLC.



**Christopher Brown**  
Director of Environmental Services



**Olivia Chan**  
Project Associate

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### 3.1 Defining Noise

"Sound" is a vibratory disturbance created by a moving or vibrating source and is capable of being detected. "Noise" is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance and, in the extreme, hearing impairment.

#### *THE PRODUCTION OF SOUND*

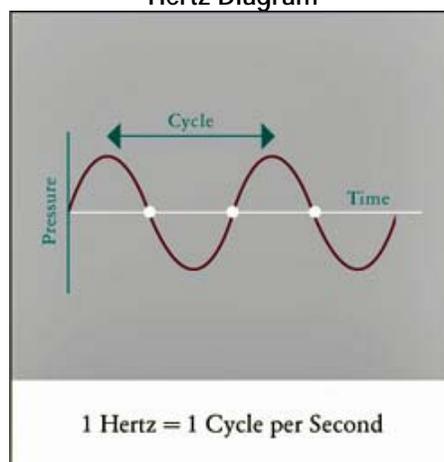
Sound has three properties: amplitude and amplitude variation of the acoustical wave (loudness), frequency (pitch), and duration of the noise. Despite the ability to measure sound, human perceptibility is subjective, and the physical response to sound complicates the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms such as "noisiness" or "loudness."

#### *MEASURING SOUND*

Sound pressure levels are described in logarithmic units of ratios of sound pressures to a reference pressure, squared. These units are called bels. To provide a finer description of sound, a bel is subdivided into 10 decibels, abbreviated dB. Since decibels are logarithmic units, sound pressure levels cannot be added or subtracted by ordinary arithmetic means. For example, if one automobile produces a sound pressure level of 70 dB when it passes an observer, two cars passing simultaneously would not produce 140 dB. In fact, they would combine to produce 73 dB. This same principle can be applied to other traffic quantities as well. In other words, doubling the traffic volume on a street or the speed of the traffic will increase the traffic noise level by three dB. Conversely, halving the traffic volume or speed will reduce the traffic noise level by three dB. A three dB change in sound is the beginning at which humans generally notice a *barely perceptible* change in sound and a five dB change is generally *readily perceptible*.<sup>1</sup>

Sound pressure level alone is not a reliable indicator of loudness. The frequency or pitch of a sound also has a substantial effect on how humans will respond. While the intensity of the sound is a purely physical quantity, the loudness or human response depends on the characteristics of the human ear. Human hearing is limited not only to the range of audible frequencies but also in the way it perceives the sound pressure level in that range. In general, the healthy human ear is most sensitive to sounds between 1,000 Hertz (Hz) and 5,000 Hz, and perceives both higher and lower frequency sounds of the same magnitude with less intensity. Hertz is a unit of frequency that defines any periodic event. In the case of sound pressure, a Hertz defines one cycle of a sound wave per second (see Figure 1, Hertz Diagram). To approximate the frequency response of the human ear, a series of sound pressure level adjustments is usually applied to the sound measured by a sound level meter.

Figure 1  
Hertz Diagram



### **STANDARDS FOR NOISE EQUIVALENT**

Noise consists of pitch, loudness, and duration; therefore, a variety of methods for measuring noise have been developed. According to the California General Plan Guidelines for Noise Elements, the following are common metrics for measuring noise:<sup>2</sup>

**L<sub>eq</sub> (Equivalent Energy Noise Level):** The sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over given sample periods. L<sub>eq</sub> is typically computed over 1-, 8-, and 24-hour sample periods.

**CNEL (Community Noise Equivalent Level):** The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening from 7:00 PM to 10:00 PM and after addition of ten decibels to sound levels in the night from 10:00 PM to 7:00 AM.

**L<sub>dn</sub> (Day-Night Average Level):** The average equivalent A-weighted sound level during a 24-hour day, obtained after the addition of ten decibels to sound levels in the night after 10:00 PM and before 7:00 AM.

CNEL and L<sub>dn</sub> are utilized for describing ambient noise levels because they account for all noise sources over an extended period of time and account for the heightened sensitivity of people to noise during the night. L<sub>eq</sub> is better utilized for describing specific and consistent sources because of the shorter reference period.

Federal and State agencies have established noise and land use compatibility guidelines that use averaging approaches to noise measurement. The State Department of Aeronautics and the California Commission on Housing and Community Development have adopted the community noise equivalent level (CNEL).

## **3.2 Vibration and Groundborne Noise**

Vibration is the movement of mass over time. It is described in terms of frequency and amplitude and unlike sound; there is no standard way of measuring and reporting amplitude. Vibration can be described in units of velocity (inches per second) or discussed in decibel (dB) units in order to compress the range of numbers required to describe vibration. Vibration impacts to buildings are generally discussed in terms of peak particle velocity (PPV) that describes particle movement over time (in terms of physical displacement of mass). For purposes of this analysis, PPV will be used to describe all vibration for ease of reading and comparison. Vibration can impact people, structures, and sensitive equipment.<sup>3</sup> The primary concern related to vibration and people is the potential to annoy those working and residing in the area. Vibration with high enough amplitudes can damage structures (such as crack plaster or destroy windows). Groundborne vibration can also disrupt the use of sensitive medical and scientific instruments such as electron microscopes. Common sources of vibration within communities include construction activities and railroads.

Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and demolition-related activities. Next to pile driving, grading activity has the greatest potential for vibration impacts if large bulldozers, large trucks, or other heavy equipment are used.

## 4 EXISTING NOISE ENVIRONMENT

### 4.1 Sensitive Receptors

The State of California defines sensitive receptors as those land uses that require serenity or are otherwise adversely affected by noise events or conditions. Schools, libraries, churches, hospitals, and residential uses make up the majority of these areas. The proposed facility is located in a generally commercial and residential area with a self storage facility to the north, an automobile tire retailer to the west, and residential use to the west, east, and south. There are no schools located within a quarter mile of the project site. Exhibit 2 (Radius Map) identifies existing development in the project vicinity based on assessor's parcel data.

### 4.2 Existing Noise Levels

Short-term noise measurements at the project site were conducted to identify the ambient noise in the project vicinity. An American National Standards Institute (ANSI Section S14 1979, Type 1) Larson Davis model LxT sound level meter was used to monitor existing ambient noise levels in the project area. The noise meter was programmed in "slow" mode to record noise levels in A-weighted form. The microphone height was set at five feet. Three 15-minute daytime noise measurements were taken between 1:08 PM and 2:09 PM on Tuesday, February 3, 2015.

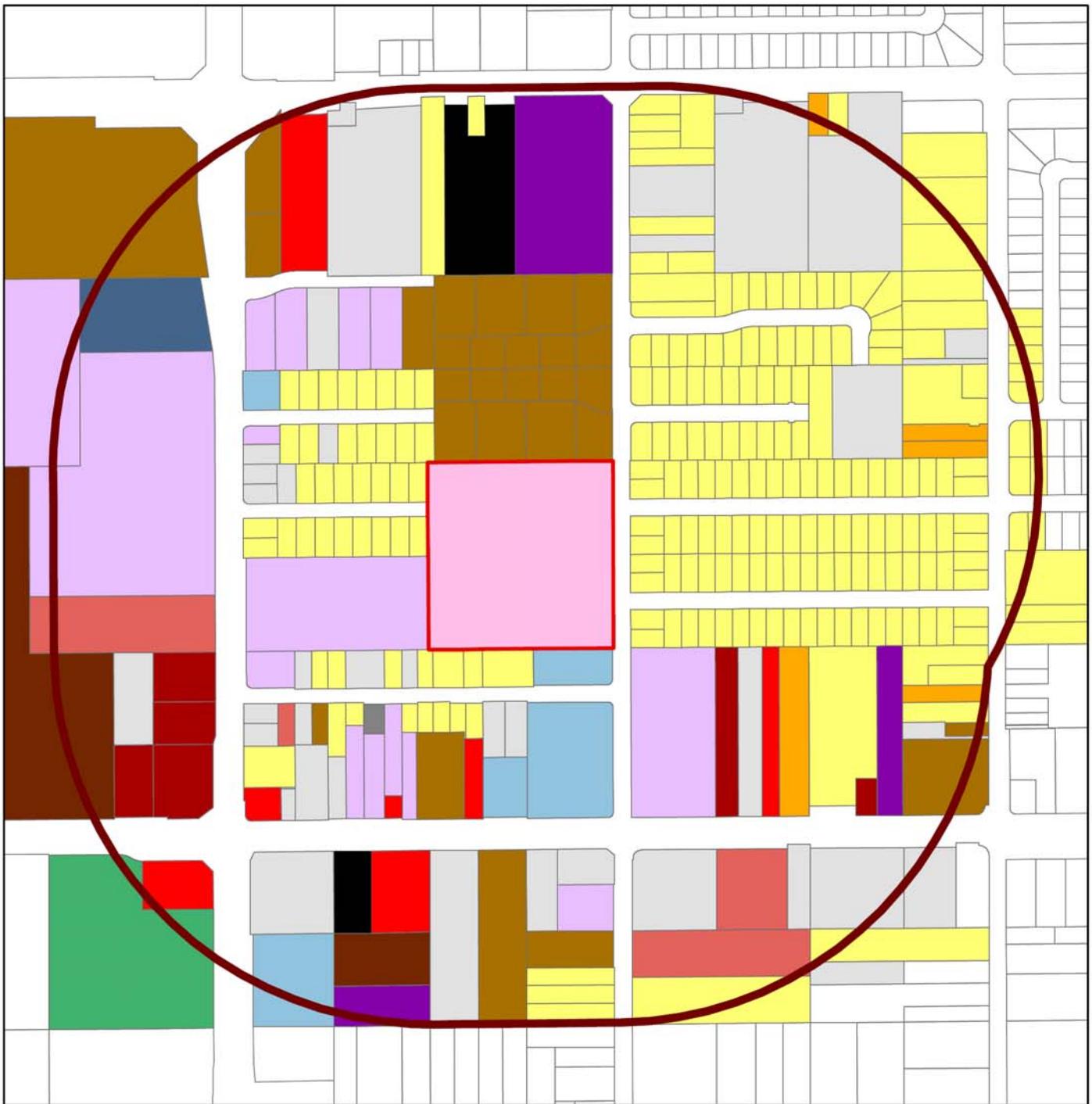
Ambient noise levels ranged from 58.0 to 62.9 dBA CNEL. Ambient noise levels are a composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location. Measurement locations are shown in Exhibit 3 (Noise Measurement Locations). Ambient noise levels are presented in Table 1 (Ambient Noise Levels) and measurement output data is included as Appendix A.

Vehicular traffic along Redwood Avenue was the dominant noise source at measurement locations 001 and 002 at the eastern boundary of the project site and vehicular traffic on Rosemary Drive and operational equipment on the project site were the dominant noise sources at measurement location 003. Other noise sources included human activity along Redwood Avenue and at the residential uses to the west of the project site.

Table 1  
Ambient Noise Levels

Location	Time Period	Measurement Period	Description	Existing Ambient Noise Levels (dBA CNEL)
001	1:08 PM-1:23 PM	15 Minutes	Intersection of Rosemary Drive and Redwood Avenue	61.2
002	1:29 PM-1:47 PM	15 Minutes	Southwest corner of project site on Redwood Avenue	62.9
003	1:54 PM-2:09 PM	15 Minutes	Northwestern boundary of project site at the termination of Rosemary Drive	58.0

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### Legend

 Project Site

 0.25 Mile Radius

### Land Use

 Single Family Residential

 Multi Family Residential

 General Office

 Retail

 Restaurant

 Storage Facility

 Warehouse

 Industrial

 Car Lot

 Auto Dealership

 Service Station

 Service Garage

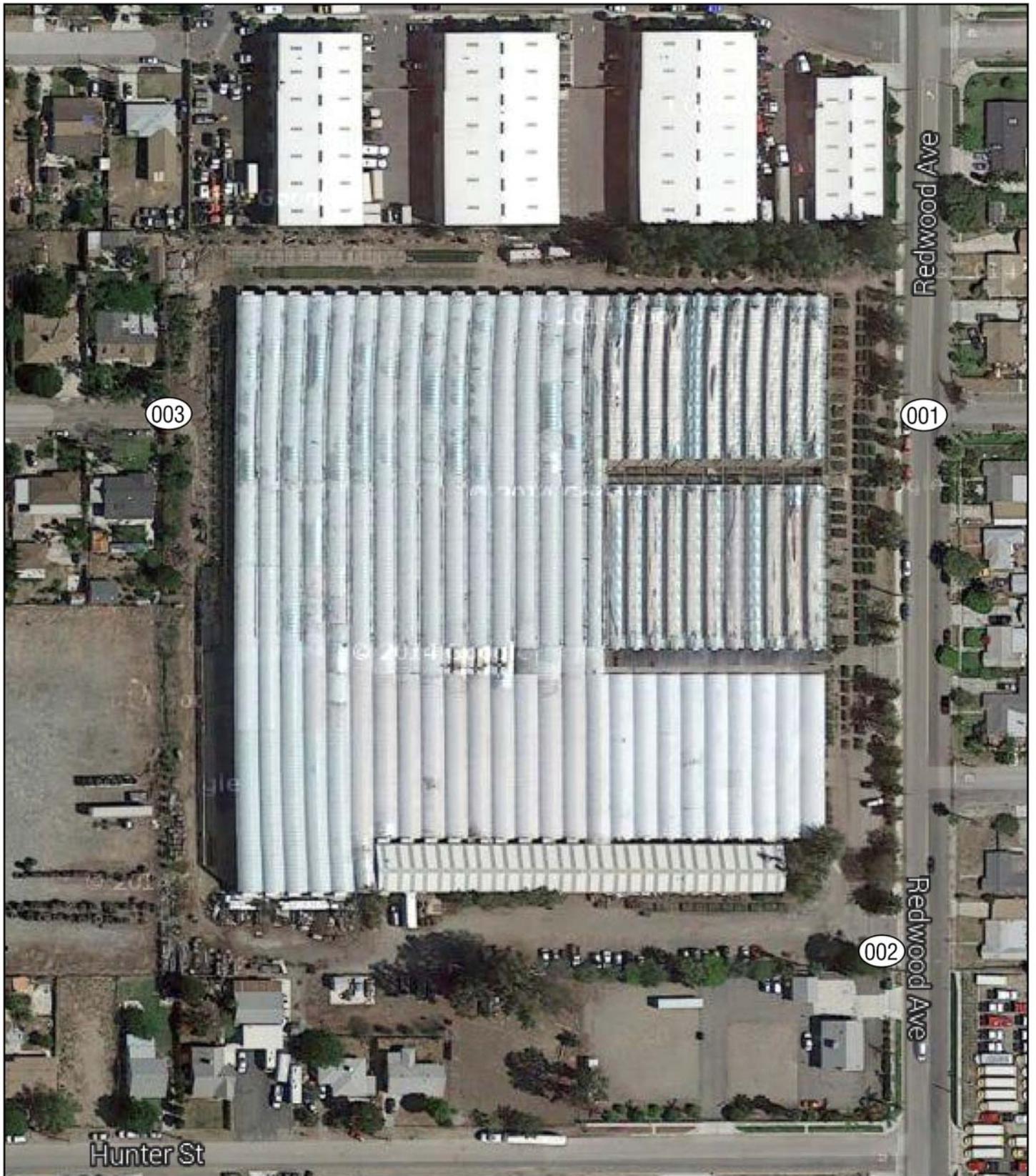
 Miscellaneous Agriculture Building

 Parking Lot

 Unknown

 Vacant

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### Exhibit 3 Noise Measurement Locations

Redwood Avenue Warehouse  
Fontana, California

Source: RGA Office of Architectural Design



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## 5.1 Federal Regulations

### *FEDERAL NOISE CONTROL ACT OF 1972*

The U.S. Environmental Protection Agency (EPA) Office of Noise Abatement and Control was originally established to coordinate federal noise control activities. After its inception, EPA's Office of Noise Abatement and Control issued the Federal Noise Control Act of 1972, establishing programs and guidelines to identify and address the effects of noise on public health, welfare, and the environment. In response, the EPA published information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (Levels of Environmental Noise). The Levels of Environmental Noise recommended that the  $L_{dn}$  should not exceed 55 dBA outdoors or 45 dBA indoors to prevent significant activity interference and annoyance in noise-sensitive areas.

In addition, the Levels of Environmental Noise identified five dBA as an "adequate margin of safety" for a noise level increase relative to a baseline noise exposure level of 55 dBA  $L_{dn}$  (i.e., there would not be a noticeable increase in adverse community reaction with an increase of five dBA or less from this baseline level). The EPA did not promote these findings as universal standards or regulatory goals with mandatory applicability to all communities, but rather as advisory exposure levels below which there would be no risk to a community from any health or welfare effect of noise.

In 1981, EPA administrators determined that subjective issues such as noise would be better addressed at more localized levels of government. Consequently, in 1982 responsibilities for regulating noise control policies were transferred to State and local governments. However, noise control guidelines and regulations contained in EPA rulings in prior years remain in place by designated federal agencies, allowing more individualized control for specific issues by designated federal, State, and local government agencies.

### *FEDERAL TRANSIT ADMINISTRATION*

The Federal Transit Administration (FTA) has developed methodology and significance criteria to evaluate incremental noise impacts from surface transportation modes (i.e., on road motor vehicles and trains) as presented in Transit Noise Impact and Vibration Assessment (FTA Guidelines). These incremental noise impact criteria are based on EPA findings and subsequent studies of annoyance in communities affected by transportation noise. The FTA extended the EPA's five dBA incremental impact criterion to higher ambient levels. As baseline ambient levels increase, smaller and smaller increments are allowed to limit expected increases in community annoyance. For example, in residential areas with a baseline ambient noise level of 50 dBA CNEL, a less-than-five dBA increase in noise levels would produce a minimal increase in community annoyance levels, while at 70 dBA CNEL, only one dBA increase could be accommodated before a significant annoyance increase would occur.

### VIBRATION STANDARDS

The FTA provides guidelines for maximum-acceptable vibration criteria for different types of land uses. Groundborne vibration and noise levels associated with various types of construction equipment and activities are summarized in Table 2 (Reference Vibration Source Amplitudes for Construction Equipment). Table 3 (Groundborne Vibration and Noise Impact Criteria) shows the Federal Transit Administration's maximum acceptable vibration standard for human annoyance in residences where people normally sleep is 80 VdB (less than 70 vibration events per day).

**Table 2**  
**Reference Vibration Source Amplitudes for Construction Equipment**

Equipment	Reference PPV at 25 ft (in/sec) at 25 Feet	Approximate Vibration Level (VL) at 25 Feet
Pile driver (impact)	1.518 (upper range)	112
	0.644 (typical)	104
Pile driver (sonic)	0.734 (upper range)	105
	0.170 (typical)	93
Clam shovel drop (slurry wall)	0.202	94
Hydromill	0.008 in soil	66
Slurry wall	0.017 in rock	75
Vibratory roller	0.210	94
Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58

*Notes: PPV is the peak particle velocity. Pile driver amplitude varies greatly based on equipment type and size.  
Source: Federal Transit Administration. Transit Noise and Vibration Impact Assessment. 2006.*

**Table 3**  
**Groundborne Vibration and Noise Impact Criteria**

Land Use Category	Groundborne Vibration Impact Levels (VdB)		Groundborne Noise Impact Levels (dBA)	
	Frequent Events <sup>1</sup>	Infrequent Events <sup>2</sup>	Frequent Events <sup>1</sup>	Infrequent Events <sup>2</sup>
Category 1: Buildings where low ambient vibration is essential for interior vibrations	65 VdB <sup>3</sup>	65 VdB <sup>3</sup>	N/A	N/A
Category 2: Residences and buildings where people normally sleep	72 VdB	80 VdB	35 dBA	43 dBA
Category 3: Institutional land uses with primarily daytime use	75 VdB	83 VdB	40 dBA	48 dBA

<sup>1</sup> Frequent Events – more than 70 vibration events per day  
<sup>2</sup> Infrequent Events – fewer than 70 vibration events per day  
<sup>3</sup> This criterion limit is based on levels that are acceptable for more moderately sensitive equipment such as optical microscopes.  
 Source: United States Department of Transportation, Federal Transit Administration, Transit Noise and Vibration Assessment, 1995

The FTA and Caltrans have compiled the data from numerous studies related to vibration and have developed standards for human perception and building damage. The FTA's maximum acceptable vibration standard for human annoyance is 78 VdB at nearby vibration-sensitive land uses.<sup>4</sup> The Caltrans maximum vibration level standard is 0.2 in/sec PPV for the prevention of structural damage to typical residential buildings.<sup>5</sup>

## 5.2 State Regulations

### *CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)*

CEQA requires lead agencies to consider noise impacts. Under CEQA, lead agencies are directed to assess conformance to locally established noise standards or other agencies' noise standards; measure and identify the potentially significant exposure of people to or generation of excessive noise levels; measure and identify potentially significant permanent or temporary increase in ambient noise levels; and measure and identify potentially significant impacts associated with air traffic.

### *CALIFORNIA NOISE CONTROL ACT OF 1973*

Sections 46000-46080 of the California Health and Safety Code, known as the California Noise Control Act of 1973, find that excessive noise is a serious hazard to public health and welfare and that exposure to certain levels of noise can result in physiological, psychological, and economic damage. It also finds that there is a continuous and increasing bombardment of noise in the urban, suburban, and rural areas. The California Noise Control Act declares that the State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise. It is the policy of the State to provide an environment for all Californians free from noise that jeopardizes their health or welfare.

### *CALIFORNIA NOISE INSULATION STANDARDS (CCR TITLE 24)*

In 1974, the California Commission on Housing and Community Development adopted noise insulation standards for multi-family residential buildings (Title 24, Part 2, California Code of Regulations). Title 24 establishes standards for interior room noise (attributable to outside noise sources). The regulations also specify that acoustical studies must be prepared whenever a residential building or structure is proposed to be located near an existing or adopted freeway route, expressway, parkway, major street, thoroughfare, rail line, rapid transit line, or industrial noise source, and where such noise source or sources create an exterior CNEL (or  $L_{dn}$ ) of 60 dBA or greater. Such acoustical analysis must demonstrate that the residence has been designed to limit intruding noise to an interior CNEL (or  $L_{dn}$ ) of 45 dBA or below [California's Title 24 Noise Standards, Chap. 2-35].

### *STATE OF CALIFORNIA GENERAL PLAN GUIDELINES 2003*

Though not adopted by law, the State of California General Plan Guidelines 2003, published by the California Governor's Office of Planning and Research (OPR) (OPR Guidelines), provides guidance for the compatibility of projects within areas of specific noise exposure. The OPR Guidelines identify the suitability of various types of development relative to a range of outdoor noise levels and provide each local community some flexibility in setting local noise standards that allow for the variability in community preferences. Findings presented in the Levels of Environmental Noise Document (EPA 1974) influenced the recommendations of the OPR Guidelines, most importantly in the choice of noise exposure metrics (i.e.,  $L_{dn}$  or CNEL) and in the upper limits for the normally acceptable outdoor exposure of noise-sensitive uses.

The OPR Guidelines include a Noise and Land Use Compatibility Matrix which identifies acceptable and unacceptable community noise exposure limits for various land use categories. Where the "normally acceptable" range is used, it is defined as the highest noise level that should be considered for the construction of the buildings which do not incorporate any special acoustical treatment or noise mitigation. The "conditionally acceptable" or "normally acceptable" ranges include conditions calling for detailed acoustical study or construction mitigation to reduce interior exposure levels prior to the construction or operation of the building under the listed exposure levels.

### *CALIFORNIA DEPARTMENT OF TRANSPORTATION*

According to the Caltrans vibration manual, large bulldozers, vibratory rollers (used to compact earth), and loaded trucks utilized during grading activities can produce vibration, and depending on the level of vibration, could cause annoyance at uses within the project vicinity or damage structures. Caltrans has developed a screening tool to determine if vibration from construction equipment is substantial enough to impact surrounding uses.

The Caltrans vibration manual establishes thresholds for vibration impacts on buildings and humans. These thresholds are summarized in Tables 4 (Vibration Damage Potential Threshold Criteria) and 5 (Vibration Annoyance Potential Threshold Criteria).

**Table 4  
Vibration Damage Potential Threshold Criteria**

Structural Integrity	Maximum PPV (in/sec)	
	Transient	Continuous
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.20	0.10
Historic and some older buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial and commercial structures	2.00	0.50
<i>Source: Caltrans 2004</i>		

**Table 5  
Vibration Annoyance Potential Threshold Criteria**

Human Response	PPV Threshold (in/sec)	
	Transient	Continuous
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.90	0.10
Severely perceptible	2.00	0.40
<i>Source: Caltrans 2004</i>		

### 5.3 Local Regulations

#### ***COUNTY OF SAN BERNARDINO MUNICIPAL CODE***

The County of San Bernardino Municipal Code, under Title 8 (Development Code) Division 3 (Countywide Development Standards) Chapter 83.01 (General Performance Standards) Section 83.01.080 (Noise), provides the local government ordinance relative to community noise level exposure, guidelines, and regulations.

#### Stationary Noise Sources

Table 83-2 (Noise Standards for Stationary Noise Sources) of the Municipal Code includes exterior noise standard for daytime and nighttime noise levels resulting from stationary noise sources. Between the hours of 7:00 AM and 10:00 PM, exterior noise levels shall not exceed 55 dBA for residential use and 60 dBA for commercial use.

#### Mobile Noise Sources

Table 83-3 (Noise Standards for Stationary Noise Sources) of the Municipal Code includes exterior noise standards for mobile noise sources. The allowable exterior noise level resulting from mobile noise sources is 60 dBA for residential use and 65 dBA for office commercial use. There is no exterior noise standard for retail commercial use or industrial use.

#### Construction Noise Levels

Pursuant to Section 83.01.080(g), temporary construction, maintenance, repair, and demolition activities occurring between the hours of 7:00 AM and 7:00 PM except on Sundays and Federal holidays is exempt from County noise standards. In addition, noise from motor vehicles not under the control of the commercial or industrial use is exempt.

Vibration Impacts

Pursuant to Section 83.01.090 (Vibration), temporary construction, maintenance, repair, and demolition activities occurring between the hours of 7:00 AM and 7:00 PM except on Sundays and Federal holidays is exempt from County vibration standards. In addition, noise from motor vehicles not under the control of the commercial or industrial use is exempt.

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The thresholds identified in Appendix G of the State CEQA Guidelines, as implemented by the County of San Bernardino, have been utilized to assess the significance of the potential environmental effects of the project.

### **6.1 Thresholds of Significance**

In accordance with Appendix G of the State CEQA Guidelines, the proposed project could result in potentially significant impacts related to noise if it results in:

- A. Exposure of persons 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, exposure of people residing or working in the project area to excessive noise levels.
- F. For a project within a vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

To assess construction impacts, a worst-case construction scenario was modeled using the Federal Highway Administration's Roadway Construction Noise Model (RCNM). Modeling parameters and output are provided in Appendix B. RCNM utilizes standard noise emission levels for different types of equipment and includes utilization percentage, impact, and shielding parameters.

To assess current and opening year traffic noise levels, vehicle trips associated with surrounding roadways were modeled utilizing the SoundPLAN software. SoundPLAN is a three-dimensional noise modeling software that accounts for the shielding and reflective effects associated with intervening topography and nearby buildings.

### **6.2 Consistency with Applicable Standards**

#### ***CONSTRUCTION NOISE LEVELS***

Construction noise levels were estimated using the FHWA Roadway Construction Noise Model (RCNM). Temporary noise increases will be greatest during the demolition and grading phases. The model indicates that the use of construction equipment such as graders, tractors, dozers, and excavators could expose the single family residence located approximately 355 feet to the west of the center of the project site to a combined noise level of 72.6 dBA  $L_{max}$  (see Exhibit 4, Receptors). Construction equipment could expose the single family residences located 410 feet, 413 feet, and 470 feet to the east of the center of the project site to a combined noise level of 71.3 dBA  $L_{max}$ , 71.2 dBA  $L_{max}$ , and 70.1 dBA  $L_{max}$ , respectively. Although construction noise is exempt pursuant to the municipal code, Mitigation Measure N-1 has been incorporated to reduce the impact to neighboring uses during construction.

Per Section 83.01.080(g) of the San Bernardino County Code, construction activities occurring between the hours of 7:00 AM and 7:00 PM on Mondays through Saturdays are exempt from noise standards. Due to the time limitations on construction activity, surrounding employees and residents will be exposed to limited construction noise with adherence to County standards. Because noise levels construction are anticipated to exceed the City's standards for stationary noise sources, mitigation measures will be necessary to minimize noise levels at nearby receptors. Mitigation Measure N-1 will be incorporated to minimize noise associated with general construction activities. Mitigation Measure N-1 requires preparation of a construction noise reduction plan to reduce temporary noise impacts by minimum of 20 dBA which is a feasible performance standard based on available technology. Engineered controls include retrofitting equipment with improved exhaust and intake muffling, disengaging equipment fans, and installation of sound panels

around equipment engines. These types of controls can achieve noise level reductions of approximately 10 dBA.<sup>6 7</sup> Sound curtains and other noise barriers can be used for general construction noise and achieve reductions of up to 20 dBA.<sup>8</sup> Implementation of Mitigation Measure N-1 will reduce temporary noise impacts by a minimum of 20 dBA, resulting in a maximum construction noise level of 57.3 dBA at the commercial use to the west of the project site. Therefore, with implementation of Mitigation Measures N-1 and adherence to County standards, construction noise will feasibly be reduced to unsubstantial levels.

**OPERATIONAL NOISE LEVELS**

The San Bernardino County Municipal Code sets an allowable exterior noise level resulting from stationary noise sources for residential uses at 55 dBA CNEL, 65 dBA CNEL for commercial uses, and 70 dBA CNEL for industrial uses. Allowable exterior noise levels resulting from adjacent mobile sources are set at 60 dBA CNEL for residential uses and 65 dBA CNEL for office commercial uses. There is no mobile source exterior standard for retail commercial or industrial uses. Ambient noise at the project site would generally be defined by traffic on Redwood Avenue, Hunter Street, and operational noise from neighboring commercial uses. All measurement equipment meets American National Standards Institute (ANSI) specifications for sound level meters. Using a Larson Davis LxT sound level meter, three short-term (15 minute) noise measurements were recorded at various locations at the site. Short-term noise measurements were recorded during daytime hours. Traffic noise from vehicular traffic generated by the proposed project was projected using SoundPLAN software based on trip generation and distribution estimated in the project traffic study prepared by Kunzman Associates.

The noise levels at neighboring uses were calculated using SoundPLAN software to provide a baseline of the opening year traffic noise levels. Noise levels at the single family homes to the east and west, the storage facility to the north, and the commercial uses to the south were calculated (see Appendix C for output data) and projected at the ground floor. The 2017 opening year without and with project traffic noise levels during the AM and PM peak hours at neighboring uses are summarized in Table 6 (Roadway Noise Levels Without Project) and Table 7 (Roadway Noise Levels With Project). Opening year without and with project exterior mobile source noise levels will exceed the 60 dBA CNEL standard established by the County for residential uses at six of the eight single family homes identified below. However, the project does not cause the exterior noise levels to exceed the 60 dBA CNEL threshold for a receptor that is currently below 60 dBA CNEL. Therefore, no significant impacts will result.

**Table 6  
Roadway Noise Levels Without Project**

Receptors	AM Peak Hour dBA CNEL	PM Peak Hour dBA CNEL
1 – Single Family Home (NE)	60.0	61.4
2 – Storage Facility (N)	63.7	64.9
3 – Single Family Home (E)	61.0	62.5
4 – Single Family Home (E)	61.0	62.5
5 – Single Family Home (E)	61.0	62.5
6 – Single Family Home (E)	62.1	63.5
7 – Retail Commercial (SE)	62.3	63.7
8 – Single Family Home (S)	62.0	63.0
9 – Single Family Home (S)	53.9	55.2
10 – Single Family Home (W)	48.8	50.2

**Table 7**  
**Roadway Noise Levels With Project**

Receptors	AM Peak Hour dBA CNEL	PM Peak Hour dBA CNEL
1 – Single Family Home (NE)	60.0	61.7
2 – Storage Facility (N)	63.7	65.2
3 – Single Family Home (E)	61.2	62.7
4 – Single Family Home (E)	61.2	62.6
5 – Single Family Home (E)	61.3	62.7
6 – Single Family Home (E)	62.4	63.7
7 – Retail Commercial (SE)	62.7	64.1
8 – Single Family Home (S)	62.4	63.4
9 – Single Family Home (S)	54.0	55.3
10 – Single Family Home (W)	48.9	50.4

Operation of the proposed warehouse facility will involve on-site truck movement, truck idling, loading activities, doors slamming, and back-up alarms on the south side of the building. Parking areas for passenger cars located on the west and north sides of the building will involve car movement, car doors slamming, and the starting up of vehicles. The proposed project includes an eight-foot concrete screen wall along the northern, western, and southern boundaries of the site, shielding neighboring uses from noise generated on-site. These operational noise levels have been calculated using SoundPLAN software and summarized in Table 8 (On-Site Project Noise Levels). As shown below, exterior noise levels at all receivers are within the 55 dBA CNEL stationary noise standard for residential use and 60 dBA CNEL stationary noise standard for commercial use.

**Table 8**  
**On-site Project Noise Levels**

Receptors	dBA CNEL
1 – Single Family Home (NE)	40.2
2 – Storage Facility (N)	45.2
3 – Single Family Home (E)	46.8
4 – Single Family Home (E)	39.3
5 – Single Family Home (E)	32.7
6 – Single Family Home (E)	42.6
7 – Retail Commercial (SE)	39.4
8 – Single Family Home (S)	43.9
9 – Single Family Home (S)	47.2
10 – Single Family Home (W)	53.3

### 6.3 Vibration Impacts

Construction activities that use vibratory rollers and bulldozers are repetitive sources of vibration; therefore, the *continuous* threshold is used. Single family residences to the south and east were built in the 1970s to 1990s. Therefore, the *older residential structures* threshold is used. Based on the threshold criteria summarized in Tables 4 and 5, vibration from use of heavy construction equipment for the proposed project would be below the thresholds to cause damage to nearby structures and result in less than *barely perceptible* vibration at the ten receptors shown in Table 9 (Distance to Vibration Receptors) and Table 10 (Construction Vibration Impacts).

**Table 9**  
**Distance to Vibration Receptors**

Receptors	Distance from Center of Project Site (ft)
1 – Single Family Home (NE)	683
2 – Storage Facility (N)	680
3 – Single Family Home (E)	465
4 – Single Family Home (E)	410
5 – Single Family Home (E)	413
6 – Single Family Home (E)	470
7 – Retail Commercial (SE)	753
8 – Single Family Home (S)	472
9 – Single Family Home (S)	427
10 – Single Family Home (W)	355

Construction of the project does not require rock blasting, pile driving, or the use of a jack hammer, but will use a vibratory roller, small and large bulldozer, and loaded trucks. All of the receptors will experience less than *barely perceptible* vibration from construction of the proposed project. Furthermore, these construction activities will be limited to the hours of 7:00 AM to 7:00 PM Mondays through Saturdays.

Use of a vibratory roller may be required in the event that roadway improvements are required. To ensure that vibration-related impacts related to potential roadway improvements will not damage the neighboring residential structures or cause annoyance, Mitigation Measure N-2 has been incorporated. Mitigation Measure N-2 requires the preparation of supplemental vibration analysis in the event that roadway improvements are required.

With regard to long-term operational impacts, activities associated with the project will not result in any vibration-related impacts to adjacent or on-site properties.

**Table 10**  
**Construction Vibration Impacts**

Receptors	Equipment	PPVref	Distance (feet)	PPV
1 – Single Family Home (NE)	Vibratory Roller	0.21	683	0.0028
2 – Storage Facility (N)	Vibratory Roller	0.21	680	0.0029
3 – Single Family Home (E)	Vibratory Roller	0.21	465	0.0047
4 – Single Family Home (E)	Vibratory Roller	0.21	410	0.0055
5 – Single Family Home (E)	Vibratory Roller	0.21	413	0.0055
6 – Single Family Home (E)	Vibratory Roller	0.21	470	0.0046
7 – Retail Commercial (SE)	Vibratory Roller	0.21	753	0.0025
8 – Single Family Home (S)	Vibratory Roller	0.21	472	0.0046
9 – Single Family Home (S)	Vibratory Roller	0.21	427	0.0052
10 – Single Family Home (W)	Vibratory Roller	0.21	355	0.0067
1 – Single Family Home (NE)	Large Bulldozer	0.089	683	0.001208
2 – Storage Facility (N)	Large Bulldozer	0.089	680	0.001215
3 – Single Family Home (E)	Large Bulldozer	0.089	465	0.001991
4 – Single Family Home (E)	Large Bulldozer	0.089	410	0.002345
5 – Single Family Home (E)	Large Bulldozer	0.089	413	0.002323
6 – Single Family Home (E)	Large Bulldozer	0.089	470	0.001963
7 – Retail Commercial (SE)	Large Bulldozer	0.089	753	0.001064
8 – Single Family Home (S)	Large Bulldozer	0.089	472	0.001952
9 – Single Family Home (S)	Large Bulldozer	0.089	427	0.002224
10 – Single Family Home (W)	Large Bulldozer	0.089	355	0.002828
1 – Single Family Home (NE)	Small Bulldozer	0.003	683	0.000041
2 – Storage Facility (N)	Small Bulldozer	0.003	680	0.000041
3 – Single Family Home (E)	Small Bulldozer	0.003	465	0.000067
4 – Single Family Home (E)	Small Bulldozer	0.003	410	0.000079
5 – Single Family Home (E)	Small Bulldozer	0.003	413	0.000078
6 – Single Family Home (E)	Small Bulldozer	0.003	470	0.000066
7 – Retail Commercial (SE)	Small Bulldozer	0.003	753	0.000036
8 – Single Family Home (S)	Small Bulldozer	0.003	472	0.000066
9 – Single Family Home (S)	Small Bulldozer	0.003	427	0.000075
10 – Single Family Home (W)	Small Bulldozer	0.003	355	0.000095
1 – Single Family Home (NE)	Loaded Truck	0.076	683	0.001031
2 – Storage Facility (N)	Loaded Truck	0.076	680	0.001037
3 – Single Family Home (E)	Loaded Truck	0.076	465	0.001700
4 – Single Family Home (E)	Loaded Truck	0.076	410	0.002002
5 – Single Family Home (E)	Loaded Truck	0.076	413	0.001983
6 – Single Family Home (E)	Loaded Truck	0.076	470	0.001677
7 – Retail Commercial (SE)	Loaded Truck	0.076	753	0.000908
8 – Single Family Home (S)	Loaded Truck	0.076	472	0.001667
9 – Single Family Home (S)	Loaded Truck	0.076	427	0.001899
10 – Single Family Home (W)	Loaded Truck	0.076	355	0.002415

#### 6.4 Increase in Ambient Noise Levels

A substantial increase in ambient noise is an increase that is *barely perceptible* (3 dBA). Operationally, the proposed project will result in periodic landscaping and other occasional noise generating activities. These activities are common

in industrial uses and do not represent a substantial increase in periodic noise in consideration that the project site is located in an industrialized area.

Traffic noise levels will not increase more than 3 dBA as a result of the proposed project as shown in Table 11 (AM Peak Hour Change in Noise Levels) and Table 12 (PM Peak Hour Change in Noise Levels). In addition, the ambient noise measurements at the eastern boundary of the project site, as previously indicated in Table 1, is generally consistent with the modeled roadway noise levels with project. Therefore impacts will be less than significant.

**Table 11  
AM Peak Hour Change in Noise Levels**

Receptors	Without Project dBA CNEL	With Project dBA CNEL	Difference	Significant?
1 – Single Family Home (NE)	60.0	60.0	0.0	No
2 – Storage Facility (N)	63.7	63.7	0.0	No
3 – Single Family Home (E)	61.0	61.2	0.2	No
4 – Single Family Home (E)	61.0	61.2	0.2	No
5 – Single Family Home (E)	61.0	61.3	0.3	No
6 – Single Family Home (E)	62.1	62.4	0.3	No
7 – Retail Commercial (SE)	62.3	62.7	0.4	No
8 – Single Family Home (S)	62.0	62.4	0.4	No
9 – Single Family Home (S)	53.9	54.0	0.1	No
10 – Single Family Home (W)	48.8	48.9	0.1	No

**Table 12  
PM Peak Hour Change in Noise Levels**

Receptors	Without Project dBA CNEL	With Project dBA CNEL	Difference	Significant?
1 – Single Family Home (NE)	61.4	61.7	0.3	No
2 – Storage Facility (N)	64.9	65.2	0.3	No
3 – Single Family Home (E)	62.5	62.7	0.2	No
4 – Single Family Home (E)	62.5	62.6	0.1	No
5 – Single Family Home (E)	62.5	62.7	0.2	No
6 – Single Family Home (E)	63.5	63.7	0.2	No
7 – Retail Commercial (SE)	63.7	64.1	0.4	No
8 – Single Family Home (S)	63.0	63.4	0.4	No
9 – Single Family Home (S)	55.2	55.3	0.1	No
10 – Single Family Home (W)	50.2	50.4	0.2	No

## 6.5 Airport Noise

The project site is located with two miles of a public or private use airport or helipad. Therefore, no substantial impacts will occur.



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## 7 MITIGATION MEASURES

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The following mitigation measures are required to ensure that project-related noise levels will not exceed established thresholds.

- N-1 Prior to issuance of grading permits, the Applicant shall submit a mitigation plan prepared by a qualified engineer or other acoustical expert for review and approval by the Planning Division that identifies noise control measures that achieve a minimum 20 dBA reduction in construction-related noise levels at the residential uses to the west, south, and east of the project site. The mitigation plan may include use of vibratory pile drivers or other pile driving noise controls, sound curtains, engineered equipment controls, or other methods. Noise control requirements shall be noted on project construction drawings and verified by the Building Department during standard inspection procedures.
  
- N-2 In the event that roadway improvements are necessary, the Applicant shall ensure that vibration associated with the use of a vibratory roller will not exceed the vibration damage potential for older residential structures of 0.30 PPV and the vibration annoyance potential of 0.04 PPV (distinctly perceptible) established by Caltrans. Supplemental analysis shall be performed and submitted for the review and approval of the Planning Division prior to the start of construction activities.

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- <sup>1</sup> California Department of Transportation. Basics of Highway Noise: Technical Noise Supplement. November 2009.
- <sup>2</sup> California Governor's Office of Planning and Research. General Plan Guidelines. 2003
- <sup>3</sup> California Department of Transportation. Transportation- and Construction-Induced Vibration Guidance Manual. June 2004
- <sup>4</sup> Federal Transit Administration. *Transit Noise and Vibration Impact Assessment*. 2006
- <sup>5</sup> California Department of Transportation. *Transportation and Construction Vibration Guidance Manual. Division of Environmental Analysis. September 2013*
- <sup>6</sup> United States Bureau of Mines. Mining Machinery Noise Control Guidelines. 1983
- <sup>7</sup> United States Bureau of Mines. Noise Abatement Techniques for Construction Equipment. August 1979
- <sup>8</sup> Sound Seal. Sound Seal Sound Curtains Exterior Grade Noise Control. <http://www.soundcurtains.com/exterior-grade-noise-control.pdf> [October 2014]



## **Appendix A Noise Measurement Data**

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**General Information**

Serial Number	03790
Model	SoundExpert™ LxT
Firmware Version	2.206
Filename	LxT_Data.002
User	OliviaChan
Job Description	Redwood Warehouse
Location	San Bernardino County

**Measurement Description**

Start Time	Tuesday, 03 February 2015 13:08:36
Stop Time	Tuesday, 03 February 2015 13:23:36
Duration	00:15:00.0
Run Time	00:15:00.0
Pause	00:00:00.0
Pre Calibration	Thursday, 30 January 2014 00:00:58
Post Calibration	None
Calibration Deviation	---

**Note****Overall Data**

LASeq		61.2	dB
LASmax	03 Feb 2015 13:12:00	77.1	dB
LApeak (max)	03 Feb 2015 13:12:00	92.3	dB
LASmin	03 Feb 2015 13:16:06	45.5	dB
LCSeq		67.9	dB
LASeq		61.2	dB
LCSeq - LASEq		6.7	dB
LASeq		63.1	dB
LAEq		61.2	dB
LASeq - LAeq		1.9	dB
LASE		90.7	dB
# Overloads		0	
Overload Duration		0.0	s
# OBA Overloads		8	
OBA Overload Duration		19.8	s

**Statistics**

LAS5.00	68.5	dBA
LAS10.00	65.2	dBA
LAS33.30	55.3	dBA
LAS50.00	50.2	dBA
LAS66.60	47.7	dBA
LAS90.00	46.2	dBA
LAS > 85.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LAS > 115.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LApeak > 135.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LApeak > 137.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LApeak > 140.0 dB (Exceedence Counts / Duration)	0 / 0.0	s

**Settings**

RMS Weight	A Weighting	
Peak Weight	A Weighting	
Detector	Slow	
Preamp	PRMLxT1L	
Microphone Correction	Off	
Integration Method	Exponential	
OBA Range	Low	
OBA Bandwidth	1/1 and 1/3	
OBA Freq. Weighting	A Weighting	
OBA Max Spectrum	At Lmax	
Under Range Limit	25.0	dB
Under Range Peak	78.0	dB
Noise Floor	14.9	dB
Overload	121.8	dB

**1/1 Spectra**

Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k
LASeq	6.3	10.7	24.2	36.8	45.8	47.7	53.4	57.9	54.4	45.2	38.9	22.7
LASmax	6.3	15.8	31.1	42.6	53.2	58.9	68.4	72.7	67.6	58.5	52.0	40.5
LASmin	6.3	5.7	18.8	29.1	35.0	36.6	37.5	40.5	37.4	26.6	14.5	6.4

### 1/3 Spectra

Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LASeq	2.1	1.6	0.8	0.4	4.8	9.3	12.4	20.1	21.7	28.0	32.6	33.7
LASmax	2.1	1.6	0.8	0.5	6.8	14.8	18.1	25.3	30.0	32.7	38.8	38.7
LASmin	2.1	1.6	0.8	0.3	-0.6	3.2	5.8	13.6	15.0	18.6	23.8	24.7
Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LASeq	40.1	41.0	41.9	41.1	43.5	43.7	46.1	48.0	50.5	52.6	53.7	53.1
LASmax	48.8	46.1	51.0	52.4	53.8	56.5	58.0	60.6	67.3	68.7	67.7	66.6
LASmin	27.4	30.9	29.3	31.0	32.5	30.7	32.7	32.4	32.8	34.9	35.7	34.5
Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LASeq	51.6	49.3	46.5	42.9	39.5	36.6	34.1	36.8	27.0	21.1	15.8	8.3
LASmax	64.6	63.0	59.7	55.5	53.1	51.8	49.9	46.4	43.2	39.1	33.5	25.8
LASmin	33.3	33.2	28.5	24.7	20.4	16.0	11.8	9.4	6.3	3.0	2.0	-1.6

### Calibration History

Preamp	Date	dB re. 1V/Pa
PRMLxT1L	30 Jan 2014 00:00:58	-28.0
PRMLxT1L	13 Sep 2014 10:03:02	-27.2
PRMLxT1L	13 Aug 2014 07:59:24	-28.6
PRMLxT1L	21 Jul 2014 14:19:41	-28.1
PRMLxT1L	08 May 2014 10:49:07	-28.1
PRMLxT1L	07 Oct 2013 00:47:30	-28.3
PRMLxT1L	07 Oct 2013 00:06:24	-26.4

**General Information**

Serial Number 03790  
 Model SoundExpert™ LxT  
 Firmware Version 2.206  
 Filename LxT\_Data.003  
 User OliviaChan  
 Job Description Redwood Warehouse  
 Location San Bernardino County

**Measurement Description**

Start Time Tuesday, 03 February 2015 13:29:34  
 Stop Time Tuesday, 03 February 2015 13:47:28  
 Duration 00:15:04.5  
 Run Time 00:15:04.5  
 Pause 00:00:00.0  
 Pre Calibration Thursday, 30 January 2014 00:00:58  
 Post Calibration  
 Calibration Deviation ---

**Note**

**Overall Data**

LASeq		62.9	dB
LASmax	03 Feb 2015 13:44:33	79.4	dB
LApeak (max)	03 Feb 2015 13:41:29	93.8	dB
LASmin	03 Feb 2015 13:39:24	44.9	dB
LCSeq		72.4	dB
LASeq		62.9	dB
LCSeq - LASeq		9.5	dB
LASeq		65.0	dB
LAEq		63.1	dB
LASeq - LAeq		2.0	dB
LASE		92.5	dB
# Overloads		0	
Overload Duration		0.0	s
# OBA Overloads		13	
OBA Overload Duration		61.8	s

**Statistics**

LAS5.00	70.4	dBA
LAS10.00	67.5	dBA
LAS33.30	58.1	dBA
LAS50.00	53.1	dBA
LAS66.60	49.8	dBA
LAS90.00	47.8	dBA

LAS > 85.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LAS > 115.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LApeak > 135.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LApeak > 137.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LApeak > 140.0 dB (Exceedence Counts / Duration)	0 / 0.0	s

**Settings**

RMS Weight	A Weighting	
Peak Weight	A Weighting	
Detector	Slow	
Preamp	PRMLxT1L	
Microphone Correction	Off	
Integration Method	Exponential	
OBA Range	Low	
OBA Bandwidth	1/1 and 1/3	
OBA Freq. Weighting	A Weighting	
OBA Max Spectrum	At Lmax	
Under Range Limit	25.0	dB
Under Range Peak	78.0	dB
Noise Floor	14.9	dB
Overload	121.8	dB

**1/1 Spectra**

Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k
LASeq	6.3	12.8	33.1	42.1	48.9	49.6	55.3	59.2	56.0	49.0	43.4	33.8
LASmax	6.3	14.2	38.6	52.7	57.4	64.4	71.1	75.1	72.9	71.0	66.5	53.5
LASmin	6.3	6.3	19.4	29.4	33.3	33.8	37.5	41.4	33.3	28.1	13.8	6.4

### 1/3 Spectra

Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LASeq	2.1	1.6	0.8	0.5	7.3	11.2	14.9	23.9	32.5	33.9	37.5	38.6
LASmax	2.1	1.6	0.8	2.0	7.6	11.7	14.5	20.5	37.4	33.3	42.0	51.3
LASmin	2.1	1.6	0.8	0.3	-0.6	1.7	6.3	13.6	12.4	18.8	23.1	21.2
Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LASeq	43.5	45.2	44.1	44.1	44.0	46.2	48.4	50.6	52.0	53.9	55.2	54.2
LASmax	49.2	51.5	55.5	58.8	56.8	61.8	66.3	66.4	66.7	69.2	71.7	69.8
LASmin	26.3	28.7	27.3	29.0	28.5	28.7	30.2	31.9	34.5	37.0	36.6	34.9
Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LASeq	52.9	51.2	48.6	46.0	43.6	41.8	39.9	36.8	38.6	31.8	25.4	19.1
LASmax	67.7	68.3	68.6	67.8	65.4	65.4	64.4	61.3	56.2	52.2	46.3	39.2
LASmin	31.3	26.7	22.7	25.0	22.5	19.6	11.5	7.2	4.9	2.8	1.4	-1.1

### Calibration History

Preamp	Date	dB re. 1V/Pa
PRMLxT1L	30 Jan 2014 00:00:58	-28.0
PRMLxT1L	13 Sep 2014 10:03:02	-27.2
PRMLxT1L	13 Aug 2014 07:59:24	-28.6
PRMLxT1L	21 Jul 2014 14:19:41	-28.1
PRMLxT1L	08 May 2014 10:49:07	-28.1
PRMLxT1L	07 Oct 2013 00:47:30	-28.3
PRMLxT1L	07 Oct 2013 00:06:24	-26.4

**General Information**

Serial Number 03790  
 Model SoundExpert™ LxT  
 Firmware Version 2.206  
 Filename LxT\_Data.004  
 User OliviaChan  
 Job Description Redwood Warehouse  
 Location San Bernardino County

**Measurement Description**

Start Time Tuesday, 03 February 2015 13:54:08  
 Stop Time Tuesday, 03 February 2015 14:09:08  
 Duration 00:15:00.0  
 Run Time 00:15:00.0  
 Pause 00:00:00.0  
 Pre Calibration Thursday, 30 January 2014 00:00:58  
 Post Calibration  
 Calibration Deviation ---

**Note**

**Overall Data**

LASeq		58.0	dB
LASmax	03 Feb 2015 14:08:23	81.0	dB
LAPeak (max)	03 Feb 2015 14:08:22	104.2	dB
LASmin	03 Feb 2015 13:54:08	48.6	dB
LCSeq		65.6	dB
LASeq		58.0	dB
LCSeq - LASeq		7.6	dB
LASeq		66.4	dB
LAEq		58.0	dB
LASeq - LAEq		8.4	dB
LASE		87.5	dB
# Overloads		0	
Overload Duration		0.0	s
# OBA Overloads		4	
OBA Overload Duration		8.3	s

**Statistics**

LAS5.00	62.2	dBA
LAS10.00	60.3	dBA
LAS33.30	54.4	dBA
LAS50.00	52.4	dBA
LAS66.60	51.4	dBA
LAS90.00	50.1	dBA

LAS > 85.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LAS > 115.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LAPeak > 135.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LAPeak > 137.0 dB (Exceedence Counts / Duration)	0 / 0.0	s
LAPeak > 140.0 dB (Exceedence Counts / Duration)	0 / 0.0	s

**Settings**

RMS Weight	A Weighting	
Peak Weight	A Weighting	
Detector	Slow	
Preamp	PRMLxT1L	
Microphone Correction	Off	
Integration Method	Exponential	
OBA Range	Low	
OBA Bandwidth	1/1 and 1/3	
OBA Freq. Weighting	A Weighting	
OBA Max Spectrum	At Lmax	
Under Range Limit	25.0	dB
Under Range Peak	78.0	dB
Noise Floor	14.9	dB
Overload	121.8	dB

**1/1 Spectra**

Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k
LASeq	6.3	11.2	25.0	33.9	37.5	41.6	47.4	50.7	50.8	52.7	41.2	28.7
LASmax	10.3	16.2	26.3	34.5	42.3	53.6	53.9	58.3	68.4	75.2	59.8	55.0
LASmin	6.3	4.5	18.2	30.2	33.6	36.5	42.8	44.6	36.0	30.5	16.8	6.5

### 1/3 Spectra

Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LASeq	2.1	1.6	0.8	0.7	5.3	9.6	17.6	19.0	22.6	25.5	30.2	30.2
LASmax	2.1	1.6	4.1	6.7	10.5	13.8	15.4	21.9	22.5	27.4	32.0	30.8
LASmin	2.1	1.6	0.8	0.3	-0.6	2.0	6.7	-3.4	15.6	20.9	26.1	23.0
Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LASeq	30.4	33.9	33.2	36.1	35.9	38.1	40.4	42.6	44.2	45.5	45.8	46.5
LASmax	38.3	38.9	34.5	37.8	41.9	53.3	42.6	44.7	53.2	49.9	51.1	56.8
LASmin	25.2	28.6	28.0	29.0	29.5	32.0	35.0	37.4	39.1	39.7	40.0	37.4
Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LASeq	45.9	45.0	47.0	50.0	47.5	45.5	39.2	34.3	31.9	26.8	22.7	15.4
LASmax	54.3	54.7	67.7	75.1	63.9	55.6	52.5	54.7	57.2	53.2	49.3	43.0
LASmin	33.7	29.6	28.1	25.3	23.1	18.9	14.1	9.9	6.4	4.1	0.9	-3.1

### Calibration History

Preamp	Date	dB re. 1V/Pa
PRMLxT1L	30 Jan 2014 00:00:58	-28.0
PRMLxT1L	13 Sep 2014 10:03:02	-27.2
PRMLxT1L	13 Aug 2014 07:59:24	-28.6
PRMLxT1L	21 Jul 2014 14:19:41	-28.1
PRMLxT1L	08 May 2014 10:49:07	-28.1
PRMLxT1L	07 Oct 2013 00:47:30	-28.3
PRMLxT1L	07 Oct 2013 00:06:24	-26.4

## **Appendix B Construction Noise and Vibration Output Data**

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Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 2/3/2015  
 Case Description: Building Demolition

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Single Family Home (NE)	Residential		55	55

		Equipment				
Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	683	0
Excavator	No	40		80.7	683	0
Excavator	No	40		80.7	683	0
Excavator	No	40		80.7	683	0
Dozer	No	40		81.7	683	0
Dozer	No	40		81.7	683	0

Results

		Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
Equipment		*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Concrete Saw		66.9		59.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator		58		54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator		58		54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator		58		54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		59		55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		59		55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		66.9		63.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Storage Facility (N)	Industrial		65	65

		Equipment				
Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	680	0
Excavator	No	40		80.7	680	0
Excavator	No	40		80.7	680	0
Excavator	No	40		80.7	680	0
Dozer	No	40		81.7	680	0
Dozer	No	40		81.7	680	0

Results

		Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
Equipment		*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Concrete Saw		66.9		59.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator		58		54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator		58		54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator		58		54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		59		55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		59		55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		66.9		63.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Single Family Home (E)	Residential		55	55

		Equipment				
Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	465	0
Excavator	No	40		80.7	465	0
Excavator	No	40		80.7	465	0
Excavator	No	40		80.7	465	0
Dozer	No	40		81.7	465	0
Dozer	No	40		81.7	465	0

Equipment	Results													
	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)				
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
Lmax			Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Concrete Saw	70.2	N/A	63.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	61.3	57.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	61.3	57.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	61.3	57.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	62.3	58.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	62.3	58.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	70.2	67.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (E)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Concrete Saw	No	20	89.6
Excavator	No	40	80.7	410	0	
Excavator	No	40	80.7	410	0	
Excavator	No	40	80.7	410	0	
Dozer	No	40	81.7	410	0	
Dozer	No	40	81.7	410	0	

Equipment	Results													
	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)				
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
Lmax			Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Concrete Saw	71.3	64.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	62.4	58.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	62.4	58.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	62.4	58.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	63.4	59.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	63.4	59.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	71.3	68.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (E)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Concrete Saw	No	20	89.6
Excavator	No	40	80.7	413	0	
Excavator	No	40	80.7	413	0	
Excavator	No	40	80.7	413	0	
Dozer	No	40	81.7	413	0	
Dozer	No	40	81.7	413	0	

Equipment	Results													
	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)				
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
Lmax			Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Concrete Saw	71.2	64.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	62.4	58.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	62.4	58.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	62.4	58.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	63.3	59.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	63.3	59.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	71.2	68.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Single Family Home (E)	Residential	55	55	55

		Equipment				
		Spec	Actual	Receptor	Estimated	
		Lmax	Lmax	Distance	Shielding	
Description	Impact Device	Usage(%)	(dBA)	(feet)	(dBA)	
Concrete Saw	No		20	89.6	470	0
Excavator	No		40	80.7	470	0
Excavator	No		40	80.7	470	0
Excavator	No		40	80.7	470	0
Dozer	No		40	81.7	470	0
Dozer	No		40	81.7	470	0

		Results														
		Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
		Day			Evening			Night			Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	
Concrete Saw	70.1		63.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Excavator	61.2		57.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Excavator	61.2		57.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Excavator	61.2		57.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Dozer	62.2		58.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Dozer	62.2		58.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total	70.1		67	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

\*Calculated Lmax is the Loudest value.

---- Receptor #7 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Retail Commercial (SE)	Commercial	60	60	60

		Equipment				
		Spec	Actual	Receptor	Estimated	
		Lmax	Lmax	Distance	Shielding	
Description	Impact Device	Usage(%)	(dBA)	(feet)	(dBA)	
Concrete Saw	No		20	89.6	753	0
Excavator	No		40	80.7	753	0
Excavator	No		40	80.7	753	0
Excavator	No		40	80.7	753	0
Dozer	No		40	81.7	753	0
Dozer	No		40	81.7	753	0

		Results														
		Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
		Day			Evening			Night			Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	
Concrete Saw	66		59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Excavator	57.2		53.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Excavator	57.2		53.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Excavator	57.2		53.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Dozer	58.1		54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Dozer	58.1		54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total	66		62.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

\*Calculated Lmax is the Loudest value.

---- Receptor #8 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Single Family Home (S)	Residential	55	55	55

		Equipment				
		Spec	Actual	Receptor	Estimated	
		Lmax	Lmax	Distance	Shielding	
Description	Impact Device	Usage(%)	(dBA)	(feet)	(dBA)	
Concrete Saw	No		20	89.6	472	0
Excavator	No		40	80.7	472	0
Excavator	No		40	80.7	472	0
Excavator	No		40	80.7	472	0
Dozer	No		40	81.7	472	0
Dozer	No		40	81.7	472	0

		Results														
		Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
		Day			Evening		Night		Day			Evening		Night		
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Concrete Saw		70.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Excavator		61.2	57.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Excavator		61.2	57.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Excavator		61.2	57.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Dozer		62.2	58.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Dozer		62.2	58.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total		70.1	66.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

\*Calculated Lmax is the Loudest value.

---- Receptor #9 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Single Family Home (S)	Residential	55	55	55

		Equipment				
		Spec	Actual	Receptor	Estimated	
Description	Impact	Lmax	Lmax	Distance	Shielding	
Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)	
Concrete Saw	No	20	89.6	427	0	
Excavator	No	40	80.7	427	0	
Excavator	No	40	80.7	427	0	
Excavator	No	40	80.7	427	0	
Dozer	No	40	81.7	427	0	
Dozer	No	40	81.7	427	0	

		Results														
		Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
		Day			Evening		Night		Day			Evening		Night		
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Concrete Saw		71	64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Excavator		62.1	58.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Excavator		62.1	58.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Excavator		62.1	58.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Dozer		63	59.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Dozer		63	59.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total		71	67.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

\*Calculated Lmax is the Loudest value.

---- Receptor #10 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Single Family Home (W)	Residential	55	55	55

		Equipment				
		Spec	Actual	Receptor	Estimated	
Description	Impact	Lmax	Lmax	Distance	Shielding	
Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)	
Concrete Saw	No	20	89.6	355	0	
Excavator	No	40	80.7	355	0	
Excavator	No	40	80.7	355	0	
Excavator	No	40	80.7	355	0	
Dozer	No	40	81.7	355	0	
Dozer	No	40	81.7	355	0	

		Results														
		Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
		Day			Evening		Night		Day			Evening		Night		
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Concrete Saw		72.6	65.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Excavator		63.7	59.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Excavator		63.7	59.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Excavator		63.7	59.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Dozer		64.6	60.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Dozer		64.6	60.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total		72.6	69.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

\*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 2/3/2015  
 Case Description: Paving Demolition

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Single Family Home (NE)	Residential		55	55

		Equipment				
		Spec	Actual	Receptor	Estimated	
Description	Impact	Lmax	Lmax	Distance	Shielding	
	Device	Usage(%)	(dBA)	(feet)	(dBA)	
Concrete Saw	No	20		89.6	683	0
Excavator	No	40		80.7	683	0
Excavator	No	40		80.7	683	0
Excavator	No	40		80.7	683	0
Dozer	No	40		81.7	683	0
Dozer	No	40		81.7	683	0

Results

		Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
		Day		Evening		Night		Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Saw		66.9		59.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator		58		54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator		58		54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator		58		54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		59		55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		59		55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		66.9		63.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Storage Facility (N)	Industrial		65	65

		Equipment				
		Spec	Actual	Receptor	Estimated	
Description	Impact	Lmax	Lmax	Distance	Shielding	
	Device	Usage(%)	(dBA)	(feet)	(dBA)	
Concrete Saw	No	20		89.6	680	0
Excavator	No	40		80.7	680	0
Excavator	No	40		80.7	680	0
Excavator	No	40		80.7	680	0
Dozer	No	40		81.7	680	0
Dozer	No	40		81.7	680	0

Results

		Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
		Day		Evening		Night		Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Saw		66.9		59.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator		58		54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator		58		54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator		58		54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		59		55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer		59		55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		66.9		63.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Single Family Home (E)	Residential		55	55

		Equipment				
		Spec	Actual	Receptor	Estimated	
Description	Impact	Lmax	Lmax	Distance	Shielding	
	Device	Usage(%)	(dBA)	(feet)	(dBA)	
Concrete Saw	No	20		89.6	465	0
Excavator	No	40		80.7	465	0
Excavator	No	40		80.7	465	0
Excavator	No	40		80.7	465	0
Dozer	No	40		81.7	465	0
Dozer	No	40		81.7	465	0

Equipment	Results													
	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)				
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
Lmax			Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Concrete Saw	70.2	N/A	63.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	61.3	57.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	61.3	57.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	61.3	57.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	62.3	58.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	62.3	58.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	70.2	67.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (E)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Concrete Saw	No	20	89.6
Excavator	No	40	80.7	410	0	
Excavator	No	40	80.7	410	0	
Excavator	No	40	80.7	410	0	
Dozer	No	40	81.7	410	0	
Dozer	No	40	81.7	410	0	

Equipment	Results													
	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)				
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
Lmax			Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Concrete Saw	71.3	64.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	62.4	58.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	62.4	58.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	62.4	58.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	63.4	59.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	63.4	59.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	71.3	68.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (E)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Concrete Saw	No	20	89.6
Excavator	No	40	80.7	413	0	
Excavator	No	40	80.7	413	0	
Excavator	No	40	80.7	413	0	
Dozer	No	40	81.7	413	0	
Dozer	No	40	81.7	413	0	

Equipment	Results													
	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)				
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
Lmax			Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Concrete Saw	71.2	64.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	62.4	58.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	62.4	58.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	62.4	58.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	63.3	59.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	63.3	59.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	71.2	68.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (E)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	470	0
Excavator	No	40		80.7	470	0
Excavator	No	40		80.7	470	0
Excavator	No	40		80.7	470	0
Dozer	No	40		81.7	470	0
Dozer	No	40		81.7	470	0

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Concrete Saw	70.1	63.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	61.2	57.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	61.2	57.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	61.2	57.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	62.2	58.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	62.2	58.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	70.1	67	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #7 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Retail Commercial (SE)	Commercial	60	60	60

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	753	0
Excavator	No	40		80.7	753	0
Excavator	No	40		80.7	753	0
Excavator	No	40		80.7	753	0
Dozer	No	40		81.7	753	0
Dozer	No	40		81.7	753	0

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Concrete Saw	66	59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	57.2	53.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	57.2	53.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	57.2	53.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	58.1	54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	58.1	54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	66	62.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #8 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (S)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	472	0
Excavator	No	40		80.7	472	0
Excavator	No	40		80.7	472	0
Excavator	No	40		80.7	472	0
Dozer	No	40		81.7	472	0
Dozer	No	40		81.7	472	0

Equipment	Results													
	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)				
	*Lmax	Leq	Lmax	Day		Evening		Night		Day		Evening		Night
Concrete Saw				70.1	N/A	63.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	61.2	57.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	61.2	57.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	61.2	57.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	62.2	58.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	62.2	58.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	70.1	66.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #9 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (S)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Concrete Saw	No	20	89.6
Excavator	No	40	80.7	427	0	
Excavator	No	40	80.7	427	0	
Excavator	No	40	80.7	427	0	
Dozer	No	40	81.7	427	0	
Dozer	No	40	81.7	427	0	

Equipment	Results													
	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)				
	*Lmax	Leq	Lmax	Day		Evening		Night		Day		Evening		Night
Concrete Saw				71	64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	62.1	58.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Excavator	62.1	58.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Excavator	62.1	58.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Dozer	63	59.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Dozer	63	59.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total	71	67.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

\*Calculated Lmax is the Loudest value.

---- Receptor #10 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (W)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Concrete Saw	No	20	89.6
Excavator	No	40	80.7	355	0	
Excavator	No	40	80.7	355	0	
Excavator	No	40	80.7	355	0	
Dozer	No	40	81.7	355	0	
Dozer	No	40	81.7	355	0	

Equipment	Results													
	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)				
	*Lmax	Leq	Lmax	Day		Evening		Night		Day		Evening		Night
Concrete Saw				72.6	65.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	63.7	59.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Excavator	63.7	59.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Excavator	63.7	59.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Dozer	64.6	60.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Dozer	64.6	60.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total	72.6	69.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

\*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 2/3/2015  
 Case Description: Grading

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (NE)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)	
			Spec Lmax (dBA)	Actual Lmax (dBA)			
Excavator	No		40		80.7	683	0
Grader	No		40	85		683	0
Dozer	No		40		81.7	683	0
Tractor	No		40	84		683	0
Backhoe	No		40		77.6	683	0
Backhoe	No		40		77.6	683	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
Excavator	66.9		59.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	58		54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	58		54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	58		54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	59		55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	59		55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	66.9		63.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Storage Facility (N)	Industrial	65	65	65

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)	
			Spec Lmax (dBA)	Actual Lmax (dBA)			
Excavator	No		40		80.7	680	0
Grader	No		40	85		680	0
Dozer	No		40		81.7	680	0
Tractor	No		40	84		680	0
Backhoe	No		40		77.6	680	0
Backhoe	No		40		77.6	680	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
Excavator	66.9		59.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	58		54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	58		54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	58		54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	59		55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	59		55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	66.9		63.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (E)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment				
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)	
Excavator	No		40		80.7	465	0
Grader	No		40	85		465	0
Dozer	No		40		81.7	465	0
Tractor	No		40	84		465	0
Backhoe	No		40		77.6	465	0
Backhoe	No		40		77.6	465	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
Excavator	70.2	N/A	63.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	61.3	N/A	57.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	61.3	N/A	57.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	61.3	N/A	57.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	62.3	N/A	58.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	62.3	N/A	58.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	70.2	N/A	67.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (E)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment				
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)	
Excavator	No		40		80.7	410	0
Grader	No		40	85		410	0
Dozer	No		40		81.7	410	0
Tractor	No		40	84		410	0
Backhoe	No		40		77.6	410	0
Backhoe	No		40		77.6	410	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
Excavator	71.3	N/A	64.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	62.4	N/A	58.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	62.4	N/A	58.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	62.4	N/A	58.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	63.4	N/A	59.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	63.4	N/A	59.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	71.3	N/A	68.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (E)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment				
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)	
Excavator	No		40		80.7	413	0
Grader	No		40	85		413	0
Dozer	No		40		81.7	413	0
Tractor	No		40	84		413	0
Backhoe	No		40		77.6	413	0
Backhoe	No		40		77.6	413	0

Equipment	Results													
	Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
	Day		Evening		Night		Day		Evening		Night			
*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Excavator	71.2	64.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	62.4	58.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	62.4	58.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	62.4	58.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	63.3	59.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	63.3	59.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	71.2	68.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (E)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Excavator	No	40	80.7
Grader	No	40	85	470	0	
Dozer	No	40	81.7	470	0	
Tractor	No	40	84	470	0	
Backhoe	No	40	77.6	470	0	
Backhoe	No	40	77.6	470	0	

Equipment	Results													
	Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
	Day		Evening		Night		Day		Evening		Night			
*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Excavator	70.1	63.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	61.2	57.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	61.2	57.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	61.2	57.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	62.2	58.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	62.2	58.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	70.1	67	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #7 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Retail Commercial (SE)	Commercial	60	60	60

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Excavator	No	40	80.7
Grader	No	40	85	753	0	
Dozer	No	40	81.7	753	0	
Tractor	No	40	84	753	0	
Backhoe	No	40	77.6	753	0	
Backhoe	No	40	77.6	753	0	

Equipment	Results													
	Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
	Day		Evening		Night		Day		Evening		Night			
*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Excavator	66	59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	57.2	53.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	57.2	53.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	57.2	53.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	58.1	54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	58.1	54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	66	62.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #8 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (S)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment				
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)	
Excavator	No		40		80.7	472	0
Grader	No		40	85		472	0
Dozer	No		40		81.7	472	0
Tractor	No		40	84		472	0
Backhoe	No		40		77.6	472	0
Backhoe	No		40		77.6	472	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
Excavator	70.1	N/A	63.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	61.2	N/A	57.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	61.2	N/A	57.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	61.2	N/A	57.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	62.2	N/A	58.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	62.2	N/A	58.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Total</b>	<b>70.1</b>	<b>66.9</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>

\*Calculated Lmax is the Loudest value.

---- Receptor #9 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (S)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment				
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)	
Excavator	No		40		80.7	427	0
Grader	No		40	85		427	0
Dozer	No		40		81.7	427	0
Tractor	No		40	84		427	0
Backhoe	No		40		77.6	427	0
Backhoe	No		40		77.6	427	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
Excavator	62.1	N/A	58.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	66.4	N/A	62.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	63	N/A	59.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	65.4	N/A	61.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	58.9	N/A	55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	58.9	N/A	55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Total</b>	<b>66.4</b>	<b>67.2</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>

\*Calculated Lmax is the Loudest value.

---- Receptor #10 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (W)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment				
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)	
Excavator	No		40		80.7	355	0
Grader	No		40	85		355	0
Dozer	No		40		81.7	355	0
Tractor	No		40	84		355	0
Backhoe	No		40		77.6	355	0
Backhoe	No		40		77.6	355	0

Equipment	Results													
	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
Lmax			Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Excavator	72.6	65.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	63.7	59.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	63.7	59.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	63.7	59.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	64.6	60.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	64.6	60.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	72.6	69.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 2/3/2015  
 Case Description: Building Construction

--- Receptor #1 ---

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (NE)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Crane	No	16			80.6	683
All Other Equipment > 5 HP	No	50	85			683
All Other Equipment > 5 HP	No	50	85			683
All Other Equipment > 5 HP	No	50	85			683
Generator	No	50			80.6	683
Backhoe	No	40			77.6	683
Backhoe	No	40			77.6	683
Tractor	No	40	84			683
Welder / Torch	No	40			74	683

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Crane	57.8	49.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	62.3	59.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	62.3	59.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	62.3	59.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	57.9	54.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	54.9	50.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	54.9	50.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	61.3	57.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	51.3	47.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	62.3	65.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

--- Receptor #2 ---

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Storage Facility (N)	Industrial	65	65	65

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Crane	No	16			80.6	680
All Other Equipment > 5 HP	No	50	85			680
All Other Equipment > 5 HP	No	50	85			680
All Other Equipment > 5 HP	No	50	85			680
Generator	No	50			80.6	680
Backhoe	No	40			77.6	680
Backhoe	No	40			77.6	680
Tractor	No	40	84			680
Welder / Torch	No	40			74	680

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Crane	57.9	49.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	62.3	59.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	62.3	59.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	62.3	59.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	58	54.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	54.9	50.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	54.9	50.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	61.3	57.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	51.3	47.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	62.3	65.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

--- Receptor #3 ---

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (E)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Crane	No	16			80.6	465
All Other Equipment > 5 HP	No	50	85			465
All Other Equipment > 5 HP	No	50	85			465
All Other Equipment > 5 HP	No	50	85			465
Generator	No	50			80.6	465
Backhoe	No	40			77.6	465
Backhoe	No	40			77.6	465
Tractor	No	40	84			465
Welder / Torch	No	40			74	465

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	61.2		53.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	65.6	62.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	65.6	62.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	65.6	62.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	61.3	58.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	58.2	54.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	58.2	54.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	64.6	60.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	54.6	50.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	65.6	69.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

--- Receptor #4 ---

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (E)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Crane	No	16			80.6	410
All Other Equipment > 5 HP	No	50	85			410
All Other Equipment > 5 HP	No	50	85			410
All Other Equipment > 5 HP	No	50	85			410
Generator	No	50			80.6	410
Backhoe	No	40			77.6	410
Backhoe	No	40			77.6	410
Tractor	No	40	84			410
Welder / Torch	No	40			74	410

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	62.3		54.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	66.7	63.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	66.7	63.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	66.7	63.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	62.4	59.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	59.3	55.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	59.3	55.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	65.7	61.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	55.7	51.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	66.7	70.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (E)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment Spec		Receptor Distance (feet)	Estimated Shielding (dBA)	
			Lmax (dBA)	Actual Lmax (dBA)			
Crane	No		16		80.6	413	0
All Other Equipment > 5 HP	No		50	85		413	0
All Other Equipment > 5 HP	No		50	85		413	0
All Other Equipment > 5 HP	No		50	85		413	0
Generator	No		50		80.6	413	0
Backhoe	No		40		77.6	413	0
Backhoe	No		40		77.6	413	0
Tractor	No		40	84		413	0
Welder / Torch	No		40		74	413	0

Results

Equipment	Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
	Day		Evening		Night		Day		Evening		Night			
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	62.2		54.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	66.7		63.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	66.7		63.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	66.7		63.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	62.3		59.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	59.2		55.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	59.2		55.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	65.7		61.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	55.7		51.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	66.7		70.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (E)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment Spec		Receptor Distance (feet)	Estimated Shielding (dBA)	
			Lmax (dBA)	Actual Lmax (dBA)			
Crane	No		16		80.6	470	0
All Other Equipment > 5 HP	No		50	85		470	0
All Other Equipment > 5 HP	No		50	85		470	0
All Other Equipment > 5 HP	No		50	85		470	0
Generator	No		50		80.6	470	0
Backhoe	No		40		77.6	470	0
Backhoe	No		40		77.6	470	0
Tractor	No		40	84		470	0
Welder / Torch	No		40		74	470	0

Results

Equipment	Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
	Day		Evening		Night		Day		Evening		Night			
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	61.1		53.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	65.5		62.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	65.5		62.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	65.5		62.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	61.2		58.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	58.1		54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	58.1		54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	64.5		60.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	54.5		50.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	65.5		69	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #7 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Retail Commercial (SE)	Commercial	60	60	60

Description	Impact Device	Usage(%)	Equipment Spec		Receptor Distance (feet)	Estimated Shielding (dBA)
			Lmax (dBA)	Actual Lmax (dBA)		
Crane	No		16		80.6	753
All Other Equipment > 5 HP	No		50	85		753
All Other Equipment > 5 HP	No		50	85		753
All Other Equipment > 5 HP	No		50	85		753
Generator	No		50		80.6	753
Backhoe	No		40		77.6	753
Backhoe	No		40		77.6	753
Tractor	No		40	84		753
Welder / Torch	No		40		74	753

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Crane	57		49	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	61.4		58.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	61.4		58.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	61.4		58.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	57.1		54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	54		50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	54		50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	60.4		56.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	50.4		46.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Total</b>	<b>61.4</b>		<b>64.9</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>

\*Calculated Lmax is the Loudest value.

---- Receptor #8 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (S)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment Spec		Receptor Distance (feet)	Estimated Shielding (dBA)
			Lmax (dBA)	Actual Lmax (dBA)		
Crane	No		16		80.6	472
All Other Equipment > 5 HP	No		50	85		472
All Other Equipment > 5 HP	No		50	85		472
All Other Equipment > 5 HP	No		50	85		472
Generator	No		50		80.6	472
Backhoe	No		40		77.6	472
Backhoe	No		40		77.6	472
Tractor	No		40	84		472
Welder / Torch	No		40		74	472

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Crane	61.1		53.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	65.5		62.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	65.5		62.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	65.5		62.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	61.1		58.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	58.1		54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	58.1		54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	64.5		60.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	54.5		50.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Total</b>	<b>65.5</b>		<b>69</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>

\*Calculated Lmax is the Loudest value.

---- Receptor #9 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (S)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment Spec		Receptor Distance (feet)	Estimated Shielding (dBA)
			Lmax (dBA)	Actual Lmax (dBA)		
Crane	No		16		80.6	427
All Other Equipment > 5 HP	No		50	85		427
All Other Equipment > 5 HP	No		50	85		427
All Other Equipment > 5 HP	No		50	85		427
Generator	No		50		80.6	427
Backhoe	No		40		77.6	427
Backhoe	No		40		77.6	427
Tractor	No		40	84		427
Welder / Torch	No		40		74	427

Results

Equipment	Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)			
	Day		Evening		Night		Day		Evening		Night	
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	61.9		54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	66.4		63.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	66.4		63.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	66.4		63.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	62		59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	58.9		55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	58.9		55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	65.4		61.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	55.4		51.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	66.4		69.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #10 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (W)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment Spec		Receptor Distance (feet)	Estimated Shielding (dBA)
			Lmax (dBA)	Actual Lmax (dBA)		
Crane	No		16		80.6	355
All Other Equipment > 5 HP	No		50	85		355
All Other Equipment > 5 HP	No		50	85		355
All Other Equipment > 5 HP	No		50	85		355
Generator	No		50		80.6	355
Backhoe	No		40		77.6	355
Backhoe	No		40		77.6	355
Tractor	No		40	84		355
Welder / Torch	No		40		74	355

Results

Equipment	Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)			
	Day		Evening		Night		Day		Evening		Night	
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	63.5		55.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	68		65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	68		65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	68		65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	63.6		60.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	60.5		56.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	60.5		56.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	67		63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	57		53	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	68		71.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 2/3/2015  
 Case Description: Paving

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Single Family Home (NE)	Residential	55	55	55

		Equipment				
Description	Impact	Spec Usage(%)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)	
Paver	No	50	77.2	683	0	
Paver	No	50	77.2	683	0	
All Other Equipment > 5 HP	No	50	85	683	0	
All Other Equipment > 5 HP	No	50	85	683	0	
Roller	No	20	80	683	0	
Roller	No	20	80	683	0	

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
Paver	54.5	51.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	54.5	51.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	62.3	59.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	62.3	59.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	57.3	50.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	57.3	50.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	62.3	63.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Storage Facility (N)	Industrial	65	65	65

		Equipment				
Description	Impact	Spec Usage(%)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)	
Paver	No	50	77.2	680	0	
Paver	No	50	77.2	680	0	
All Other Equipment > 5 HP	No	50	85	680	0	
All Other Equipment > 5 HP	No	50	85	680	0	
Roller	No	20	80	680	0	
Roller	No	20	80	680	0	

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
Paver	57.9	49.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	62.3	59.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	62.3	59.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	62.3	59.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	58	54.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	54.9	50.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	62.3	65.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (E)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment			Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
Paver	No	50		77.2	465	0
Paver	No	50		77.2	465	0
All Other Equipment > 5 HP	No	50	85		465	0
All Other Equipment > 5 HP	No	50	85		465	0
Roller	No	20		80	465	0
Roller	No	20		80	465	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Paver	61.2	N/A	53.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	65.6	N/A	62.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	65.6	N/A	62.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	65.6	N/A	62.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	61.3	N/A	58.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	58.2	N/A	54.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	65.6	N/A	69.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (E)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment			Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
Paver	No	50		77.2	410	0
Paver	No	50		77.2	410	0
All Other Equipment > 5 HP	No	50	85		410	0
All Other Equipment > 5 HP	No	50	85		410	0
Roller	No	20		80	410	0
Roller	No	20		80	410	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Paver	62.3	N/A	54.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	66.7	N/A	63.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	66.7	N/A	63.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	66.7	N/A	63.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	62.4	N/A	59.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	59.3	N/A	55.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	66.7	N/A	70.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (E)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment			Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
Paver	No	50		77.2	413	0
Paver	No	50		77.2	413	0
All Other Equipment > 5 HP	No	50	85		413	0
All Other Equipment > 5 HP	No	50	85		413	0
Roller	No	20		80	413	0
Roller	No	20		80	413	0

Equipment	Results														
	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day	Evening		Night		Day		Evening		Night			
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Paver	62.2	54.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Paver	66.7	63.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
All Other Equipment > 5 HP	66.7	63.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
All Other Equipment > 5 HP	66.7	63.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Roller	62.3	59.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Roller	59.2	55.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total	66.7	70.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

\*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (E)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Paver	No	50	77.2
Paver	No	50	77.2	470	0	
All Other Equipment > 5 HP	No	50	85	470	0	
All Other Equipment > 5 HP	No	50	85	470	0	
Roller	No	20	80	470	0	
Roller	No	20	80	470	0	

Equipment	Results														
	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day	Evening		Night		Day		Evening		Night			
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Paver	61.1	53.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Paver	65.5	62.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
All Other Equipment > 5 HP	65.5	62.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
All Other Equipment > 5 HP	65.5	62.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Roller	61.2	58.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Roller	58.1	54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total	65.5	69	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

\*Calculated Lmax is the Loudest value.

---- Receptor #7 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Retail Commercial (SE)	Commercial	60	60	60

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
			Paver	No	50	77.2
Paver	No	50	77.2	753	0	
All Other Equipment > 5 HP	No	50	85	753	0	
All Other Equipment > 5 HP	No	50	85	753	0	
Roller	No	20	80	753	0	
Roller	No	20	80	753	0	

Equipment	Results														
	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day	Evening		Night		Day		Evening		Night			
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Paver	57	49	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Paver	61.4	58.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
All Other Equipment > 5 HP	61.4	58.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
All Other Equipment > 5 HP	61.4	58.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Roller	57.1	54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Roller	54	50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total	61.4	64.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

\*Calculated Lmax is the Loudest value.

---- Receptor #8 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (S)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment			Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
Paver	No	50		77.2	472	0
Paver	No	50		77.2	472	0
All Other Equipment > 5 HP	No	50	85		472	0
All Other Equipment > 5 HP	No	50	85		472	0
Roller	No	20		80	472	0
Roller	No	20		80	472	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Paver	61.1	N/A	53.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	65.5	62.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	65.5	62.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	65.5	62.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	61.1	58.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	58.1	54.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	65.5	69	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #9 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (S)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment			Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
Paver	No	50		77.2	427	0
Paver	No	50		77.2	427	0
All Other Equipment > 5 HP	No	50	85		427	0
All Other Equipment > 5 HP	No	50	85		427	0
Roller	No	20		80	427	0
Roller	No	20		80	427	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Paver	61.9	54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	66.4	63.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	66.4	63.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	66.4	63.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	62	59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	58.9	55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	66.4	69.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

---- Receptor #10 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (W)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment			Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	
Paver	No	50		77.2	355	0
Paver	No	50		77.2	355	0
All Other Equipment > 5 HP	No	50	85		355	0
All Other Equipment > 5 HP	No	50	85		355	0
Roller	No	20		80	355	0
Roller	No	20		80	355	0

Equipment	Calculated (dBA)		Results									Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day			Evening			Night			Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	
Paver	63.5	55.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	68	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	68	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment > 5 HP	68	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	63.6	60.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	60.5	56.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	68	71.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 2/3/2015  
 Case Description: Architectural Coating

--- Receptor #1 ---

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (NE)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40	40	77.7	683	0

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	55	N/A	51	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Total</b>	<b>55</b>	<b>51</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>

\*Calculated Lmax is the Loudest value.

--- Receptor #2 ---

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Storage Facility (N)	Industrial	65	65	65

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40	40	77.7	680	0

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	55	N/A	51	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Total</b>	<b>55</b>	<b>51</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

\*Calculated Lmax is the Loudest value.

--- Receptor #3 ---

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (E)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40	40	77.7	465	0

Equipment	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	*Lmax	Leq	Day		Evening		Night		Day		Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	58.3	54.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Total</b>	<b>58.3</b>	<b>54.3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

\*Calculated Lmax is the Loudest value.

--- Receptor #4 ---

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single Family Home (E)	Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40	40	77.7	410	0

Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
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Equipment		Day			Evening			Night			Day			Evening			Night		
		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)		59.4		55.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		59.4		55.4			0			0			0			0			0

\*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description		Baselines (dBA)		
	Land Use	Daytime	Evening	Night
Single Family Home (E)	Residential	55	55	55

Description		Equipment				
	Impact	Spec	Actual	Receptor	Estimated	
	Device	Lmax	Lmax	Distance	Shielding	
	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)	
Compressor (air)	No	40		77.7	413	0

Equipment		Calculated (dBA)			Noise Limits (dBA)			Noise Limit Exceedance (dBA)		
		*Lmax	Leq	Day	Evening	Night	Day	Evening	Night	
				Lmax	Lmax	Lmax	Lmax	Lmax	Lmax	
				Leq	Leq	Leq	Leq	Leq	Leq	
Compressor (air)		59.3		55.4	N/A	N/A	N/A	N/A	N/A	
Total		59.3		55.4			0		0	

\*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

Description		Baselines (dBA)		
	Land Use	Daytime	Evening	Night
Single Family Home (E)	Residential	55	55	55

Description		Equipment				
	Impact	Spec	Actual	Receptor	Estimated	
	Device	Lmax	Lmax	Distance	Shielding	
	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)	
Compressor (air)	No	40		77.7	470	0

Equipment		Calculated (dBA)			Noise Limits (dBA)			Noise Limit Exceedance (dBA)		
		*Lmax	Leq	Day	Evening	Night	Day	Evening	Night	
				Lmax	Lmax	Lmax	Lmax	Lmax	Lmax	
				Leq	Leq	Leq	Leq	Leq	Leq	
Compressor (air)		58.2		54.2	N/A	N/A	N/A	N/A	N/A	
Total		58.2		54.2			0		0	

\*Calculated Lmax is the Loudest value.

---- Receptor #7 ----

Description		Baselines (dBA)		
	Land Use	Daytime	Evening	Night
Retail Commercial (SE)	Commercial	60	60	60

Description		Equipment				
	Impact	Spec	Actual	Receptor	Estimated	
	Device	Lmax	Lmax	Distance	Shielding	
	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)	
Compressor (air)	No	40		77.7	753	0

Equipment		Calculated (dBA)			Noise Limits (dBA)			Noise Limit Exceedance (dBA)		
		*Lmax	Leq	Day	Evening	Night	Day	Evening	Night	
				Lmax	Lmax	Lmax	Lmax	Lmax	Lmax	
				Leq	Leq	Leq	Leq	Leq	Leq	
Compressor (air)		54.1		50.1	N/A	N/A	N/A	N/A	N/A	
Total		54.1		50.1			0		0	

\*Calculated Lmax is the Loudest value.

---- Receptor #8 ----

Description		Baselines (dBA)		
	Land Use	Daytime	Evening	Night
Single Family Home (S)	Residential	55	55	55

Description		Equipment				
	Impact	Spec	Actual	Receptor	Estimated	
	Device	Lmax	Lmax	Distance	Shielding	
	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)	
Compressor (air)	No	40		77.7	472	0

Results

Equipment	Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
	Day		Evening		Night		Day		Evening		Night		Leq	
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	58.2	54.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	58.2	54.2			0	0	0	0	0	0	0	0	0	0

\*Calculated Lmax is the Loudest value.

--- Receptor #9 ---

Description	Land Use	Baselines (dBA)			Equipment				
		Daytime	Evening	Night	Spec Lmax	Actual Lmax	Receptor Distance (feet)	Estimated Shielding (dBA)	
Single Family Home (S)	Residential	55	55	55	No	40	77.7	427	0

Results

Equipment	Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
	Day		Evening		Night		Day		Evening		Night		Leq	
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	59	55.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	59	55.1			0	0	0	0	0	0	0	0	0	0

\*Calculated Lmax is the Loudest value.

--- Receptor #10 ---

Description	Land Use	Baselines (dBA)			Equipment				
		Daytime	Evening	Night	Spec Lmax	Actual Lmax	Receptor Distance (feet)	Estimated Shielding (dBA)	
Single Family Home (W)	Residential	55	55	55	No	40	77.7	355	0

Results

Equipment	Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
	Day		Evening		Night		Day		Evening		Night		Leq	
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	60.6	56.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	60.6	56.7			0	0	0	0	0	0	0	0	0	0

\*Calculated Lmax is the Loudest value.

San Sevaime & Bain Vibration Screening

Receptors	Distance (ft)
1 – Single Family Home (NE)	683
2 – Storage Facility (N)	680
3 – Single Family Home (E)	465
4 – Single Family Home (E)	410
5 – Single Family Home (E)	413
6 – Single Family Home (E)	470
7 – Retail Commercial (SE)	753
8 – Single Family Home (S)	472
9 – Single Family Home (S)	427
10 – Single Family Home (W)	355

Equipment	PPVref	D	n	Eref	Eequip	PPV
Vibratory Roller	0.21	683	1.3			0.0028
Vibratory Roller	0.21	680	1.3			0.0029
Vibratory Roller	0.21	465	1.3			0.0047
Vibratory Roller	0.21	410	1.3			0.0055
Vibratory Roller	0.21	413	1.3			0.0055
Vibratory Roller	0.21	470	1.3			0.0046
Vibratory Roller	0.21	753	1.3			0.0025
Vibratory Roller	0.21	472	1.3			0.0046
Vibratory Roller	0.21	427	1.3			0.0052
Vibratory Roller	0.21	355	1.3			0.0067
Large Bulldozer	0.089	683	1.3			0.001208
Large Bulldozer	0.089	680	1.3			0.001215
Large Bulldozer	0.089	465	1.3			0.001991
Large Bulldozer	0.089	410	1.3			0.002345
Large Bulldozer	0.089	413	1.3			0.002323
Large Bulldozer	0.089	470	1.3			0.001963
Large Bulldozer	0.089	753	1.3			0.001064
Large Bulldozer	0.089	472	1.3			0.001952
Large Bulldozer	0.089	427	1.3			0.002224
Large Bulldozer	0.089	355	1.3			0.002828
Small Bulldozer	0.003	683	1.3			0.000041
Small Bulldozer	0.003	680	1.3			0.000041
Small Bulldozer	0.003	465	1.3			0.000067
Small Bulldozer	0.003	410	1.3			0.000079
Small Bulldozer	0.003	413	1.3			0.000078
Small Bulldozer	0.003	470	1.3			0.000066
Small Bulldozer	0.003	753	1.3			0.000036
Small Bulldozer	0.003	472	1.3			0.000066
Small Bulldozer	0.003	427	1.3			0.000075
Small Bulldozer	0.003	355	1.3			0.000095
Loaded Truck	0.076	683	1.3			0.001031
Loaded Truck	0.076	680	1.3			0.001037
Loaded Truck	0.076	465	1.3			0.001700
Loaded Truck	0.076	410	1.3			0.002002
Loaded Truck	0.076	413	1.3			0.001983
Loaded Truck	0.076	470	1.3			0.001677
Loaded Truck	0.076	753	1.3			0.000908
Loaded Truck	0.076	472	1.3			0.001667
Loaded Truck	0.076	427	1.3			0.001899
Loaded Truck	0.076	355	1.3			0.002415

Table

Equipment	PPVref	Distance	PPV
Vibratory Roller	0.21	683	0.0028
Vibratory Roller	0.21	680	0.0029
Vibratory Roller	0.21	465	0.0047
Vibratory Roller	0.21	410	0.0055
Vibratory Roller	0.21	413	0.0055
Vibratory Roller	0.21	470	0.0046
Vibratory Roller	0.21	753	0.0025
Vibratory Roller	0.21	472	0.0046
Vibratory Roller	0.21	427	0.0052
Vibratory Roller	0.21	355	0.0067
Large Bulldozer	0.089	683	0.0012
Large Bulldozer	0.089	680	0.0012
Large Bulldozer	0.089	465	0.0020
Large Bulldozer	0.089	410	0.0023
Large Bulldozer	0.089	413	0.0023
Large Bulldozer	0.089	470	0.0020
Large Bulldozer	0.089	753	0.0011
Large Bulldozer	0.089	472	0.0020
Large Bulldozer	0.089	427	0.0022
Large Bulldozer	0.089	355	0.0028
Small Bulldozer	0.003	683	0.0000
Small Bulldozer	0.003	680	0.0000
Small Bulldozer	0.003	465	0.0001
Small Bulldozer	0.003	410	0.0001
Small Bulldozer	0.003	413	0.0001
Small Bulldozer	0.003	470	0.0001
Small Bulldozer	0.003	753	0.0000
Small Bulldozer	0.003	472	0.0001
Small Bulldozer	0.003	427	0.0001
Small Bulldozer	0.003	355	0.0001
Loaded Truck	0.076	683	0.0010
Loaded Truck	0.076	680	0.0010
Loaded Truck	0.076	465	0.0017
Loaded Truck	0.076	410	0.0020
Loaded Truck	0.076	413	0.0020
Loaded Truck	0.076	470	0.0017
Loaded Truck	0.076	753	0.0009
Loaded Truck	0.076	472	0.0017
Loaded Truck	0.076	427	0.0019
Loaded Truck	0.076	355	0.0024

## **Appendix C SoundPLAN Output Data**

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Redwood Avenue Warehouse 13419  
 Opening Year 2017 Without Project  
 Road

Stationing km	ADT Veh/24h	Traffic values		Vehicle name	day Veh/h	night Veh/h	Speed km/h	Control device	Constr. Speed km/h	Affect. veh. %	Road surface	Gradient Min / Max %
		Vehicles type										
<b>Valley Blvd EB Traffic direction: In entry direction</b>												
0+000	18528	Total	-		558	1200	-	none	-	-	Average (of DGAC and PCC)	0
0+000	18528	Automobiles	-		443	954	64	none	-	-	Average (of DGAC and PCC)	0
0+000	18528	Medium trucks	-		46	98	64	none	-	-	Average (of DGAC and PCC)	0
0+000	18528	Heavy trucks	-		69	148	64	none	-	-	Average (of DGAC and PCC)	0
0+000	18528	Buses	-	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	18528	Motorcycles	-	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	18528	Auxiliary Vehicle	-	-	-	-	none	-	-	-	Average (of DGAC and PCC)	0
0+368	18528	Total	-		558	1200	-	Traffic light	0	-	Average (of DGAC and PCC)	0
0+368	18528	Automobiles	-		443	954	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+368	18528	Medium trucks	-		46	98	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+368	18528	Heavy trucks	-		69	148	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+368	18528	Buses	-	-	-	-	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+368	18528	Motorcycles	-	-	-	-	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+368	18528	Auxiliary Vehicle	-	-	-	-	Traffic light	0	-	-	Average (of DGAC and PCC)	0
0+572	-		-						-	-		
0+000	18528	Total	-		558	1200	-	none	-	-	Average (of DGAC and PCC)	0
0+000	18528	Automobiles	-		443	954	64	none	-	-	Average (of DGAC and PCC)	0
0+000	18528	Medium trucks	-		46	98	64	none	-	-	Average (of DGAC and PCC)	0
0+000	18528	Heavy trucks	-		69	148	64	none	-	-	Average (of DGAC and PCC)	0
0+000	18528	Buses	-	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	18528	Motorcycles	-	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	18528	Auxiliary Vehicle	-	-	-	-	none	-	-	-	Average (of DGAC and PCC)	0
<b>Valley Blvd WB Traffic direction: In entry direction</b>												
0+000	14168	Total	-		628	515	-	none	-	-	Average (of DGAC and PCC)	0
0+000	14168	Automobiles	-		499	409	64	none	-	-	Average (of DGAC and PCC)	0
0+000	14168	Medium trucks	-		51	42	64	none	-	-	Average (of DGAC and PCC)	0
0+000	14168	Heavy trucks	-		78	64	64	none	-	-	Average (of DGAC and PCC)	0
0+000	14168	Buses	-	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	14168	Motorcycles	-	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	14168	Auxiliary Vehicle	-	-	-	-	none	-	-	-	Average (of DGAC and PCC)	0
0+208	14168	Total	-		628	515	-	Traffic light	0	-	Average (of DGAC and PCC)	0
0+208	14168	Automobiles	-		499	409	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+208	14168	Medium trucks	-		51	42	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+208	14168	Heavy trucks	-		78	64	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+208	14168	Buses	-	-	-	-	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+208	14168	Motorcycles	-	-	-	-	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+208	14168	Auxiliary Vehicle	-	-	-	-	Traffic light	0	-	-	Average (of DGAC and PCC)	0
0+570	-		-						-	-		
0+000	14168	Total	-		628	515	-	none	-	-	Average (of DGAC and PCC)	0
0+000	14168	Automobiles	-		499	409	64	none	-	-	Average (of DGAC and PCC)	0
0+000	14168	Medium trucks	-		51	42	64	none	-	-	Average (of DGAC and PCC)	0
0+000	14168	Heavy trucks	-		78	64	64	none	-	-	Average (of DGAC and PCC)	0
0+000	14168	Buses	-	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	14168	Motorcycles	-	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	14168	Auxiliary Vehicle	-	-	-	-	none	-	-	-	Average (of DGAC and PCC)	0
<b>Hunter St. EB Traffic direction: In entry direction</b>												
0+000	544	Total	-		22	24	-	none	-	-	Average (of DGAC and PCC)	0

0+000	544 Automobiles	-	17	19	64	none	-	-	Average (of DGAC and PCC)	0
0+000	544 Medium trucks	-	2	2	64	none	-	-	Average (of DGAC and PCC)	0
0+000	544 Heavy trucks	-	3	3	64	none	-	-	Average (of DGAC and PCC)	0
0+000	544 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	544 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	544 Auxiliary Vehicle	-	-	-	none	-	-	-	Average (of DGAC and PCC)	0
0+362	-	-	-	-	-	-	-	-	-	-
<b>Iris Dr. EB</b>	<b>Traffic direction:</b>	<b>In entry direction</b>								
0+000	312 Total	-	7	25	-	none	-	-	Average (of DGAC and PCC)	0
0+000	312 Automobiles	-	5	20	64	none	-	-	Average (of DGAC and PCC)	0
0+000	312 Medium trucks	-	1	2	64	none	-	-	Average (of DGAC and PCC)	0
0+000	312 Heavy trucks	-	1	3	64	none	-	-	Average (of DGAC and PCC)	0
0+000	312 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	312 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	312 Auxiliary Vehicle	-	-	-	none	-	-	-	Average (of DGAC and PCC)	0
0+211	-	-	-	-	-	-	-	-	-	-
<b>Rosemary Dr EB</b>	<b>Traffic direction:</b>	<b>In entry direction</b>								
0+000	600 Total	-	21	33	-	none	-	-	Average (of DGAC and PCC)	0
0+000	600 Automobiles	-	16	26	64	none	-	-	Average (of DGAC and PCC)	0
0+000	600 Medium trucks	-	2	3	64	none	-	-	Average (of DGAC and PCC)	0
0+000	600 Heavy trucks	-	3	4	64	none	-	-	Average (of DGAC and PCC)	0
0+000	600 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	600 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	600 Auxiliary Vehicle	-	-	-	none	-	-	-	Average (of DGAC and PCC)	0
0+210	-	-	-	-	-	-	-	-	-	-
<b>Redwood Ave SB</b>	<b>Traffic direction:</b>	<b>In entry direction</b>								
0+000	2448 Total	-	101	104	-	none	-	-	Average (of DGAC and PCC)	0
0+000	2448 Automobiles	-	79	82	64	none	-	-	Average (of DGAC and PCC)	0
0+000	2448 Medium trucks	-	9	9	64	none	-	-	Average (of DGAC and PCC)	0
0+000	2448 Heavy trucks	-	13	13	64	none	-	-	Average (of DGAC and PCC)	0
0+000	2448 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	2448 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	2448 Auxiliary Vehicle	-	-	-	none	-	-	-	Average (of DGAC and PCC)	0
0+154	2448 Total	-	101	104	-	none	-	-	Average (of DGAC and PCC)	0
0+154	2448 Automobiles	-	79	82	64	none	-	-	Average (of DGAC and PCC)	0
0+154	2448 Medium trucks	-	9	9	64	none	-	-	Average (of DGAC and PCC)	0
0+154	2448 Heavy trucks	-	13	13	64	none	-	-	Average (of DGAC and PCC)	0
0+154	2448 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+154	2448 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+154	2448 Auxiliary Vehicle	-	-	-	none	-	-	-	Average (of DGAC and PCC)	0
0+189	2704 Total	-	111	116	-	none	-	-	Average (of DGAC and PCC)	0
0+189	2704 Automobiles	-	88	91	64	none	-	-	Average (of DGAC and PCC)	0
0+189	2704 Medium trucks	-	9	10	64	none	-	-	Average (of DGAC and PCC)	0
0+189	2704 Heavy trucks	-	14	15	64	none	-	-	Average (of DGAC and PCC)	0
0+189	2704 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+189	2704 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+189	2704 Auxiliary Vehicle	-	-	-	none	-	-	-	Average (of DGAC and PCC)	0
0+290	2928 Total	-	126	114	-	none	-	-	Average (of DGAC and PCC)	0
0+290	2928 Automobiles	-	99	90	64	none	-	-	Average (of DGAC and PCC)	0
0+290	2928 Medium trucks	-	11	10	64	none	-	-	Average (of DGAC and PCC)	0
0+290	2928 Heavy trucks	-	16	14	64	none	-	-	Average (of DGAC and PCC)	0
0+290	2928 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+290	2928 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+290	2928 Auxiliary Vehicle	-	-	-	none	-	-	-	Average (of DGAC and PCC)	0
0+328	2928 Total	-	126	114	-	none	-	-	Average (of DGAC and PCC)	0

0+328	2928 Automobiles	-	99	90	64	none	-	-	Average (of DGAC and PCC)	0
0+328	2928 Medium trucks	-	11	10	64	none	-	-	Average (of DGAC and PCC)	0
0+328	2928 Heavy trucks	-	16	14	64	none	-	-	Average (of DGAC and PCC)	0
0+328	2928 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+328	2928 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+328	2928 Auxiliary Vehicle	-	-	-	none	-	-	-	Average (of DGAC and PCC)	0
0+384	3504 Total	-	130	178	-	none	-	-	Average (of DGAC and PCC)	0
0+384	3504 Automobiles	-	103	141	64	none	-	-	Average (of DGAC and PCC)	0
0+384	3504 Medium trucks	-	11	15	64	none	-	-	Average (of DGAC and PCC)	0
0+384	3504 Heavy trucks	-	16	22	64	none	-	-	Average (of DGAC and PCC)	0
0+384	3504 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+384	3504 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+384	3504 Auxiliary Vehicle	-	-	-	none	-	-	-	Average (of DGAC and PCC)	0
0+543	992 Total	-	47	30	-	Traffic light	0	-	Average (of DGAC and PCC)	0
0+543	992 Automobiles	-	37	23	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+543	992 Medium trucks	-	4	3	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+543	992 Heavy trucks	-	6	4	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+543	992 Buses	-	-	-	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+543	992 Motorcycles	-	-	-	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+543	992 Auxiliary Vehicle	-	-	-	Traffic light	0	-	-	Average (of DGAC and PCC)	0
0+623	-	-	-	-	-	-	-	-	-	-
0+000	992 Total	-	47	30	-	none	-	-	Average (of DGAC and PCC)	0
0+000	992 Automobiles	-	37	23	64	none	-	-	Average (of DGAC and PCC)	0
0+000	992 Medium trucks	-	4	3	64	none	-	-	Average (of DGAC and PCC)	0
0+000	992 Heavy trucks	-	6	4	64	none	-	-	Average (of DGAC and PCC)	0
0+000	992 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	992 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	992 Auxiliary Vehicle	-	-	-	none	-	-	-	Average (of DGAC and PCC)	0
<b>Redwood Ave NB Traffic direction: In entry direction</b>										
0+622	1992 Total	-	72	105	-	none	-	-	Average (of DGAC and PCC)	0
0+622	1992 Automobiles	-	57	83	64	none	-	-	Average (of DGAC and PCC)	0
0+622	1992 Medium trucks	-	6	9	64	none	-	-	Average (of DGAC and PCC)	0
0+622	1992 Heavy trucks	-	9	13	64	none	-	-	Average (of DGAC and PCC)	0
0+622	1992 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+622	1992 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+622	1992 Auxiliary Vehicle	-	-	-	none	-	-	-	Average (of DGAC and PCC)	0
0+701	1992 Total	-	72	105	-	Traffic light	0	-	Average (of DGAC and PCC)	0
0+701	1992 Automobiles	-	57	83	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+701	1992 Medium trucks	-	6	9	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+701	1992 Heavy trucks	-	9	13	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+701	1992 Buses	-	-	-	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+701	1992 Motorcycles	-	-	-	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+701	1992 Auxiliary Vehicle	-	-	-	Traffic light	0	-	-	Average (of DGAC and PCC)	0
0+860	2888 Total	-	94	173	-	none	-	-	Average (of DGAC and PCC)	0
0+860	2888 Automobiles	-	74	137	64	none	-	-	Average (of DGAC and PCC)	0
0+860	2888 Medium trucks	-	8	14	64	none	-	-	Average (of DGAC and PCC)	0
0+860	2888 Heavy trucks	-	12	22	64	none	-	-	Average (of DGAC and PCC)	0
0+860	2888 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+860	2888 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+860	2888 Auxiliary Vehicle	-	-	-	none	-	-	-	Average (of DGAC and PCC)	0
0+917	2872 Total	-	93	173	-	none	-	-	Average (of DGAC and PCC)	0
0+917	2872 Automobiles	-	73	137	64	none	-	-	Average (of DGAC and PCC)	0
0+917	2872 Medium trucks	-	8	14	64	none	-	-	Average (of DGAC and PCC)	0
0+917	2872 Heavy trucks	-	12	22	64	none	-	-	Average (of DGAC and PCC)	0
0+917	2872 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0

0+917	2872 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+917	2872 Auxiliary Vehicle	-	-	-	-	none	-	-	Average (of DGAC and PCC)	0
0+958	2688 Total	-	89	158	-	none	-	-	Average (of DGAC and PCC)	0
0+958	2688 Automobiles	-	70	125	64	none	-	-	Average (of DGAC and PCC)	0
0+958	2688 Medium trucks	-	8	13	64	none	-	-	Average (of DGAC and PCC)	0
0+958	2688 Heavy trucks	-	11	20	64	none	-	-	Average (of DGAC and PCC)	0
0+958	2688 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+958	2688 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+958	2688 Auxiliary Vehicle	-	-	-	-	none	-	-	Average (of DGAC and PCC)	0
1+057	2272 Total	-	70	144	-	none	-	-	Average (of DGAC and PCC)	0
1+057	2272 Automobiles	-	55	114	64	none	-	-	Average (of DGAC and PCC)	0
1+057	2272 Medium trucks	-	6	12	64	none	-	-	Average (of DGAC and PCC)	0
1+057	2272 Heavy trucks	-	9	18	64	none	-	-	Average (of DGAC and PCC)	0
1+057	2272 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
1+057	2272 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
1+057	2272 Auxiliary Vehicle	-	-	-	-	none	-	-	Average (of DGAC and PCC)	0
1+091	2200 Total	-	70	135	-	none	-	-	Average (of DGAC and PCC)	0
1+091	2200 Automobiles	-	55	107	64	none	-	-	Average (of DGAC and PCC)	0
1+091	2200 Medium trucks	-	6	11	64	none	-	-	Average (of DGAC and PCC)	0
1+091	2200 Heavy trucks	-	9	17	64	none	-	-	Average (of DGAC and PCC)	0
1+091	2200 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
1+091	2200 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
1+091	2200 Auxiliary Vehicle	-	-	-	-	none	-	-	Average (of DGAC and PCC)	0
1+242	-	-	-	-	-	-	-	-	-	0

Redwood Avenue Warehouse 13419  
 Opening Year 2017 Without Project  
 Receivers

No.	Receiver name	Building side	Floor	Level	
				Day dB(A)	Night
1	1 Single Family Home NE		GF	60	61.4
2	2 Storage Facility N		GF	63.7	64.9
3	3 Single Family Home E1		GF	61	62.5
4	4 Single Family Home E2		GF	61	62.5
5	5 Single Family Home E3		GF	61	62.5
6	6 Single Family Home E4		GF	62.1	63.5
7	7 Commercial SE		GF	62.3	63.7
8	8 Single Family Home S		GF	62	63
9	9 Single Family Home S2		GF	53.9	55.2
10	10 Single Family Home W		GF	48.8	50.2

Redwood Avenue Warehouse 13419  
 Opening Year 2017 Without Project  
 Contributions

Source name		Level	
		Day dB(A)	Night
<b>1 Single Family Home NE</b>	<b>GF</b>	<b>60.0</b>	<b>61.4</b>
Hunter St. EB		28.4	28.4
Iris Dr. EB		25.1	29.8
Redwood Ave NB		56.2	59.0
Redwood Ave SB		57.4	57.4
Rosemary Dr EB		34.5	35.9
Valley Blvd EB		40.5	43.8
Valley Blvd WB		41.2	40.3
<b>2 Storage Facility N</b>	<b>GF</b>	<b>63.7</b>	<b>64.9</b>
Hunter St. EB		29.9	29.9
Iris Dr. EB		27.5	32.2
Redwood Ave NB		59.2	61.9
Redwood Ave SB		61.7	61.8
Rosemary Dr EB		38.0	39.5
Valley Blvd EB		41.6	44.9
Valley Blvd WB		42.2	41.4
<b>3 Single Family Home E1</b>	<b>GF</b>	<b>61.0</b>	<b>62.5</b>
Hunter St. EB		31.1	31.1
Iris Dr. EB		29.9	34.5
Redwood Ave NB		57.1	60.0
Redwood Ave SB		58.2	58.3
Rosemary Dr EB		45.8	47.3
Valley Blvd EB		42.7	46.0
Valley Blvd WB		43.4	42.5
<b>4 Single Family Home E2</b>	<b>GF</b>	<b>61.0</b>	<b>62.5</b>
Hunter St. EB		32.3	32.4
Iris Dr. EB		32.9	37.6
Redwood Ave NB		57.0	59.6
Redwood Ave SB		57.6	57.8
Rosemary Dr EB		50.7	52.2
Valley Blvd EB		43.7	47.0
Valley Blvd WB		44.4	43.5
<b>5 Single Family Home E3</b>	<b>GF</b>	<b>61.0</b>	<b>62.5</b>
Hunter St. EB		35.1	35.2
Iris Dr. EB		41.7	46.3
Redwood Ave NB		57.4	59.9
Redwood Ave SB		57.8	58.0

Rosemary Dr EB		38.4	39.8
Valley Blvd EB		45.7	49.0
Valley Blvd WB		46.4	45.5
<b>6 Single Family Home E4</b>	<b>GF</b>	<b>62.1</b>	<b>63.5</b>
Hunter St. EB		38.2	38.3
Iris Dr. EB		42.2	46.9
Redwood Ave NB		58.6	61.2
Redwood Ave SB		58.8	58.5
Rosemary Dr EB		34.6	36.0
Valley Blvd EB		47.0	50.3
Valley Blvd WB		47.7	46.9
<b>7 Commercial SE</b>	<b>GF</b>	<b>62.3</b>	<b>63.7</b>
Hunter St. EB		39.9	40.0
Iris Dr. EB		28.9	33.6
Redwood Ave NB		57.7	59.4
Redwood Ave SB		58.5	59.7
Rosemary Dr EB		29.2	30.6
Valley Blvd EB		52.4	55.7
Valley Blvd WB		53.1	52.3
<b>8 Single Family Home S</b>	<b>GF</b>	<b>62.0</b>	<b>63.0</b>
Hunter St. EB		45.0	45.1
Iris Dr. EB		34.0	38.7
Redwood Ave NB		57.0	59.5
Redwood Ave SB		59.5	59.2
Rosemary Dr EB		32.1	33.6
Valley Blvd EB		48.5	51.8
Valley Blvd WB		49.2	48.3
<b>9 Single Family Home S2</b>	<b>GF</b>	<b>53.9</b>	<b>55.2</b>
Hunter St. EB		47.2	47.3
Iris Dr. EB		25.9	30.7
Redwood Ave NB		42.3	44.6
Redwood Ave SB		44.0	44.4
Rosemary Dr EB		28.5	29.8
Valley Blvd EB		48.4	51.7
Valley Blvd WB		49.1	48.3
<b>10 Single Family Home W</b>	<b>GF</b>	<b>48.8</b>	<b>50.2</b>
Hunter St. EB		34.4	34.5
Iris Dr. EB		23.3	28.0
Redwood Ave NB		39.4	41.9
Redwood Ave SB		41.0	41.3
Rosemary Dr EB		28.5	29.9
Valley Blvd EB		43.7	47.0
Valley Blvd WB		44.3	43.5

No.	Name	Floor	Time slice	50 Hz	63 Hz	80 Hz	100 Hz	125 Hz	160 Hz	200 Hz	250 Hz	315 Hz	400 Hz	500 Hz	630 Hz	800 Hz	1 kHz	1 kHz	2 kHz	2 kHz	2 kHz	3 kHz	4 kHz	5 kHz	6 kHz	8 kHz	10 kHz
1	1 Single Family Home NE	GF	Day	28.1	34.9	39	41.3	42.8	44.3	45.5	46.4	47.9	47.2	48.7	50	49.9	50	49.1	48.3	47.6	46.7	46.2	44.2	42	39.8	36.9	32.7
1	1 Single Family Home NE	GF	Night	29.6	36.5	40.6	42.8	44.3	45.8	47.1	48.1	49.6	48.6	50.2	51.8	51.2	51.4	50.5	49.5	48.8	48	47.5	45.6	43.4	41.2	38.3	34.1
2	2 Storage Facility N	GF	Day	30.7	37.6	41.7	44	45.6	47.2	48.9	51.3	51	51	53.3	54.2	53.7	54.2	53.3	52.1	51.2	49.5	48.5	46.3	44.7	42.5	39.6	35.4
2	2 Storage Facility N	GF	Night	31.9	38.8	42.9	45.2	46.7	48.4	50	52.3	52.3	52.1	54.3	55.4	55	55.5	54.6	53.4	52.5	50.9	49.8	47.5	45.8	43.6	40.7	36.6
3	3 Single Family Home E1	GF	Day	29.3	36.2	40.3	42.6	44	45.5	46.7	47.3	48.7	48.3	49.8	50.7	50.8	51.1	50.1	49.2	48.6	47.8	47.3	45.5	43.1	41	38.1	33.9
3	3 Single Family Home E1	GF	Night	30.9	37.8	41.9	44.2	45.6	47.1	48.3	49.1	50.5	49.9	51.3	52.6	52.3	52.6	51.5	50.6	49.9	49.1	48.7	46.8	44.6	42.4	39.5	35.3
4	4 Single Family Home E2	GF	Day	29.6	36.4	40.5	42.8	44.2	45.7	46.8	47.1	48.6	48.5	49.9	50.6	50.9	51.1	49.8	48.9	48.3	47.8	47.6	45.7	43.6	41.3	38.4	34.2
4	4 Single Family Home E2	GF	Night	31.1	38	42.1	44.3	45.8	47.2	48.4	48.7	50.3	50	51.4	52.2	52.5	52.6	51.2	50.3	49.6	49.1	49	47.2	45	42.8	39.9	35.6
5	5 Single Family Home E3	GF	Day	29.7	36.6	40.6	42.9	44.4	45.8	46.9	47.2	48.4	48.3	49.9	50.5	50.7	51.2	49.9	49	48.5	48	48	45.9	43.5	41.2	38.3	34.1
5	5 Single Family Home E3	GF	Night	31.2	38.1	42.2	44.5	45.9	47.4	48.5	48.8	50.1	49.9	51.3	52.2	52.2	52.6	51.3	50.3	49.8	49.3	49.4	47.3	45	42.7	39.8	35.5
6	6 Single Family Home E4	GF	Day	30.5	37.3	41.4	43.7	45.2	46.7	47.9	48.7	49.7	49.2	51	51.9	51.8	52.2	51.5	50.4	49.7	49.1	48.6	46.5	43.6	41.8	38.9	34.7
6	6 Single Family Home E4	GF	Night	31.9	38.9	43	45.2	46.7	48.2	49.4	50.4	51.4	50.6	52.3	53.7	53.1	53.5	52.7	51.6	50.9	50.4	50	47.9	45	43.2	40.3	36.1
7	7 Commercial SE	GF	Day	31.3	38.2	42.3	44.6	46	47.5	48.7	49.3	49.6	48.9	50.8	51.6	51.7	52.3	51.7	50.7	50.1	49	48.4	46.8	44.4	41.9	39	34.7
7	7 Commercial SE	GF	Night	32.8	39.7	43.8	46	47.5	48.9	50.1	50.8	51	50.3	52.2	53.2	53.2	53.8	53.2	52.2	51.5	50.5	49.8	48.2	45.9	43.4	40.5	36.2
8	8 Single Family Home S	GF	Day	30.8	37.7	41.7	44	45.5	46.9	48.1	48.8	49.8	49.1	50.7	52	51.6	52	51	50.1	49.5	49	48.8	46.2	43.4	41.8	38.9	34.6
8	8 Single Family Home S	GF	Night	31.8	38.7	42.8	45.1	46.5	47.9	49.1	49.5	50.3	50	51.7	52.6	52.5	53.1	52.2	51.3	50.8	50.2	50	47.4	44.6	42.9	40	35.8
9	9 Single Family Home S2	GF	Day	25.9	32.8	36.8	39	40.4	41.6	42.3	40.6	37.5	35.7	38.4	39.5	40.4	41.6	42.1	42.5	42.9	44	44.2	40.5	37.7	35.5	32.4	27.9
9	9 Single Family Home S2	GF	Night	27.2	34.1	38.1	40.3	41.7	42.9	43.6	41.8	38.4	36.4	39	40.3	41.3	42.7	43.2	43.8	44.2	45.4	45.6	41.9	38.8	36.8	33.7	29.2
10	10 Single Family Home W	GF	Day	21.6	28.4	32.4	34.6	35.9	37.1	37.5	32.7	27.1	23	26.3	28.5	31.2	33.1	34.4	35.6	36.9	39	40.6	39.1	36.7	34.7	31.5	26.8
10	10 Single Family Home W	GF	Night	23	29.9	33.9	36.1	37.4	38.5	38.9	34	28.4	24.6	27.8	30	32.6	34.5	35.8	37	38.3	40.4	42.1	40.6	38.3	36.2	33.1	28.4

Redwood Avenue Warehouse 13419  
 Opening Year 2017 With Project  
 Road

Stationing km	ADT Veh/24h	Traffic values		Vehicle name	day Veh/h	night Veh/h	Speed km/h	Control device	Constr. Speed km/h	Affect. veh. %	Road surface	Gradient Min / Max %
		Vehicles type										
<b>Valley Blvd EB Traffic direction: In entry direction</b>												
0+000	18568	Total	-		559	1203	-	none	-	-	Average (of DGAC and PCC)	0
0+000	18568	Automobiles	-		444	956	64	none	-	-	Average (of DGAC and PCC)	0
0+000	18568	Medium trucks	-		46	98	64	none	-	-	Average (of DGAC and PCC)	0
0+000	18568	Heavy trucks	-		69	149	64	none	-	-	Average (of DGAC and PCC)	0
0+000	18568	Buses	-	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	18568	Motorcycles	-	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	18568	Auxiliary Vehicle	-	-	-	-	none	-	-	-	Average (of DGAC and PCC)	0
0+368	18568	Total	-		559	1203	-	Traffic light	0	0	Average (of DGAC and PCC)	0
0+368	18568	Automobiles	-		444	956	64	Traffic light	0	0	Average (of DGAC and PCC)	0
0+368	18568	Medium trucks	-		46	98	64	Traffic light	0	0	Average (of DGAC and PCC)	0
0+368	18568	Heavy trucks	-		69	149	64	Traffic light	0	0	Average (of DGAC and PCC)	0
0+368	18568	Buses	-	-	-	-	64	Traffic light	0	0	Average (of DGAC and PCC)	0
0+368	18568	Motorcycles	-	-	-	-	64	Traffic light	0	0	Average (of DGAC and PCC)	0
0+368	18568	Auxiliary Vehicle	-	-	-	-	none	Traffic light	0	0	Average (of DGAC and PCC)	0
0+572	-		-						-	-		
0+000	18568	Total	-		559	1203	-	none	-	-	Average (of DGAC and PCC)	0
0+000	18568	Automobiles	-		444	956	64	none	-	-	Average (of DGAC and PCC)	0
0+000	18568	Medium trucks	-		46	98	64	none	-	-	Average (of DGAC and PCC)	0
0+000	18568	Heavy trucks	-		69	149	64	none	-	-	Average (of DGAC and PCC)	0
0+000	18568	Buses	-	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	18568	Motorcycles	-	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	18568	Auxiliary Vehicle	-	-	-	-	none	-	-	-	Average (of DGAC and PCC)	0
<b>Valley Blvd WB Traffic direction: In entry direction</b>												
0+000	14368	Total	-		633	530	-	none	-	-	Average (of DGAC and PCC)	0
0+000	14368	Automobiles	-		503	421	64	none	-	-	Average (of DGAC and PCC)	0
0+000	14368	Medium trucks	-		52	43	64	none	-	-	Average (of DGAC and PCC)	0
0+000	14368	Heavy trucks	-		78	66	64	none	-	-	Average (of DGAC and PCC)	0
0+000	14368	Buses	-	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	14368	Motorcycles	-	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	14368	Auxiliary Vehicle	-	-	-	-	none	-	-	-	Average (of DGAC and PCC)	0
0+208	14368	Total	-		633	530	-	Traffic light	0	0	Average (of DGAC and PCC)	0
0+208	14368	Automobiles	-		503	421	64	Traffic light	0	0	Average (of DGAC and PCC)	0
0+208	14368	Medium trucks	-		52	43	64	Traffic light	0	0	Average (of DGAC and PCC)	0
0+208	14368	Heavy trucks	-		78	66	64	Traffic light	0	0	Average (of DGAC and PCC)	0
0+208	14368	Buses	-	-	-	-	64	Traffic light	0	0	Average (of DGAC and PCC)	0
0+208	14368	Motorcycles	-	-	-	-	64	Traffic light	0	0	Average (of DGAC and PCC)	0
0+208	14368	Auxiliary Vehicle	-	-	-	-	none	Traffic light	0	0	Average (of DGAC and PCC)	0
0+570	-		-						-	-		
0+000	14368	Total	-		633	530	-	none	-	-	Average (of DGAC and PCC)	0
0+000	14368	Automobiles	-		503	421	64	none	-	-	Average (of DGAC and PCC)	0
0+000	14368	Medium trucks	-		52	43	64	none	-	-	Average (of DGAC and PCC)	0
0+000	14368	Heavy trucks	-		78	66	64	none	-	-	Average (of DGAC and PCC)	0
0+000	14368	Buses	-	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	14368	Motorcycles	-	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	14368	Auxiliary Vehicle	-	-	-	-	none	-	-	-	Average (of DGAC and PCC)	0
<b>Hunter St. EB Traffic direction: In entry direction</b>												

0+000	552 Total	-	22	25	-	none	-	-	Average (of DGAC and PCC)	0
0+000	552 Automobiles	-	17	20	64	none	-	-	Average (of DGAC and PCC)	0
0+000	552 Medium trucks	-	2	2	64	none	-	-	Average (of DGAC and PCC)	0
0+000	552 Heavy trucks	-	3	3	64	none	-	-	Average (of DGAC and PCC)	0
0+000	552 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	552 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	552 Auxiliary Vehicle	-	-	-	-	none	-	-	Average (of DGAC and PCC)	0
0+362	-	-	-	-	-	-	-	-	-	-
<b>Iris Dr. EB Traffic direction: In entry direction</b>										
0+000	312 Total	-	7	25	-	none	-	-	Average (of DGAC and PCC)	0
0+000	312 Automobiles	-	5	20	64	none	-	-	Average (of DGAC and PCC)	0
0+000	312 Medium trucks	-	1	2	64	none	-	-	Average (of DGAC and PCC)	0
0+000	312 Heavy trucks	-	1	3	64	none	-	-	Average (of DGAC and PCC)	0
0+000	312 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	312 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	312 Auxiliary Vehicle	-	-	-	-	none	-	-	Average (of DGAC and PCC)	0
0+211	-	-	-	-	-	-	-	-	-	-
<b>Rosemary Dr EB Traffic direction: In entry direction</b>										
0+000	600 Total	-	21	33	-	none	-	-	Average (of DGAC and PCC)	0
0+000	600 Automobiles	-	16	26	64	none	-	-	Average (of DGAC and PCC)	0
0+000	600 Medium trucks	-	2	3	64	none	-	-	Average (of DGAC and PCC)	0
0+000	600 Heavy trucks	-	3	4	64	none	-	-	Average (of DGAC and PCC)	0
0+000	600 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	600 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	600 Auxiliary Vehicle	-	-	-	-	none	-	-	Average (of DGAC and PCC)	0
0+210	-	-	-	-	-	-	-	-	-	-
<b>Redwood Ave SB Traffic direction: In entry direction</b>										
0+000	2544 Total	-	102	114	-	none	-	-	Average (of DGAC and PCC)	0
0+000	2544 Automobiles	-	80	90	64	none	-	-	Average (of DGAC and PCC)	0
0+000	2544 Medium trucks	-	9	10	64	none	-	-	Average (of DGAC and PCC)	0
0+000	2544 Heavy trucks	-	13	14	64	none	-	-	Average (of DGAC and PCC)	0
0+000	2544 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	2544 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	2544 Auxiliary Vehicle	-	-	-	-	none	-	-	Average (of DGAC and PCC)	0
0+154	2544 Total	-	102	114	-	none	-	-	Average (of DGAC and PCC)	0
0+154	2544 Automobiles	-	80	90	64	none	-	-	Average (of DGAC and PCC)	0
0+154	2544 Medium trucks	-	9	10	64	none	-	-	Average (of DGAC and PCC)	0
0+154	2544 Heavy trucks	-	13	14	64	none	-	-	Average (of DGAC and PCC)	0
0+154	2544 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+154	2544 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+154	2544 Auxiliary Vehicle	-	-	-	-	none	-	-	Average (of DGAC and PCC)	0
0+189	2864 Total	-	116	126	-	none	-	-	Average (of DGAC and PCC)	0
0+189	2864 Automobiles	-	91	99	64	none	-	-	Average (of DGAC and PCC)	0
0+189	2864 Medium trucks	-	10	11	64	none	-	-	Average (of DGAC and PCC)	0
0+189	2864 Heavy trucks	-	15	16	64	none	-	-	Average (of DGAC and PCC)	0
0+189	2864 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+189	2864 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+189	2864 Auxiliary Vehicle	-	-	-	-	none	-	-	Average (of DGAC and PCC)	0
0+290	3056 Total	-	129	124	-	none	-	-	Average (of DGAC and PCC)	0
0+290	3056 Automobiles	-	102	98	64	none	-	-	Average (of DGAC and PCC)	0
0+290	3056 Medium trucks	-	11	10	64	none	-	-	Average (of DGAC and PCC)	0
0+290	3056 Heavy trucks	-	16	16	64	none	-	-	Average (of DGAC and PCC)	0
0+290	3056 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+290	3056 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0

0+290	3056 Auxiliary Vehicle	-	-	-	-	none	-	-	Average (of DGAC and PCC)	0
0+328	3200 Total	-	133	134	-	none	-	-	Average (of DGAC and PCC)	0
0+328	3200 Automobiles	-	105	106	64	none	-	-	Average (of DGAC and PCC)	0
0+328	3200 Medium trucks	-	11	11	64	none	-	-	Average (of DGAC and PCC)	0
0+328	3200 Heavy trucks	-	17	17	64	none	-	-	Average (of DGAC and PCC)	0
0+328	3200 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+328	3200 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+328	3200 Auxiliary Vehicle	-	-	-	-	none	-	-	Average (of DGAC and PCC)	0
0+384	3752 Total	-	136	197	-	none	-	-	Average (of DGAC and PCC)	0
0+384	3752 Automobiles	-	108	156	64	none	-	-	Average (of DGAC and PCC)	0
0+384	3752 Medium trucks	-	11	16	64	none	-	-	Average (of DGAC and PCC)	0
0+384	3752 Heavy trucks	-	17	25	64	none	-	-	Average (of DGAC and PCC)	0
0+384	3752 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+384	3752 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+384	3752 Auxiliary Vehicle	-	-	-	-	none	-	-	Average (of DGAC and PCC)	0
0+543	992 Total	-	47	30	-	Traffic light	0	-	Average (of DGAC and PCC)	0
0+543	992 Automobiles	-	37	23	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+543	992 Medium trucks	-	4	3	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+543	992 Heavy trucks	-	6	4	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+543	992 Buses	-	-	-	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+543	992 Motorcycles	-	-	-	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+543	992 Auxiliary Vehicle	-	-	-	-	Traffic light	0	-	Average (of DGAC and PCC)	0
0+623	-	-	-	-	-	-	-	-	-	-
0+000	992 Total	-	47	30	-	none	-	-	Average (of DGAC and PCC)	0
0+000	992 Automobiles	-	37	23	64	none	-	-	Average (of DGAC and PCC)	0
0+000	992 Medium trucks	-	4	3	64	none	-	-	Average (of DGAC and PCC)	0
0+000	992 Heavy trucks	-	6	4	64	none	-	-	Average (of DGAC and PCC)	0
0+000	992 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	992 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+000	992 Auxiliary Vehicle	-	-	-	-	none	-	-	Average (of DGAC and PCC)	0
<b>Redwood Ave NB Traffic direction: In entry direction</b>										
0+622	2352 Total	-	90	114	-	none	-	-	Average (of DGAC and PCC)	0
0+622	2352 Automobiles	-	71	90	64	none	-	-	Average (of DGAC and PCC)	0
0+622	2352 Medium trucks	-	8	10	64	none	-	-	Average (of DGAC and PCC)	0
0+622	2352 Heavy trucks	-	11	14	64	none	-	-	Average (of DGAC and PCC)	0
0+622	2352 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+622	2352 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+622	2352 Auxiliary Vehicle	-	-	-	-	none	-	-	Average (of DGAC and PCC)	0
0+701	2352 Total	-	90	114	-	Traffic light	0	-	Average (of DGAC and PCC)	0
0+701	2352 Automobiles	-	71	90	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+701	2352 Medium trucks	-	8	10	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+701	2352 Heavy trucks	-	11	14	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+701	2352 Buses	-	-	-	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+701	2352 Motorcycles	-	-	-	64	Traffic light	0	-	Average (of DGAC and PCC)	0
0+701	2352 Auxiliary Vehicle	-	-	-	-	Traffic light	0	-	Average (of DGAC and PCC)	0
0+860	3256 Total	-	114	179	-	none	-	-	Average (of DGAC and PCC)	0
0+860	3256 Automobiles	-	90	142	64	none	-	-	Average (of DGAC and PCC)	0
0+860	3256 Medium trucks	-	10	15	64	none	-	-	Average (of DGAC and PCC)	0
0+860	3256 Heavy trucks	-	14	22	64	none	-	-	Average (of DGAC and PCC)	0
0+860	3256 Buses	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+860	3256 Motorcycles	-	-	-	64	none	-	-	Average (of DGAC and PCC)	0
0+860	3256 Auxiliary Vehicle	-	-	-	-	none	-	-	Average (of DGAC and PCC)	0
0+917	3072 Total	-	103	178	-	none	-	-	Average (of DGAC and PCC)	0
0+917	3072 Automobiles	-	81	141	64	none	-	-	Average (of DGAC and PCC)	0

0+917	3072 Medium trucks	-	9	15	64 none	-	-	Average (of DGAC and PCC)	0
0+917	3072 Heavy trucks	-	13	22	64 none	-	-	Average (of DGAC and PCC)	0
0+917	3072 Buses	-	-	-	64 none	-	-	Average (of DGAC and PCC)	0
0+917	3072 Motorcycles	-	-	-	64 none	-	-	Average (of DGAC and PCC)	0
0+917	3072 Auxiliary Vehicle	-	-	-	none	-	-	Average (of DGAC and PCC)	0
0+958	2872 Total	-	98	163	none	-	-	Average (of DGAC and PCC)	0
0+958	2872 Automobiles	-	78	129	64 none	-	-	Average (of DGAC and PCC)	0
0+958	2872 Medium trucks	-	8	14	64 none	-	-	Average (of DGAC and PCC)	0
0+958	2872 Heavy trucks	-	12	20	64 none	-	-	Average (of DGAC and PCC)	0
0+958	2872 Buses	-	-	-	64 none	-	-	Average (of DGAC and PCC)	0
0+958	2872 Motorcycles	-	-	-	64 none	-	-	Average (of DGAC and PCC)	0
0+958	2872 Auxiliary Vehicle	-	-	-	none	-	-	Average (of DGAC and PCC)	0
1+057	2472 Total	-	80	149	none	-	-	Average (of DGAC and PCC)	0
1+057	2472 Automobiles	-	63	118	64 none	-	-	Average (of DGAC and PCC)	0
1+057	2472 Medium trucks	-	7	12	64 none	-	-	Average (of DGAC and PCC)	0
1+057	2472 Heavy trucks	-	10	19	64 none	-	-	Average (of DGAC and PCC)	0
1+057	2472 Buses	-	-	-	64 none	-	-	Average (of DGAC and PCC)	0
1+057	2472 Motorcycles	-	-	-	64 none	-	-	Average (of DGAC and PCC)	0
1+057	2472 Auxiliary Vehicle	-	-	-	none	-	-	Average (of DGAC and PCC)	0
1+091	2272 Total	-	72	140	none	-	-	Average (of DGAC and PCC)	0
1+091	2272 Automobiles	-	57	110	64 none	-	-	Average (of DGAC and PCC)	0
1+091	2272 Medium trucks	-	6	12	64 none	-	-	Average (of DGAC and PCC)	0
1+091	2272 Heavy trucks	-	9	18	64 none	-	-	Average (of DGAC and PCC)	0
1+091	2272 Buses	-	-	-	64 none	-	-	Average (of DGAC and PCC)	0
1+091	2272 Motorcycles	-	-	-	64 none	-	-	Average (of DGAC and PCC)	0
1+091	2272 Auxiliary Vehicle	-	-	-	none	-	-	Average (of DGAC and PCC)	0
1+242	-	-	-	-	-	-	-	-	0

Redwood Avenue Warehouse 13419  
 Opening Year 2017 With Project  
 Receivers

No.	Receiver name	Building side	Floor	Level	
				Day dB(A)	Night
1	1 Single Family Home NE		GF	60	61.7
2	2 Storage Facility N		GF	63.7	65.2
3	3 Single Family Home E1		GF	61.2	62.7
4	4 Single Family Home E2		GF	61.2	62.6
5	5 Single Family Home E3		GF	61.3	62.7
6	6 Single Family Home E4		GF	62.4	63.7
7	7 Commercial SE		GF	62.7	64.1
8	8 Single Family Home S		GF	62.4	63.4
9	9 Single Family Home S2		GF	54	55.3
10	10 Single Family Home W		GF	48.9	50.4

Redwood Avenue Warehouse 13419  
 Opening Year 2017 With Project  
 Contributions

Source name		Level	
		Day dB(A)	Night
<b>1 Single Family Home NE</b>	<b>GF</b>	<b>60.0</b>	<b>61.7</b>
Hunter St. EB		28.4	28.4
Iris Dr. EB		25.1	29.8
Redwood Ave NB		56.2	59.2
Redwood Ave SB		57.4	57.8
Rosemary Dr EB		34.5	35.9
Valley Blvd EB		40.5	43.9
Valley Blvd WB		41.2	40.5
<b>2 Storage Facility N</b>	<b>GF</b>	<b>63.7</b>	<b>65.2</b>
Hunter St. EB		29.9	29.9
Iris Dr. EB		27.5	32.2
Redwood Ave NB		59.2	62.2
Redwood Ave SB		61.7	62.1
Rosemary Dr EB		38.0	39.5
Valley Blvd EB		41.6	44.9
Valley Blvd WB		42.2	41.5
<b>3 Single Family Home E1</b>	<b>GF</b>	<b>61.2</b>	<b>62.7</b>
Hunter St. EB		31.1	31.2
Iris Dr. EB		29.9	34.5
Redwood Ave NB		57.5	60.2
Redwood Ave SB		58.2	58.6
Rosemary Dr EB		45.8	47.3
Valley Blvd EB		42.7	46.0
Valley Blvd WB		43.4	42.7
<b>4 Single Family Home E2</b>	<b>GF</b>	<b>61.2</b>	<b>62.6</b>
Hunter St. EB		32.3	32.4
Iris Dr. EB		32.9	37.6
Redwood Ave NB		57.3	59.7
Redwood Ave SB		57.8	58.2
Rosemary Dr EB		50.7	52.2
Valley Blvd EB		43.7	47.0
Valley Blvd WB		44.4	43.7
<b>5 Single Family Home E3</b>	<b>GF</b>	<b>61.3</b>	<b>62.7</b>
Hunter St. EB		35.1	35.2
Iris Dr. EB		41.7	46.3
Redwood Ave NB		57.7	60.0
Redwood Ave SB		58.1	58.4

Rosemary Dr EB		38.4	39.8
Valley Blvd EB		45.7	49.0
Valley Blvd WB		46.4	45.6
<b>6 Single Family Home E4</b>	<b>GF</b>	<b>62.4</b>	<b>63.7</b>
Hunter St. EB		38.2	38.3
Iris Dr. EB		42.2	46.9
Redwood Ave NB		59.1	61.3
Redwood Ave SB		58.9	59.0
Rosemary Dr EB		34.6	36.0
Valley Blvd EB		47.0	50.3
Valley Blvd WB		47.7	47.0
<b>7 Commercial SE</b>	<b>GF</b>	<b>62.7</b>	<b>64.1</b>
Hunter St. EB		39.9	40.1
Iris Dr. EB		28.9	33.6
Redwood Ave NB		58.6	59.7
Redwood Ave SB		58.7	60.2
Rosemary Dr EB		29.2	30.6
Valley Blvd EB		52.4	55.7
Valley Blvd WB		53.2	52.4
<b>8 Single Family Home S</b>	<b>GF</b>	<b>62.4</b>	<b>63.4</b>
Hunter St. EB		45.0	45.1
Iris Dr. EB		34.0	38.7
Redwood Ave NB		57.7	59.6
Redwood Ave SB		59.8	59.9
Rosemary Dr EB		32.1	33.6
Valley Blvd EB		48.5	51.8
Valley Blvd WB		49.2	48.5
<b>9 Single Family Home S2</b>	<b>GF</b>	<b>54.0</b>	<b>55.3</b>
Hunter St. EB		47.2	47.4
Iris Dr. EB		25.9	30.7
Redwood Ave NB		42.9	44.8
Redwood Ave SB		44.2	44.9
Rosemary Dr EB		28.5	29.8
Valley Blvd EB		48.4	51.8
Valley Blvd WB		49.1	48.4
<b>10 Single Family Home W</b>	<b>GF</b>	<b>48.9</b>	<b>50.4</b>
Hunter St. EB		34.4	34.5
Iris Dr. EB		23.3	28.0
Redwood Ave NB		39.9	42.1
Redwood Ave SB		41.2	41.7
Rosemary Dr EB		28.5	29.9
Valley Blvd EB		43.7	47.0
Valley Blvd WB		44.3	43.6

Redwood Avenue Warehouse 13419  
 Opening Year 2017 With Project  
 Receiver Spectra

No.	Name	Floor	Time slice	50 Hz	63 Hz	80 Hz	100 Hz	125 Hz	160 Hz	200 Hz	250 Hz	315 Hz	400 Hz	500 Hz	630 Hz	800 Hz	1 kHz	1 kHz	2 kHz	2 kHz	2 kHz	3 kHz	4 kHz	5 kHz	6 kHz	8 kHz	10 kHz
1	1 Single Family Home NE	GF	Day	28.1	35	39.1	41.3	42.8	44.3	45.5	46.4	47.9	47.2	48.7	50.1	49.9	50.1	49.2	48.3	47.7	46.8	46.2	44.2	42	39.9	37	32.8
1	1 Single Family Home NE	GF	Night	29.8	36.7	40.8	43.1	44.6	46.1	47.3	48.4	49.9	48.9	50.4	52	51.5	51.7	50.7	49.8	49.1	48.3	47.8	45.9	43.6	41.5	38.6	34.4
2	2 Storage Facility N	GF	Day	30.7	37.6	41.8	44.1	45.6	47.3	48.9	51.4	51	51.1	53.3	54.2	53.7	54.3	53.3	52.1	51.2	49.6	48.6	46.3	44.7	42.5	39.6	35.5
2	2 Storage Facility N	GF	Night	32.2	39.1	43.2	45.5	47	48.7	50.3	52.6	52.6	52.4	54.6	55.7	55.3	55.8	54.9	53.7	52.8	51.2	50.1	47.8	46.1	43.9	41	36.8
3	3 Single Family Home E1	GF	Day	29.5	36.4	40.5	42.7	44.2	45.7	46.9	47.6	48.9	48.5	49.9	51	51	51.3	50.3	49.4	48.8	47.9	47.5	45.6	43.3	41.1	38.2	34
3	3 Single Family Home E1	GF	Night	31.1	38	42.1	44.4	45.9	47.3	48.6	49.4	50.7	50.1	51.5	52.8	52.6	52.8	51.8	50.8	50.2	49.3	49	47.1	44.8	42.7	39.7	35.5
4	4 Single Family Home E2	GF	Day	29.8	36.7	40.8	43	44.5	45.9	47.1	47.4	48.9	48.7	50.2	50.8	51.2	51.4	50.1	49.2	48.5	48	47.8	46	43.8	41.6	38.6	34.4
4	4 Single Family Home E2	GF	Night	31.3	38.2	42.2	44.5	46	47.4	48.5	48.9	50.4	50.2	51.6	52.4	52.6	52.8	51.4	50.5	49.8	49.3	49.2	47.3	45.2	42.9	40	35.8
5	5 Single Family Home E3	GF	Day	29.9	36.8	40.9	43.2	44.6	46	47.2	47.5	48.7	48.6	50.1	50.8	51	51.4	50.2	49.3	48.8	48.2	48.2	46.1	43.7	41.5	38.6	34.3
5	5 Single Family Home E3	GF	Night	31.4	38.3	42.4	44.7	46.1	47.5	48.7	49	50.3	50	51.5	52.4	52.4	52.8	51.5	50.6	50	49.5	49.5	47.5	45.1	42.9	39.9	35.7
6	6 Single Family Home E4	GF	Day	30.7	37.6	41.7	44	45.4	46.9	48.1	49	50	49.5	51.2	52.3	52.1	52.5	51.7	50.6	50	49.3	48.8	46.7	43.9	42.1	39.1	35
6	6 Single Family Home E4	GF	Night	32.1	39	43.1	45.4	46.9	48.4	49.6	50.6	51.6	50.8	52.6	53.9	53.4	53.7	52.9	51.8	51.2	50.6	50.2	48.1	45.2	43.4	40.5	36.3
7	7 Commercial SE	GF	Day	31.6	38.6	42.6	44.9	46.4	47.8	49	49.8	50.1	49.4	51.3	52.2	52.2	52.8	52.1	51.1	50.4	49.4	48.7	47.1	44.7	42.3	39.3	35.1
7	7 Commercial SE	GF	Night	33	39.9	44	46.3	47.8	49.2	50.4	51.1	51.4	50.7	52.6	53.5	53.6	54.1	53.5	52.5	51.8	50.8	50.1	48.5	46.2	43.7	40.8	36.5
8	8 Single Family Home S	GF	Day	31.1	37.9	42	44.3	45.8	47.2	48.4	49.1	50.1	49.5	51.1	52.3	51.9	52.5	51.5	50.5	49.9	49.3	49.1	46.5	43.8	42.1	39.2	35
8	8 Single Family Home S	GF	Night	32.1	39	43.1	45.4	46.8	48.2	49.4	49.9	50.8	50.4	52.1	53	52.9	53.5	52.5	51.6	51.1	50.5	50.3	47.7	44.9	43.2	40.3	36.1
10	10 Single Family Home W	GF	Day	21.7	28.5	32.5	34.7	36	37.1	37.6	32.8	27.2	23.1	26.4	28.6	31.3	33.2	34.5	35.7	37	39.1	40.7	39.1	36.8	34.7	31.6	26.9
10	10 Single Family Home W	GF	Night	23.2	30	34	36.2	37.5	38.6	39.1	34.2	28.5	24.7	27.9	30.2	32.7	34.6	35.9	37.2	38.4	40.5	42.2	40.7	38.4	36.3	33.2	28.5
9	9 Single Family Home S2	GF	Day	26	32.8	36.9	39.1	40.4	41.7	42.4	40.7	37.5	35.8	38.4	39.6	40.4	41.7	42.1	42.6	43	44.1	44.2	40.5	37.8	35.6	32.5	28
9	9 Single Family Home S2	GF	Night	27.3	34.2	38.2	40.5	41.8	43	43.7	41.9	38.5	36.5	39.1	40.4	41.4	42.8	43.3	43.9	44.4	45.5	45.7	42	39	36.9	33.8	29.3

Redwood Avenue Warehouse 13419  
Warehouse Operation  
Industry

Source name	Reference	Level	Frequency spectrum [dB(A)]																								
			50 dB(A)	63 Hz	80 Hz	100 Hz	125 Hz	160 Hz	200 Hz	250 Hz	315 Hz	400 Hz	500 Hz	630 Hz	800 Hz	1 kHz	1.3 kHz	1.6 kHz	2 kHz	2.5 kHz	3.2 kHz	4 kHz	5 kHz	6.3 kHz	8 kHz	10 kHz	
Truck Docking Area	Unit	Day	97.1	53	55	59	68	68	69	76	78	80	82	84	88	90	87	87	86	86	85	84	83	81	78	77	74
Truck Parking Area	Unit	Day	61	-	28	-	-	38	-	-	45	-	-	51	-	-	54	-	-	55	-	-	55	-	-	53	-
Passenger Car Parking Area N	Unit	Day	97.1	53	55	59	68	68	69	76	78	80	82	84	88	90	87	87	86	86	85	84	83	81	78	77	74
Passenger Car Parking Area W	Unit	Day	97.1	53	55	59	68	68	69	76	78	80	82	84	88	90	87	87	86	86	85	84	83	81	78	77	74

Redwood Avenue Warehouse 13419  
Warehouse Operation  
Receivers

No.	Receiver name	Floor	Level Day dB(A)
1	1 Single Family Home NE	GF	42.5
2	2 Storage Facility N	GF	48.5
3	3 Single Family Home E1	GF	46.5
4	4 Single Family Home E2	GF	38.2
5	5 Single Family Home E3	GF	31.8
6	6 Single Family Home E4	GF	42.4
7	7 Commercial SE	GF	39.6
8	8 Single Family Home S	GF	44.7
9	9 Single Family Home S2	GF	48.8
10	10 Single Family Home W	GF	63.2

Redwood Avenue Warehouse 13419  
Warehouse Operation  
Contributions

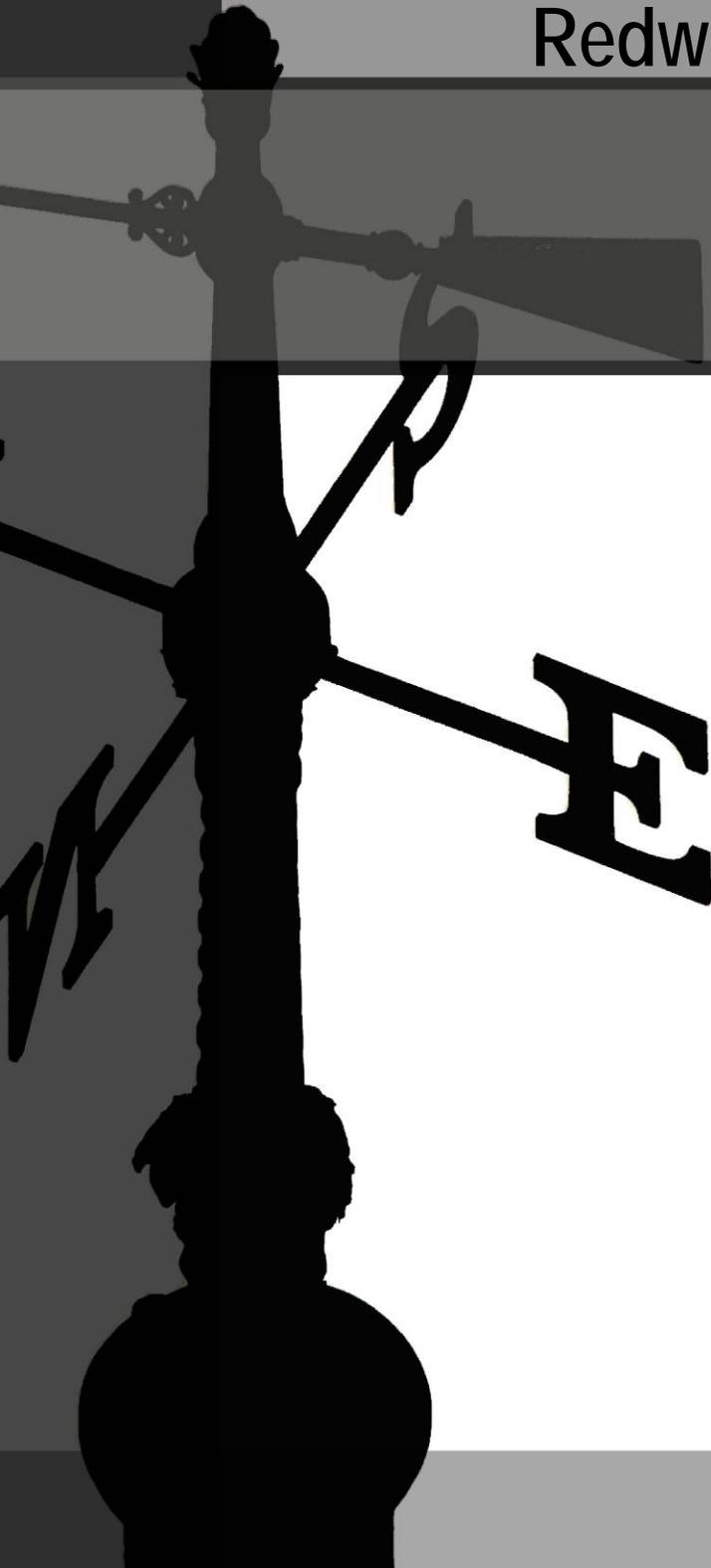
Source name	Level Day dB(A)
<b>1 Single Family Home NE GF</b>	<b>42.5</b>
Passenger Car Parking Area N	42.3
Passenger Car Parking Area W	28.9
Truck Docking Area	18
Truck Parking Area	-15.2
<b>2 Storage Facility N GF</b>	<b>48.5</b>
Passenger Car Parking Area N	48.4
Passenger Car Parking Area W	30.6
Truck Docking Area	19.9
Truck Parking Area	-14.9
<b>3 Single Family Home E1 GF</b>	<b>46.5</b>
Passenger Car Parking Area N	46.4
Passenger Car Parking Area W	28.7
Truck Docking Area	21.4
Truck Parking Area	-13.3
<b>4 Single Family Home E2 GF</b>	<b>38.2</b>
Passenger Car Parking Area N	38
Passenger Car Parking Area W	19.5
Truck Docking Area	23.3
Truck Parking Area	-11.8
<b>5 Single Family Home E3 GF</b>	<b>31.8</b>
Passenger Car Parking Area N	29.4
Passenger Car Parking Area W	20
Truck Docking Area	27.3
Truck Parking Area	-3.4
<b>6 Single Family Home E4 GF</b>	<b>42.4</b>
Passenger Car Parking Area N	25.6
Passenger Car Parking Area W	29.6
Truck Docking Area	42.1
Truck Parking Area	6.6
<b>7 Commercial SE GF</b>	<b>39.6</b>
Passenger Car Parking Area N	20.1
Passenger Car Parking Area W	28.4
Truck Docking Area	39.2
Truck Parking Area	2.4
<b>8 Single Family Home S GF</b>	<b>44.7</b>

Passenger Car Parking Area N		22.5
Passenger Car Parking Area W		31
Truck Docking Area		44.5
Truck Parking Area		9.2
<b>9 Single Family Home S2</b>	<b>GF</b>	<b>48.8</b>
Passenger Car Parking Area N		19.4
Passenger Car Parking Area W		38.6
Truck Docking Area		48.3
Truck Parking Area		15.8
<b>10 Single Family Home W</b>	<b>GF</b>	<b>63.2</b>
Passenger Car Parking Area N		38.9
Passenger Car Parking Area W		63.2
Truck Docking Area		31.5
Truck Parking Area		-8.2

Redwood Avenue Warehouse 13419  
Warehouse Operation  
Receiver Spectra

No.	Name	Floor	Time slice	50 Hz	63 Hz	80 Hz	100 Hz	125 Hz	160 Hz	200 Hz	250 Hz	315 Hz	400 Hz	500 Hz	630 Hz	800 Hz	1 kHz	1 kHz	2 kHz	2 kHz	2 kHz	3 kHz	4 kHz	5 kHz	6 kHz	8 kHz	10 kHz
1	1 Single Family Home NE	GF	Day	-1.7	0.2	4.1	13	12.9	14.4	21.6	23.7	25.8	28.1	30.3	34.2	36.1	33	32.8	31.5	31.1	29.4	27.3	24.7	20.3	13.7	7.4	-2.5
2	2 Storage Facility N	GF	Day	3.9	5.9	9.8	18.9	19.1	20.1	27.2	29.4	31.7	33.8	35.8	39.9	41.8	38.8	38.7	37.6	37.3	36	34.5	32.7	29.6	25	21.7	15.9
3	3 Single Family Home E1	GF	Day	2.9	4.9	8.8	17.8	17.7	18.7	25.6	27.6	29.6	31.6	33.7	37.8	39.8	36.8	36.7	35.6	35.3	34	32.5	30.7	27.6	23.1	19.8	14.1
4	4 Single Family Home E2	GF	Day	-0.7	0.7	4.2	12.7	12.2	12.7	19.3	20.9	22.6	24.3	26	29.8	31.6	28.4	28.2	27	26.7	25.3	23.8	22	18.8	14.1	10.3	3.7
5	5 Single Family Home E3	GF	Day	-2.5	-1.2	1.9	10.1	9.3	9.3	15.5	16.8	18	19.2	20.5	23.9	25.2	21.7	21.1	19.5	18.9	17.1	15.1	12.6	8.5	2.4	-3.4	-12.8
6	6 Single Family Home E4	GF	Day	-0.6	1.2	5	13.9	13.8	14.7	21.7	23.7	25.8	28	30	34	36	32.9	32.7	31.5	31.1	29.5	27.7	25.3	21.4	15.7	10.7	2.5
7	7 Commercial SE	GF	Day	-4	-2.1	1.7	10.6	10.5	11.9	19	21	23	25.5	27.6	31.5	33.4	30.2	30	28.6	28	26.1	23.6	20.3	14.9	6.8	-2	-15.3
8	8 Single Family Home S	GF	Day	0.4	2.4	6.4	15.5	15.4	16.4	23.6	25.9	28	30.1	32.3	36.3	38.3	35.2	35	33.8	33.5	32	30.1	27.9	24	18.3	13.4	5.2
9	9 Single Family Home S2	GF	Day	4.5	6.4	10.7	19.7	19.7	20.6	27.9	29.9	32.1	34.3	36.2	40.2	42.1	39.1	39	37.8	37.6	36.2	34.6	32.7	29.3	24.2	20.2	12.9
10	10 Single Family Home W	GF	Day	19.1	21.1	25	34	34	35.1	42.2	44.2	46.3	48.3	50.3	54.2	56.2	53.2	53.2	52.2	52.1	51.1	50	48.8	46.6	43.3	41.8	38.2





# Redwood Avenue Warehouse Air Quality & Climate Change Assessment

February 2015 (13419)

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This document is formatted for double-sided printing to conserve natural resources.

# Redwood Avenue Warehouse

## Air Quality & Climate Change Assessment

February 2015

San Bernardino County



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# 1 Executive Summary

Construction-related and operational emissions of criteria pollutants and toxic air contaminants were modeled and analyzed for the proposed warehouse building located at 9988 Redwood Avenue, San Bernardino County, California. This report also analyzes the project's consistency with the South Coast Air Quality Management District (SCAQMD) 2012 Air Quality Management Plan (AQMP) for the South Coast Air Basin. Cumulative impacts were analyzed using the methodology provided by the 1993 SCAQMD California Environmental Quality Act (CEQA) Air Quality Handbook. The results of this report find that the thresholds established by SCAQMD for volume and receptor-specific criteria pollutant emissions and toxic air contaminants will not be exceeded.

Additionally, this report models and analyzes construction- and operation-related emissions of greenhouse gases from the proposed project. This analysis utilizes guidance provided in the California Air Pollution Control Officers Association (CAPCOA) *CEQA and Climate Change* white paper and the *Quantifying Greenhouse Gas Mitigation Measures* handbook. Modeling of emissions utilizes the California Emissions Estimator Model (CalEEMod) v 2013.2.2. The results of this report find that the criteria established by the San Bernardino County for greenhouse gas emissions will be met, therefore, substantial climate change impacts will not occur.

## 1.1 Project Description

The proposed project includes the demolition of the existing on-site structures and the development of a 215,000-square-foot warehouse building located at 9988 Redwood Avenue, San Bernardino, California. The project site will be bounded by an eight-foot concrete screening wall along the northern, western, and southern boundaries. The project includes 160 parking stalls, 27 trailer docks, 31 trailer spaces, and 70,450 square feet of landscaping.

## 1.2 Air Quality

The project will not result in substantial emissions of oxides of nitrogen, volatile organic compounds (with mitigation incorporated), or particulate matter and would not exceed the regional growth assumptions used in the Air Quality Management Plan (AQMP). The project will not individually cause or cumulatively contribute to an air quality standard violation. Emissions of diesel particulate matter and carbon monoxide will not substantially impact sensitive receptors in vicinity of the project. The project will not expose a substantial number of people to odors.

## 1.3 Climate Change

The project is consistent with the Tier 2 requirement of earning 100 Project Points to reduce greenhouse gas emissions as required through the County's implementation of the Greenhouse Gas Emissions Reduction Plan and thus will not contribute substantially to global climate change impacts. Furthermore, because the project will incorporate the features necessary to meet the 100 Project Point minimum requirement, the project will not conflict with the Greenhouse Gas Emissions Reduction Plan.

## 1.4 Mitigation Measures

The following mitigation measures are required to ensure that project-related emissions do not exceed established thresholds.

**AQ1** *Coating Restrictions.* Prior to issuance of building permits, the project proponent shall submit, to the satisfaction of County Planning, a Coating Restriction Plan (CRP), consistent with South Coast Air Quality Management District (SCAQMD) guidelines and a letter agreeing to include in any construction contracts and/or subcontracts a requirement that the contractors adhere to the requirements of the CRP. The CRP measures shall be implemented to the satisfaction of County Building and Safety. These shall include the following:

- The volatile organic compounds (VOC) of proposed architectural coatings shall not exceed zero for interior applications.

- The volatile organic compounds (VOC) of proposed architectural coatings shall not exceed 125 g/l for exterior applications.

## 2 Introduction

This report models and analyzes construction- and operation-related emissions of criteria air pollutants, toxic air contaminants, and greenhouse gas emissions from the proposed Redwood Avenue warehouse facility. The project includes construction of one 215,000-square foot warehouse on 9.89 gross acres located in unincorporated San Bernardino, California (near the City of Fontana)).

The air quality analysis provided herein utilizes guidance provided in the South Coast Air Quality Management District (SCAQMD) the 1993 California Environmental Quality Act (CEQA) Air Quality handbook as amended and supplemented (<http://www.aqmd.gov/ceqa/hdbk.html>). Modeling of emissions utilizes the following software/methodologies:

- California Emissions Estimator Model (CalEEMod) v 2013.2.2
- California Emissions Factors (EMFAC2011)
- United States Environmental Protection Agency SCREEN3 v 96043
- California Department of Transportation (Caltrans) *Carbon Monoxide Protocol*

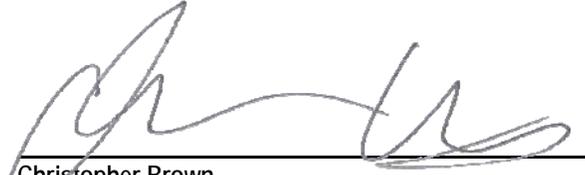
The climate change analysis provided herein follows the procedures outlined in the San Bernardino County *Greenhouse Gas Emissions Reduction Plan*, as interpreted and implemented by the County Land Uses Services Department. This report has been designed to demonstrate project consistency with the San Bernardino County *Greenhouse Gas Emissions Reduction Plan*.

This report has been prepared utilizing project-specific characteristics where available. In those instances where project-specific data is not available, the analysis has been supplemented by model defaults or other standardized sources of comparable data. In any case where non-project defaults or other data have been used, a “worst-case” scenario was developed to ensure a conservative estimate of emissions.

This report has been prepared for use by the Lead Agency to assess potential project-related air quality impacts in compliance with the State CEQA Statutes and Guidelines, particularly in respect to the air quality issues identified in Appendix G of the State CEQA Guidelines. This report does not make determinations of significance pursuant to CEQA because such determinations are required to be made solely in the purview of the Lead Agency.

This document has been reviewed in accordance with the *Table 7-2, Checklist for an Air Quality Analysis Section* of the SCAQMD Air Quality Handbook for quality control purposes.

This report was prepared by Christopher Brown (Director of Environmental Services) and Olivia Chan (Project Associate) of MIG, Inc. under contract by CRP Oakmont Redwood Avenue, LLC.



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Director of Environmental Services



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Project Associate

### 3.1 Climate

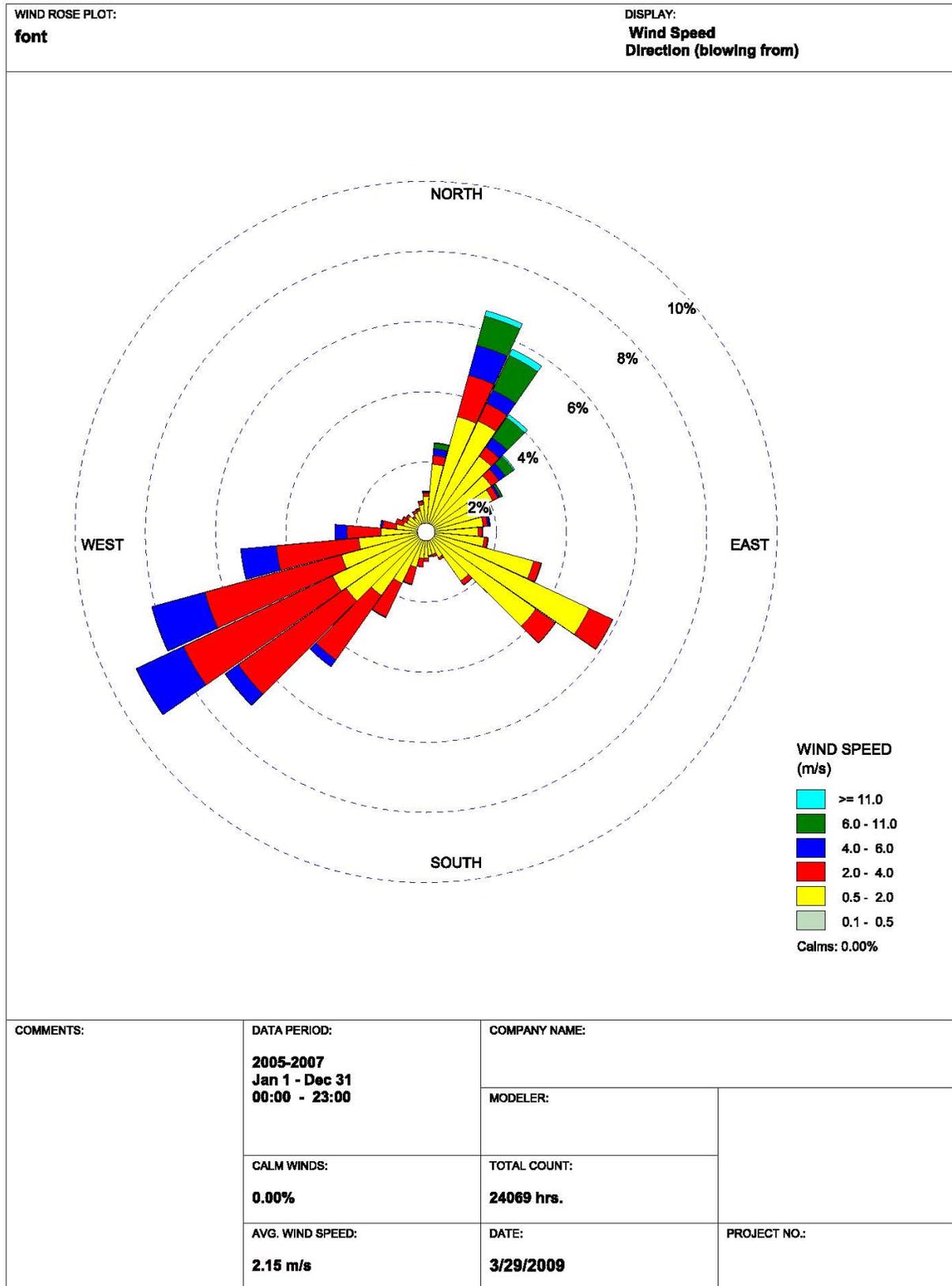
The project is located in unincorporated San Bernardino County, north of the City of Fontana. The City of Fontana and the broader South Coast Air Basin are defined by a Mediterranean climate with dry summers and rainy winters. Annual rainfall averages 1.55 inches with the rainy season occurring during the winter.<sup>1</sup> The coolest month of the year is January with an average monthly low of 41.5° Fahrenheit (F). The warmest month is August with an average monthly high of 96.2° F. The annual average maximum temperature is 78.5° F and the annual average minimum temperature is 50.3° F. The project site is located at an approximate elevation of 1,060 AMSL. Figure 1 (Fontana Wind Rose) summarizes wind direction and speed patterns for the Fontana area.<sup>2</sup> Wind generally blows from the southwest and northeast.

### 3.2 Regional Air Quality

The proposed warehouse is located within the South Coast Air Basin (Basin).<sup>3</sup> The Basin includes Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties. The Basin is bounded by the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east that trap ambient air and pollutants within the Los Angeles and Inland Empire valleys below. The Basin is managed by the South Coast Air Quality Management District (SCAQMD). Pursuant to the California Clean Air Act (CCAA), SCAQMD is responsible for bringing air quality within the Basin into conformity with federal and state air quality standards by reducing existing emission levels and ensuring that future emission levels meet applicable air quality standards. SCAQMD works with federal, state, and local agencies to reduce pollutant emissions from stationary, mobile, and indirect pollutant sources through the development of rules and regulations.

Both California and the federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants (known as *criteria pollutants*). These pollutants include ozone (O<sub>3</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), inhalable particulate matter with a diameter of 10 microns or less (PM<sub>10</sub>), fine particulate matter with a diameter of 2.5 microns or less (PM<sub>2.5</sub>), and lead (Pb). The State has also established AAQS for the additional pollutants of visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. The AAQS are designed to protect the health and welfare of the populace within a reasonable margin of safety. Where the State and Federal standards differ, State AAQS are more stringent than Federal AAQS. Federal and State standards are shown in Table 1 (Ambient Air Quality Standards). A brief description of each criteria pollutant is provided herein.

Figure 1  
Fontana Wind Rose



WRPLOT View - Lakes Environmental Software

**Ozone.** Ozone is a pungent, colorless, and highly reactive gas that forms from the atmospheric reaction of organic gases with nitrogen oxides in the presence of sunlight. Ozone is most commonly associated with smog. Ozone precursors such as reactive organic gases (ROG) and oxides of nitrogen (NO<sub>x</sub>) are released from mobile and stationary sources. Ozone is a respiratory irritant and can cause cardiovascular diseases, eye irritation, and impaired cardiopulmonary function. Ozone cause also damage building materials and plant leaves.

**Carbon Monoxide.** Carbon monoxide is primarily emitted from vehicles due to the incomplete combustion of fuels. Carbon monoxide has wide ranging impacts on human health because is combines with hemoglobin in the body and reduces the amount of oxygen transported in the bloodstream. Carbon monoxide can result in reduced tolerance for exercise, impairment of mental function, impairment of fetal development, headaches, nausea, and death at high levels of exposure.

**Nitrogen Dioxide.** Nitrogen dioxide and other oxides of nitrogen (NO<sub>x</sub>) contribute to the formation of smog and results in the brownish haze associated with it. They are primarily emitted from motor vehicle exhaust but can be omitted from other high-temperature stationary sources. Nitrogen oxides can aggravate respiratory illnesses, reduce visibility, impair plant growth, and form acid rain.

**Particulate Matter.** Particulate matter is a complex mixture of small-suspended particles and liquid droplets in the air. Particulate matter between ten microns and 2.5 microns is known as PM<sub>10</sub>, also known as coarse or inhalable particulate matter. PM<sub>10</sub> is emitted from diverse sources including road dust, diesel soot, combustion products, abrasion of tires and brakes, construction operations, and windstorms. PM<sub>10</sub> can also be formed secondarily in the atmosphere when NO<sub>2</sub> and SO<sub>2</sub> react with ammonia. Particulate matter less than 2.5 microns in size are called PM<sub>2.5</sub> or fine particulate matter. PM<sub>2.5</sub> is primarily emitted from point sources such as power plants, industrial facilities, automobiles, wood-burning fireplaces, and construction sites. Particulate matter is deposited in the lungs and cause permanent lung damage, potentially resulting in lung disease and respiratory symptoms like asthma and bronchitis. Particulate matter has also been linked to cardiovascular problems such as arrhythmia and heart attacks. Particulate matter can also interfere with the body's ability to clear the respiratory tract and can act as a carrier of absorbed toxic substances. Particulate matter causes welfare issues because it scatters light and reduces visibility, causes environmental damage such as increasing the acidity of lakes and streams, and can stain and damage stone, such as that applied in statues and monuments.

**Sulfur Dioxide.** Sulfur dioxide and other oxides of sulfur (SO<sub>x</sub>) are reactive gasses emitted from the burning of fossil fuels, primarily from power plants and other industrial facilities.<sup>4</sup> Other less impacting sources include metal extraction activities, locomotives, large ships, and off-road equipment. Human health impacts associated with SO<sub>x</sub> emissions include bronchoconstriction and increased asthma symptoms.

**Lead.** Lead is primarily emitted from metal processing facilities (i.e. secondary lead smelters) and other sources such as manufacturers of batteries, paints, ink, ceramics, and ammunition. Historically, automobiles were the primary sources before lead was phased out of gasoline. The health effects of exposure to lead include gastrointestinal disturbances, anemia, kidney diseases, and potential neuromuscular and neurologic dysfunction. Lead is also classified as a probable human carcinogen.

**Table 1  
Ambient Air Quality Standards**

Pollutant	Averaging Time	California Standards <sup>1</sup>		National Standards <sup>2</sup>		
		Concentration <sup>3</sup>	Method <sup>4</sup>	Primary <sup>3,5</sup>	Secondary <sup>3,6</sup>	Method <sup>7</sup>
Ozone (O <sub>3</sub> )	1 Hour	0.09 ppm (180 µg/m <sup>3</sup> )	Ultraviolet Photometry	-	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.07 ppm (137 µg/m <sup>3</sup> )		0.075 ppm (147 µg/m <sup>3</sup> )		
Respirable Particulate Matter (PM <sub>10</sub> ) <sup>8</sup>	24 Hour	50 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	150 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>		-		
Fine Particulate Matter (PM <sub>2.5</sub> ) <sup>8</sup>	24 Hour	-	-	35 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	12 µg/m <sup>3</sup>		
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/ m <sup>3</sup> )	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m <sup>3</sup> )	-	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10mg/m <sup>3</sup> )		9 ppm (10 mg/m <sup>3</sup> )	-	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/ m <sup>3</sup> )		-	-	
Nitrogen Dioxide (NO <sub>2</sub> )	Annual Arithmetic Mean	0.03 ppm (57 µg/m <sup>3</sup> )	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m <sup>3</sup> )	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.18 ppm (339 µg/m <sup>3</sup> )		100 ppb (188 µg/m <sup>3</sup> )		
Sulfur Dioxide (SO <sub>2</sub> )	1 Hour	0.25 ppm (655 µg/m <sup>3</sup> )	Ultraviolet Fluorescence	75 ppb (196 µg/m <sup>3</sup> )	-	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	-		-	0.5 ppm (1,300 µg/m <sup>3</sup> )	
	24 Hour	0.04 ppm (105 µg/m <sup>3</sup> )		0.14 ppm (for certain areas) <sup>10</sup>	-	
	Annual Arithmetic Mean	-		0.030 ppm (for certain areas) <sup>10</sup>	-	
Lead <sup>11,12</sup>	30 Day Average	1.5 µg/m <sup>3</sup>	Atomic Absorption	-	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Calendar Quarter	-		1.5 µg/m <sup>3</sup> (for certain areas) <sup>12</sup>		
	Rolling 3-Month Average <sup>10</sup>	-		0.15 µg/m <sup>3</sup>		
Visibility Reducing Particles <sup>13</sup>	8 Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	No Federal Standards		
Sulfates	24 Hour	25 µg/m <sup>3</sup>	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m <sup>3</sup> )	Ultraviolet Fluorescence			
Vinyl Chloride <sup>11</sup>	24 Hour	0.01 ppm (26 µg/m <sup>3</sup> )	Gas Chromatography			

Source: ARB, June 2013

PPM, parts per million  
µg/m<sup>3</sup>, micrograms per cubic meter

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), and particulate matter (PM<sub>10</sub>, PM<sub>2.5</sub>, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM<sub>10</sub>, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m<sup>3</sup> is equal to or less than one. For PM<sub>2.5</sub>, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are

equal to or less than the standard. Contact U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.
8. On December 14, 2012, the national annual PM<sub>2.5</sub> primary standard was lowered from 15 µg/m<sup>3</sup> to 12.0 µg/m<sup>3</sup>. The existing national 24-hour PM<sub>2.5</sub> standards (primary and secondary) were retained at 35 µg/m<sup>3</sup>, as was the annual secondary standard of 15 µg/m<sup>3</sup>. The existing 24-hour PM<sub>10</sub> standards (primary and secondary) of 150 µg/m<sup>3</sup> also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
9. To attain the 1-hour national standard, the 3-year average of the 98th percentile of the daily maximum 1-hour daily maximum concentrations at each site must not exceed 100ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standards of 100ppb is identical to 0.100ppm.
10. On June 2, 2010, a new 1-hour SO<sub>2</sub> standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99<sup>th</sup> percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO<sub>2</sub> national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
11. The ARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
11. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m<sup>3</sup> as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
12. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

### 3.3 Non-Attainment Status

Air pollution levels are measured at monitoring stations located throughout the Basin. Areas that are in nonattainment with respect to criteria pollutants are required to prepare plans and implement measures that will bring the region into attainment. Table 2 (South Coast Air Basin Attainment Status) summarizes the attainment status in the Basin for the criteria pollutants. The Basin is currently in nonattainment status for ozone and inhalable and fine particulate matter.

Pollution problems in the Basin are caused by emissions within the area and the specific meteorology that promotes pollutant concentrations. Emissions sources vary widely from smaller sources such as individual residential water heaters and short-term grading activities to extensive operational sources including long-term operation of electrical power plants and other intense industrial use. Pollutants in the Basin are blown inward from coastal areas by sea breezes from the Pacific Ocean and are prevented from horizontally dispersing due to the surrounding mountains. This is further complicated by atmospheric temperature inversions that create inversion layers. The inversion layer in Southern California refers to the warm layer of air that lies over the cooler air from the Pacific Ocean. This is strongest in the summer and prevents ozone and other pollutants from dispersing upward. A ground-level surface inversion commonly occurs during winter nights and traps carbon monoxide emitted during the morning rush hour.

Table 2  
South Coast Air Basin Attainment Status

Pollutant	Federal	State
O <sub>3</sub> (1-hr)	--	Nonattainment
O <sub>3</sub> (8-hr)	Nonattainment	Nonattainment
PM <sub>10</sub>	Attainment	Nonattainment
PM <sub>2.5</sub>	Nonattainment	Nonattainment
CO	Attainment	Attainment
NO <sub>2</sub>	Attainment	Nonattainment
SO <sub>2</sub>	Attainment	Attainment
Pb	Nonattainment	Attainment
VRP	--	Attainment
SO <sub>4</sub>	--	Attainment
H <sub>2</sub> S	--	Attainment
Sources: ARB 2011		

### 3.4 Local Air Quality

The project site is located near the City of Fontana. The City of Fontana is located in the Central San Bernardino Valley 2 air monitoring area (Source Receptor Area (SRA) 34). Air quality in SRA 34 is monitored at Station 5203. Air monitoring results for Station 5203 over the last three years of available data is summarized in Table 3 (2013-2011 Local Air Quality).<sup>5 6 7</sup> Table 4 (2011-2013 Air Quality Standards Exceedance) summarizes the number of days for each monitoring year that air quality standards were exceeded. Based on the 2011-2013 air quality monitoring data, the Central San Bernardino Valley area experiences ozone pollution and has exceeded the State 8-hr maximum concentration a minimum of 53 days. This is not necessarily due to local production of ozone, but due to how ozone forms and travels over the Basin. Ozone precursors are emitted primarily in the urban centers of the Basin such as Los Angeles. Ozone does not form immediately but rather forms over the day. This combined with prevailing winds blowing ozone precursors inland cause the highest concentrations of ozone in the Basin to occur in the San Bernardino valley and mountain regions. The Central San Bernardino Valley area also experiences particulate matter pollution, with five percent PM<sub>10</sub> samples in year 2013 exceeding the State standard.

Table 3  
2011-2013 Local Air Quality

Monitoring Station	CO		O <sub>3</sub> (PPM)		NO <sub>2</sub> (PPB)		PM <sub>10</sub> (µg/m <sup>3</sup> )		PM <sub>2.5</sub> (µg/m <sup>3</sup> )		TSP (µg/m <sup>3</sup> )		Pb (µg/m <sup>3</sup> )		SO <sub>4</sub> (µg/m <sup>3</sup> )
	Max 1-hr	Max 8-hr	Max 1-hr	Max 8-hr	Max 1-hr	AAM	Max 24-hr	AAM	Max 24-hr	AAM	Max 24-hr	AAM	Max Month	Max Qtr	Max 24-hr
2013	--	1.3	0.151	0.122	81.7	20.6	102	31.3	55.3	11.4			0.010	0.010	4.6
2012	--	1.7	0.124	0.109	67.0	18.8	53	29.2	34.8	11.8	128	55.6	0.008	0.007	4.4
2011	--	1.7	0.135	0.121	61.9	16.9	56	31.5	65.0	12.2	97	51.4	0.007	0.007	5.5

Source: SCAQMD 2011-2013

-- pollutant not monitored  
 PPM, parts per million  
 PPB, parts per billion  
 µg/m<sup>3</sup>, micrograms per cubic meter  
 AAM, annual arithmetic mean

Table 4  
2011-2013 Air Quality Standards Exceedance

Monitoring Station	O <sub>3</sub> (PPM)			PM <sub>10</sub> (µg/m <sup>3</sup> )		PM <sub>2.5</sub> (µg/m <sup>3</sup> )
	Fed* 8-hr	State 1-hr	State 8-hr	Fed 24-hr	State 24-hr	Fed^ 24-hr
2013	36	22	53	0	5%	0.9%
2012	54	41	74	0	1%	0%
2011	39	40	66	0	5%	2%

Source: SCAQMD 2013-2011

-- pollutant not monitored  
 \* 0.075 ppm  
 ^35 µg/m<sup>3</sup>

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### 3.5 Sensitive Receptors

Some populations are more susceptible to the effects of air pollution than the population at large; these populations are defined as sensitive receptors. Sensitive receptors include children, the elderly, the sick, and the athletic. Land uses associated with sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Sensitive land uses located within one-quarter mile of the proposed warehouse includes residential use to the north, south, east, and west of the project site. Pollutants of particular concern when relating to sensitive receptors include carbon monoxide, toxic air contaminants, and odors. Exhibit 2 (Radius Map) identifies existing development in the project vicinity based on assessor's parcel data.

### 3.6 Toxic Emission Sources

According to the EPA, there are no existing sources of industrial- or utility-related toxic emissions uses within one-quarter mile of the project site.<sup>8</sup> There are existing warehouses and distribution centers in the project vicinity that emit diesel-particulate matter associated with heavy-duty truck traffic, an identified toxic air contaminant.

### 3.7 Local Transportation

The proposed warehouse will be located at 9988 Redwood Avenue, north of Valley Boulevard and south of San Bernardino Avenue. Regional access to the project site is provided by the Interstate 10. Redwood Avenue, Rosemary Drive, Iris Drive, and Hunter Street are two-lane, undivided roadways. Valley Boulevard is a four-lane, divided roadway. The project traffic report indicates that existing level of service (LOS) at the intersection of Redwood Avenue at Rosemary Drive is LOS A during the morning and afternoon peak hours. Performance at the intersection of Redwood Avenue at Iris Drive is LOS B during the morning peak hour and LOS A during the afternoon peak hour. Performance at the intersection of Redwood Avenue at Hunter Street is LOS B during the morning and afternoon peak hours. Performance at the intersection of Redwood Avenue at Valley Boulevard is LOS B during the morning and afternoon peak hours.

### 3.8 Odors

According to the CEQA Air Quality Handbook, land uses associated with odor complaints include agricultural operations, wastewater treatment plants, landfills, and certain industrial operations (such as manufacturing uses that produce chemicals, paper, etc.). The proposed warehouse is not considered sensitive receptor and will not be substantially affected by potential odors from citrus operations. The proposed warehouse, in turn, does not produce odors that could affect a substantial number of people.

### 3.9 Climate Change

#### 3.9.1 Defining Climate Change

Climate change is the distinct change in measures of climate for a long period of time. Climate change can result from natural processes and from human activities. Natural changes in the climate can be caused by indirect processes such as changes in the Earth's orbit around the Sun or direct changes within the climate system itself (i.e. changes in ocean circulation). Human activities can affect the atmosphere through emissions of gases and changes to the planet's surface. Emissions affect the atmosphere directly by changing its chemical composition, while changes to the land surface indirectly affects the atmosphere by changing the way the Earth absorbs gases from the atmosphere. The term *climate change* is preferred over the term *global warming* because *climate change* conveys the fact that other changes can occur beyond just average increase in temperatures near the Earth's surface. Elements that indicate that climate change is occurring on Earth include:

- Rising of global surface temperatures by 1.3° Fahrenheit (F) over the last 100 years
- Changes in precipitation patterns
- Melting ice in the Arctic

- Melting glaciers throughout the world
- Rising ocean temperatures
- Acidification of oceans
- Range shifts in plant and animal species

Climate change is intimately tied to the Earth's greenhouse effect. The greenhouse effect is a natural occurrence that helps regulate the temperature of the planet. The majority of radiation from the Sun hits the Earth's surface and warms it. The surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping back into space and re-radiate it in all directions. This process is essential to supporting life on Earth because it keeps the planet approximately 60° F warmer than without it. Emissions from human activities since the beginning of the industrial revolution (approximately 150 years) are adding to the natural greenhouse effect by increasing the gases in the atmosphere that trap heat, thereby contributing to an average increase in the Earth's temperature. Human activities that enhance the greenhouse effect are detailed below.

### Greenhouse Gases

The greenhouse effect is caused by a variety of *greenhouse gases*. Greenhouse gases (GHGs) occur naturally and from human activities. Greenhouse gases produced by human activities include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). Since the year 1750, it is estimated that the concentrations of carbon dioxide, methane, and nitrous oxide in the atmosphere have increased over 36 percent, 148 percent, and 18 percent, respectively, primarily due to human activity. The primary GHGs are discussed below.<sup>9</sup>

**Carbon Dioxide.** CO<sub>2</sub> is emitted and removed from the atmosphere naturally. Animal and plant respiration involves the release of carbon dioxide from animals and its absorption by plants in a continuous cycle. The ocean-atmosphere exchange results in the absorption and release of CO<sub>2</sub> at the sea surface. Carbon dioxide is also released from plants during wildfires. Volcanic eruptions release a small amount of CO<sub>2</sub> from the Earth's crust.

Human activities that affect carbon dioxide in the atmosphere include burning of fossil fuels, industrial processes, and product uses. Combustion of fossil fuels is the largest source of carbon dioxide emissions in the United States, accounting for approximately 85 percent of all equivalent emissions. Because of the fossil fuels used, the largest of these sources is electricity generation and transportation. When fossil fuels are burned, the carbon stored in them is released into the atmosphere entirely as CO<sub>2</sub>. Emissions from onsite industrial activities also emit carbon dioxide such as cement, metal, and chemical production and use of petroleum produced in plastics, solvents, and lubricants.

**Methane.** Methane (CH<sub>4</sub>) is emitted from human activities and natural sources. Natural sources of methane include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, soils, and wildfires. Human activities that cause methane releases include fossil fuel production, animal digestive processes from farms, manure management, and waste management. It is estimated that 50 percent of global methane emissions are generated from human activities. Wetlands are the primary producers of methane in the world because the habitat is conducive to bacteria that produce methane during decomposition of organic material. Methane is produced from landfills as solid waste decomposes. Methane is a primary component of natural gas and is emitted during its production, processing, storage, transmission, distribution, and use. Decomposition of organic material in manure stocks or in liquid manure management systems also releases methane. Releases from animal digestive processes at agricultural operations are the primary source of human-related methane emissions.

**Nitrous Oxide.** Anthropogenic (human) sources of nitrous oxide include agricultural soil management, animal manure management, sewage treatment, combustion of fossil fuels, and production of certain acids. N<sub>2</sub>O is produced naturally in soil and water, especially in wet, tropical forests. The primary human-related source of N<sub>2</sub>O is agricultural soil management due to use of synthetic nitrogen fertilizers and other techniques to boost nitrogen in soils. Combustion of fossil fuels (mobile and stationary) is the second leading source of nitrous oxide, although parts of the world where catalytic converters are used (such as California) have significantly lower levels than those areas that do not.

**High Global Warming Potential Gases.** High global warming potential (GWP) gases (or fluorinated gases) are entirely manmade and are mainly used in industrial processes. HFCs, PFCs, and SF<sub>6</sub> are high GWP gases. These types of gases are used in aluminum production, semiconductor manufacturing, electric power transmission, magnesium production and processing, and in the production of hydrochlorofluorocarbon-22 (HCFC-22). High GWP gases are also used as substitutes for ozone-depleting gases like chlorofluorocarbons (CFCs) and halons. Use of high GWP gases as substitutes for ozone-depleting substances is the primary use of these gases in the United States.

**Water Vapor.** It should be noted that water vapor is also a significant GHG in the atmosphere; however, concentration of water vapor in the air is primarily dependent on air temperature and cannot be influenced by humans.

GHGs behave differently in the atmosphere and contribute to climate change in different ways. Some gases have more potential to reflect infrared heat back towards the earth while some persist in the atmosphere longer than others. To equalize the contribution of GHGs to climate change, the Intergovernmental Panel on Climate Change (IPCC) devised a weighted metric to compare all greenhouse gases to carbon dioxide.<sup>10</sup> The weighting depends on the lifetime of the gas in the atmosphere and its radiative efficiency. As an example, over a time horizon of 100-years, emissions of nitrous oxide will contribute to climate change 298 times more than the same amount of emissions of carbon dioxide while emissions of HFC-23 would contribute 14,800 times more than the same amount of carbon dioxide. These differences define a gas's GWP. Table 5 (Global Warming Potential of Greenhouse Gases) identifies the lifetime and GWP of select GHGs. The lifetime of the GHG represents how many years the GHG will persist in the atmosphere. The GWP of the GHG represents the GHG's relative potential to induce climate change as compared to carbon dioxide.

#### Carbon Sequestration

Carbon sequestration is the process by which plants absorb CO<sub>2</sub> from the atmosphere and store it in biomass like leaves and grasses. Agricultural lands, forests, and grasslands can all sequester carbon dioxide, or emit it. The key is to determine if the land use is emitting carbon dioxide faster than it is absorbing it. Young, fast-growing trees are particularly good at absorbing more than they release and are known as a "sink". Agricultural resources often end up being sources of carbon release because of soil management practices. Deforestation contributes to carbon dioxide emissions by removing trees, or carbon sinks, that would otherwise absorb CO<sub>2</sub>. Forests are a crucial part of sequestration in some parts of the world, but not much in the United States. Another form of sequestration is geologic sequestration. This is a manmade process that results in the collection and transport of CO<sub>2</sub> from industrial emitters (i.e. power plants) and injecting it into underground reservoirs.

Table 5  
Global Warming Potential (GWP) of Greenhouse Gases (GHG)

GHG	Lifetime (yrs)	GWP
Carbon Dioxide	50-200	1
Methane	12	25
Nitrous Oxide	114	298
HFC-23	270	14,800
HFC-134a	14	1,430
HFC-152a	1.4	124
PFC-14	50,000	7,390
PFC-116	10,000	12,200
Sulfur Hexafluoride	3,200	22,800
Source: IPCC 2007		

### 3.9.2 Climate Change and California

Specific, anticipated impacts to California have been identified in the 2009 California Climate Adaptation Strategy prepared by the California Natural Resources Agency (CNRA) through extensive modeling efforts.<sup>11</sup> General climate changes in California indicate that:

- California is likely to get hotter and drier as climate change occurs with a reduction in winter snow, particularly in the Sierra Nevadas
- Some reduction in precipitation is likely by the middle of the century
- Sea-levels will rise up to an estimated 55 inches
- Extreme events such as heat waves, wildfires, droughts, and floods will increase
- Ecological shifts of habitat and animals are already occurring and will continue to occur

It should be noted that changes are based on the results of several models prepared under different climatic scenarios; therefore, discrepancies occur between the projections. The potential impacts of global climate change in California are detailed below.

#### Public Health and Welfare

Concerns related to public health and climate change includes higher rates of mortality and morbidity, change in prevalence and spread of disease vectors, decreases in food quality and security, reduced water availability, and increased exposure to pesticides. These concerns are all generally related to increase in ambient outdoor air temperature, particularly in summer.

Higher rates of mortality and morbidity could arise from more frequent heat waves at greater intensities. Health impacts associated with extreme heat events include heat stroke, heat exhaustion, and exacerbation of medical conditions such as cardiovascular and respiratory diseases, diabetes, nervous system disorders, emphysema, and epilepsy. Climate change would result in degradation of air quality promoting the formation of ground-level pollutants, particularly ozone. Degradation of air quality would increase the severity of health impacts from criteria and other air pollutants discussed in Section 4.3 (Air Quality). Temperature increases and increases in carbon dioxide are also expected to increase plant production of pollens, spores, and fungus. Pollens and spores could induce or aggravate allergic rhinitis, asthma, and obstructive pulmonary diseases.

Precipitation projections suggest that California will become drier over the next century due to reduced precipitation and increased evaporation from higher temperatures. These conditions could result in increased occurrences of drought. Surface water reductions will increase the need to pump groundwater, reducing supplies and increasing the potential for land subsidence.

Precipitation changes are also suspected to impact the Sierra snowpack (see *Water Management* herein). Earlier snow melts could coincide with the rainy season and could result in failure of the flood control devices in that region. Flooding can cause property damage and loss of life for those affected. Increased wildfires are also of concern as the State *dries* over time. Wildfires can also cause property damage, loss of life, and injuries to citizens and emergency response services.

Sea-level rises would also threaten human health and welfare. Flood risks will be increased in coastal areas due to strengthened storm surges and greater tidal damage that could result in injury and loss of property and life. Gradual rising of the sea will permanently inundate many coastal areas in the state.

Other concerns related to public health are changes in the range, incidence, and spread of infectious, water-borne, and food-borne diseases. Changes in humidity levels, distribution of surface water, and precipitation changes are all likely to shift or increase the preferred range of disease vectors (i.e. mosquitoes). This could expose more people and animals to potential for vector-borne disease.

### Biodiversity and Habitat

Changes in temperature will change the livable ranges of plants and animals throughout the state and cause considerable stress on these species. Species will shift their range if appropriate habitat is available and accessible if they cannot adapt to their new climate. If they do not adapt or shift, they face local extirpation or extinction. As the climate changes, community compositions and interactions will be interrupted and changed. These have substantial implications on the ecosystems in the state. Extreme events will lead to tremendous stress and displacement on affected species. This could make it easier for invasive species to enter new areas, due to their ability to more easily adapt. Precipitation changes would alter stream flow patterns and affect fish populations during their life cycle. Sea level rises could impact fragile wetland and other coastal habitat.

### Water Management

Although disagreement among scientists on long-term precipitation patterns in the State has occurred, it is generally accepted by scientists that rising temperatures will impact California's water supply due to changes in the Sierra Nevada snowpack. Currently, the State's water infrastructure is designed to both gather and convey water from melting snow and to serve as a flood control device. Snowpack melts gradually through spring warming into early summer, releasing an average of approximately 15 million acre-feet of water. The State's concern related to climate change is that due to rising temperatures, snowpack melt will begin earlier in the spring and will coincide with the rainy season. The combination of precipitation and snowmelt would overwhelm the current system, requiring tradeoffs between water storage and flood protection to be made. Reduction in reserves from the Sierra Nevada snowpack is troublesome for California and particularly for Southern California. Approximately 75-percent of California's available water supply originates in the northern third of the state while 80 percent of demand occurs in the southern two-thirds. There is also concern is that rising temperatures will result in decreasing volumes from the Colorado River basin. Colorado River water is important to Southern California because it supplies water directly to Metropolitan Water District of Southern California. Water from the Colorado River is also used to recharge groundwater basins in the Coachella Valley.

### Agriculture

California is the most agriculturally productive state in the US resulting in more than 37 billion dollars in revenue in 2008. California is the nation's leading producer of nearly 80 crops and livestock commodities, supplying more than half of the nation's fruit and vegetables and over 90 percent of the nation's production of almonds, apricots, raisin grapes, olives, pistachios, and walnuts. Production of crops is not limited to the Central Valley but also occurs in Southern California. Strawberries and grapes are grown in San Bernardino and Riverside Counties. Orange County and San Diego County also contribute to strawberry production. Cherries are also grown in Los Angeles and Riverside County. Anticipated impacts to agricultural resources are mixed when compared to the potentially increased temperatures, reduced chill hours, and changes in precipitation associated with climate change. For example, wheat, cotton, maize, sunflower, and rice are anticipated to show declining yields as temperatures rise. Conversely, grapes and almonds would benefit from warming temperatures. Anticipated increases in the number and severity in heat waves would have a negative impact on livestock where heat stress

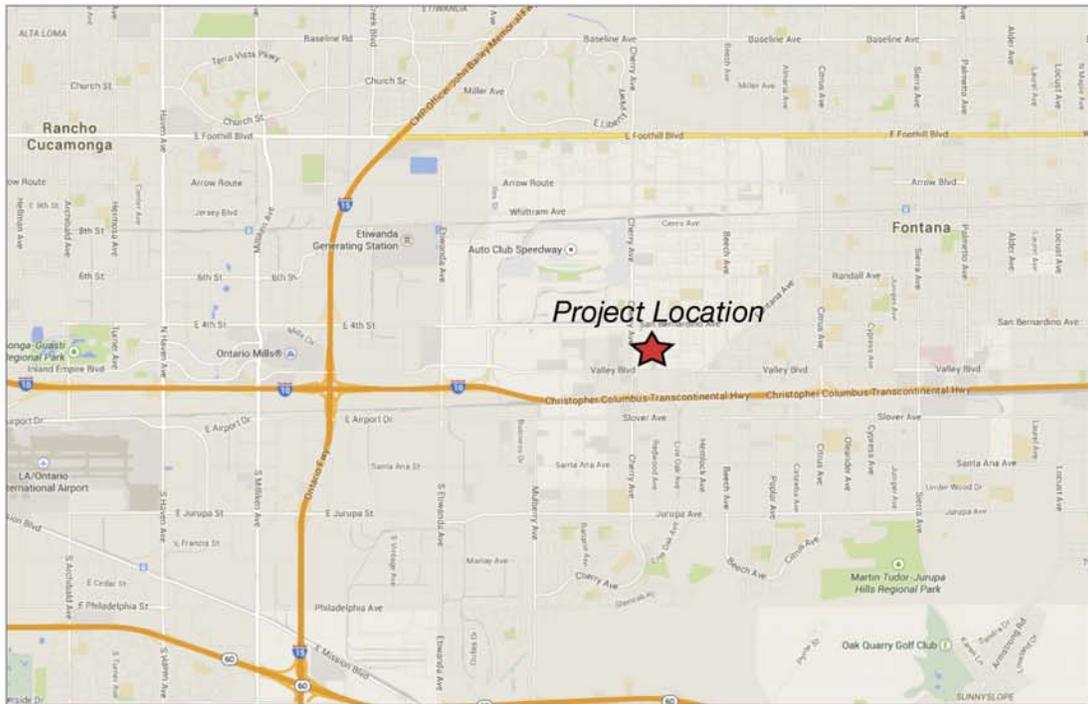
would make livestock more vulnerable to disease, infection and mortality. The projected drying trend and changes in precipitation are a threat to agricultural production in California. Reduced water reliability and changes in weather patterns would impact irrigated farmlands and reduce food security. Furthermore, a drying trend would increase wildfire risk. Overall, agriculture in California is anticipated to suffer due to climate change impacts.

### Forestry

Increases in wildfires will substantially impact California's forest resources that are prime targets for wildfires. This can increase public safety risks, property damage, emergency response costs, watershed quality, and habitat fragmentation. Climate change is also predicted to affect the behavior of plant species including seed production, seedling establishment, growth, and vigor due to rising temperatures. Precipitation changes will affect forests due to longer dry periods and moisture deficits and drought conditions that limit seedling and sapling growth. Prolonged drought also weakens trees, making them more susceptible to disease and pest invasion. Furthermore, as trees die due to disease and pest invasion (i.e. the Bark Beetle invasion of the San Bernardino Forest), wildfires can spread more rapidly.

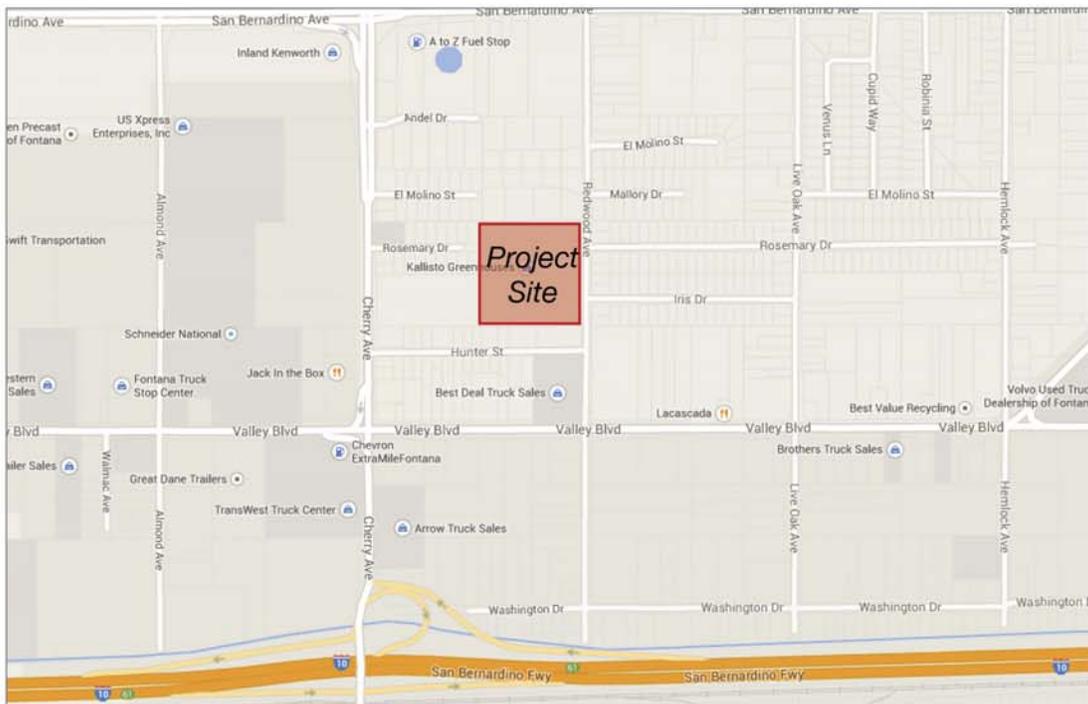
### Transportation and Energy Infrastructure

Higher temperatures will require increased cooling, raising energy production demand. Higher temperatures also decrease the efficiency of distributing electricity and could lead to more power outages during peak demand. Climate changes would impact the effectiveness of California's transportation infrastructure as extreme weather events damage, destroy, and impair roadways and railways throughout the state causing governmental costs to increase as well as impacts to human life as accidents increase. Other infrastructure costs and potential impacts to life would increase due to the need to upgrade levees and other flood control devices throughout the state. Infrastructure improvement costs related to climate change adaptation are estimated in the tens of billions of dollars.



Source: Google Maps 2014

Regional



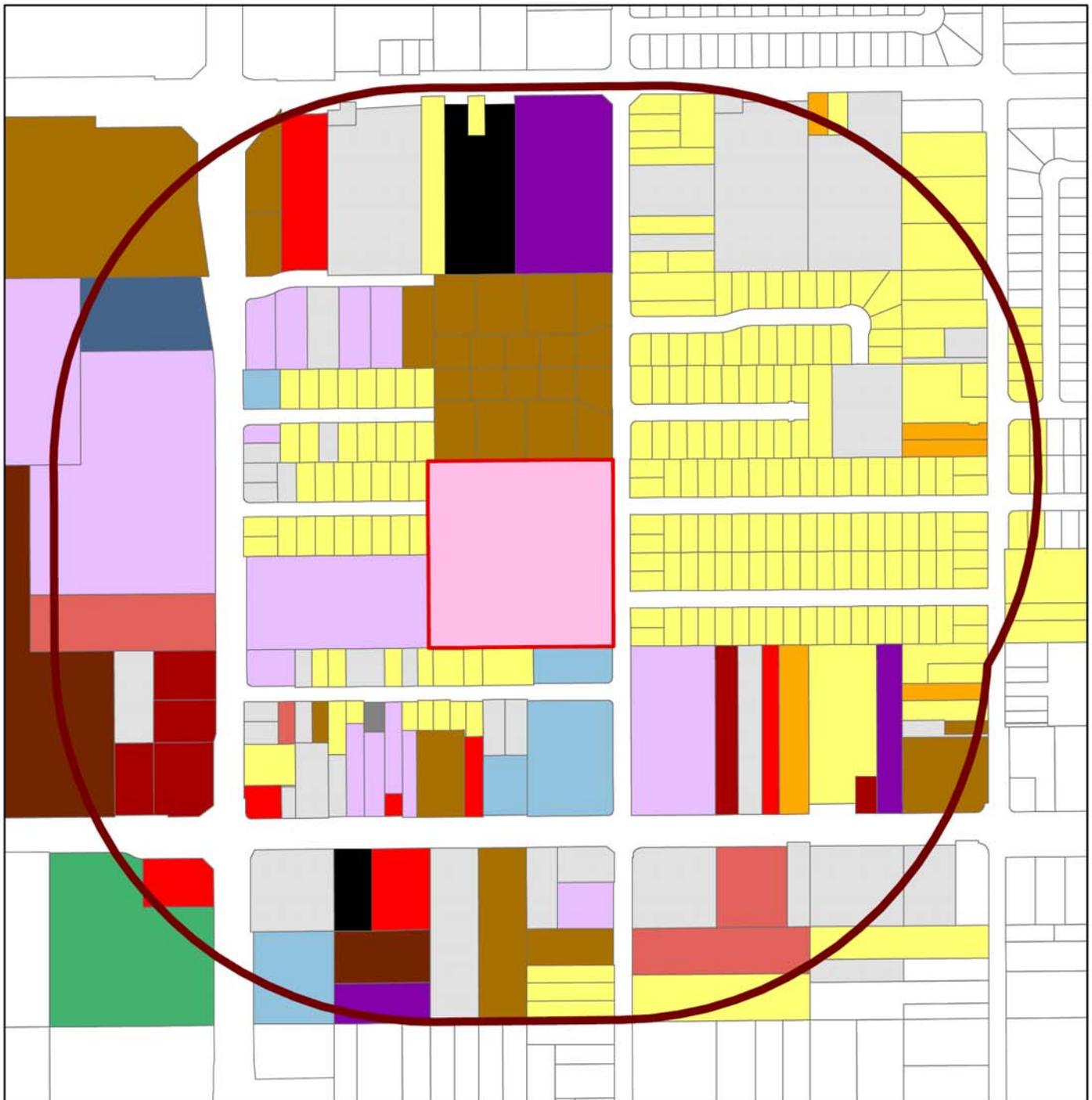
Source: Google Maps 2014

Vicinity



Not to Scale

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**Legend**

Project Site

0.25 Mile Radius

**Land Use**

Single Family Residential

Multi Family Residential

General Office

Retail

Restaurant

Storage Facility

Warehouse

Industrial

Car Lot

Auto Dealership

Service Station

Service Garage

Miscellaneous Agriculture Building

Parking Lot

Unknown

Vacant

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## 4 Regulatory Framework

The following summarizes Federal, State, and local regulations related to air quality, pollution control, and greenhouse gas emissions.

### 4.1 Clean Air Act

The Federal Clean Air Act (CAA) defines the Environmental Protection Agency's (EPA) responsibilities for protecting and improving the United States air quality and ozone layer.<sup>12</sup> Key components of the CAA include reducing ambient concentrations of air pollutants that cause health and aesthetic problems, reducing emission of toxic air pollutants, and stopping production and use of chemicals that destroy the ozone.

Federal clean air laws require areas with unhealthy levels of ozone, inhalable particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide to develop State Implementation Plans (SIPs); comprehensive documents that identify how an area will attain NAAQS. Deadlines for attainment were established in the 1990 amendments to the CAA based on the severity of an area's air pollution problem. Failure to meet air quality deadlines can result in sanctions against the state or the EPA taking over enforcement of the CAA in the affected area. SIPs are a compilation of new and previously submitted plans, programs, district rules, and state and federal regulations. The SCAQMD implements the required provisions of an applicable SIP through its AQMPs and updates. Currently, SCAQMD implements the 8-hr Ozone SIP in the 2007 AQMP and the PM<sub>10</sub> SIP in the 2003 AQMP. The PM<sub>2.5</sub> SIP is currently being revised by SCAQMD in response to partial disapproval by the EPA. The 2012 Lead SIP for the Los Angeles County portion of the SCAB was adopted by the SCAQMD Board on May 4, 2012 and approved by ARB on May 24, 2012 and forwarded to the EPA for approval as a revision to the California SIP.

### 4.2 California Clean Air Act

The California Clean Air Act (CCAA) of 1988 was enacted to develop plans and strategies for attaining California Ambient Air Quality Standards (CAAQS). The California Air Resources Board (ARB), which is part of the California Environmental Protection Agency (Cal-EPA), develops statewide air quality regulations, including industry-specific limits on criteria, toxic, and nuisance pollutants. The CCAA is more stringent than Federal law in a number of ways including revised standards for PM<sub>10</sub> and ozone and State for visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride.

### 4.3 Toxic Hotspots

State requirements specifically address air toxics issues through Assembly Bill (AB) 1807 (known as the Tanner Bill) that established the State air toxics program and the Air Toxics Hot Spots Information and Assessment Act (AB 2588). The air quality regulations developed from these bills have been modified recently to incorporate the Federal regulations associated with the Federal Clean Air Act Amendments of 1990. The Air Toxics Hot Spots Information and Assessment Act (Hot Spots Act) was enacted in September 1987. Under this bill, stationary sources of emissions are required to report the types and quantities of certain substances that their facilities routinely release into the air.

The SCAQMD is required to prepare an annual report on the status and forecast of air toxic *hotspots* pursuant to Section 44363 of the California Health and Safety Code. SCAQMD monitors facilities that are not exempt from the fee and reporting requirements of AB2588.

Some facilities are covered under *umbrella* permits that address industry-wide categories. SCAQMD has issued general permits for the following seven activities:

- Retail gasoline dispensing
- Perchloroethylene dry cleaning
- Auto body shops
- Fiberglass molding
- Printing

- Metal plating
- Wood striping and finishing

Emissions inventories and risk assessment guidelines have been prepared for the seven industry-wide categories. Approximately 1,400 auto body shops, 3,200 gasoline stations, and 1,400 perchloroethylene dry cleaners within the District are covered under these umbrella permits.

Depending on the severity of the facilities' TAC releases, SCAQMD requires either public notification of toxic hot spots or preparation of a risk reduction plan, as follows:

Action Risk Level	Cancer Risk (per million)	Acute Risk	Chronic Risk
Public Notification Level	>= 25	>= 3.0	>= 3.0
Exempt	>= 10	>= 1.0	>= 1.0
	<1	<0.1	<0.1

#### 4.4 California Code of Regulations

In December 2008, the California Air Resources Board (ARB) approved the *Truck and Bus Regulations* as part of their rulemaking authority and adopted in Title 13 (Motor Vehicles) of the California Code of Regulations (CCR).<sup>13</sup> These regulations are applicable to all diesel-fueled trucks and buses with a gross vehicle weight rating (GVWR) of 14,000 pounds or more (Class 4 or greater) that are privately or federally owned and for privately and publically owned school buses.<sup>14</sup> These regulations are designed to reduce emissions of particulate matter and oxides of nitrogen from existing diesel vehicles operating in California. Compliance scheduling is phased for light and heavy vehicle depending on the age of the vehicle engine. Full compliance across vehicle ratings is set in 2023. Regulations affect the following areas:

- Auxiliary Power Units
- Port and Rail Yard Trucks
- Emissions Control Label Inspection
- Greenhouse Gas Emissions Reductions
- Heavy-Duty Diesel Vehicle Inspection
- Idling Reduction
- Periodic Smoke Inspection
- Public and Utility Agencies
- Public Transit Agencies
- School Bus Fleets
- Solid Waste Collection Vehicles
- Transport Refrigeration Units

Regarding the proposed warehouse, vehicle turnover, idling restrictions, and requirements for installation of diesel particulate filters will reduce particulate matter and oxides of nitrogen from future operations. Starting in 2015, lighter trucks (between 14,000 and 26,000 GVWR) will be required to replace the vehicle and/or engine if the engine manufacture date is from 1995 or earlier. Newer engines will be required to be replaced on a graduated scale until 2023 when all engines will be required to meet model year 2010 emissions or equivalent. Heavier trucks (greater than 26,000 GVWR) have options for meeting the regulation requirements through 2023. Vehicles with engine years earlier than 1994 and 1995 will be required to be replaced in 2015 and 2016, respectively. Engines between 1996 and 2006 have the option to install a particulate filter before being required to replace the engine towards the compliance deadline. Later engines are considered compliant 2023 when they demonstrate 2010 emissions levels or equivalent.

Idling restrictions were established in 2008 and apply to vehicles greater than 10,000 GVWR (Class 3 or greater). These restrictions limit idling to five minutes or less before manual or automatic shutdown must be initiated. Engine models

manufactured in 2008 and beyond are required to be equipped with a non-programmable engine shutdown mechanism that automatically shuts off the engine after five minutes of idling.

#### 4.5 2012 Air Quality Management Plan

The purpose of an Air Quality Management Plan (AQMP) is to bring an air basin into compliance with federal and state air quality standards and is a multi-tiered document that builds on previously adopted AQMPs.<sup>15</sup> The 2003 AQMP was adopted in August 2003 and demonstrated O<sub>3</sub> and PM<sub>10</sub> for the Basin. It also provides the maintenance plans for CO and NO<sub>2</sub>, which the Basin has been in attainment for since 1997 and 1992, respectively. The 2007 AQMP for the Basin was approved by the SCAQMD Board of Directors in June 2007. The 2007 AQMP builds on the 2003 AQMP and is designed to address the federal 8-hour ozone and PM<sub>2.5</sub> air quality standards. The AQMP identifies short- and long-term control measures designed to reduce stationary, area, and mobile source emissions, organized into four primary components:

1. District Stationary and Mobile Source Control Measures
2. Air Resources Board (ARB) State Strategy
3. Supplement to ARB Control Strategy
4. SCAG Regional Transportation Strategy and Control Measures

The 2012 AQMP was adopted by the SCAQMD board on December 7, 2012. The 2012 AQMP incorporated the latest scientific and technological information and planning assumptions, including the 2012 Regional Transportation Plan/Sustainable Communities Strategy and updated emission inventory methodologies for various source categories. The 2012 AQMP includes the new and changing federal requirements, implementation of new technology measures, and the continued development of economically sound, flexible compliance approaches. The SCAQMD is currently in the process of preparing the 2016 AQMP update.

#### 4.6 SCAQMD Rule Book

In order to control air pollution in the Basin, SCAQMD adopts rules that establish permissible air pollutant emissions and governs a variety of businesses, processes, operations, and products to implement the AQMP and the various federal and state air quality requirements. SCAQMD does not adopt rules for mobile sources; those are established by ARB or the United States Environmental Protection Agency (EPA). Rules that will be applicable during construction of the proposed warehouse include Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings). Rule 403 prohibits emissions of fugitive dust from any grading activity, storage pile, or other disturbed surface area if it crosses the project property line or if emissions caused by vehicle movement cause substantial impairment of visibility (defined as exceeding 20 percent opacity in the air). Rule 403 requires the implementation of Best Available Control Measures (BACM) and includes additional provisions for projects disturbing more than five acres and those disturbing more than fifty acres. Rule 1113 establishes maximum concentrations of VOCs in paints and other applications and establishes the thresholds for low-VOC coatings.

#### 4.7 Executive Order S-3-05

Executive Order S-3-05 was issued by California Governor Arnold Schwarzenegger and established targets for the reduction of greenhouse gas emission at the milestone years of 2010, 2020, and 2050. Statewide GHG emissions must be reduced to 1990 levels by year 2020 and by 80 percent beyond that by year 2050. The Order requires the Secretary of the California Environmental Protection Agency (CalEPA) to coordinate with other State departments to identify strategies and reduction programs to meet the identified targets. A Climate Action Team (CAT) was created and is headed by the Secretary of CalEPA who reports on the progress of the reduction strategies. The latest CAT *Biennial Report to the Governor and Legislature* was completed in April 2010.<sup>16</sup> CAT also works in 11 subgroups to support development and implementation of the Scoping Plan (see *California Global Warming Solutions Act* herein).

#### **4.8 California Global Warming Solutions Act**

The California State Legislature adopted the California Global Warming Solutions Act in 2006 (AB32). AB32 establishes the caps on statewide greenhouse gas emissions proclaimed in Executive Order S-3-05 and establishes a regulatory timeline to meet the reduction targets. The timeline is as follows:

January 1, 2009	Adopt Scoping Plan
January 1, 2010	Early action measures take effect
January 1, 2011	Adopt GHG reduction measures
January 1, 2012	Reduction measures take effect
December 31, 2020	Deadline for 2020 reduction target

As part of AB32, CARB had to determine what 1990 GHG emissions levels were and projected a business-as-usual (BAU) estimate for 2020 to determine the amount of GHG emissions that will need to be reduced. BAU is a term used to define emissions levels without considering reductions from future or existing programs or technologies. 1990 emissions are estimated at 427 million metric tons of carbon dioxide equivalent (MMTCO<sub>2</sub>E) while 2020 emissions (after accounting for the economic downturn in 2008 and implementation of Pavley 1 vehicle emissions reductions and the State Renewable Portfolio Standard identified in Air Resources Board Scoping Plan below) are estimated at 507 MMTCO<sub>2</sub>E; therefore, California GHG emissions must be reduced 80 MMTCO<sub>2</sub>E (507 – 427 = 80) by 2020, a reduction of approximately 16 percent below BAU. Emissions are required to be reduced an additional 80 percent below 1990 levels by 2050.

The California Air Resources Board (ARB) is responsible for implementation of AB32. Nine discrete early action measures and 35 additional measures were adopted in October 2007 and are now enforceable. The discrete early actions include a low carbon fuel standard, landfill methane capture regulations, reductions in HFCs from mobile air conditioning systems, fluorinated gas emissions from semiconductor manufacturing, sulfur hexafluoride from some industrial processes, high GWP gases in consumer products, and emissions from diesel auxiliary engines on ships at California Ports, improved fuel efficiency in heavy-duty diesel vehicles, and new tire pressure regulations. The early action programs form part of California's comprehensive strategy for achieving the GHG reduction targets.

#### **4.9 Sustainable Communities and Climate Protection Act**

In January 2009, California Senate Bill (SB) 375 went into effect known as the Sustainable Communities and Climate Protection Act.<sup>17</sup> The objective of SB375 is to better integrate regional planning of transportation, land use, and housing to reduce sprawl and ultimately reduce greenhouse gas emissions and other air pollutants. SB375 tasks ARB to set greenhouse gas reduction targets for each of California's 18 regional Metropolitan Planning Organizations (MPOs). Each MPO is required to prepare a Sustainable Communities Strategy (SCS) as part of their Regional Transportation Plan (RTP). The SCS is a growth strategy in combination with transportation policies that will show how the MPO will meet its GHG reduction target. If the SCS cannot meet the reduction goal, an Alternative Planning Strategy (APS) may be adopted that meets the goal through alternative development, infrastructure, and transportation measures or policies.

In the Southern California Association of Governments (SCAG) region (in which the project is located), sub-regions can also elect to prepare their own SCS or APS. In August 2010, ARB released the proposed GHG reduction targets for the MPOs to be adopted in September 2010. The proposed reduction targets for the SCAG region were 8-percent by year 2020 and 13-percent by year 2035. The 8-percent year 2020 target was adopted in September 2010 and tentatively adopted the year 2035 until February 2011 to provide additional time for SCAG, ARB, and other stakeholders to account for additional resources (such as state transportation funds) needed to achieve the proposed targets. In February 2011, the SCAG President affirmed

the year 2035 reduction target and SCAG Staff updated ARB on additional funding opportunities. The status of funding was requested to be revisited again in year 2014.

#### ***4.10 Air Resources Board Scoping Plan***

The ARB Scoping Plan is the comprehensive plan to reach the GHG reduction targets stipulated in AB32. The key elements of the plan are to expand and strengthen energy efficiency programs, achieve a statewide renewable energy mix of 33 percent, develop a cap-and-trade program with other partners in the Western Climate Initiative (includes seven states in the United States and four territories in Canada), establish transportation-related targets, and establish fees.<sup>18</sup> The Scoping Plan measures are identified in Table 6 (Scoping Plan Measures). Note that the current early discrete actions are incorporated into these measures. ARB estimates that implementation of these measures will reduce GHG emissions in the state by 174 MMTCO<sub>2</sub>E by 2020; therefore, implementation of the Scoping Plan will meet the 2020 reduction target. In a report prepared on September 23, 2010, ARB indicates that 40 percent of the reduction measures identified in the Scoping Plan have been secured.<sup>19</sup> The cap-and-trade program began on January 1, 2012 after ARB completes a series of activities that deal with the registration process, compliance cycle, and tracking system; however, covered entities will not have an emissions obligation until 2013.<sup>20</sup> ARB is currently working on the low carbon fuel standard where public hearings and workshops are currently being conducted. In August 2011, the Scoping Plan was reapproved by the ARB Board with the program's environmental documentation.

The ARB has prepared the First Update to the Scoping Plan (Update) with a draft made available for public review on February 10, 2014. The Update to the Scoping Plan builds upon the 2008 Scoping Plan with new strategies and recommendations. The Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The Update defines ARB's climate change priorities for the next five years and sets the groundwork to reach post-2020 goals set forth in Executive Orders S-3-05 and B-16-2012. The Update highlights California's progress toward meeting the 2020 GHG emission reduction goals defined in the 2008 Scoping Plan. It also evaluates how to align the State's long-term GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use. A draft Environmental Analysis (EA) was released for a 45-day public review period on March 14, 2014. After considering public comments and Board direction, the final First Update, summary of comments received on the draft EA, and ARB's responses to those comments were released on May 15, 2014. The First Update to the Scoping Plan was approved by the Board on May 22, 2014.

#### ***4.11 California Green Building Standards***

New California Green Building Standards Code (CALGREEN) went into effect on January 1, 2011.<sup>21</sup> The purpose of the new addition to the California Building Code (CBC) is to improve public health, safety, and general welfare by enhancing the design and construction of buildings using concepts to reduce negative impacts or produce positive impacts on the environment. The CALGREEN regulations cover planning and design, energy efficiency, water efficiency and conservation, material conservation and resources efficiency, and environmental quality. Many of the new regulations have the effect of reducing greenhouse gas emissions from the operation of new buildings. Table 7 (CALGREEN Requirements) summarizes the previous requirements of the CBC and the new requirements of CALGREEN that went into effect in January 2011. Minor technical revisions and additional requirements went into effect in July 2012. The Code was further updated in 2013, effective January 1, 2014 through 2016.

Table 6  
Scoping Plan Measures

Measure	Description
T-1	Pavely I and II Greenhouse Gas Standards
T-2	Low Carbon Fuel Standard
T-3	Regional Transportation-Related Greenhouse Gas Targets
T-4	Vehicle Efficiency Measures
T-5	Ship Electrification at Ports
T-6	Good Movement Efficiency Measures
T-7	Heavy-Duty Vehicle Aerodynamic Efficiency
T-8	Medium and Heavy-Duty Vehicle Hybridization
T-9	High Speed Rail
E-1	Energy Efficiency (Electricity Demand Reduction)
E-2	Increase Combined Heat and Power Use
E-3	Renewable Portfolio Standard
E-4	Million Solar Roofs
CR-1	Energy Efficiency (Natural Gas Demand Reduction)
CR-2	Solar Water Heating
GB-1	Green Buildings
W-1	Water Use Efficiency
W-2	Water Recycling
W-3	Water System Energy Efficiency
W-4	Reuse Urban Runoff
W-5	Increase Renewable Energy Production
W-6	Public Good Charge (Water)
I-1	Energy Efficiency for Large Industrial Sources
I-2	Oil and Gas Extraction GHG Reductions
I-3	Oil and Gas Transmission Leak Reductions
I-4	Refinery Flare Recovery Process Improvements
I-5	Removal of Methane Exemption from Existing Refinery Regulations
RW-1	Landfill Methane Control
RW-2	Increase Landfill Methane Capture Efficiency
RW-3	Recycling and Zero Waste
F-1	Sustainable Forest Target
H-1	Motor Vehicle Air Conditioning
H-2	Non-Utilities and Non-Semiconductor SF <sub>6</sub> Limits
H-3	Semiconductor Manufacturing PFC Reductions
H-4	Consumer Products High GWP Limits
H-5	High GWP Mobile Source Reductions
H-6	High GWP Stationary Source Reductions
H-7	High GWP Mitigation Fees
A-1	Large Dairy Methane Capture

**Table 7  
CALGREEN Requirements**

Item		Requirements	
		Previous	CALGREEN
4.1	Stormwater Management	Stormwater management required on projects > than one acre	All projects subject to stormwater management.
	Surface Drainage	Surface water must flow away from building	Drainage patterns must be analyzed
4.2	Energy Efficiency	California Energy Code	Minimum energy efficiency to be established by California Energy Commissions
4.3	Indoor Water Use	HCD maximum flush rates; CEC water use standards for appliances and fixtures	Indoor water use must decrease by at least 20 percent (prescriptive or performance based)
	Multiple Showerheads	Not covered	Multiple showerheads can not exceed combined flow of the code
	Irrigation Controllers	Not covered	Irrigation controllers must be weather or soil moisture based controllers
4.4	Joint Protection	Plumbing and Mechanical Codes	All openings must be sealed with materials that rodents cannot penetrate
	Construction Waste	Local Ordinances	Establishes minimum 50 percent recycling and waste management plan
	Operation	Plumbing Code for gray water systems	Educational materials and manuals must be provided to building occupants and owners to ensure proper equipment operation
4.5	Fireplaces	Local Ordinances	Gas fireplaces must be direct-vent sealed-combustion type; Wood stoves and pellet stoves must meet USEPA Phase II emissions limits
	Mechanical Equipment	Not covered	All ventilation equipment must be sealed from contamination during construction
	VOCs	Local Ordinances	Establishes statewide limits on VOC emissions from adhesives, paints, sealants, and other coatings
	Capillary Break	No prescriptive method of compliance	Establishes minimum requirements for vapor barriers in slab on grade foundations
	Moisture Content	Current mill moisture levels for wall and floor beams is 15-20 percent	Moisture content must be verified prior to enclosure of wall or floor beams
	Whole House Fans	Not covered	Requires insulated louvers and closing mechanism when fan is off
	Bath Exhaust Fans	Not covered	Requires Energy Star compliance and humidistat control
7	HVAC Design	Minimal requirements for heat loss, heat gain, and duct systems	Entire system must be designed in respects to the local climate
	Installer Qualifications	HVAC installers need not be trained	HVAC installers must be trained or certified
	Inspectors	Training only required for structural materials	All inspectors must be trained

Source: HCD 2010

### 4.12 San Bernardino County GHG Reduction Plan

In December 2011, San Bernardino County adopted its *Greenhouse Gas Emissions Reduction Plan*.<sup>22</sup> The plan is based on the premise the County is capable of reducing GHG emissions and should coordinate reduction efforts with state strategies in an efficient and cost-effective manner. The plan is designed to reduce direct and indirect GHG emissions from the County by 15 percent below current levels by 2020. For development review, the plan establishes a preliminary screening threshold of 3,000 metric tons of carbon dioxide equivalent per year (MTCO<sub>2</sub>E) to determine if a project is subject to further climate change review.

### 4.13 Water Conservation in Landscaping Act

Section 65591 of the Government Code requires all local jurisdictions to adopt a water efficient landscape ordinance. The ordinance is to address water conservation through appropriate use and grouping of plants based on environmental conditions, water budgeting to maximize irrigation efficiency, storm water retention, and automatic irrigation systems. Failure to adopt a water efficiency ordinance requires a local jurisdiction to enforce the provisions of the State's model water efficiency ordinance. In 2009, the Department of Water Resources (DWR) updated the Model Water Efficient Landscape Ordinance

pursuant to amendments to the 1991 Act. These amendments and the new model ordinance went into effect on January 1, 2010. The amended Act is applicable to any new commercial, multi-family, industrial or tract home project containing 2,500 square feet (SF) or more of landscaping. Individual landscape projects of 5,000 SF or more on single-family properties will also be subject to the Act. All landscape plans are required to include calculations verifying conformance with the maximum applied water allowance and must be prepared and stamped by a licensed landscape architect.

## 5 Project Description

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The proposed project includes the demolition of the existing on-site structures and the development of a 215,000-square foot warehouse building located at 9988 Redwood Avenue, San Bernardino County, California. The project site has a gross site area of 9.89 acres. The project site will be bounded by an eight-foot concrete screening wall along the northern, western, and southern boundaries. The project includes 160 parking stalls, 27 trailer docks, 31 trailer parking spaces, and 70,450 square feet of landscaping.

The project is located on Redwood Avenue, north of Hunter Street and south of San Bernardino Avenue in unincorporated San Bernardino County (near Fontana). As defined by San Bernardino County, warehouse facilities are used primarily for the storage and/or consolidation of manufactured goods prior to their distribution to retail locations or other warehouses. These facilities are commonly constructed utilizing a concrete tilt-up technique, with a typical ceiling height of at least 24 feet. High-cube warehouse/distribution centers are generally greater than 100,000 SF in size with a land coverage ratio of approximately 50 percent and a dock-high loading ratio of approximately 1:5,000-10,000 SF.

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## 6 Air Quality Impact Analysis

The impact analysis contained herein was prepared utilizing guidance provided in the 1993 SCAQMD California Environmental Quality Act (CEQA) Air Quality Handbook. The thresholds identified in Appendix G of the State CEQA Guidelines, as implemented by the County of San Bernardino, have been utilized to determine the significance of potential impacts.

### 6.1 Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines and the local implementation procedures of San Bernardino County, the project could result in potentially significant impacts related to air quality if it:

- A. Conflicts with or obstructs implementation of the applicable air quality plan.
- B. Violates any air quality standard or contributes substantially to an existing or projected air quality violation.
- C. Results in a cumulatively considerable net increase of any criteria pollutant that the region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors).
- D. Exposes sensitive receptors to substantial pollutant concentrations.
- E. Create objectionable odors affecting a substantial number of people.

To determine if maximum daily criteria pollutant emissions from construction and operation of the proposed warehouse are significant, the SCAQMD significance thresholds are used. These thresholds are identified in Table 8 (SCAQMD Maximum Daily Emissions Thresholds (lbs/day)).

Table 8  
SCAQMD Maximum Daily Emissions Thresholds (lbs/days)

Pollutant	Construction	Operation
NO <sub>x</sub>	100	55
VOC/ROG	75	55
PM <sup>10</sup>	150	150
PM <sup>2.5</sup>	55	55
SO <sub>x</sub>	150	150
CO	550	550
Lead	3	3
Source: SCAQMD 2013		

### 6.2 AQMP Consistency

A significant impact could occur if the proposed project conflicts with or obstructs the implementation of South Coast Air Basin 2012 Air Quality Management Plan. Conflicts and obstructions that hinder implementation of the AQMP can delay efforts to meet attainment deadlines for criteria pollutants and maintaining existing compliance with applicable air quality standards. Pursuant to the methodology provided in Chapter 12 of the 1993 SCAQMD CEQA Air Quality Handbook, consistency with the South Coast Air Basin 2012 Air Quality Management Plan (AQMP) is affirmed when a project (1) does not increase the frequency or severity of an air quality standards violation or cause a new violation and (2) is consistent with the growth assumptions in the AQMP.<sup>23</sup> Consistency review is presented below:

1. The project would result in short-term construction and long-term pollutant emissions that are less than the CEQA significance emissions thresholds established by the SCAQMD, with mitigation incorporated, as demonstrated in Section 6.3 et seq of this report; therefore, the project could not result in an increase in the frequency or severity of any air quality standards violation and will not cause a new air quality standard violation.

2. The CEQA Air Quality Handbook indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and *significant projects*. *Significant projects* include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and off-shore drilling facilities; therefore, the proposed project is not defined as *significant*. This project does not include a General Plan Amendment and therefore does not require consistency analysis with the AQMP.

Based on the consistency analysis presented above, the proposed project will not conflict with the AQMP.

## 6.3 Pollutant Emissions

### 6.3.1 Building Construction

Short-term criteria pollutant emissions will occur during site grading, building construction, paving, and architectural coating activities. Emissions will occur from use of equipment, worker, vendor, and hauling trips, and disturbance of onsite soils (fugitive dust). To determine if construction of the proposed warehouse could result in a significant air quality impact, the California Emissions Estimator Model (CalEEMod) has been utilized. The methodology for calculating emissions is included in the CalEEMod *User Guide*, freely available at <http://www.caleemod.com/>. The construction schedule and equipment list was based on CalEEMod defaults. It is estimated that the building will take approximately 15 months to complete. All existing on-site structures, approximately 278,784 square feet, will be demolished along with approximately 972 tons of parking asphalt. The project site is relatively flat and will not require the import or export of soils. Based on the results of the model, maximum daily emissions from the construction of the warehouse will result in excessive emissions of volatile organic chemicals (identified as reactive organic gases) associated with interior and exterior coating activities. Using the default assumption of 250 grams per liter (g/l) VOC content for interior and exterior coatings, daily VOC emissions would reach 356.01 lbs/day during summer and winter.

To compensate for excessive VOC emissions from coating activities, the model includes use of a minimum zero g/l VOC content for interior coatings and 125 g/l VOC content for exterior surfaces. Use of low-VOC coatings during construction activities will reduce VOC emissions to 44.91 lbs/day in summer and winter, less than the threshold established by SCAQMD. The requirement for use of low-VOC coatings has been included as Mitigation Measure AQ1 in Section 8 of this report. The results of the CalEEMod outputs with mitigation incorporated are summarized in Table 9 (Maximum Daily Construction Emissions).

Table 9  
Maximum Daily Construction Emissions (lbs/day)

Source	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<i>Summer</i>						
2016	6.54	80.83	60.68	0.14	32.66	7.44
2017	44.91	32.88	35.47	0.07	4.37	2.43
<i>Winter</i>						
2016	6.66	82.11	64.20	0.14	32.66	7.44
2017	44.91	33.10	36.01	0.07	4.37	2.44
Threshold	75	100	550	150	150	55
Substantial?	No	No	No	No	No	No

### 6.3.2 Operational Sources

Long-term criteria air pollutant emissions will result from the operation of the proposed warehouse. Long-term emissions are categorized as area source emissions, energy demand emissions, and operational emissions. Operational emissions will result from automobile, truck, and other vehicle sources associated with daily trips to and from the warehouse. The California Emissions Estimator Model (CalEEMod) was utilized to estimate mobile source emissions. Trip generation (1.68 daily trips per 1,000 SF) is based on the project traffic study prepared by Kunzman Associates.<sup>24</sup> The fleet mix was adjusted to reflect

the traffic study fleet mix.<sup>25</sup> The heavy duty fleet mix is comprised of 12.33 percent heavy-heavy-duty (HHD), 4.64 percent medium-heavy-duty (MHD), and 3.46 percent light-heavy-duty (LHD1). The remaining 79.57 percent of the fleet mix is allocated to passenger vehicles (LDA). Assuming an opening year of 2018 with the building occupied and operational, the total results of the CalEEMod model for summer and winter conditions are summarized in Table 10 (Operational Daily Emissions).

Area source emissions are the combination of many small emissions sources that include use of outdoor landscape maintenance equipment, use of consumer products such as cleaning products, and periodic repainting of the proposed warehouse. Energy demand emissions result from use of electricity and natural gas. Emissions from area and energy sources were estimated using CalEEMod defaults (note that the emissions factor for consumer products was adjusted to account for an error that includes parking lot square footage in the emissions calculations). Area and energy source emissions are included in Table 10. Based on the results of the model, maximum daily operational emissions associated with the proposed warehouse will not exceed any threshold established by SCAQMD. No mitigation is required.

Table 10  
Operational Daily Emissions (lbs/day)

Source	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sup>10</sup>	PM <sup>2.5</sup>
Summer	12.52	20.36	25.51	0.09	4.92	1.56
Winter	12.60	21.10	27.46	0.09	4.93	1.57
Threshold	55	55	550	150	150	55
Substantial?	No	No	No	No	No	No

## 6.4 Localized Emissions

### 6.4.1 Toxic Air Contaminants

Distribution warehouses result in the generation of heavy diesel truck traffic and have been linked with high emissions of diesel particulate matter (DPM), established as an air toxic contaminant by ARB in 1998. DPM was identified as a toxic because of its potential to cause cancer, premature deaths, and other health problems. Health hazards associated with DPM are especially hazardous for children because their lungs are still developing, and the elderly who may have other serious health problems. As identified in Exhibit 2, there are sensitive land uses within one-quarter mile of the project site.

Cancer risk and non-cancer health risks from construction activities were analyzed using the EPA SCREEN3 model and guidance provided by SCAQMD.<sup>26</sup> SCREEN3 is a single source Gaussian plume model that provides maximum ground-level concentrations for point, area, flare, and volume sources. SCREEN3 outputs are attached as Appendix B. The emissions factors for idling trucks and on-site truck movement were modeled using EMFAC2014. EMFAC2014 was developed by ARB to calculate emissions inventories for mobile vehicles operating in California based on raw vehicle data. EMFAC2014 outputs are included in Appendix C.

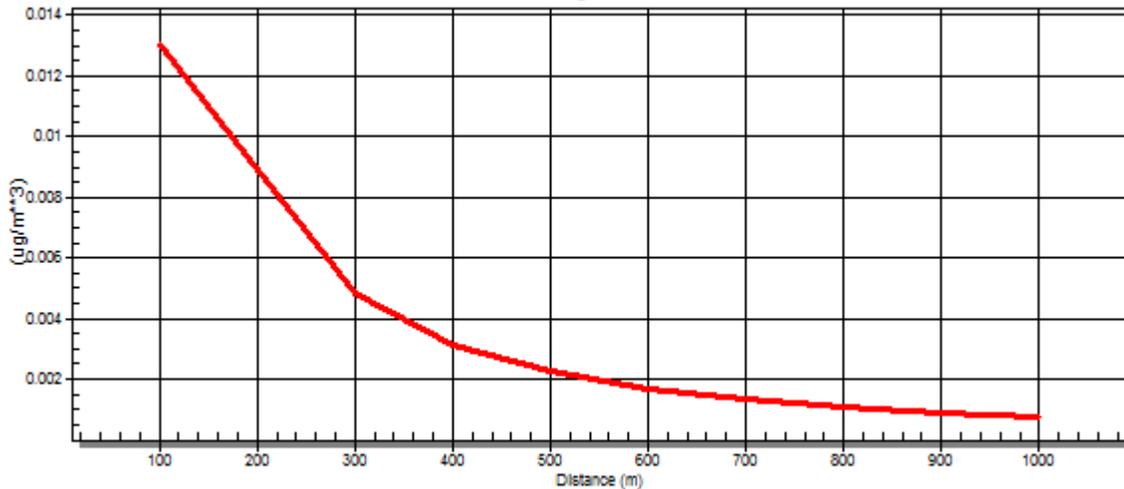
Idling and running emissions (10 miles per hour) were modeled for average hourly truck traffic consisting of one light-heavy duty trucks (LHD1), one medium-heavy duty trucks (T6), and one heavy-heavy duty trucks (T7). With a project site size of 40,000 square meters (m<sup>2</sup>), the maximum idling and running emissions factor from the proposed building is 3.139E-09 grams per second per square meter (g/sec/m<sup>2</sup>). Truck movement was estimated at 0.12 miles per truck reflecting the length of the longest side of the project site. These emissions factors were input into SCREEN3 to estimate DPM concentrations in a 1,000-meter grid around the project site at 100-meter transects. The analysis also included a discrete measurement at 20 meters at 90 degrees wind direction to determine exposure to single-family residential units to the east of the project site. Meteorological data was input for neutral stability class and a wind speed of 3 meters per second. The model was set for simple and flat terrain. Wind direction was set relative to the larger side of the building. SCREEN3 indicates that the *worst-case* maximum concentration will occur 148 meters from the northeast (45 degrees wind direction) of the project site at 1.395E-02 µg/m<sup>3</sup>. The maximum DPM concentration at the residences located east of the project site is estimated at 9.353E-03 µg/m<sup>3</sup>. The discrete and maximum grid receptor concentrations around the proposed warehouse are summarized in Table

11 (Maximum Diesel Particulate Concentrations). Figure 2 (Automated Distance vs. DPM Concentration) graphically summarizes the DPM concentrations along the dispersion path. Plume height was set at 4.3 meters to reflect truck exhaust height and receptor height was set at 2 meters to reflect the average breathing area of a person.

Table 11  
Maximum Diesel Particulate Concentrations ( $\mu\text{g}/\text{m}^3$ )

Distance (m)	Concentration	Direction (deg)
20	9.353E-03	90
148	1.395E-02	45

Figure 2  
Automated Distance vs. DPM Concentration



Hand calculations for determining cancer and non-cancer risk are attached in Appendix C. Cancer risk assessment assumes a lifetime exposure of 70 years (LEA 1.0) because the nearby residences are sensitive receptors. The incremental increase of cancer risk at nearby residences is two persons in one million. The incremental increase of cancer risk at the maximum concentration 148 meters from the southeast corner of the project site is four persons in one million. These incremental increases are less than the threshold of 10 in one million ( $10.000\text{E}-06$ ) established by SCAQMD. The non-cancer hazard index is 0.002 at the nearby residences and 0.003 at 148 meters from the southeast corner of the project site. These hazard index values are less than the threshold of 1.0 established by SCAQMD. The results of the cancer and non-cancer risk assessments are summarized in Table 12 (Cancer and Non-Cancer Risk).

Table 12  
Cancer and Non-Cancer Risk

Distance (m)	Cancer Risk	Non-Cancer Risk
20	2.806E-06	0.002
148	4.185E-06	0.003
Threshold	10.000E-06	1.000
Substantial?	No	No

### 6.4.2 Carbon Monoxide Hotspots

A carbon monoxide (CO) hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. CO hotspots have the potential to violate state and federal CO standards at intersections, even if the broader Basin is in attainment for federal and state levels. In general, SCAQMD and the California

Department of Transportation *Project-Level Carbon Monoxide Protocol* (CO Protocol) recommend analysis of CO hotspots when a project increases traffic volumes at an intersection by more than two percent that is operating at LOS D or worse.<sup>27 28</sup> According to Section 3.1.3 of the Protocol, the project is not regionally significant and therefore is only required to examine local impacts. Regionally significant projects are defined in 40 CFR Section 93.101 and through extension in 40 CFR Section 93.105(c)(1)(ii), as follows:

*Regionally significant project means a transportation project (other than an exempt project) that is on a facility which serves regional transportation needs (such as access to and from the area outside of the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc., or transportation terminals as well as most terminals themselves) and would normally be included in the modeling of a metropolitan area's transportation network, including at a minimum all principal arterial highways and all fixed guideway transit facilities that offer an alternative to regional highway travel.*

Localized impacts are analyzed in Protocol Section 4. The local analysis procedures in Section 4.7.1 indicate that the project has the potential to worsen air quality (as defined for Protocol purposes only) because it will result in an increase in the number of vehicles operating in *cold start* mode by more than two percent. *Cold Start* mode refers to a vehicle started after an hour or more being turned off. The project will also result in an average daily trip (ADT) increase of 287 ADT and will likely result in some decrease in average speeds due to the increased traffic at the project site ingress and egress. The local analysis procedures then direct to Protocol Sections 4.7.3 and 4.7.4. These sections indicate that if the project involves signalized intersections performing at Level of Service (LOS) E or worse, then the project will be subject to a screening analysis to determine if a detailed analysis will be required. Section 4.4 references Appendix A of the Protocol for screening purposes; however, because of the age of the assumptions used in the screening procedures, they are no longer accepted. The Sacramento Metropolitan Air Quality Management District (SAQMD) developed a screening threshold that states that any project involving an intersection experiencing 31,600 vehicles per hour or more will require detailed analysis.<sup>29</sup> The project will not involve an intersection experiencing this level of traffic; therefore, the project passes the screening analysis and impacts are deemed acceptable. Based on the local analysis procedures, the project is satisfactory pursuant to the Protocol and will not result in a CO hotspot.

## 6.5 Odors

According to the CEQA Air Quality Handbook, land uses associated with odor complaints include agricultural operations, wastewater treatment plants, landfills, and certain industrial operations (such as manufacturing uses that produce chemicals, paper, etc.). The current use on the project site includes agricultural use, a nursery. The proposed warehouse is sited within an area that consists of residential, industrial, and warehouse use. The proposed warehouse is not considered a sensitive receptor and therefore would not be substantially affected by potential odors from existing industrial uses operations. The proposed warehouse, in turn, does not produce odors that would affect a substantial number of people considering that the proposed warehouse will not result in heavy manufacturing activities.

## 6.6 Localized Significance Thresholds

As part of SCAQMD's environmental justice program, attention has recently been focusing more on the localized effects of air quality. Although the region may be in attainment for a particular criteria pollutant, localized emissions from construction activities coupled with ambient pollutant levels can cause localized increases in criteria pollutant that exceed national and/or State air quality standards.

Construction-related criteria pollutant emissions and potentially significant localized impacts were evaluated pursuant to the SCAQMD Final Localized Significance Thresholds Methodology. This methodology provides screening tables for one through five acre project scenarios, depending on the amount of site disturbance during a day. As the project site consists of more than five acres, the SCREEN3 modeling software was utilized to calculate localized pollutant concentrations for construction activity. SCREEN3 uses dispersion screening techniques to estimate impacts of point, area, and volume stationary sources. For purposes of this analysis, receptors were located at residential uses to the north and east of the proposed project.

Localized NO<sub>x</sub> and CO emissions are combined with background concentrations to determine if the construction of the proposed project would cause NO<sub>x</sub> or CO to exceed established thresholds. Per SCAQMD methodology, incremental PM<sub>10</sub> and PM<sub>2.5</sub> impacts from construction are derived based on the change in concentration threshold of 10.4 μ/m<sup>3</sup> as nearly the entire district exceeds PM<sub>10</sub> and PM<sub>2.5</sub> standards.

Applicable localized thresholds are as follows:

- State 8-hour CO standard of 20.0 ppm
- State 1-hour NO<sub>2</sub> standard of 0.18 ppm
- SCAQMD 24-hour construction PM<sub>10</sub> LST of 10.4 μ/m<sup>3</sup>
- SCAQMD 24-hour construction PM<sub>2.5</sub> LST of 10.4 μ/m<sup>3</sup>

For construction, an area source encompassing approximately 40,000 square meters was modeled. The urban option of the model was selected, and receptor height was set at 2.0 meters, consistent with SCAQMD methodology. For PM<sub>10</sub> and PM<sub>2.5</sub> a source release height of one meter was utilized consistent with SCAQMD methodology. Additionally, for emissions of NO<sub>x</sub> and CO released during construction activity, a source release height of five meters was utilized to approximate the height of equipment exhausts. Table 13 (Localized Significance) summarizes on-site emissions during construction activities. Emissions for NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> would not exceed localized thresholds. See Appendix B (SCREEN3 Output) for SCREEN3 output data.

**Table 13  
Localized Significance**

	NO <sub>2</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Building Demolition</b>				
Peak Day Localized Emissions	0.00	0.00	6.32	1.34
Background Concentration	0.07	1.70	NA	NA
<i>Total Concentration</i>	<i>0.07</i>	<i>1.70</i>	<i>6.32</i>	<i>1.34</i>
SCAQMD Localized Significance Threshold	0.18	9	10.4	10.4
Threshold Exceeded?	No	No	No	No
<b>Pavement Demolition</b>				
Peak Day Localized Emissions	0.00	0.00	0.93	0.52
Background Concentration	0.07	1.70	NA	NA
<i>Total Concentration</i>	<i>0.07</i>	<i>1.70</i>	<i>0.93</i>	<i>0.52</i>
SCAQMD Localized Significance Threshold	0.18	9	10.4	10.4
Threshold Exceeded?	No	No	No	No
<b>Grading</b>				
Peak Day Localized Emissions	0.00	0.00	1.86	1.15
Background Concentration	0.07	1.70	NA	NA
<i>Total Concentration</i>	<i>0.07</i>	<i>1.70</i>	<i>1.86</i>	<i>1.15</i>
SCAQMD Localized Significance Threshold	0.18	9	10.4	10.4
Threshold Exceeded?	No	No	No	No
<b>Building Construction</b>				
Peak Day Localized Emissions	0.00	0.00	0.42	0.39
Background Concentration	0.07	1.70	NA	NA
<i>Total Concentration</i>	<i>0.07</i>	<i>1.70</i>	<i>0.42</i>	<i>0.39</i>
SCAQMD Localized Significance Threshold	0.18	9	10.4	10.4
Threshold Exceeded?	No	No	No	No
<b>Paving</b>				
Peak Day Localized Emissions	0.00	0.00	0.24	0.22
Background Concentration	0.07	1.70	NA	NA
<i>Total Concentration</i>	<i>0.07</i>	<i>1.70</i>	<i>0.24</i>	<i>0.22</i>
SCAQMD Localized Significance Threshold	0.18	9	10.4	10.4
Threshold Exceeded?	No	No	No	No
<b>Architectural Coating</b>				
Peak Day Localized Emissions	0.00	0.00	0.04	0.04
Background Concentration	0.07	1.70	NA	NA
<i>Total Concentration</i>	<i>0.07</i>	<i>1.70</i>	<i>0.04</i>	<i>0.04</i>
SCAQMD Localized Significance Threshold	0.18	9	10.4	10.4
Threshold Exceeded?	No	No	No	No
<i>Note: PM10 and PM2.5 concentrations are expressed in µ/m<sup>3</sup>. NO<sub>2</sub> and CO emissions are expressed in ppm.</i>				

## 6.7 Cumulative Impacts

### 6.7.1 Cumulative Construction Impacts

Cumulative short-term, construction-related emissions from the project will not contribute considerably to any potential cumulative air quality impact because short-term project emissions will be less than significant and other concurrent construction projects in the region will be required to implement standard air quality regulations and mitigation pursuant to state CEQA requirements, just as this project has.

### **6.7.2 Cumulative Operational Impacts**

The SCAQMD CEQA Air Quality Handbook identifies methodologies for analyzing long-term cumulative air quality impacts for criteria pollutants for which the Basin is nonattainment. These methodologies identify three performance standards that can be used to determine if long-term emissions will result in cumulative impacts. Essentially, these methodologies assess growth associated with a land use project and are evaluated for consistency with regional projections. These methodologies are outdated, and are no longer recommended by SCAQMD.

As discussed in Section 6.2 (AQMD Consistency) of this report, the proposed project is consistent with current land use designations and is consistent with the growth assumptions in the AQMP. Therefore, the proposed project will not contribute to any potential cumulative air quality impacts.

### 7.1 *Thresholds of Significance*

The proposed project could result in potentially significant impacts related to greenhouse gas emissions and global climate change if it would:

- A. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- B. Conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of greenhouse gases.

The County of San Bernardino adopted its *Greenhouse Gas Emissions Plan* in December 2011.<sup>30</sup> The purpose of the GHG Plan is to reduce the County's internal and external GHG emissions by 15 percent below current (2011) levels by year 2020. The GHG Plan includes a two-tiered development review procedure to determine if a project could result in a significant impact related greenhouse gas emissions or otherwise comply with the Plan pursuant to Section 15183.5 of the state CEQA Guidelines. The initial screening procedure is to determine if a project will emit 3,000 metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>E) per year or more. Projects that do not exceed this threshold require no further climate change analysis. Projects exceeding this threshold must meet a minimum 31 percent emissions reduction in order to garner a less than significant determination. This can be met by either (1) achieving 100 points from a menu of mitigation options provided in the GHG Plan or (2) quantifying proposed reduction measures. Projects failing to meet the 31 percent reduction threshold would have a potentially significant impact related to climate change and greenhouse gas emissions.

### 7.2 *Greenhouse Gas Emissions Screening*

Currently, the County uses a table to determine if projects pass the initial screening procedure in-lieu of accepting modeled greenhouse gas emissions inventories. Table 14 (County Greenhouse Gas Emissions Screening Table) summarizes the screening thresholds used to implement Tier 1 screening procedures. Because the proposed warehouse is over 53,000 square feet in size, the project fails the initial screening procedures. Furthermore, the County currently does not accept modeled reductions in greenhouse gas emissions to meet the 31 percent Tier 2 threshold; therefore, the *Screening Table for Implementation of GHG Reduction Measures for Commercial Development* included in the Greenhouse Gas Emissions Reduction Plan has been completed and is included as Table 15 below. 106 Project Points will be earned by the project; therefore, the project meets the Tier 2 100 point requirements and will not substantially contribute to global climate change impacts.

**Table 14  
County Greenhouse Gas Emissions Screening Table**

<b>Project Type</b>	<b>Project Size</b>
Single Family Residential	60-80 units
Apartments Condominiums	85-120 units
Retirement Community	100-150 units
General Commercial Office Space	162,000 square feet
Retail Space (No Refrigeration)	160,000 square feet
Supermarket Grocery Space	36,000 square feet
Restaurants (Sit Down)	8,200 square feet
Fast Food Restaurants	5,300 square feet
Gas Station Convenience Store Fast-Foot Restaurant	7,200 square feet
LD Manufacturing and Warehousing	53,000 square feet
Wireless Communications Towers	2,400 kilowatt (3-Phase)
Passive Park (No Athletic Fields)	200 acres
Active Park with Athletic Fields	60 acres
Source: San Bernardino County 2012	

**Table 15**  
**Screening Table for Implementation of GHG Reduction Measures**

<i>Feature</i>	<i>Descriptions</i>	<i>Assigned Point Values</i>	<i>Project Points</i>
<b>Reduction Measure R2E7: Energy Efficiency for Commercial Development</b>			
<b><i>Building Envelope</i></b>			
Insulation	Title 24 standard (required) Modestly Enhanced Insulation (5%>Title 24) Enhanced Insulation (15%>Title 24) Greatly Enhanced Insulation (20%>Title 24)	0 points 4 points 8 points 12 points	8
Windows	Title 24 standard (required) Modestly Enhanced Window Insulation (5%>Title 24) Enhanced Window Insulation (15%>Title 24) Greatly Enhanced Window Insulation (20%>Title 24)	0 points 4 points 8 points 12 points	8
Doors	Title 24 standard (required) Modestly enhanced Insulation (5%>Title 24) Enhanced Insulation (15%>Title 24) Greatly Enhanced Insulation (20%>Title 24)	0 points 4 points 8 points 12 points	4
Air Infiltration	Minimizing leaks in the building envelope is as important as the insulation properties of the building. Insulation does not work effectively if there is excess air leakage.  Title 24 standard (required) Modest Building Envelope Leakage (5%>Title 24) Reduced Building Envelope Leakage (15%>Title 24) Minimum Building Envelope Leakage (20%>Title 24)	0 points 4 points 8 points 12 points	8
Thermal Storage of Building	Thermal storage is a design characteristic that helps keep a constant temperature in the building. Common thermal storage devices include strategically placed water filled columns, water storage tanks, and thick masonry walls.  Thermal storage designed to reduce heating/cooling by 5°F within the building  Thermal storage to reduce heating/cooling by 10 °F within the building  Note: Engineering details must be provided to substantiate the efficiency of the thermal storage device.	6 points   12 points	--
<b><i>Indoor Space Efficiencies</i></b>			
Heating/Cooling Distribution System	Title 24 (required) Modest Distribution Losses (5%>Title 24) Reduced Distribution Losses (15%>Title 24) Greatly Reduced Distribution Losses (15%>Title 24)	0 points 4 points 8 points 12 points	4
Space Heating/Cooling Equipment	Title 24 standard (required) Efficiency HVAC (5%>Title 24) High Efficiency HBAC (15%>Title 24) Very High Efficiency HBAC (20%>Title 24)	0 points 4 points 8 points 12 points	4
<b><i>Building Envelope</i></b>			
Commercial Heat Recovery Systems	Heat recovery strategies employed with commercial laundry, cooking equipment, and other commercial heat sources for reuse in HVAC air intake or other appropriate heat recovery technology. Point values for these types of systems will be determined based upon design and engineering data documenting energy savings.	TBD	--
Water Heaters	Title 24 standard (required) Efficiency Water heater (Energy Star Conventional that is 5%>Title 24) High Efficiency Water Heater (Conventional water heater that is 15%>Title 24) High Efficiency Water Heater (Conventional water heater that is 20%>Title 24) Solar Water Heating System (commercial only-this reduction feature also implements R2E10)	0 points 4 points 8 points 12 points 14 points	8
Daylighting	Daylighting is the ability of each room within the building to provide outside light during the day reducing the need for artificial lighting during daylight hours.		7

<i>Feature</i>	<i>Descriptions</i>	<i>Assigned Point Values</i>	<i>Project Points</i>
	All peripheral rooms within building have at least one window or skylight	1 point	
	All rooms within building have daylight (through use of windows, solar tubes, skylights, etc.) such that each room has at least 800 lumens of light during a sunny day	5 points	
	All rooms daylighted to a least 1,000 lumens.	7 points	
Artificial Lighting	Title 24 standard (required) Efficient Lights (5%>Title 24) High Efficiency Lights (LED, etc. 15%>Title 24) Very High Efficiency Lights (LED, etc. 20%>Title 24)	0 points 4 points 6 points 8 points	8
Appliances	Title 24 standard (required) Efficient Appliances (5%>Title 24) High Efficiency Energy Star Appliances (15%>Title 24) Very High Efficiency Appliances (20%>Title 24)	0 points 4 points 8 points 12 points	8
<b>Miscellaneous Commercial Building Efficiencies</b>			
Building Placement	North/South alignment of building or other placement such that the orientation of the buildings optimizes conditions for natural heating, cooling, and lighting	4 points	--
Other	This allows innovation by the applicant to provide design features that increases the energy efficiency of the project not provided in the table. Note that engineering data will be required documenting the energy efficiency of innovative designs and point values given based upon the proven efficiency beyond Title 24 Energy Efficiency Standards.	TBD	--
Existing Commercial Building Retrofits	The applicant may wish to provide energy efficiency retrofit projects to existing residential dwelling units to further the point value of their project. Retrofitting existing commercial buildings within the unincorporated County is a key reduction measure that is needed to reach the reduction goal. The potential for an applicant to take advantage of this program will be decided on a case by case basis and must have the approval of the San Bernardino County Land Use Services Department. The decision to allow applicants the ability to participate in this program will be evaluated based upon, but not limited to the following:  Will the energy efficiency retrofit project benefit low income or disadvantaged communities?  Does the energy efficiency retrofit project fit within the overall assumptions in Reduction Measure R2E4?  Does the energy efficiency retrofit project provide co-benefits important to the County?  Point value will be determined based upon engineering and design criteria of the energy efficiency retrofit project.	TBD	--
Photovoltaic	Solar Photovoltaic panels installed on commercial buildings or in collective arrangements within a commercial development such that the total power provided augments:  Solar Read Roofs (study roof and electric hookups) 10 percent of the power needs of the project 20 percent of the power needs of the project 30 percent of the power needs of the project 40 percent of the power needs of the project 50 percent of the power needs of the project 60 percent of the power needs of the project 70 percent of the power needs of the project 80 percent of the power needs of the project 90 percent of the power needs of the project 100 percent of the power needs of the project	2 points 7 points 13 points 19 points 25 points 31 points 37 points 43 points 49 points 55 points 60 points	--
Wind turbines	Some areas of the County lend themselves to wind turbine applications. Analysis of the areas capability to support wind turbines should be evaluated prior to choosing		--

Feature	Descriptions	Assigned Point Values	Project Points
	<p>this feature. Wind turbines as part of the commercial development such that the total power provided augments:</p> <p>10 percent of the power needs of the project                      20 percent of the power needs of the project                      30 percent of the power needs of the project                      40 percent of the power needs of the project                      50 percent of the power needs of the project                      60 percent of the power needs of the project                      70 percent of the power needs of the project                      80 percent of the power needs of the project                      90 percent of the power needs of the project                      100 percent of the power needs of the project</p>	<p>7 points                      13 points                      19 points                      25 points                      31 points                      37 points                      43 points                      49 points                      55 points                      60 points</p>	
Off-site renewable energy project	The applicant may submit a proposal to supply an off-site renewable energy project such as renewable energy retrofits of existing residential that will help Implement R2E1, existing commercial/industrial that will help Implement R2E2, or the Warehouse Renewable Energy incentive Program (R2E4). These off-site renewable energy retrofit project proposals will be determined on a case by case basis accompanied by a detailed plan documenting the quantity of renewable energy the proposal will generate. Point values will be based upon the energy generated by the proposal.	TBD	--
Other Renewable Energy Generation	The applicant may have innovative designs or unique site circumstances (such as geothermal) that allow the project to generate electricity from renewable energy not provided in the table. The ability to supply other renewable energy and the point values allowed will be decided based upon engineering data documenting the ability to generate electricity.	TBD	--
<b>Reduction Measures R2E7: Warehouse Renewable Energy Incentive Program</b>			
Warehouse Photovoltaic	<p>This measure is for warehouse projects and involves partnership with Southern California Edison and California Public Utilities Commissions to develop an incentive program for solar installation on new and retrofit existing warehouses. A mandatory minimum solar requirement for new warehouse space. Solar Photovoltaic panels installed on warehouses or in collective arrangements within a logistics/warehouse complex such that the total power provided augments:</p> <p>Solar Ready Roof (sturdy roof and electric hookups)                      10 percent of the power needs of the project                      20 percent of the power needs of the project                      30 percent of the power needs of the project                      40 percent of the power needs of the project                      50 percent of the power needs of the project                      60 percent of the power needs of the project                      70 percent of the power needs of the project                      80 percent of the power needs of the project                      90 percent of the power needs of the project                      100 percent of the power needs of the project</p>	<p>2 points                      4 points                      5 points                      7 points                      9 points                      11 points                      13 points                      15 points                      17 points                      19 points                      21 points</p>	--
<b>Reduction Measure R2WC-1: Per Capita Water Use Reduction Goal</b>			
<b><i>Irrigation and Landscaping</i></b>			
Water Efficient Landscaping	<p>Limit conventional turf to &lt;20% of each lot (required)                      Eliminate conventional turf from landscaping                      Eliminate turf and only provide drought tolerant plants                      Xeroscaping that requires no irrigation</p>	<p>0 points                      3 points                      4 points                      6 points</p>	3
Water Efficient Irrigation Systems	<p>Drip irrigation                      Smart irrigation control systems combined with drip irrigation (demonstrate 20 reduced water use)</p>	<p>1 point                      5 points</p>	5
Recycled Water	Graywater (purple pipe) irrigation system on site	5 points	5
Storm water Reuse systems	Innovative on-site stormwater collection, filtration and reuse systems are being developed that provide supplemental irrigation water and provide vector control. These systems can greatly reduce the irrigation needs of a project. Point values for these types of systems will be determined based upon the design and engineering data documenting the water savings	TBD	--

Feature	Descriptions	Assigned Point Values	Project Points
<b>Potable Water</b>			
Showers	Title 24 standard (required) EPA High Efficiency Showerheads (15%>Title 24)	0 points 3 points	3
Toilets	Title 24 standard (required) EPA High Efficiency Toilets/Urinals (15%>Title 24) Waterless Urinals (note that commercial buildings having both waterless urinals and high efficiency toilets will have a combined point value of 6 points)	0 points 3 points 3 points	3
Faucets	Title 24 standard (required) EPA High Efficiency faucets (15%>Title 24)	0 points 3 points	3
Commercial Dishwashers	Title 24 standard (required) EPA High Efficiency dishwasher (20% water savings)	0 points 4 points	--
Commercial Laundry Washers	Title 24 standard (required) EPA High Efficiency Laundry (15% water savings) EPA High Efficiency laundry equipment that captures and reuses rinse water (30% water savings)	0 points 3 points 6 points	--
Commercial Water Operations Program	Establish an operational program to reduce water loss from pools, water features, etc., by covering pools, adjusting fountain operational hours, and using water treatment to reduce draw down and replacement of water. Point values for these types of plans will be determined based upon design and engineering data documenting the water savings	TBD	--
<b>Reduction Measure R2T1: Anti-Idling Enforcement</b>			
Commercial Vehicle Idling Restrictions	All commercial vehicles are restricted to 5-minutes or less per trip on site and at loading docks (required of all commercial projects)	1 point	1
<b>Reduction Measure R2T2: Employment Based Trip and VMT Reduction Policy</b>			
Compressed Work Week	Reduce the number of days per week that employees need to be on site will reduce the number of vehicle trips associated with commercial/industrial development. Compressed work week such that full time employees are on site:  5 days per week 4 days per week on site 3 days per week on site	0 points 4 points 8 points	--
Car/Vanpools	Car/vanpool program Car/vanpool program with preferred parking Car/vanpool with guaranteed ride home program Subsidized employee incentive car/vanpool program Combination of all the above	1 point 2 points 3 points 5 points 6 points	2
Employee Bicycle/Pedestrian Programs	Complete sidewalk to residential within ½ mile Complete bike path to residential within 3 miles Bike lockers and secure racks Showers and changing facilities Subsidized employee walk/bike program Note combine all applicable points for total value	1 point 1 point 1 point 2 points 3 points	2
Shuttle/Transit Programs	Local transit within ¼ mile Light rail transit within ½ mile Shuttle service to light rail transit station Guaranteed ride home program Subsidized Transit passes Note combine all applicable points for total value	1 point 3 points 5 points 1 point 2 points	1
CRT	Employer based commute trip reduction (CRT). CRTs apply to commercial, offices, or industrial projects that include a reduction of vehicle trip or VMT goal using a variety of employee commutes trip reduction methods. The point value will be determined based upon a TIA that demonstrates the trip/VMT reduction. Suggested point ranges: Incentive based CRT programs (1-8 points) Mandatory CRT programs (5-20 points)	TBD	--
Other Trip Reductions	Other trip or VMT reduction measures not listed above with TIA and/or other traffic data supporting the trip and/or VMT for the project	TBD	--

<i>Feature</i>	<i>Descriptions</i>	<i>Assigned Point Values</i>	<i>Project Points</i>
<b>Reduction Measure R2T4: Signal Synchronization and Intelligent Traffic Systems</b>			
Signal Improvements	Signal Synchronization-1 point per signal Traffic signals connected to ITS	1 point/signal 3 points/signal	--
<b>Reduction Measure R2T5: Renewable Fuel/Low Emissions Vehicle</b>			
Electric Vehicle Recharging	Provide circuit and capacity in garages/parking areas for installation of electric vehicle charging stations. Install electric vehicle charging stations in garages /parking areas	2 points/area  8 points/station	--
<b>Reduction Measure R2T6: Vehicle Trip Reduction Measures</b>			
Mixed Use	Mixes of land uses that complement one another in a way that reduces the need for vehicle trips can greatly reduce GG emissions. The point value of mixed use projects will be determined based upon traffic studies that demonstrate trip reductions and/or reductions in vehicle miles traveled	TBD	--
Local Retail Near Residential (commercial only projects)	Having residential developments within walking and biking distance of local retail helps to reduce vehicle trips and/or vehicle miles traveled.  The point value of residential projects in close proximity to local retail will be determined based upon traffic studies that demonstrate trip reductions and/or reduction in vehicle miles traveled	TBD	--
<b>Reduction Measure R2W5: construction and demolition debris diversion program</b>			
Recycling of Construction/ Debris	Recycle 2% of debris (required) Recycle 5% of debris Recycle 8% of debris Recycle 10% of debris Recycle 12% of debris Recycle 15% of debris Recycle 20% of debris	0 point 1 point 2 points 3 points 4 points 5 points 6 points	6
<b>Reduction Measure R2W6: 75 Percent Solid Waste Diversion Program</b>			
Recycling	County initiated recycling program diverting 75% of waste requires coordination with commercial development to realize this goal. The following recycling features will help the County fulfill this goal:  Provide separated recycling bins within each commercial building/floor and provide large external recycling collection bins at central location for collection truck pick-up  Provide commercial/industrial recycling programs that fulfills an on-site goal of 75% diversion of solid waste	2 points  5 points	5
<b>Total Points Earned by Commercial/Industrial Project:</b>			<b>106</b>

### 7.3 Greenhouse Gas Emissions Reduction Planning

#### 7.3.1 San Bernardino County Greenhouse Gas Emissions Reduction Plan

In December 2011, the County of San Bernardino adopted the "Greenhouse Gas Emissions Reduction Plan". The purpose of the GHG Plan is to reduce the County's internal and external GHG emissions by 15 percent below current (2011) levels by year 2020 in consistency with State climate change goals pursuant to AB32. The specific objectives of the GHG Plan are as follows:

- Reduce emissions from activities over which the County has jurisdictional and operational control consistent with the target reductions of Assembly Bill (AB) 32 Scoping Plan;
- Provide estimated GHG reductions associated with the County's existing sustainability efforts and integrate the County's sustainability efforts into the discrete actions of this Plan;
- Provide a list of discrete actions that will reduce GHG emissions; and approve a GHG Plan that satisfies the requirements of Section 15183.5 of the California Environmental Quality Act (CEQA) Guidelines, so that compliance with the GHG Plan can be used in appropriate situations to determine the significance of a project's effects relating to

GHG emissions, thus providing streamlined CEQA analysis of future projects that are consistent with the approved GHG Plan.

The GHG Plan identifies goals and strategies to obtain the 2020 reduction target. Reduction measures are classified into broad classes based on the source of the reduction measure. Class 1 (R1) reduction measures are those adopted at the state or regional level and require no additional action on behalf of the County other than required implementation. Class 2 (R2) reflect quantified measures that have or will be implemented by the County as a result of the GHG Plan. Class 3 (R3) measures are qualified measures that have or will be implemented by the County as a result of the GHG Plan.

Section 5.6 of the GHG Plan identifies the procedures for reviewing development projects for consistency with the GHG Plan. The GHG Plan has been designed in accordance with Section 15183.5 of the State CEQA Guidelines which provides for streamline review of climate change issues related to development projects when found consistent with an applicable greenhouse gas emissions reduction plan. The GHG Plan includes a two-tiered development review procedure to determine if a project could result in a significant impact related greenhouse gas emissions or otherwise comply with the Plan pursuant to Section 15183.5 of the state CEQA Guidelines. The initial screening procedure is to determine if a project will emit 3,000 metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>E) per year or more. Projects that do not exceed this threshold require no further climate change analysis. Projects exceeding this threshold must meet a minimum 31 percent emissions reduction in order to garner a less than significant determination. This can be met by either (1) achieving 100 points from a menu of mitigation options provided in the GHG Plan or (2) quantifying proposed reduction measures. Projects failing to meet the 31 percent reduction threshold would have a potentially significant impact related to climate change and greenhouse gas emissions.

As analyzed and discussed in Section 7.2, the project will earn 106 Project Points pursuant to the mitigation measures identified in the GHG Plan; therefore, the project is consistent with the GHG Plan pursuant to Section 15183.5 of the State CEQA Guidelines.

### 7.3.2 Green County San Bernardino

In August 2007, the San Bernardino County Board of Supervisors launched four environmental initiatives known as Green County San Bernardino.<sup>31</sup> These initiatives included:

1. Adoption of a County policy that would require that new county buildings and major renovations of existing county facilities comply with U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) Silver standards. LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health – sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality.
2. Establishment of the San Bernardino County Green Builder Program (SBCGB) as a voluntary green building incentive program for residential construction. Under the SBCGB program, builders who agree to satisfy the requirements of the California Green Builder program would receive priority processing for plan review from the County Land Use Services Department, including guaranteed timelines and priority field inspection service. The California Green Builder program has set goals for significant improvements in energy efficiency, indoor air quality and comfort, onsite waste recycling, and water and wood conservation.
3. Waiver of County building permit fees for the installation of solar energy systems, wind-generated electrical systems, tankless water heaters, and highly energy-efficient heating, ventilation and air-conditioning systems for existing buildings. The waiver of fees would promote energy conservation, facilitate a reduction in greenhouse gas emission, and reduce the public's reliance on commercial energy sources.
4. Establishment of a County website, [www.greencountysb.com](http://www.greencountysb.com), to serve as a resource for the public to obtain information on creating and maintaining environmentally friendly buildings, landscapes, and lifestyles. Through this website, the public would have access to the various "green" programs such as the Green Builder Program, the Municipal LEED program, and the New Commercial Construction and Renovation LEED Program. The website

would also contain information pertaining to energy efficient building permits, useful “green” tips, and information on affordable ways to protect the environment.

These initiatives are critically tied with the County’s current efforts to reduce greenhouse gas emissions through a GHG reduction plan and General Plan amendment. The County’s Green County website provides information related to transportation, construction, recycling, and landscaping for the community to learn how to reduce individual and development-related carbon footprints. The proposed warehouse will not result in substantial emissions of greenhouse gases and therefore will not conflict with the Green County initiatives.

#### 7.4 SCAQMD Interim Greenhouse Gas Emissions Threshold

A numerical threshold for determining the significance of greenhouse gas emissions in the South Coast Air Basin (Basin) has not been established by the South Coast Air Quality Management District (SCAQMD). As an interim threshold based on guidance provided in the CAPCOA *CEQA and Climate Change* handbook, a non-zero threshold approach based on Approach 2 of the handbook has been used. Threshold 2.5 (Unit-Based Thresholds Based on Market Capture) establishes a numerical threshold based on capture of approximately 90 percent of emissions from future development. The latest threshold developed by SCAQMD using this method is 10,000 metric tons carbon dioxide equivalent (MTCO<sub>2</sub>E) per year for industrial projects.<sup>32</sup> This threshold is based on the review of 711 CEQA projects.

The proposed project will include activities that emit greenhouse gas emissions over the short- and long-term. While one project could not be said to cause global climate change, individual projects contribute cumulatively to greenhouse gas emissions that result in climate change. Table 16 (Greenhouse Gas Emissions Inventory) summarizes the yearly estimated greenhouse gas emissions from the construction of the project and operational sources. Estimated annual greenhouse gas emissions resulting from the construction and operation of the proposed warehouse is 2,000.76 MTCO<sub>2</sub>E, less than the interim SCAQMD threshold of 10,000 MTCO<sub>2</sub>E.

Table 16  
Greenhouse Gas Emissions Inventory

Source	GHG Emissions (MT/YR)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	TOTAL*
Construction <sup>^</sup>	26.56	0.00	0.00	26.63
Operational	1,875.09	4.09	0.04	1,974.13
Total	1,901.65	4.09	0.04	2,000.76
* MTCO <sub>2</sub> E/YR				
Note: Slight variations may occur due to rounding				
<sup>^</sup> Construction impacts amortized over 30-years				

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### 8.1 Required Mitigation

The following mitigation measures are required to ensure that project-related emissions do not exceed established thresholds and that the project is consistent with the County Greenhouse Gas Emissions Development Review Process.

**AQ1** *Coating Restrictions.* Prior to issuance of building permits, the project proponent shall submit, to the satisfaction of County Planning, a Coating Restriction Plan (CRP), consistent with South Coast Air Quality Management District (SCAQMD) guidelines and a letter agreeing to include in any construction contracts and/or subcontracts a requirement that the contractors adhere to the requirements of the CRP. The CRP measures shall be implemented to the satisfaction of County Building and Safety. These shall include the following:

- The volatile organic compounds (VOC) of proposed architectural coatings shall not exceed zero for interior applications.
- The volatile organic compounds (VOC) of proposed architectural coatings shall not exceed 125 g/l for exterior applications.

This measure shall conform to the performance standard that emissions of volatile organic compounds from application of interior or exterior coatings shall not exceed the daily emissions thresholds established by the South Coast Air Quality Management District. The CRP shall specify use of High-Volume, Low Pressure (HVLP) spray guns for application of coatings.

### 8.2 Regulatory Requirements and Standards

The following lists existing regulatory requirements and standards that are required to be implemented as part of the project. While the following measures are not considered mitigation pursuant to the CEQA, the Lead Agency may choose to include the following as conditions of approval to ensure that they appropriately implemented.

**S1** *Dust Control Plan.* The developer shall submit to the satisfaction of County Planning a Dust Control Plan (DCP) consistent with SCAQMD guidelines and a letter agreeing to include in any construction contracts and/or subcontracts a requirement that the contractors adhere to the requirements of the approved DCP. The DCP shall include activities to reduce on-site and off-site fugitive dust production, including:

- Exposed soil shall be kept moist through a minimum of twice daily watering to reduce fugitive dust, throughout grading and construction activities. During high wind conditions (i.e., wind speeds exceeding 25 mph), areas with disturbed soil will be watered hourly and activities on unpaved surfaces shall be terminated until wind speeds no longer exceed 25 mph. Use reclaimed water if available.
- Vehicle tires will be washed before leaving the project site to enter a paved road.
- Paved site access driveways and adjacent streets will be washed and swept by street sweepers daily, if there are visible signs of any dirt track-out.
- All trucks hauling soil or other loose materials off-site shall be covered.
- On-site hauling shall either be covered or maintain at least 2 feet of "freeboard".
- Storage piles that are to be left in place for more than 3 working days shall either be: 1) re-vegetated, or 2) covered with plastic or 3) sprayed with a non-toxic soil binder until placed in use.

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- 1 Western Regional Climate Center. Period of Record Monthly Climate Summary: Fontana Kaiser, California (043120). <http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca3120> [February 2015]
- 2 South Coast Air Quality Management District. Wind Rose Plot font. March 2009
- 3 South Coast Air Quality Management District. CEQA Air Quality Handbook. 1993
- 4 United States Environmental Protection Agency. Particulate Matter. <http://www.epa.gov/air/particlepollution/index.html> [September 20, 2010]
- 5 South Coast Air Quality Management District. Air Quality. 2011
- 6 South Coast Air Quality Management District. Air Quality. 2012
- 7 South Coast Air Quality Management District. Air Quality. 2013
- 8 United States Environmental Protection Agency. EnviroMapper for Envirofacts. <http://www.epa.gov/emefdata/em4ef.home> [February 2015]
- 9 United States Environmental Protection Agency. Greenhouse Gas Emissions. <http://www.epa.gov/climatechange/ghgemissions/gases.html> [February 2015]
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## Appendix A CalEEMod Outputs

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**9988 Redwood Warehouse  
South Coast Air Basin, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	215.00	1000sqft	4.94	215,000.00	0
Other Non-Asphalt Surfaces	87.89	1000sqft	2.02	87,890.00	0
Parking Lot	131.40	1000sqft	3.02	131,403.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	10	<b>Operational Year</b>	2018		
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	630.89	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use -
- Construction Phase - Input Project Schedule
- Demolition -
- Vehicle Trips - Trip Rate Per ITE & Traffic Study
- Trip % Per SCAQMD Recommendation
- Trip Length NCHRP Analysis
- Vehicle Emission Factors - Fleet Mix Per SCAQMD Recommendation
- Vehicle Emission Factors - Fleet Mix Per SCAQMD Recommendation
- Vehicle Emission Factors - Fleet Mix Per SCAQMD Recommendation
- Water And Wastewater - Outdoor Water Demand Calculated as MAWA
- Architectural Coating - Interior 0 g/L; Exterior 125 g/L

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	125.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	0.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	20.00	10.00
tblLandUse	LandUseSquareFeet	131,400.00	131,403.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblVehicleEF	HHD	0.03	0.23
tblVehicleEF	HHD	0.03	0.23
tblVehicleEF	HHD	0.03	0.23
tblVehicleEF	LDA	0.51	0.62
tblVehicleEF	LDA	0.51	0.62
tblVehicleEF	LDA	0.51	0.62
tblVehicleEF	LDA	0.51	0.62
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00

tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LHD1	0.04	0.06
tblVehicleEF	LHD1	0.04	0.06
tblVehicleEF	LHD1	0.04	0.06
tblVehicleEF	LHD2	6.6470e-003	0.00
tblVehicleEF	LHD2	6.6470e-003	0.00
tblVehicleEF	LHD2	6.6470e-003	0.00
tblVehicleEF	MCY	4.3620e-003	0.00
tblVehicleEF	MCY	4.3620e-003	0.00
tblVehicleEF	MCY	4.3620e-003	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MH	2.1170e-003	0.00
tblVehicleEF	MH	2.1170e-003	0.00
tblVehicleEF	MH	2.1170e-003	0.00
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	OBUS	1.9400e-003	0.00
tblVehicleEF	OBUS	1.9400e-003	0.00
tblVehicleEF	OBUS	1.9400e-003	0.00
tblVehicleEF	SBUS	5.8800e-004	0.00
tblVehicleEF	SBUS	5.8800e-004	0.00
tblVehicleEF	SBUS	5.8800e-004	0.00
tblVehicleEF	UBUS	2.5020e-003	0.00
tblVehicleEF	UBUS	2.5020e-003	0.00
tblVehicleEF	UBUS	2.5020e-003	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	17.41
tblVehicleTrips	CNW_TTP	41.00	38.00
tblVehicleTrips	CW_TTP	59.00	62.00
tblVehicleTrips	ST_TR	2.59	1.68
tblVehicleTrips	SU_TR	2.59	1.68
tblVehicleTrips	WD_TR	2.59	1.68
tblWater	OutdoorWaterUseRate	0.00	1,724,546.00

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	6.5355	80.8281	60.6759	0.1356	29.8188	2.8364	32.6552	4.8043	2.6372	7.4415	0.0000	13,702.2291	13,702.2291	1.1888	0.0000	13,727.1947
2017	44.9097	32.8758	35.4736	0.0680	2.4782	1.8869	4.3651	0.6659	1.7702	2.4362	0.0000	6,246.1269	6,246.1269	0.7629	0.0000	6,262.1473
<b>Total</b>	<b>51.4452</b>	<b>113.7039</b>	<b>96.1495</b>	<b>0.2036</b>	<b>32.2969</b>	<b>4.7233</b>	<b>37.0203</b>	<b>5.4702</b>	<b>4.4074</b>	<b>9.8777</b>	<b>0.0000</b>	<b>19,948.3560</b>	<b>19,948.3560</b>	<b>1.9517</b>	<b>0.0000</b>	<b>19,989.3420</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	6.5355	80.8281	60.6759	0.1356	29.8188	2.8364	32.6552	4.8043	2.6372	7.4415	0.0000	13,702.2291	13,702.2291	1.1888	0.0000	13,727.1947
2017	44.9097	32.8758	35.4736	0.0680	2.4782	1.8869	4.3651	0.6659	1.7702	2.4362	0.0000	6,246.1269	6,246.1269	0.7629	0.0000	6,262.1473
<b>Total</b>	<b>51.4452</b>	<b>113.7039</b>	<b>96.1495</b>	<b>0.2036</b>	<b>32.2969</b>	<b>4.7233</b>	<b>37.0203</b>	<b>5.4702</b>	<b>4.4074</b>	<b>9.8777</b>	<b>0.0000</b>	<b>19,948.3559</b>	<b>19,948.3559</b>	<b>1.9517</b>	<b>0.0000</b>	<b>19,989.3420</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.5515	4.2000e-004	0.0450	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0951	0.0951	2.6000e-004		0.1005
Energy	0.0136	0.1236	0.1038	7.4000e-004	9.3900e-003	9.3900e-003	9.3900e-003	9.3900e-003	9.3900e-003	9.3900e-003		148.2998	148.2998	2.8400e-003	2.7200e-003	149.2023
Mobile	1.9549	20.2383	25.3567	0.0942	4.5675	0.3474	4.9148	1.2354	0.3196	1.5551		8,510.2566	8,510.2566	0.1422		8,513.2429
<b>Total</b>	<b>12.5200</b>	<b>20.3623</b>	<b>25.5055</b>	<b>0.0949</b>	<b>4.5675</b>	<b>0.3569</b>	<b>4.9244</b>	<b>1.2354</b>	<b>0.3292</b>	<b>1.5646</b>		<b>8,658.6514</b>	<b>8,658.6514</b>	<b>0.1453</b>	<b>2.7200e-003</b>	<b>8,662.5457</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.5515	4.2000e-004	0.0450	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0951	0.0951	2.6000e-004		0.1005
Energy	0.0136	0.1236	0.1038	7.4000e-004	9.3900e-003	9.3900e-003	9.3900e-003	9.3900e-003	9.3900e-003	9.3900e-003		148.2998	148.2998	2.8400e-003	2.7200e-003	149.2023
Mobile	1.9549	20.2383	25.3567	0.0942	4.5675	0.3474	4.9148	1.2354	0.3196	1.5551		8,510.2566	8,510.2566	0.1422		8,513.2429
<b>Total</b>	<b>12.5200</b>	<b>20.3623</b>	<b>25.5055</b>	<b>0.0949</b>	<b>4.5675</b>	<b>0.3569</b>	<b>4.9244</b>	<b>1.2354</b>	<b>0.3292</b>	<b>1.5646</b>		<b>8,658.6514</b>	<b>8,658.6514</b>	<b>0.1453</b>	<b>2.7200e-003</b>	<b>8,662.5457</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Demolition	Demolition	1/1/2016	1/14/2016	5	10	
2	Paving Demolition	Demolition	1/15/2016	1/28/2016	5	10	
3	Grading	Grading	1/29/2016	2/25/2016	5	20	
4	Building Construction	Building Construction	2/26/2016	1/12/2017	5	230	
5	Paving	Paving	1/13/2017	2/9/2017	5	20	
6	Architectural Coating	Architectural Coating	2/10/2017	3/9/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 460,248; Non-Residential Outdoor: 153,416 (Architectural Coating

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Demolition	Excavators	3	8.00	162	0.38
Building Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Paving Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving Demolition	Excavators	3	8.00	162	0.38
Paving Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Demolition	6	15.00	0.00	1,268.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving Demolition	6	15.00	0.00	96.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	182.00	71.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	36.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Building Demolition - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					27.4422	0.0000	27.4422	4.1550	0.0000	4.1550			0.0000			0.0000
Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365		4,089.2841	4,089.2841	1.1121		4,112.6374
<b>Total</b>	<b>4.2876</b>	<b>45.6559</b>	<b>35.0303</b>	<b>0.0399</b>	<b>27.4422</b>	<b>2.2921</b>	<b>29.7343</b>	<b>4.1550</b>	<b>2.1365</b>	<b>6.2915</b>		<b>4,089.2841</b>	<b>4,089.2841</b>	<b>1.1121</b>		<b>4,112.6374</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.1854	35.0941	24.6726	0.0936	2.2089	0.5429	2.7517	0.6048	0.4994	1.1042		9,434.5076	9,434.5076	0.0676		9,435.9278
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003		178.6295
<b>Total</b>	<b>2.2478</b>	<b>35.1722</b>	<b>25.6455</b>	<b>0.0957</b>	<b>2.3765</b>	<b>0.5443</b>	<b>2.9208</b>	<b>0.6493</b>	<b>0.5006</b>	<b>1.1499</b>		<b>9,612.9450</b>	<b>9,612.9450</b>	<b>0.0768</b>		<b>9,614.5573</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					27.4422	0.0000	27.4422	4.1550	0.0000	4.1550			0.0000			0.0000
Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365	0.0000	4,089.2841	4,089.2841	1.1121		4,112.6374
<b>Total</b>	<b>4.2876</b>	<b>45.6559</b>	<b>35.0303</b>	<b>0.0399</b>	<b>27.4422</b>	<b>2.2921</b>	<b>29.7343</b>	<b>4.1550</b>	<b>2.1365</b>	<b>6.2915</b>	<b>0.0000</b>	<b>4,089.2841</b>	<b>4,089.2841</b>	<b>1.1121</b>		<b>4,112.6374</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.1854	35.0941	24.6726	0.0936	2.2089	0.5429	2.7517	0.6048	0.4994	1.1042		9,434.5076	9,434.5076	0.0676		9,435.9278
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003		178.6295
<b>Total</b>	<b>2.2478</b>	<b>35.1722</b>	<b>25.6455</b>	<b>0.0957</b>	<b>2.3765</b>	<b>0.5443</b>	<b>2.9208</b>	<b>0.6493</b>	<b>0.5006</b>	<b>1.1499</b>		<b>9,612.9450</b>	<b>9,612.9450</b>	<b>0.0768</b>		<b>9,614.5573</b>

**3.3 Paving Demolition - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0800	0.0000	2.0800	0.3149	0.0000	0.3149			0.0000			0.0000
Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365		4,089.2841	4,089.2841	1.1121		4,112.6374
<b>Total</b>	<b>4.2876</b>	<b>45.6559</b>	<b>35.0303</b>	<b>0.0399</b>	<b>2.0800</b>	<b>2.2921</b>	<b>4.3721</b>	<b>0.3149</b>	<b>2.1365</b>	<b>2.4515</b>		<b>4,089.2841</b>	<b>4,089.2841</b>	<b>1.1121</b>		<b>4,112.6374</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1655	2.6570	1.8680	7.0900e-003	0.1672	0.0411	0.2083	0.0458	0.0378	0.0836		714.2845	714.2845	5.1200e-003		714.3920
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003		178.6295
<b>Total</b>	<b>0.2279</b>	<b>2.7351</b>	<b>2.8409</b>	<b>9.2100e-003</b>	<b>0.3349</b>	<b>0.0425</b>	<b>0.3774</b>	<b>0.0903</b>	<b>0.0391</b>	<b>0.1294</b>		<b>892.7219</b>	<b>892.7219</b>	<b>0.0143</b>		<b>893.0215</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					2.0800	0.0000	2.0800	0.3149	0.0000	0.3149			0.0000				0.0000
Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365	0.0000	4,089.2841	4,089.2841	1.1121			4,112.6374
<b>Total</b>	<b>4.2876</b>	<b>45.6559</b>	<b>35.0303</b>	<b>0.0399</b>	<b>2.0800</b>	<b>2.2921</b>	<b>4.3721</b>	<b>0.3149</b>	<b>2.1365</b>	<b>2.4515</b>	<b>0.0000</b>	<b>4,089.2841</b>	<b>4,089.2841</b>	<b>1.1121</b>			<b>4,112.6374</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.1655	2.6570	1.8680	7.0900e-003	0.1672	0.0411	0.2083	0.0458	0.0378	0.0836		714.2845	714.2845	5.1200e-003			714.3920
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003			178.6295
<b>Total</b>	<b>0.2279</b>	<b>2.7351</b>	<b>2.8409</b>	<b>9.2100e-003</b>	<b>0.3349</b>	<b>0.0425</b>	<b>0.3774</b>	<b>0.0903</b>	<b>0.0391</b>	<b>0.1294</b>		<b>892.7219</b>	<b>892.7219</b>	<b>0.0143</b>			<b>893.0215</b>

**3.4 Grading - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000				0.0000
Off-Road	3.6669	38.4466	26.0787	0.0298		2.1984	2.1984		2.0225	2.0225		3,093.7889	3,093.7889	0.9332			3,113.3860
<b>Total</b>	<b>3.6669</b>	<b>38.4466</b>	<b>26.0787</b>	<b>0.0298</b>	<b>6.5523</b>	<b>2.1984</b>	<b>8.7507</b>	<b>3.3675</b>	<b>2.0225</b>	<b>5.3900</b>		<b>3,093.7889</b>	<b>3,093.7889</b>	<b>0.9332</b>			<b>3,113.3860</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003			178.6295
<b>Total</b>	<b>0.0624</b>	<b>0.0781</b>	<b>0.9730</b>	<b>2.1200e-003</b>	<b>0.1677</b>	<b>1.4000e-003</b>	<b>0.1691</b>	<b>0.0445</b>	<b>1.2900e-003</b>	<b>0.0458</b>		<b>178.4374</b>	<b>178.4374</b>	<b>9.1500e-003</b>			<b>178.6295</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000				0.0000
Off-Road	3.6669	38.4466	26.0787	0.0298		2.1984	2.1984		2.0225	2.0225	0.0000	3,093.7889	3,093.7889	0.9332			3,113.3860
<b>Total</b>	<b>3.6669</b>	<b>38.4466</b>	<b>26.0787</b>	<b>0.0298</b>	<b>6.5523</b>	<b>2.1984</b>	<b>8.7507</b>	<b>3.3675</b>	<b>2.0225</b>	<b>5.3900</b>	<b>0.0000</b>	<b>3,093.7889</b>	<b>3,093.7889</b>	<b>0.9332</b>			<b>3,113.3860</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003		178.6295
<b>Total</b>	<b>0.0624</b>	<b>0.0781</b>	<b>0.9730</b>	<b>2.1200e-003</b>	<b>0.1677</b>	<b>1.4000e-003</b>	<b>0.1691</b>	<b>0.0445</b>	<b>1.2900e-003</b>	<b>0.0458</b>		<b>178.4374</b>	<b>178.4374</b>	<b>9.1500e-003</b>		<b>178.6295</b>

**3.5 Building Construction - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
<b>Total</b>	<b>3.4062</b>	<b>28.5063</b>	<b>18.5066</b>	<b>0.0268</b>		<b>1.9674</b>	<b>1.9674</b>		<b>1.8485</b>	<b>1.8485</b>		<b>2,669.2864</b>	<b>2,669.2864</b>	<b>0.6620</b>		<b>2,683.1890</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5931	6.1661	7.0820	0.0155	0.4437	0.1001	0.5438	0.1264	0.0921	0.2184		1,549.2054	1,549.2054	0.0111		1,549.4389
Worker	0.7577	0.9476	11.8051	0.0258	2.0343	0.0170	2.0513	0.5395	0.0156	0.5552		2,165.0403	2,165.0403	0.1110		2,167.3710
<b>Total</b>	<b>1.3508</b>	<b>7.1137</b>	<b>18.8871</b>	<b>0.0412</b>	<b>2.4781</b>	<b>0.1171</b>	<b>2.5952</b>	<b>0.6659</b>	<b>0.1077</b>	<b>0.7736</b>		<b>3,714.2457</b>	<b>3,714.2457</b>	<b>0.1221</b>		<b>3,716.8099</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
<b>Total</b>	<b>3.4062</b>	<b>28.5063</b>	<b>18.5066</b>	<b>0.0268</b>		<b>1.9674</b>	<b>1.9674</b>		<b>1.8485</b>	<b>1.8485</b>	<b>0.0000</b>	<b>2,669.2864</b>	<b>2,669.2864</b>	<b>0.6620</b>		<b>2,683.1890</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5931	6.1661	7.0820	0.0155	0.4437	0.1001	0.5438	0.1264	0.0921	0.2184		1,549.2054	1,549.2054	0.0111		1,549.4389
Worker	0.7577	0.9476	11.8051	0.0258	2.0343	0.0170	2.0513	0.5395	0.0156	0.5552		2,165.0403	2,165.0403	0.1110		2,167.3710
<b>Total</b>	<b>1.3508</b>	<b>7.1137</b>	<b>18.8871</b>	<b>0.0412</b>	<b>2.4781</b>	<b>0.1171</b>	<b>2.5952</b>	<b>0.6659</b>	<b>0.1077</b>	<b>0.7736</b>		<b>3,714.2457</b>	<b>3,714.2457</b>	<b>0.1221</b>		<b>3,716.8099</b>

### 3.5 Building Construction - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
<b>Total</b>	<b>3.1024</b>	<b>26.4057</b>	<b>18.1291</b>	<b>0.0268</b>		<b>1.7812</b>	<b>1.7812</b>		<b>1.6730</b>	<b>1.6730</b>		<b>2,639.8053</b>	<b>2,639.8053</b>	<b>0.6497</b>		<b>2,653.4490</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5437	5.6144	6.6605	0.0154	0.4439	0.0894	0.5332	0.1264	0.0822	0.2086		1,524.1368	1,524.1368	0.0108		1,524.3626
Worker	0.6811	0.8557	10.6840	0.0258	2.0343	0.0164	2.0507	0.5395	0.0151	0.5546		2,082.1847	2,082.1847	0.1024		2,084.3358
<b>Total</b>	<b>1.2248</b>	<b>6.4701</b>	<b>17.3445</b>	<b>0.0412</b>	<b>2.4782</b>	<b>0.1057</b>	<b>2.5839</b>	<b>0.6659</b>	<b>0.0973</b>	<b>0.7632</b>		<b>3,606.3215</b>	<b>3,606.3215</b>	<b>0.1132</b>		<b>3,608.6983</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
<b>Total</b>	<b>3.1024</b>	<b>26.4057</b>	<b>18.1291</b>	<b>0.0268</b>		<b>1.7812</b>	<b>1.7812</b>		<b>1.6730</b>	<b>1.6730</b>	<b>0.0000</b>	<b>2,639.8053</b>	<b>2,639.8053</b>	<b>0.6497</b>		<b>2,653.4490</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5437	5.6144	6.6605	0.0154	0.4439	0.0894	0.5332	0.1264	0.0822	0.2086		1,524.1368	1,524.1368	0.0108		1,524.3626
Worker	0.6811	0.8557	10.6840	0.0258	2.0343	0.0164	2.0507	0.5395	0.0151	0.5546		2,082.1847	2,082.1847	0.1024		2,084.3358
<b>Total</b>	<b>1.2248</b>	<b>6.4701</b>	<b>17.3445</b>	<b>0.0412</b>	<b>2.4782</b>	<b>0.1057</b>	<b>2.5839</b>	<b>0.6659</b>	<b>0.0973</b>	<b>0.7632</b>		<b>3,606.3215</b>	<b>3,606.3215</b>	<b>0.1132</b>		<b>3,608.6983</b>

### 3.6 Paving - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9074	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473		2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.3956					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.3030</b>	<b>20.2964</b>	<b>14.7270</b>	<b>0.0223</b>		<b>1.1384</b>	<b>1.1384</b>		<b>1.0473</b>	<b>1.0473</b>		<b>2,281.0588</b>	<b>2,281.0588</b>	<b>0.6989</b>		<b>2,295.7360</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0561	0.0705	0.8806	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		171.6086	171.6086	8.4400e-003		171.7859
<b>Total</b>	<b>0.0561</b>	<b>0.0705</b>	<b>0.8806</b>	<b>2.1200e-003</b>	<b>0.1677</b>	<b>1.3500e-003</b>	<b>0.1690</b>	<b>0.0445</b>	<b>1.2400e-003</b>	<b>0.0457</b>		<b>171.6086</b>	<b>171.6086</b>	<b>8.4400e-003</b>		<b>171.7859</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9074	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473	0.0000	2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.3956					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.3030</b>	<b>20.2964</b>	<b>14.7270</b>	<b>0.0223</b>		<b>1.1384</b>	<b>1.1384</b>		<b>1.0473</b>	<b>1.0473</b>	<b>0.0000</b>	<b>2,281.0588</b>	<b>2,281.0588</b>	<b>0.6989</b>		<b>2,295.7360</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0561	0.0705	0.8806	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		171.6086	171.6086	8.4400e-003		171.7859
<b>Total</b>	<b>0.0561</b>	<b>0.0705</b>	<b>0.8806</b>	<b>2.1200e-003</b>	<b>0.1677</b>	<b>1.3500e-003</b>	<b>0.1690</b>	<b>0.0445</b>	<b>1.2400e-003</b>	<b>0.0457</b>		<b>171.6086</b>	<b>171.6086</b>	<b>8.4400e-003</b>		<b>171.7859</b>

**3.7 Architectural Coating - 2017**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	44.4427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
<b>Total</b>	<b>44.7750</b>	<b>2.1850</b>	<b>1.8681</b>	<b>2.9700e-003</b>		<b>0.1733</b>	<b>0.1733</b>		<b>0.1733</b>	<b>0.1733</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0297</b>		<b>282.0721</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1347	0.1693	2.1133	5.1000e-003	0.4024	3.2400e-003	0.4056	0.1067	2.9900e-003	0.1097		411.8607	411.8607	0.0203		412.2862
<b>Total</b>	<b>0.1347</b>	<b>0.1693</b>	<b>2.1133</b>	<b>5.1000e-003</b>	<b>0.4024</b>	<b>3.2400e-003</b>	<b>0.4056</b>	<b>0.1067</b>	<b>2.9900e-003</b>	<b>0.1097</b>		<b>411.8607</b>	<b>411.8607</b>	<b>0.0203</b>		<b>412.2862</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	44.4427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
<b>Total</b>	<b>44.7750</b>	<b>2.1850</b>	<b>1.8681</b>	<b>2.9700e-003</b>		<b>0.1733</b>	<b>0.1733</b>		<b>0.1733</b>	<b>0.1733</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0297</b>		<b>282.0721</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1347	0.1693	2.1133	5.1000e-003	0.4024	3.2400e-003	0.4056	0.1067	2.9900e-003	0.1097		411.8607	411.8607	0.0203		412.2862
<b>Total</b>	<b>0.1347</b>	<b>0.1693</b>	<b>2.1133</b>	<b>5.1000e-003</b>	<b>0.4024</b>	<b>3.2400e-003</b>	<b>0.4056</b>	<b>0.1067</b>	<b>2.9900e-003</b>	<b>0.1097</b>		<b>411.8607</b>	<b>411.8607</b>	<b>0.0203</b>		<b>412.2862</b>

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.9549	20.2383	25.3567	0.0942	4.5675	0.3474	4.9148	1.2354	0.3196	1.5551		8,510.2566	8,510.2566	0.1422		8,513.2429
Unmitigated	1.9549	20.2383	25.3567	0.0942	4.5675	0.3474	4.9148	1.2354	0.3196	1.5551		8,510.2566	8,510.2566	0.1422		8,513.2429

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	361.20	361.20	361.20	2,073,326	2,073,326
<b>Total</b>	<b>361.20</b>	<b>361.20</b>	<b>361.20</b>	<b>2,073,326</b>	<b>2,073,326</b>

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	0.00	17.41	62.00	0.00	38.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.618000	0.000000	0.000000	0.000000	0.064600	0.000000	0.087000	0.230400	0.000000	0.000000	0.000000	0.000000	0.000000

**5.0 Energy Detail**

**4.4 Fleet Mix**

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0136	0.1236	0.1038	7.4000e-004		9.3900e-003	9.3900e-003		9.3900e-003	9.3900e-003		148.2998	148.2998	2.8400e-003	2.7200e-003	149.2023
NaturalGas Unmitigated	0.0136	0.1236	0.1038	7.4000e-004		9.3900e-003	9.3900e-003		9.3900e-003	9.3900e-003		148.2998	148.2998	2.8400e-003	2.7200e-003	149.2023

### 5.2 Energy by Land Use - NaturalGas

#### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No	1260.55	0.0136	0.1236	0.1038	7.4000e-004		9.3900e-003	9.3900e-003		9.3900e-003	9.3900e-003		148.2998	148.2998	2.8400e-003	2.7200e-003	149.2023
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0136</b>	<b>0.1236</b>	<b>0.1038</b>	<b>7.4000e-004</b>		<b>9.3900e-003</b>	<b>9.3900e-003</b>		<b>9.3900e-003</b>	<b>9.3900e-003</b>		<b>148.2998</b>	<b>148.2998</b>	<b>2.8400e-003</b>	<b>2.7200e-003</b>	<b>149.2023</b>

#### Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No	1.26055	0.0136	0.1236	0.1038	7.4000e-004		9.3900e-003	9.3900e-003		9.3900e-003	9.3900e-003		148.2998	148.2998	2.8400e-003	2.7200e-003	149.2023
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0136</b>	<b>0.1236</b>	<b>0.1038</b>	<b>7.4000e-004</b>		<b>9.3900e-003</b>	<b>9.3900e-003</b>		<b>9.3900e-003</b>	<b>9.3900e-003</b>		<b>148.2998</b>	<b>148.2998</b>	<b>2.8400e-003</b>	<b>2.7200e-003</b>	<b>149.2023</b>

### 6.0 Area Detail

#### 6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	10.5515	4.2000e-004	0.0450	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0951	0.0951	2.6000e-004		0.1005
Unmitigated	10.5515	4.2000e-004	0.0450	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0951	0.0951	2.6000e-004		0.1005

#### 6.2 Area by SubCategory

##### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.9482					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.5990					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.3000e-003	4.2000e-004	0.0450	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0951	0.0951	2.6000e-004		0.1005
<b>Total</b>	<b>10.5515</b>	<b>4.2000e-004</b>	<b>0.0450</b>	<b>0.0000</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>0.0951</b>	<b>0.0951</b>	<b>2.6000e-004</b>		<b>0.1005</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	1.9482					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Consumer Products	8.5990					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Landscaping	4.3000e-003	4.2000e-004	0.0450	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0951	0.0951	2.6000e-004			0.1005
<b>Total</b>	<b>10.5515</b>	<b>4.2000e-004</b>	<b>0.0450</b>	<b>0.0000</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>0.0951</b>	<b>0.0951</b>	<b>2.6000e-004</b>			<b>0.1005</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Vegetation**

**9988 Redwood Warehouse**  
**South Coast Air Basin, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	215.00	1000sqft	4.94	215,000.00	0
Other Non-Asphalt Surfaces	87.89	1000sqft	2.02	87,890.00	0
Parking Lot	131.40	1000sqft	3.02	131,403.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	10			<b>Operational Year</b>	2018
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	630.89	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use -
- Construction Phase - Input Project Schedule
- Demolition -
- Vehicle Trips - Trip Rate Per ITE & Traffic Study
- Trip % Per SCAQMD Recommendation
- Trip Length NCHRP Analysis
- Vehicle Emission Factors - Fleet Mix Per SCAQMD Recommendation
- Vehicle Emission Factors - Fleet Mix Per SCAQMD Recommendation
- Vehicle Emission Factors - Fleet Mix Per SCAQMD Recommendation
- Water And Wastewater - Outdoor Water Demand Calculated as MAWA
- Architectural Coating - Interior 0 g/L; Exterior 125 g/L

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	125.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	0.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	20.00	10.00
tblLandUse	LandUseSquareFeet	131,400.00	131,403.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblVehicleEF	HHD	0.03	0.23
tblVehicleEF	HHD	0.03	0.23
tblVehicleEF	HHD	0.03	0.23
tblVehicleEF	LDA	0.51	0.62
tblVehicleEF	LDA	0.51	0.62
tblVehicleEF	LDA	0.51	0.62
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT2	0.18	0.00

tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LHD1	0.04	0.06
tblVehicleEF	LHD1	0.04	0.06
tblVehicleEF	LHD1	0.04	0.06
tblVehicleEF	LHD2	6.6470e-003	0.00
tblVehicleEF	LHD2	6.6470e-003	0.00
tblVehicleEF	LHD2	6.6470e-003	0.00
tblVehicleEF	MCY	4.3620e-003	0.00
tblVehicleEF	MCY	4.3620e-003	0.00
tblVehicleEF	MCY	4.3620e-003	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MH	2.1170e-003	0.00
tblVehicleEF	MH	2.1170e-003	0.00
tblVehicleEF	MH	2.1170e-003	0.00
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	OBUS	1.9400e-003	0.00
tblVehicleEF	OBUS	1.9400e-003	0.00
tblVehicleEF	OBUS	1.9400e-003	0.00
tblVehicleEF	SBUS	5.8800e-004	0.00
tblVehicleEF	SBUS	5.8800e-004	0.00
tblVehicleEF	SBUS	5.8800e-004	0.00
tblVehicleEF	UBUS	2.5020e-003	0.00
tblVehicleEF	UBUS	2.5020e-003	0.00
tblVehicleEF	UBUS	2.5020e-003	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	17.41
tblVehicleTrips	CNW_TTP	41.00	38.00
tblVehicleTrips	CW_TTP	59.00	62.00
tblVehicleTrips	ST_TR	2.59	1.68
tblVehicleTrips	SU_TR	2.59	1.68
tblVehicleTrips	WD_TR	2.59	1.68
tblWater	OutdoorWaterUseRate	0.00	1,724,546.00

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	6.6595	82.1066	64.1959	0.1353	29.8188	2.8377	32.6564	4.8043	2.6384	7.4427	0.0000	13,668.7402	13,668.7402	1.1897	0.0000	13,693.7246
2017	44.9124	33.0983	36.0126	0.0663	2.4782	1.8878	4.3660	0.6659	1.7711	2.4370	0.0000	6,103.7183	6,103.7183	0.7632	0.0000	6,119.7458
<b>Total</b>	<b>51.5719</b>	<b>115.2049</b>	<b>100.2085</b>	<b>0.2016</b>	<b>32.2969</b>	<b>4.7255</b>	<b>37.0224</b>	<b>5.4702</b>	<b>4.4094</b>	<b>9.8796</b>	<b>0.0000</b>	<b>19,772.4585</b>	<b>19,772.4585</b>	<b>1.9529</b>	<b>0.0000</b>	<b>19,813.4703</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	6.6595	82.1066	64.1959	0.1353	29.8188	2.8377	32.6564	4.8043	2.6384	7.4427	0.0000	13,668.7402	13,668.7402	1.1897	0.0000	13,693.7246
2017	44.9124	33.0983	36.0126	0.0663	2.4782	1.8878	4.3660	0.6659	1.7711	2.4370	0.0000	6,103.7183	6,103.7183	0.7632	0.0000	6,119.7458
<b>Total</b>	<b>51.5719</b>	<b>115.2049</b>	<b>100.2085</b>	<b>0.2016</b>	<b>32.2969</b>	<b>4.7255</b>	<b>37.0224</b>	<b>5.4702</b>	<b>4.4094</b>	<b>9.8796</b>	<b>0.0000</b>	<b>19,772.4585</b>	<b>19,772.4585</b>	<b>1.9529</b>	<b>0.0000</b>	<b>19,813.4703</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.5515	4.2000e-004	0.0450	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0951	0.0951	2.6000e-004		0.1005
Energy	0.0136	0.1236	0.1038	7.4000e-004		9.3900e-003	9.3900e-003		9.3900e-003	9.3900e-003		148.2998	148.2998	2.8400e-003	2.7200e-003	149.2023
Mobile	2.0350	20.9798	27.3131	0.0921	4.5675	0.3485	4.9160	1.2354	0.3207	1.5561		8,347.4659	8,347.4659	0.1429		8,350.4666
<b>Total</b>	<b>12.6001</b>	<b>21.1038</b>	<b>27.4619</b>	<b>0.0929</b>	<b>4.5675</b>	<b>0.3581</b>	<b>4.9255</b>	<b>1.2354</b>	<b>0.3302</b>	<b>1.5657</b>		<b>8,495.8607</b>	<b>8,495.8607</b>	<b>0.1460</b>	<b>2.7200e-003</b>	<b>8,499.7694</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.5515	4.2000e-004	0.0450	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0951	0.0951	2.6000e-004		0.1005
Energy	0.0136	0.1236	0.1038	7.4000e-004		9.3900e-003	9.3900e-003		9.3900e-003	9.3900e-003		148.2998	148.2998	2.8400e-003	2.7200e-003	149.2023
Mobile	2.0350	20.9798	27.3131	0.0921	4.5675	0.3485	4.9160	1.2354	0.3207	1.5561		8,347.4659	8,347.4659	0.1429		8,350.4666
<b>Total</b>	<b>12.6001</b>	<b>21.1038</b>	<b>27.4619</b>	<b>0.0929</b>	<b>4.5675</b>	<b>0.3581</b>	<b>4.9255</b>	<b>1.2354</b>	<b>0.3302</b>	<b>1.5657</b>		<b>8,495.8607</b>	<b>8,495.8607</b>	<b>0.1460</b>	<b>2.7200e-003</b>	<b>8,499.7694</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Demolition	Demolition	1/1/2016	1/14/2016	5	10	
2	Paving Demolition	Demolition	1/15/2016	1/28/2016	5	10	
3	Grading	Grading	1/29/2016	2/25/2016	5	20	
4	Building Construction	Building Construction	2/26/2016	1/12/2017	5	230	
5	Paving	Paving	1/13/2017	2/9/2017	5	20	
6	Architectural Coating	Architectural Coating	2/10/2017	3/9/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 460,248; Non-Residential Outdoor: 153,416 (Architectural Coating –

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Demolition	Excavators	3	8.00	162	0.38
Building Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Paving Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving Demolition	Excavators	3	8.00	162	0.38
Paving Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Demolition	6	15.00	0.00	1,268.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving Demolition	6	15.00	0.00	96.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	182.00	71.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	36.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

**3.2 Building Demolition - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					27.4422	0.0000	27.4422	4.1550	0.0000	4.1550			0.0000			0.0000
Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365		4,089.2841	4,089.2841	1.1121		4,112.6374
<b>Total</b>	<b>4.2876</b>	<b>45.6559</b>	<b>35.0303</b>	<b>0.0399</b>	<b>27.4422</b>	<b>2.2921</b>	<b>29.7343</b>	<b>4.1550</b>	<b>2.1365</b>	<b>6.2915</b>		<b>4,089.2841</b>	<b>4,089.2841</b>	<b>1.1121</b>		<b>4,112.6374</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.3080	36.3650	28.2685	0.0934	2.2089	0.5442	2.7530	0.6048	0.5005	1.1054		9,412.1019	9,412.1019	0.0685		9,413.5408
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003		167.5464
<b>Total</b>	<b>2.3718</b>	<b>36.4507</b>	<b>29.1655</b>	<b>0.0954</b>	<b>2.3765</b>	<b>0.5456</b>	<b>2.9221</b>	<b>0.6493</b>	<b>0.5018</b>	<b>1.1511</b>		<b>9,579.4562</b>	<b>9,579.4562</b>	<b>0.0777</b>		<b>9,581.0872</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					27.4422	0.0000	27.4422	4.1550	0.0000	4.1550			0.0000			0.0000
Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365	0.0000	4,089.2841	4,089.2841	1.1121		4,112.6374
<b>Total</b>	<b>4.2876</b>	<b>45.6559</b>	<b>35.0303</b>	<b>0.0399</b>	<b>27.4422</b>	<b>2.2921</b>	<b>29.7343</b>	<b>4.1550</b>	<b>2.1365</b>	<b>6.2915</b>	<b>0.0000</b>	<b>4,089.2841</b>	<b>4,089.2841</b>	<b>1.1121</b>		<b>4,112.6374</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.3080	36.3650	28.2685	0.0934	2.2089	0.5442	2.7530	0.6048	0.5005	1.1054		9,412.1019	9,412.1019	0.0685		9,413.5408
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003		167.5464
<b>Total</b>	<b>2.3718</b>	<b>36.4507</b>	<b>29.1655</b>	<b>0.0954</b>	<b>2.3765</b>	<b>0.5456</b>	<b>2.9221</b>	<b>0.6493</b>	<b>0.5018</b>	<b>1.1511</b>		<b>9,579.4562</b>	<b>9,579.4562</b>	<b>0.0777</b>		<b>9,581.0872</b>

**3.3 Paving Demolition - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0800	0.0000	2.0800	0.3149	0.0000	0.3149			0.0000			0.0000
Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365		4,089.2841	4,089.2841	1.1121		4,112.6374
<b>Total</b>	<b>4.2876</b>	<b>45.6559</b>	<b>35.0303</b>	<b>0.0399</b>	<b>2.0800</b>	<b>2.2921</b>	<b>4.3721</b>	<b>0.3149</b>	<b>2.1365</b>	<b>2.4515</b>		<b>4,089.2841</b>	<b>4,089.2841</b>	<b>1.1121</b>		<b>4,112.6374</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1747	2.7532	2.1402	7.0700e-003	0.1672	0.0412	0.2084	0.0458	0.0379	0.0837		712.5882	712.5882	5.1900e-003		712.6971
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003		167.5464
<b>Total</b>	<b>0.2386</b>	<b>2.8390</b>	<b>3.0372</b>	<b>9.0600e-003</b>	<b>0.3349</b>	<b>0.0426</b>	<b>0.3775</b>	<b>0.0903</b>	<b>0.0392</b>	<b>0.1294</b>		<b>879.9424</b>	<b>879.9424</b>	<b>0.0143</b>		<b>880.2435</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0800	0.0000	2.0800	0.3149	0.0000	0.3149			0.0000			0.0000
Off-Road	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365	0.0000	4,089.2841	4,089.2841	1.1121		4,112.6374
<b>Total</b>	<b>4.2876</b>	<b>45.6559</b>	<b>35.0303</b>	<b>0.0399</b>	<b>2.0800</b>	<b>2.2921</b>	<b>4.3721</b>	<b>0.3149</b>	<b>2.1365</b>	<b>2.4515</b>	<b>0.0000</b>	<b>4,089.2841</b>	<b>4,089.2841</b>	<b>1.1121</b>		<b>4,112.6374</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1747	2.7532	2.1402	7.0700e-003	0.1672	0.0412	0.2084	0.0458	0.0379	0.0837		712.5882	712.5882	5.1900e-003		712.6971
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003		167.5464
<b>Total</b>	<b>0.2386</b>	<b>2.8390</b>	<b>3.0372</b>	<b>9.0600e-003</b>	<b>0.3349</b>	<b>0.0426</b>	<b>0.3775</b>	<b>0.0903</b>	<b>0.0392</b>	<b>0.1294</b>		<b>879.9424</b>	<b>879.9424</b>	<b>0.0143</b>		<b>880.2435</b>

**3.4 Grading - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.6669	38.4466	26.0787	0.0298		2.1984	2.1984		2.0225	2.0225		3,093.7889	3,093.7889	0.9332		3,113.3860
<b>Total</b>	<b>3.6669</b>	<b>38.4466</b>	<b>26.0787</b>	<b>0.0298</b>	<b>6.5523</b>	<b>2.1984</b>	<b>8.7507</b>	<b>3.3675</b>	<b>2.0225</b>	<b>5.3900</b>		<b>3,093.7889</b>	<b>3,093.7889</b>	<b>0.9332</b>		<b>3,113.3860</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003		167.5464
<b>Total</b>	<b>0.0638</b>	<b>0.0858</b>	<b>0.8970</b>	<b>1.9900e-003</b>	<b>0.1677</b>	<b>1.4000e-003</b>	<b>0.1691</b>	<b>0.0445</b>	<b>1.2900e-003</b>	<b>0.0458</b>		<b>167.3543</b>	<b>167.3543</b>	<b>9.1500e-003</b>		<b>167.5464</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.6669	38.4466	26.0787	0.0298		2.1984	2.1984		2.0225	2.0225	0.0000	3,093.7889	3,093.7889	0.9332		3,113.3860
<b>Total</b>	<b>3.6669</b>	<b>38.4466</b>	<b>26.0787</b>	<b>0.0298</b>	<b>6.5523</b>	<b>2.1984</b>	<b>8.7507</b>	<b>3.3675</b>	<b>2.0225</b>	<b>5.3900</b>	<b>0.0000</b>	<b>3,093.7889</b>	<b>3,093.7889</b>	<b>0.9332</b>		<b>3,113.3860</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003		167.5464
<b>Total</b>	<b>0.0638</b>	<b>0.0858</b>	<b>0.8970</b>	<b>1.9900e-003</b>	<b>0.1677</b>	<b>1.4000e-003</b>	<b>0.1691</b>	<b>0.0445</b>	<b>1.2900e-003</b>	<b>0.0458</b>		<b>167.3543</b>	<b>167.3543</b>	<b>9.1500e-003</b>		<b>167.5464</b>

**3.5 Building Construction - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
<b>Total</b>	<b>3.4062</b>	<b>28.5063</b>	<b>18.5066</b>	<b>0.0268</b>		<b>1.9674</b>	<b>1.9674</b>		<b>1.8485</b>	<b>1.8485</b>		<b>2,669.2864</b>	<b>2,669.2864</b>	<b>0.6620</b>		<b>2,683.1890</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6501	6.3218	8.5003	0.0153	0.4437	0.1012	0.5449	0.1264	0.0930	0.2194		1,536.2231	1,536.2231	0.0114		1,536.4634
Worker	0.7746	1.0409	10.8836	0.0242	2.0343	0.0170	2.0513	0.5395	0.0156	0.5552		2,030.5652	2,030.5652	0.1110		2,032.8959
<b>Total</b>	<b>1.4247</b>	<b>7.3627</b>	<b>19.3840</b>	<b>0.0395</b>	<b>2.4781</b>	<b>0.1182</b>	<b>2.5962</b>	<b>0.6659</b>	<b>0.1087</b>	<b>0.7745</b>		<b>3,566.7882</b>	<b>3,566.7882</b>	<b>0.1224</b>		<b>3,569.3593</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
<b>Total</b>	<b>3.4062</b>	<b>28.5063</b>	<b>18.5066</b>	<b>0.0268</b>		<b>1.9674</b>	<b>1.9674</b>		<b>1.8485</b>	<b>1.8485</b>	<b>0.0000</b>	<b>2,669.2864</b>	<b>2,669.2864</b>	<b>0.6620</b>		<b>2,683.1890</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6501	6.3218	8.5003	0.0153	0.4437	0.1012	0.5449	0.1264	0.0930	0.2194		1,536.2231	1,536.2231	0.0114		1,536.4634
Worker	0.7746	1.0409	10.8836	0.0242	2.0343	0.0170	2.0513	0.5395	0.0156	0.5552		2,030.5652	2,030.5652	0.1110		2,032.8959
<b>Total</b>	<b>1.4247</b>	<b>7.3627</b>	<b>19.3840</b>	<b>0.0395</b>	<b>2.4781</b>	<b>0.1182</b>	<b>2.5962</b>	<b>0.6659</b>	<b>0.1087</b>	<b>0.7745</b>		<b>3,566.7882</b>	<b>3,566.7882</b>	<b>0.1224</b>		<b>3,569.3593</b>

### 3.5 Building Construction - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
<b>Total</b>	<b>3.1024</b>	<b>26.4057</b>	<b>18.1291</b>	<b>0.0268</b>		<b>1.7812</b>	<b>1.7812</b>		<b>1.6730</b>	<b>1.6730</b>		<b>2,639.8053</b>	<b>2,639.8053</b>	<b>0.6497</b>		<b>2,653.4490</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5938	5.7529	8.0697	0.0153	0.4439	0.0902	0.5341	0.1264	0.0830	0.2094		1,511.3335	1,511.3335	0.0111		1,511.5662
Worker	0.6948	0.9397	9.8138	0.0241	2.0343	0.0164	2.0507	0.5395	0.0151	0.5546		1,952.5795	1,952.5795	0.1024		1,954.7305
<b>Total</b>	<b>1.2886</b>	<b>6.6927</b>	<b>17.8835</b>	<b>0.0395</b>	<b>2.4782</b>	<b>0.1066</b>	<b>2.5848</b>	<b>0.6659</b>	<b>0.0981</b>	<b>0.7640</b>		<b>3,463.9130</b>	<b>3,463.9130</b>	<b>0.1135</b>		<b>3,466.2968</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
<b>Total</b>	<b>3.1024</b>	<b>26.4057</b>	<b>18.1291</b>	<b>0.0268</b>		<b>1.7812</b>	<b>1.7812</b>		<b>1.6730</b>	<b>1.6730</b>	<b>0.0000</b>	<b>2,639.8053</b>	<b>2,639.8053</b>	<b>0.6497</b>		<b>2,653.4490</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5938	5.7529	8.0697	0.0153	0.4439	0.0902	0.5341	0.1264	0.0830	0.2094		1,511.3335	1,511.3335	0.0111		1,511.5662
Worker	0.6948	0.9397	9.8138	0.0241	2.0343	0.0164	2.0507	0.5395	0.0151	0.5546		1,952.5795	1,952.5795	0.1024		1,954.7305
<b>Total</b>	<b>1.2886</b>	<b>6.6927</b>	<b>17.8835</b>	<b>0.0395</b>	<b>2.4782</b>	<b>0.1066</b>	<b>2.5848</b>	<b>0.6659</b>	<b>0.0981</b>	<b>0.7640</b>		<b>3,463.9130</b>	<b>3,463.9130</b>	<b>0.1135</b>		<b>3,466.2968</b>

### 3.6 Paving - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9074	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473		2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.3956					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.3030</b>	<b>20.2964</b>	<b>14.7270</b>	<b>0.0223</b>		<b>1.1384</b>	<b>1.1384</b>		<b>1.0473</b>	<b>1.0473</b>		<b>2,281.0588</b>	<b>2,281.0588</b>	<b>0.6989</b>		<b>2,295.7360</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0573	0.0775	0.8088	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9269	160.9269	8.4400e-003		161.1042
<b>Total</b>	<b>0.0573</b>	<b>0.0775</b>	<b>0.8088</b>	<b>1.9900e-003</b>	<b>0.1677</b>	<b>1.3500e-003</b>	<b>0.1690</b>	<b>0.0445</b>	<b>1.2400e-003</b>	<b>0.0457</b>		<b>160.9269</b>	<b>160.9269</b>	<b>8.4400e-003</b>		<b>161.1042</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9074	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473	0.0000	2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.3956					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.3030</b>	<b>20.2964</b>	<b>14.7270</b>	<b>0.0223</b>		<b>1.1384</b>	<b>1.1384</b>		<b>1.0473</b>	<b>1.0473</b>	<b>0.0000</b>	<b>2,281.0588</b>	<b>2,281.0588</b>	<b>0.6989</b>		<b>2,295.7360</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0573	0.0775	0.8088	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9269	160.9269	8.4400e-003		161.1042
<b>Total</b>	<b>0.0573</b>	<b>0.0775</b>	<b>0.8088</b>	<b>1.9900e-003</b>	<b>0.1677</b>	<b>1.3500e-003</b>	<b>0.1690</b>	<b>0.0445</b>	<b>1.2400e-003</b>	<b>0.0457</b>		<b>160.9269</b>	<b>160.9269</b>	<b>8.4400e-003</b>		<b>161.1042</b>

**3.7 Architectural Coating - 2017**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	44.4427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
<b>Total</b>	<b>44.7750</b>	<b>2.1850</b>	<b>1.8681</b>	<b>2.9700e-003</b>		<b>0.1733</b>	<b>0.1733</b>		<b>0.1733</b>	<b>0.1733</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0297</b>		<b>282.0721</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1374	0.1859	1.9412	4.7800e-003	0.4024	3.2400e-003	0.4056	0.1067	2.9900e-003	0.1097		386.2245	386.2245	0.0203		386.6500
<b>Total</b>	<b>0.1374</b>	<b>0.1859</b>	<b>1.9412</b>	<b>4.7800e-003</b>	<b>0.4024</b>	<b>3.2400e-003</b>	<b>0.4056</b>	<b>0.1067</b>	<b>2.9900e-003</b>	<b>0.1097</b>		<b>386.2245</b>	<b>386.2245</b>	<b>0.0203</b>		<b>386.6500</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	44.4427					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
<b>Total</b>	<b>44.7750</b>	<b>2.1850</b>	<b>1.8681</b>	<b>2.9700e-003</b>		<b>0.1733</b>	<b>0.1733</b>		<b>0.1733</b>	<b>0.1733</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0297</b>		<b>282.0721</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1374	0.1859	1.9412	4.7800e-003	0.4024	3.2400e-003	0.4056	0.1067	2.9900e-003	0.1097		386.2245	386.2245	0.0203		386.6500
<b>Total</b>	<b>0.1374</b>	<b>0.1859</b>	<b>1.9412</b>	<b>4.7800e-003</b>	<b>0.4024</b>	<b>3.2400e-003</b>	<b>0.4056</b>	<b>0.1067</b>	<b>2.9900e-003</b>	<b>0.1097</b>		<b>386.2245</b>	<b>386.2245</b>	<b>0.0203</b>		<b>386.6500</b>

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	2.0350	20.9798	27.3131	0.0921	4.5675	0.3485	4.9160	1.2354	0.3207	1.5561		8,347.4659	8,347.4659	0.1429		8,350.4666
Mitigated	2.0350	20.9798	27.3131	0.0921	4.5675	0.3485	4.9160	1.2354	0.3207	1.5561		8,347.4659	8,347.4659	0.1429		8,350.4666

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	361.20	361.20	361.20	2,073,326	2,073,326
<b>Total</b>	<b>361.20</b>	<b>361.20</b>	<b>361.20</b>	<b>2,073,326</b>	<b>2,073,326</b>

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	0.00	17.41	62.00	0.00	38.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.618000	0.000000	0.000000	0.000000	0.064600	0.000000	0.087000	0.230400	0.000000	0.000000	0.000000	0.000000	0.000000

**5.0 Energy Detail**

**4.4 Fleet Mix**

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0136	0.1236	0.1038	7.4000e-004		9.3900e-003	9.3900e-003		9.3900e-003	9.3900e-003		148.2998	148.2998	2.8400e-003	2.7200e-003	149.2023
NaturalGas Unmitigated	0.0136	0.1236	0.1038	7.4000e-004		9.3900e-003	9.3900e-003		9.3900e-003	9.3900e-003		148.2998	148.2998	2.8400e-003	2.7200e-003	149.2023

### 5.2 Energy by Land Use - NaturalGas

#### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No	1260.55	0.0136	0.1236	0.1038	7.4000e-004		9.3900e-003	9.3900e-003		9.3900e-003	9.3900e-003		148.2998	148.2998	2.8400e-003	2.7200e-003	149.2023
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0136</b>	<b>0.1236</b>	<b>0.1038</b>	<b>7.4000e-004</b>		<b>9.3900e-003</b>	<b>9.3900e-003</b>		<b>9.3900e-003</b>	<b>9.3900e-003</b>		<b>148.2998</b>	<b>148.2998</b>	<b>2.8400e-003</b>	<b>2.7200e-003</b>	<b>149.2023</b>

#### Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No	1.26055	0.0136	0.1236	0.1038	7.4000e-004		9.3900e-003	9.3900e-003		9.3900e-003	9.3900e-003		148.2998	148.2998	2.8400e-003	2.7200e-003	149.2023
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0136</b>	<b>0.1236</b>	<b>0.1038</b>	<b>7.4000e-004</b>		<b>9.3900e-003</b>	<b>9.3900e-003</b>		<b>9.3900e-003</b>	<b>9.3900e-003</b>		<b>148.2998</b>	<b>148.2998</b>	<b>2.8400e-003</b>	<b>2.7200e-003</b>	<b>149.2023</b>

### 6.0 Area Detail

#### 6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Unmitigated	10.5515	4.2000e-004	0.0450	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0951	0.0951	2.6000e-004		0.1005
Mitigated	10.5515	4.2000e-004	0.0450	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0951	0.0951	2.6000e-004		0.1005

#### 6.2 Area by SubCategory

##### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.9482					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.5990					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.3000e-003	4.2000e-004	0.0450	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0951	0.0951	2.6000e-004		0.1005
<b>Total</b>	<b>10.5515</b>	<b>4.2000e-004</b>	<b>0.0450</b>	<b>0.0000</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>0.0951</b>	<b>0.0951</b>	<b>2.6000e-004</b>		<b>0.1005</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.9482					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.5990					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.3000e-003	4.2000e-004	0.0450	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0951	0.0951	2.6000e-004		0.1005
<b>Total</b>	<b>10.5515</b>	<b>4.2000e-004</b>	<b>0.0450</b>	<b>0.0000</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>0.0951</b>	<b>0.0951</b>	<b>2.6000e-004</b>		<b>0.1005</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Vegetation**

**9988 Redwood Warehouse  
South Coast Air Basin, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	215.00	1000sqft	4.94	215,000.00	0
Other Non-Asphalt Surfaces	87.89	1000sqft	2.02	87,890.00	0
Parking Lot	131.40	1000sqft	3.02	131,403.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	31
<b>Climate Zone</b>	10	<b>Operational Year</b>		2018	
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MWhr)</b>	630.89	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

- Project Characteristics -
- Land Use -
- Construction Phase - Input Project Schedule
- Demolition -
- Vehicle Trips - Trip Rate Per ITE & Traffic Study
- Trip % Per SCAQMD Recommendation
- Vehicle Emission Factors - Fleet Mix Per SCAQMD Recommendation
- Vehicle Emission Factors - Fleet Mix Per SCAQMD Recommendation
- Vehicle Emission Factors - Fleet Mix Per SCAQMD Recommendation
- Water And Wastewater - Outdoor Water Demand Calculated as MAWA

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	20.00	10.00
tblLandUse	LandUseSquareFeet	131,400.00	131,403.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblVehicleEF	HHD	0.03	0.23
tblVehicleEF	HHD	0.03	0.23
tblVehicleEF	HHD	0.03	0.23
tblVehicleEF	LDA	0.51	0.62
tblVehicleEF	LDA	0.51	0.62
tblVehicleEF	LDA	0.51	0.62
tblVehicleEF	LDA	0.51	0.62
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LHD1	0.04	0.06
tblVehicleEF	LHD1	0.04	0.06

tblVehicleEF	LHD1	0.04	0.06
tblVehicleEF	LHD2	6.6470e-003	0.00
tblVehicleEF	LHD2	6.6470e-003	0.00
tblVehicleEF	LHD2	6.6470e-003	0.00
tblVehicleEF	MCY	4.3620e-003	0.00
tblVehicleEF	MCY	4.3620e-003	0.00
tblVehicleEF	MCY	4.3620e-003	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MH	2.1170e-003	0.00
tblVehicleEF	MH	2.1170e-003	0.00
tblVehicleEF	MH	2.1170e-003	0.00
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	OBUS	1.9400e-003	0.00
tblVehicleEF	OBUS	1.9400e-003	0.00
tblVehicleEF	OBUS	1.9400e-003	0.00
tblVehicleEF	SBUS	5.8800e-004	0.00
tblVehicleEF	SBUS	5.8800e-004	0.00
tblVehicleEF	SBUS	5.8800e-004	0.00
tblVehicleEF	UBUS	2.5020e-003	0.00
tblVehicleEF	UBUS	2.5020e-003	0.00
tblVehicleEF	UBUS	2.5020e-003	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	17.41
tblVehicleTrips	CNW_TTP	41.00	38.00
tblVehicleTrips	CW_TTP	59.00	62.00
tblVehicleTrips	ST_TR	2.59	1.68
tblVehicleTrips	SU_TR	2.59	1.68
tblVehicleTrips	WD_TR	2.59	1.68
tblWater	OutdoorWaterUseRate	0.00	1,724,546.00

## 2.0 Emissions Summary

### 2.1 Overall Construction

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.6198	5.0224	4.9700	8.6200e-003	0.4970	0.2782	0.7753	0.1325	0.2605	0.3930	0.0000	743.2878	743.2878	0.0977	0.0000	745.3388
2017	3.6031	0.3771	0.3563	6.2000e-004	0.0166	0.0217	0.0382	4.4300e-003	0.0202	0.0247	0.0000	53.3596	53.3596	9.9900e-003	0.0000	53.5693
<b>Total</b>	<b>4.2229</b>	<b>5.3995</b>	<b>5.3262</b>	<b>9.2400e-003</b>	<b>0.5136</b>	<b>0.2999</b>	<b>0.8135</b>	<b>0.1369</b>	<b>0.2807</b>	<b>0.4176</b>	<b>0.0000</b>	<b>796.6474</b>	<b>796.6474</b>	<b>0.1077</b>	<b>0.0000</b>	<b>798.9082</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.6198	5.0223	4.9700	8.6200e-003	0.4970	0.2782	0.7753	0.1325	0.2605	0.3930	0.0000	743.2874	743.2874	0.0977	0.0000	745.3384
2017	3.6031	0.3771	0.3563	6.2000e-004	0.0166	0.0217	0.0382	4.4300e-003	0.0202	0.0247	0.0000	53.3596	53.3596	9.9900e-003	0.0000	53.5693
<b>Total</b>	<b>4.2229</b>	<b>5.3994</b>	<b>5.3262</b>	<b>9.2400e-003</b>	<b>0.5136</b>	<b>0.2999</b>	<b>0.8135</b>	<b>0.1369</b>	<b>0.2807</b>	<b>0.4176</b>	<b>0.0000</b>	<b>796.6470</b>	<b>796.6470</b>	<b>0.1077</b>	<b>0.0000</b>	<b>798.9077</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.9254	5.0000e-005	5.6200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0108	0.0108	3.0000e-005	0.0000	0.0114
Energy	2.4800e-003	0.0226	0.0190	1.4000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003	0.0000	243.4517	243.4517	0.0105	2.5300e-003	244.4577
Mobile	0.3625	3.8833	4.9286	0.0169	0.8167	0.0632	0.8800	0.2213	0.0582	0.2795	0.0000	1,384.0845	1,384.0845	0.0235	0.0000	1,384.5779
Waste						0.0000	0.0000		0.0000	0.0000	41.0245	0.0000	41.0245	2.4245	0.0000	91.9385
Water						0.0000	0.0000		0.0000	0.0000	15.7735	190.7438	206.5173	1.6289	0.0401	253.1443
<b>Total</b>	<b>2.2904</b>	<b>3.9059</b>	<b>4.9532</b>	<b>0.0170</b>	<b>0.8167</b>	<b>0.0650</b>	<b>0.8817</b>	<b>0.2213</b>	<b>0.0599</b>	<b>0.2812</b>	<b>56.7979</b>	<b>1,818.2907</b>	<b>1,875.0887</b>	<b>4.0874</b>	<b>0.0426</b>	<b>1,974.1298</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.9254	5.0000e-005	5.6200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0108	0.0108	3.0000e-005	0.0000	0.0114
Energy	2.4800e-003	0.0226	0.0190	1.4000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003	0.0000	243.4517	243.4517	0.0105	2.5300e-003	244.4577
Mobile	0.3625	3.8833	4.9286	0.0169	0.8167	0.0632	0.8800	0.2213	0.0582	0.2795	0.0000	1,384.0845	1,384.0845	0.0235	0.0000	1,384.5779
Waste						0.0000	0.0000		0.0000	0.0000	41.0245	0.0000	41.0245	2.4245	0.0000	91.9385
Water						0.0000	0.0000		0.0000	0.0000	15.7735	190.7438	206.5173	1.6286	0.0400	253.1191
<b>Total</b>	<b>2.2904</b>	<b>3.9059</b>	<b>4.9532</b>	<b>0.0170</b>	<b>0.8167</b>	<b>0.0650</b>	<b>0.8817</b>	<b>0.2213</b>	<b>0.0599</b>	<b>0.2812</b>	<b>56.7979</b>	<b>1,818.2907</b>	<b>1,875.0887</b>	<b>4.0871</b>	<b>0.0425</b>	<b>1,974.1046</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>	<b>0.14</b>	<b>0.00</b>

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Demolition	Demolition	1/1/2016	1/14/2016	5	10	
2	Paving Demolition	Demolition	1/15/2016	1/28/2016	5	10	
3	Grading	Grading	1/29/2016	2/25/2016	5	20	
4	Building Construction	Building Construction	2/26/2016	1/12/2017	5	230	
5	Paving	Paving	1/13/2017	2/9/2017	5	20	
6	Architectural Coating	Architectural Coating	2/10/2017	3/9/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 460,248; Non-Residential Outdoor: 153,416 (Architectural Coating

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Demolition	Excavators	3	8.00	162	0.38
Building Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Paving Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Paving Demolition	Excavators	3	8.00	162	0.38
Paving Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

#### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Demolition	6	15.00	0.00	1,268.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving Demolition	6	15.00	0.00	96.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	182.00	71.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	36.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

### 3.2 Building Demolition - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1372	0.0000	0.1372	0.0208	0.0000	0.0208	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0214	0.2283	0.1752	2.0000e-004		0.0115	0.0115		0.0107	0.0107	0.0000	18.5487	18.5487	5.0400e-003	0.0000	18.6546
<b>Total</b>	<b>0.0214</b>	<b>0.2283</b>	<b>0.1752</b>	<b>2.0000e-004</b>	<b>0.1372</b>	<b>0.0115</b>	<b>0.1487</b>	<b>0.0208</b>	<b>0.0107</b>	<b>0.0315</b>	<b>0.0000</b>	<b>18.5487</b>	<b>18.5487</b>	<b>5.0400e-003</b>	<b>0.0000</b>	<b>18.6546</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0114	0.1849	0.1389	4.7000e-004	0.0109	2.7200e-003	0.0136	2.9800e-003	2.5000e-003	5.4800e-003	0.0000	42.7515	42.7515	3.1000e-004	0.0000	42.7580
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	4.4000e-004	4.5900e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7709	0.7709	4.0000e-005	0.0000	0.7718
<b>Total</b>	<b>0.0117</b>	<b>0.1854</b>	<b>0.1435</b>	<b>4.8000e-004</b>	<b>0.0117</b>	<b>2.7300e-003</b>	<b>0.0144</b>	<b>3.2000e-003</b>	<b>2.5100e-003</b>	<b>5.7000e-003</b>	<b>0.0000</b>	<b>43.5224</b>	<b>43.5224</b>	<b>3.5000e-004</b>	<b>0.0000</b>	<b>43.5298</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1372	0.0000	0.1372	0.0208	0.0000	0.0208	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0214	0.2283	0.1752	2.0000e-004		0.0115	0.0115		0.0107	0.0107	0.0000	18.5487	18.5487	5.0400e-003	0.0000	18.6546
<b>Total</b>	<b>0.0214</b>	<b>0.2283</b>	<b>0.1752</b>	<b>2.0000e-004</b>	<b>0.1372</b>	<b>0.0115</b>	<b>0.1487</b>	<b>0.0208</b>	<b>0.0107</b>	<b>0.0315</b>	<b>0.0000</b>	<b>18.5487</b>	<b>18.5487</b>	<b>5.0400e-003</b>	<b>0.0000</b>	<b>18.6546</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0114	0.1849	0.1389	4.7000e-004	0.0109	2.7200e-003	0.0136	2.9800e-003	2.5000e-003	5.4800e-003	0.0000	42.7515	42.7515	3.1000e-004	0.0000	42.7580
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	4.4000e-004	4.5900e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7709	0.7709	4.0000e-005	0.0000	0.7718
<b>Total</b>	<b>0.0117</b>	<b>0.1854</b>	<b>0.1435</b>	<b>4.8000e-004</b>	<b>0.0117</b>	<b>2.7300e-003</b>	<b>0.0144</b>	<b>3.2000e-003</b>	<b>2.5100e-003</b>	<b>5.7000e-003</b>	<b>0.0000</b>	<b>43.5224</b>	<b>43.5224</b>	<b>3.5000e-004</b>	<b>0.0000</b>	<b>43.5298</b>

### 3.3 Paving Demolition - 2016

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0104	0.0000	0.0104	1.5700e-003	0.0000	1.5700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0214	0.2283	0.1752	2.0000e-004		0.0115	0.0115		0.0107	0.0107	0.0000	18.5487	18.5487	5.0400e-003	0.0000	18.6546
<b>Total</b>	<b>0.0214</b>	<b>0.2283</b>	<b>0.1752</b>	<b>2.0000e-004</b>	<b>0.0104</b>	<b>0.0115</b>	<b>0.0219</b>	<b>1.5700e-003</b>	<b>0.0107</b>	<b>0.0123</b>	<b>0.0000</b>	<b>18.5487</b>	<b>18.5487</b>	<b>5.0400e-003</b>	<b>0.0000</b>	<b>18.6546</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.6000e-004	0.0140	0.0105	4.0000e-005	8.2000e-004	2.1000e-004	1.0300e-003	2.3000e-004	1.9000e-004	4.1000e-004	0.0000	3.2367	3.2367	2.0000e-005	0.0000	3.2372
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	4.4000e-004	4.5900e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7709	0.7709	4.0000e-005	0.0000	0.7718
<b>Total</b>	<b>1.1600e-003</b>	<b>0.0144</b>	<b>0.0151</b>	<b>5.0000e-005</b>	<b>1.6400e-003</b>	<b>2.2000e-004</b>	<b>1.8600e-003</b>	<b>4.5000e-004</b>	<b>2.0000e-004</b>	<b>6.3000e-004</b>	<b>0.0000</b>	<b>4.0076</b>	<b>4.0076</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>4.0090</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0104	0.0000	0.0104	1.5700e-003	0.0000	1.5700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0214	0.2283	0.1752	2.0000e-004		0.0115	0.0115		0.0107	0.0107	0.0000	18.5487	18.5487	5.0400e-003	0.0000	18.6546
<b>Total</b>	<b>0.0214</b>	<b>0.2283</b>	<b>0.1752</b>	<b>2.0000e-004</b>	<b>0.0104</b>	<b>0.0115</b>	<b>0.0219</b>	<b>1.5700e-003</b>	<b>0.0107</b>	<b>0.0123</b>	<b>0.0000</b>	<b>18.5487</b>	<b>18.5487</b>	<b>5.0400e-003</b>	<b>0.0000</b>	<b>18.6546</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.6000e-004	0.0140	0.0105	4.0000e-005	8.2000e-004	2.1000e-004	1.0300e-003	2.3000e-004	1.9000e-004	4.1000e-004	0.0000	3.2367	3.2367	2.0000e-005	0.0000	3.2372
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	4.4000e-004	4.5900e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	1.0000e-005	2.2000e-004	0.0000	0.7709	0.7709	4.0000e-005	0.0000	0.7718
<b>Total</b>	<b>1.1600e-003</b>	<b>0.0144</b>	<b>0.0151</b>	<b>5.0000e-005</b>	<b>1.6400e-003</b>	<b>2.2000e-004</b>	<b>1.8600e-003</b>	<b>4.5000e-004</b>	<b>2.0000e-004</b>	<b>6.3000e-004</b>	<b>0.0000</b>	<b>4.0076</b>	<b>4.0076</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>4.0090</b>

**3.4 Grading - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0367	0.3845	0.2608	3.0000e-004		0.0220	0.0220		0.0202	0.0202	0.0000	28.0664	28.0664	8.4700e-003	0.0000	28.2442
<b>Total</b>	<b>0.0367</b>	<b>0.3845</b>	<b>0.2608</b>	<b>3.0000e-004</b>	<b>0.0655</b>	<b>0.0220</b>	<b>0.0875</b>	<b>0.0337</b>	<b>0.0202</b>	<b>0.0539</b>	<b>0.0000</b>	<b>28.0664</b>	<b>28.0664</b>	<b>8.4700e-003</b>	<b>0.0000</b>	<b>28.2442</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	8.8000e-004	9.1900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5419	1.5419	8.0000e-005	0.0000	1.5436
<b>Total</b>	<b>6.0000e-004</b>	<b>8.8000e-004</b>	<b>9.1900e-003</b>	<b>2.0000e-005</b>	<b>1.6500e-003</b>	<b>1.0000e-005</b>	<b>1.6600e-003</b>	<b>4.4000e-004</b>	<b>1.0000e-005</b>	<b>4.5000e-004</b>	<b>0.0000</b>	<b>1.5419</b>	<b>1.5419</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.5436</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0367	0.3845	0.2608	3.0000e-004		0.0220	0.0220		0.0202	0.0202	0.0000	28.0664	28.0664	8.4700e-003	0.0000	28.2441
<b>Total</b>	<b>0.0367</b>	<b>0.3845</b>	<b>0.2608</b>	<b>3.0000e-004</b>	<b>0.0655</b>	<b>0.0220</b>	<b>0.0875</b>	<b>0.0337</b>	<b>0.0202</b>	<b>0.0539</b>	<b>0.0000</b>	<b>28.0664</b>	<b>28.0664</b>	<b>8.4700e-003</b>	<b>0.0000</b>	<b>28.2441</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	8.8000e-004	9.1900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5419	1.5419	8.0000e-005	0.0000	1.5436
<b>Total</b>	<b>6.0000e-004</b>	<b>8.8000e-004</b>	<b>9.1900e-003</b>	<b>2.0000e-005</b>	<b>1.6500e-003</b>	<b>1.0000e-005</b>	<b>1.6600e-003</b>	<b>4.4000e-004</b>	<b>1.0000e-005</b>	<b>4.5000e-004</b>	<b>0.0000</b>	<b>1.5419</b>	<b>1.5419</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.5436</b>

**3.5 Building Construction - 2016**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3764	3.1500	2.0450	2.9600e-003		0.2174	0.2174		0.2043	0.2043	0.0000	267.5797	267.5797	0.0664	0.0000	268.9734
<b>Total</b>	<b>0.3764</b>	<b>3.1500</b>	<b>2.0450</b>	<b>2.9600e-003</b>		<b>0.2174</b>	<b>0.2174</b>		<b>0.2043</b>	<b>0.2043</b>	<b>0.0000</b>	<b>267.5797</b>	<b>267.5797</b>	<b>0.0664</b>	<b>0.0000</b>	<b>268.9734</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0698	0.7123	0.9143	1.7000e-003	0.0483	0.0111	0.0594	0.0138	0.0102	0.0240	0.0000	154.7518	154.7518	1.1300e-003	0.0000	154.7755
Worker	0.0806	0.1184	1.2318	2.7100e-003	0.2206	1.8800e-003	0.2225	0.0586	1.7300e-003	0.0603	0.0000	206.7205	206.7205	0.0111	0.0000	206.9542
<b>Total</b>	<b>0.1505</b>	<b>0.8307</b>	<b>2.1461</b>	<b>4.4100e-003</b>	<b>0.2689</b>	<b>0.0130</b>	<b>0.2819</b>	<b>0.0724</b>	<b>0.0120</b>	<b>0.0843</b>	<b>0.0000</b>	<b>361.4724</b>	<b>361.4724</b>	<b>0.0123</b>	<b>0.0000</b>	<b>361.7297</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3764	3.1500	2.0450	2.9600e-003		0.2174	0.2174		0.2043	0.2043	0.0000	267.5794	267.5794	0.0664	0.0000	268.9731
<b>Total</b>	<b>0.3764</b>	<b>3.1500</b>	<b>2.0450</b>	<b>2.9600e-003</b>		<b>0.2174</b>	<b>0.2174</b>		<b>0.2043</b>	<b>0.2043</b>	<b>0.0000</b>	<b>267.5794</b>	<b>267.5794</b>	<b>0.0664</b>	<b>0.0000</b>	<b>268.9731</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0698	0.7123	0.9143	1.7000e-003	0.0483	0.0111	0.0594	0.0138	0.0102	0.0240	0.0000	154.7518	154.7518	1.1300e-003	0.0000	154.7755
Worker	0.0806	0.1184	1.2318	2.7100e-003	0.2206	1.8800e-003	0.2225	0.0586	1.7300e-003	0.0603	0.0000	206.7205	206.7205	0.0111	0.0000	206.9542
<b>Total</b>	<b>0.1505</b>	<b>0.8307</b>	<b>2.1461</b>	<b>4.4100e-003</b>	<b>0.2689</b>	<b>0.0130</b>	<b>0.2819</b>	<b>0.0724</b>	<b>0.0120</b>	<b>0.0843</b>	<b>0.0000</b>	<b>361.4724</b>	<b>361.4724</b>	<b>0.0123</b>	<b>0.0000</b>	<b>361.7297</b>

**3.5 Building Construction - 2017**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0140	0.1188	0.0816	1.2000e-004		8.0200e-003	8.0200e-003		7.5300e-003	7.5300e-003	0.0000	10.7766	10.7766	2.6500e-003	0.0000	10.8323
<b>Total</b>	<b>0.0140</b>	<b>0.1188</b>	<b>0.0816</b>	<b>1.2000e-004</b>		<b>8.0200e-003</b>	<b>8.0200e-003</b>		<b>7.5300e-003</b>	<b>7.5300e-003</b>	<b>0.0000</b>	<b>10.7766</b>	<b>10.7766</b>	<b>2.6500e-003</b>	<b>0.0000</b>	<b>10.8323</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-003	0.0264	0.0353	7.0000e-005	1.9700e-003	4.0000e-004	2.3700e-003	5.6000e-004	3.7000e-004	9.3000e-004	0.0000	6.2001	6.2001	4.0000e-005	0.0000	6.2010
Worker	2.9400e-003	4.3500e-003	0.0453	1.1000e-004	8.9900e-003	7.0000e-005	9.0600e-003	2.3900e-003	7.0000e-005	2.4500e-003	0.0000	8.0953	8.0953	4.2000e-004	0.0000	8.1041
<b>Total</b>	<b>5.5400e-003</b>	<b>0.0308</b>	<b>0.0806</b>	<b>1.8000e-004</b>	<b>0.0110</b>	<b>4.7000e-004</b>	<b>0.0114</b>	<b>2.9500e-003</b>	<b>4.4000e-004</b>	<b>3.3800e-003</b>	<b>0.0000</b>	<b>14.2954</b>	<b>14.2954</b>	<b>4.6000e-004</b>	<b>0.0000</b>	<b>14.3051</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0140	0.1188	0.0816	1.2000e-004		8.0200e-003	8.0200e-003		7.5300e-003	7.5300e-003	0.0000	10.7766	10.7766	2.6500e-003	0.0000	10.8323
<b>Total</b>	<b>0.0140</b>	<b>0.1188</b>	<b>0.0816</b>	<b>1.2000e-004</b>		<b>8.0200e-003</b>	<b>8.0200e-003</b>		<b>7.5300e-003</b>	<b>7.5300e-003</b>	<b>0.0000</b>	<b>10.7766</b>	<b>10.7766</b>	<b>2.6500e-003</b>	<b>0.0000</b>	<b>10.8323</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-003	0.0264	0.0353	7.0000e-005	1.9700e-003	4.0000e-004	2.3700e-003	5.6000e-004	3.7000e-004	9.3000e-004	0.0000	6.2001	6.2001	4.0000e-005	0.0000	6.2010
Worker	2.9400e-003	4.3500e-003	0.0453	1.1000e-004	8.9900e-003	7.0000e-005	9.0600e-003	2.3900e-003	7.0000e-005	2.4500e-003	0.0000	8.0953	8.0953	4.2000e-004	0.0000	8.1041
<b>Total</b>	<b>5.5400e-003</b>	<b>0.0308</b>	<b>0.0806</b>	<b>1.8000e-004</b>	<b>0.0110</b>	<b>4.7000e-004</b>	<b>0.0114</b>	<b>2.9500e-003</b>	<b>4.4000e-004</b>	<b>3.3800e-003</b>	<b>0.0000</b>	<b>14.2954</b>	<b>14.2954</b>	<b>4.6000e-004</b>	<b>0.0000</b>	<b>14.3051</b>

### 3.6 Paving - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0191	0.2030	0.1473	2.2000e-004		0.0114	0.0114		0.0105	0.0105	0.0000	20.6934	20.6934	6.3400e-003	0.0000	20.8266
Paving	3.9600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0230</b>	<b>0.2030</b>	<b>0.1473</b>	<b>2.2000e-004</b>		<b>0.0114</b>	<b>0.0114</b>		<b>0.0105</b>	<b>0.0105</b>	<b>0.0000</b>	<b>20.6934</b>	<b>20.6934</b>	<b>6.3400e-003</b>	<b>0.0000</b>	<b>20.8266</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	8.0000e-004	8.2900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4827	1.4827	8.0000e-005	0.0000	1.4843
<b>Total</b>	<b>5.4000e-004</b>	<b>8.0000e-004</b>	<b>8.2900e-003</b>	<b>2.0000e-005</b>	<b>1.6500e-003</b>	<b>1.0000e-005</b>	<b>1.6600e-003</b>	<b>4.4000e-004</b>	<b>1.0000e-005</b>	<b>4.5000e-004</b>	<b>0.0000</b>	<b>1.4827</b>	<b>1.4827</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.4843</b>

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0191	0.2030	0.1473	2.2000e-004		0.0114	0.0114		0.0105	0.0105	0.0000	20.6934	20.6934	6.3400e-003	0.0000	20.8265
Paving	3.9600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0230</b>	<b>0.2030</b>	<b>0.1473</b>	<b>2.2000e-004</b>		<b>0.0114</b>	<b>0.0114</b>		<b>0.0105</b>	<b>0.0105</b>	<b>0.0000</b>	<b>20.6934</b>	<b>20.6934</b>	<b>6.3400e-003</b>	<b>0.0000</b>	<b>20.8265</b>

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	8.0000e-004	8.2900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4827	1.4827	8.0000e-005	0.0000	1.4843
<b>Total</b>	<b>5.4000e-004</b>	<b>8.0000e-004</b>	<b>8.2900e-003</b>	<b>2.0000e-005</b>	<b>1.6500e-003</b>	<b>1.0000e-005</b>	<b>1.6600e-003</b>	<b>4.4000e-004</b>	<b>1.0000e-005</b>	<b>4.5000e-004</b>	<b>0.0000</b>	<b>1.4827</b>	<b>1.4827</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>1.4843</b>

### 3.7 Architectural Coating - 2017

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.5554					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3200e-003	0.0219	0.0187	3.0000e-005		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	2.5533	2.5533	2.7000e-004	0.0000	2.5589
<b>Total</b>	<b>3.5587</b>	<b>0.0219</b>	<b>0.0187</b>	<b>3.0000e-005</b>		<b>1.7300e-003</b>	<b>1.7300e-003</b>		<b>1.7300e-003</b>	<b>1.7300e-003</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>2.5589</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2900e-003	1.9100e-003	0.0199	5.0000e-005	3.9500e-003	3.0000e-005	3.9800e-003	1.0500e-003	3.0000e-005	1.0800e-003	0.0000	3.5584	3.5584	1.8000e-004	0.0000	3.5622
<b>Total</b>	<b>1.2900e-003</b>	<b>1.9100e-003</b>	<b>0.0199</b>	<b>5.0000e-005</b>	<b>3.9500e-003</b>	<b>3.0000e-005</b>	<b>3.9800e-003</b>	<b>1.0500e-003</b>	<b>3.0000e-005</b>	<b>1.0800e-003</b>	<b>0.0000</b>	<b>3.5584</b>	<b>3.5584</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>3.5622</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.5554					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3200e-003	0.0219	0.0187	3.0000e-005	1.7300e-003	1.7300e-003	1.7300e-003	1.7300e-003	1.7300e-003	1.7300e-003	0.0000	2.5533	2.5533	2.7000e-004	0.0000	2.5589
<b>Total</b>	<b>3.5587</b>	<b>0.0219</b>	<b>0.0187</b>	<b>3.0000e-005</b>	<b>1.7300e-003</b>	<b>1.7300e-003</b>	<b>1.7300e-003</b>	<b>1.7300e-003</b>	<b>1.7300e-003</b>	<b>1.7300e-003</b>	<b>0.0000</b>	<b>2.5533</b>	<b>2.5533</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>2.5589</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2900e-003	1.9100e-003	0.0199	5.0000e-005	3.9500e-003	3.0000e-005	3.9800e-003	1.0500e-003	3.0000e-005	1.0800e-003	0.0000	3.5584	3.5584	1.8000e-004	0.0000	3.5622
<b>Total</b>	<b>1.2900e-003</b>	<b>1.9100e-003</b>	<b>0.0199</b>	<b>5.0000e-005</b>	<b>3.9500e-003</b>	<b>3.0000e-005</b>	<b>3.9800e-003</b>	<b>1.0500e-003</b>	<b>3.0000e-005</b>	<b>1.0800e-003</b>	<b>0.0000</b>	<b>3.5584</b>	<b>3.5584</b>	<b>1.8000e-004</b>	<b>0.0000</b>	<b>3.5622</b>

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3625	3.8833	4.9286	0.0169	0.8167	0.0632	0.8800	0.2213	0.0582	0.2795	0.0000	1,384.0845	1,384.0845	0.0235	0.0000	1,384.5779
Unmitigated	0.3625	3.8833	4.9286	0.0169	0.8167	0.0632	0.8800	0.2213	0.0582	0.2795	0.0000	1,384.0845	1,384.0845	0.0235	0.0000	1,384.5779

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	361.20	361.20	361.20	2,073,326	2,073,326
<b>Total</b>	<b>361.20</b>	<b>361.20</b>	<b>361.20</b>	<b>2,073,326</b>	<b>2,073,326</b>

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	0.00	17.41	62.00	0.00	38.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
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0.618000	0.000000	0.000000	0.000000	0.064600	0.000000	0.087000	0.230400	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
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## 5.0 Energy Detail

### 4.4 Fleet Mix

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	218.8990	218.8990	0.0101	2.0800e-003	219.7556
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	218.8990	218.8990	0.0101	2.0800e-003	219.7556
NaturalGas Mitigated	2.4800e-003	0.0226	0.0190	1.4000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003	0.0000	24.5527	24.5527	4.7000e-004	4.5000e-004	24.7021
NaturalGas Unmitigated	2.4800e-003	0.0226	0.0190	1.4000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003	0.0000	24.5527	24.5527	4.7000e-004	4.5000e-004	24.7021

### 5.2 Energy by Land Use - NaturalGas

#### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No	460100	2.4800e-003	0.0226	0.0190	1.4000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003	0.0000	24.5527	24.5527	4.7000e-004	4.5000e-004	24.7021
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>2.4800e-003</b>	<b>0.0226</b>	<b>0.0190</b>	<b>1.4000e-004</b>		<b>1.7100e-003</b>	<b>1.7100e-003</b>		<b>1.7100e-003</b>	<b>1.7100e-003</b>	<b>0.0000</b>	<b>24.5527</b>	<b>24.5527</b>	<b>4.7000e-004</b>	<b>4.5000e-004</b>	<b>24.7021</b>

#### Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Unrefrigerated Warehouse-No	460100	2.4800e-003	0.0226	0.0190	1.4000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003	0.0000	24.5527	24.5527	4.7000e-004	4.5000e-004	24.7021
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>2.4800e-003</b>	<b>0.0226</b>	<b>0.0190</b>	<b>1.4000e-004</b>		<b>1.7100e-003</b>	<b>1.7100e-003</b>		<b>1.7100e-003</b>	<b>1.7100e-003</b>	<b>0.0000</b>	<b>24.5527</b>	<b>24.5527</b>	<b>4.7000e-004</b>	<b>4.5000e-004</b>	<b>24.7021</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	115635	33.0908	1.5200e-003	3.1000e-004	33.2203
Unrefrigerated Warehouse-No	649300	185.8082	8.5400e-003	1.7700e-003	186.5353
<b>Total</b>		<b>218.8990</b>	<b>0.0101</b>	<b>2.0800e-003</b>	<b>219.7556</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	115635	33.0908	1.5200e-003	3.1000e-004	33.2203
Unrefrigerated Warehouse-No	649300	185.8082	8.5400e-003	1.7700e-003	186.5353
<b>Total</b>		<b>218.8990</b>	<b>0.0101</b>	<b>2.0800e-003</b>	<b>219.7556</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.9254	5.0000e-005	5.6200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0108	0.0108	3.0000e-005	0.0000	0.0114
Unmitigated	1.9254	5.0000e-005	5.6200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0108	0.0108	3.0000e-005	0.0000	0.0114

**6.2 Area by SubCategory**

**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.3555					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.5693					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.4000e-004	5.0000e-005	5.6200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0108	0.0108	3.0000e-005	0.0000	0.0114
<b>Total</b>	<b>1.9254</b>	<b>5.0000e-005</b>	<b>5.6200e-003</b>	<b>0.0000</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0108</b>	<b>0.0108</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0114</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.3555					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.5693					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.4000e-004	5.0000e-005	5.6200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0108	0.0108	3.0000e-005	0.0000	0.0114
<b>Total</b>	<b>1.9254</b>	<b>5.0000e-005</b>	<b>5.6200e-003</b>	<b>0.0000</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0108</b>	<b>0.0108</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0114</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	206.5173	1.6286	0.0400	253.1191
Unmitigated	206.5173	1.6289	0.0401	253.1443

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No	49.7188 / 1.72455	206.5173	1.6289	0.0401	253.1443
<b>Total</b>		<b>206.5173</b>	<b>1.6289</b>	<b>0.0401</b>	<b>253.1443</b>

### Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No	49.7188 / 1.72455	206.5173	1.6286	0.0400	253.1191
<b>Total</b>		<b>206.5173</b>	<b>1.6286</b>	<b>0.0400</b>	<b>253.1191</b>

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

#### Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	41.0245	2.4245	0.0000	91.9385
Unmitigated	41.0245	2.4245	0.0000	91.9385

### 8.2 Waste by Land Use

#### Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No	202.1	41.0245	2.4245	0.0000	91.9385
<b>Total</b>		<b>41.0245</b>	<b>2.4245</b>	<b>0.0000</b>	<b>91.9385</b>

#### Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No	202.1	41.0245	2.4245	0.0000	91.9385
<b>Total</b>		<b>41.0245</b>	<b>2.4245</b>	<b>0.0000</b>	<b>91.9385</b>

**9.0 Operational Offroad**

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Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Vegetation**

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## Appendix B SCREEN3 Outputs

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**Redwood Warehouse  
EMFAC and Health Risk Calculations**

	LHD	MHD	HHD
<i>Idling Emissions</i>			
		0.336460733 g/hr	0.066726436 g/hr
		5.608E-03 g/min	1.112E-03 g/min
		9.346E-05 g/sec	1.854E-05 g/sec
		1 Avg Hourly Trucks	1 Avg Hourly Trucks
		9.346E-05 g/sec	1.854E-05 g/sec
<i>Running Emissions</i>			
	0.083688367 g/mile	0.237225206 g/mile	0.086217146 g/mile
	1.00 Trucks	1.00 Trucks	1.00 Trucks
	0.12 Miles	0.12 Miles	0.12 Miles
	1.004E-02 Total g/mile/hr	2.847E-02 Total g/mile/hr	1.035E-02 Total g/mile/hr
	1.674E-04 Total g/mile/min	4.745E-04 Total g/mile/min	1.724E-04 Total g/mile/min
	2.790E-06 Total g/mile/sec	7.908E-06 Total g/mile/sec	2.874E-06 Total g/mile/sec
			Site Area 40000 m2
			Composite EMFAC 3.139E-09 g/s/m2

Receptor	Distance	Conc	URF	LEA	CR	REL	HI	
Discrete 1	20	9.353E-03	0.0003		1	2.806E-06	5	0.002
Automated	148	1.395E-02	0.0003		1	4.185E-06	5	0.003
				Threshold		1.000E-05		1.000

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

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SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0.313900E-08  
SOURCE HEIGHT (M) = 4.3000  
LENGTH OF LARGER SIDE (M) = 202.0000  
LENGTH OF SMALLER SIDE (M) = 200.0000  
RECEPTOR HEIGHT (M) = 2.0000  
URBAN/RURAL OPTION = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

MODEL ESTIMATES DIRECTION TO MAX CONCENTRATION

BUOY. FLUX = 0.000 M\*\*4/S\*\*3; MOM. FLUX = 0.000 M\*\*4/S\*\*2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
\*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3.00 M/S ONLY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN AUTOMATED DISTANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
100.	0.1303E-01	4	3.0	3.0	960.0	4.30	45.
200.	0.8931E-02	4	3.0	3.0	960.0	4.30	44.
300.	0.4814E-02	4	3.0	3.0	960.0	4.30	44.
400.	0.3153E-02	4	3.0	3.0	960.0	4.30	44.
500.	0.2252E-02	4	3.0	3.0	960.0	4.30	44.
600.	0.1697E-02	4	3.0	3.0	960.0	4.30	43.
700.	0.1329E-02	4	3.0	3.0	960.0	4.30	44.
800.	0.1073E-02	4	3.0	3.0	960.0	4.30	42.
900.	0.8875E-03	4	3.0	3.0	960.0	4.30	43.
1000.	0.7484E-03	4	3.0	3.0	960.0	4.30	42.

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 100. M:  
148. 0.1395E-01 4 3.0 3.0 960.0 4.30 45.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	0.1395E-01	148.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

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SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0.313900E-08  
SOURCE HEIGHT (M) = 4.3000  
LENGTH OF LARGER SIDE (M) = 202.0000  
LENGTH OF SMALLER SIDE (M) = 200.0000  
RECEPTOR HEIGHT (M) = 2.0000  
URBAN/RURAL OPTION = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

ANGLE RELATIVE TO LONG AXIS = 90.0000

BUOY. FLUX = 0.000 M\*\*4/S\*\*3; MOM. FLUX = 0.000 M\*\*4/S\*\*2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
\*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3.00 M/S ONLY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DISCRETE DISTANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DI ST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
20.	0.9353E-02	4	3.0	3.0	960.0	4.30	90.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DI ST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	0.9353E-02	20.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*



\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

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SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0. 151585E-05  
SOURCE HEIGHT (M) = 5. 0000  
LENGTH OF LARGER SIDE (M) = 200. 0000  
LENGTH OF SMALLER SIDE (M) = 200. 0000  
RECEPTOR HEIGHT (M) = 2. 0000  
URBAN/RURAL OPTI ON = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTI ON WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10. 0 METERS WAS ENTERED.

ANGLE RELATIVE TO LONG AXIS = 150. 0000

BUOY. FLUX = 0. 000 M\*\*4/S\*\*3; MOM. FLUX = 0. 000 M\*\*4/S\*\*2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
\*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3. 00 M/S ONLY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DI SCRETE DI STANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DI STANCES \*\*\*

DI ST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DI R (DEG)
25.	4. 433	4	3. 0	3. 0	960. 0	5. 00	150.
30.	4. 530	4	3. 0	3. 0	960. 0	5. 00	150.
35.	4. 623	4	3. 0	3. 0	960. 0	5. 00	150.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATI ON PROCEDURE	MAX CONC (UG/M**3)	DI ST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	4. 623	35.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

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SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0. 197584E-05  
SOURCE HEIGHT (M) = 5. 0000  
LENGTH OF LARGER SIDE (M) = 200. 0000  
LENGTH OF SMALLER SIDE (M) = 200. 0000  
RECEPTOR HEIGHT (M) = 2. 0000  
URBAN/RURAL OPTI ON = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTI ON WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10. 0 METERS WAS ENTERED.

ANGLE RELATIVE TO LONG AXI S = 150. 0000

BUOY. FLUX = 0. 000 M\*\*4/S\*\*3; MOM. FLUX = 0. 000 M\*\*4/S\*\*2.

\*\*\* STABI LITY CLASS 4 ONLY \*\*\*  
\*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3. 00 M/S ONLY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DI SCRETE DI STANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DI STANCES \*\*\*

DI ST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DI R (DEG)
25.	5. 778	4	3. 0	3. 0	960. 0	5. 00	150.
30.	5. 904	4	3. 0	3. 0	960. 0	5. 00	150.
35.	6. 026	4	3. 0	3. 0	960. 0	5. 00	150.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATI ON PROCEDURE	MAX CONC (UG/M**3)	DI ST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	6. 026	35.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATI ONS \*\*  
\*\*\*\*\*

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

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SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0. 128650E-05  
SOURCE HEIGHT (M) = 1. 0000  
LENGTH OF LARGER SIDE (M) = 200. 0000  
LENGTH OF SMALLER SIDE (M) = 200. 0000  
RECEPTOR HEIGHT (M) = 2. 0000  
URBAN/RURAL OPTI ON = URBAN  
THE REGULATORY (DEFAULT) MIXING HEIGHT OPTI ON WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10. 0 METERS WAS ENTERED.

ANGLE RELATIVE TO LONG AXIS = 150. 0000

BUOY. FLUX = 0. 000 M\*\*4/S\*\*3; MOM. FLUX = 0. 000 M\*\*4/S\*\*2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
\*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3. 00 M/S ONLY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DI SCRETE DI STANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DI STANCES \*\*\*

DI ST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DI R (DEG)
25.	6. 144	4	3. 0	3. 0	960. 0	1. 00	150.
30.	6. 235	4	3. 0	3. 0	960. 0	1. 00	150.
35.	6. 323	4	3. 0	3. 0	960. 0	1. 00	150.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATI ON PROCEDURE	MAX CONC (UG/M**3)	DI ST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	6. 323	35.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

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SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0. 272186E-06  
SOURCE HEIGHT (M) = 1. 0000  
LENGTH OF LARGER SIDE (M) = 200. 0000  
LENGTH OF SMALLER SIDE (M) = 200. 0000  
RECEPTOR HEIGHT (M) = 2. 0000  
URBAN/RURAL OPTI ON = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTI ON WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10. 0 METERS WAS ENTERED.

ANGLE RELATIVE TO LONG AXIS = 150. 0000

BUOY. FLUX = 0. 000 M\*\*4/S\*\*3; MOM. FLUX = 0. 000 M\*\*4/S\*\*2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
\*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3. 00 M/S ONLY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DI SCRETE DI STANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DI STANCES \*\*\*

DI ST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DI R (DEG)
25.	1. 300	4	3. 0	3. 0	960. 0	1. 00	150.
30.	1. 319	4	3. 0	3. 0	960. 0	1. 00	150.
35.	1. 338	4	3. 0	3. 0	960. 0	1. 00	150.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATI ON PROCEDURE	MAX CONC (UG/M**3)	DI ST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	1. 338	35.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

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SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0.189102E-06  
SOURCE HEIGHT (M) = 1.0000  
LENGTH OF LARGER SIDE (M) = 200.0000  
LENGTH OF SMALLER SIDE (M) = 200.0000  
RECEPTOR HEIGHT (M) = 2.0000  
URBAN/RURAL OPTION = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

ANGLE RELATIVE TO LONG AXIS = 150.0000

BUOY. FLUX = 0.000 M\*\*4/S\*\*3; MOM. FLUX = 0.000 M\*\*4/S\*\*2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
\*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3.00 M/S ONLY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DISCRETE DISTANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
25.	0.9031	4	3.0	3.0	960.0	1.00	150.
30.	0.9165	4	3.0	3.0	960.0	1.00	150.
35.	0.9295	4	3.0	3.0	960.0	1.00	150.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	0.9295	35.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

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SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0.151585E-05  
SOURCE HEIGHT (M) = 5.0000  
LENGTH OF LARGER SIDE (M) = 200.0000  
LENGTH OF SMALLER SIDE (M) = 200.0000  
RECEPTOR HEIGHT (M) = 2.0000  
URBAN/RURAL OPTION = URBAN  
THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

ANGLE RELATIVE TO LONG AXIS = 150.0000

BUOY. FLUX = 0.000 M\*\*4/S\*\*3; MOM. FLUX = 0.000 M\*\*4/S\*\*2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
\*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3.00 M/S ONLY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DISCRETE DISTANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DI ST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DI R (DEG)
25.	4.433	4	3.0	3.0	960.0	5.00	150.
30.	4.530	4	3.0	3.0	960.0	5.00	150.
35.	4.623	4	3.0	3.0	960.0	5.00	150.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DI ST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	4.623	35.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

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SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0. 106019E-06  
SOURCE HEIGHT (M) = 1. 0000  
LENGTH OF LARGER SIDE (M) = 200. 0000  
LENGTH OF SMALLER SIDE (M) = 200. 0000  
RECEPTOR HEIGHT (M) = 2. 0000  
URBAN/RURAL OPTION = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10. 0 METERS WAS ENTERED.

ANGLE RELATIVE TO LONG AXIS = 150. 0000

BUOY. FLUX = 0. 000 M\*\*4/S\*\*3; MOM. FLUX = 0. 000 M\*\*4/S\*\*2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
\*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3. 00 M/S ONLY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DISCRETE DISTANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DI ST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DI R (DEG)
25.	0. 5063	4	3. 0	3. 0	960. 0	1. 00	150.
30.	0. 5138	4	3. 0	3. 0	960. 0	1. 00	150.
35.	0. 5211	4	3. 0	3. 0	960. 0	1. 00	150.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DI ST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	0. 5211	35.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

C: \Users\ol i vi ay\Desktop\Redwood SCREEN3\2Pavement Demo NOX. scr

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0.197584E-05  
SOURCE HEIGHT (M) = 5.0000  
LENGTH OF LARGER SIDE (M) = 200.0000  
LENGTH OF SMALLER SIDE (M) = 200.0000  
RECEPTOR HEIGHT (M) = 2.0000  
URBAN/RURAL OPTION = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

ANGLE RELATIVE TO LONG AXIS = 150.0000

BUOY. FLUX = 0.000 M\*\*4/S\*\*3; MOM. FLUX = 0.000 M\*\*4/S\*\*2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
\*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3.00 M/S ONLY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DISCRETE DISTANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DI ST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DI R (DEG)
25.	5.778	4	3.0	3.0	960.0	5.00	150.
30.	5.904	4	3.0	3.0	960.0	5.00	150.
35.	6.026	4	3.0	3.0	960.0	5.00	150.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATI ON PROCEDURE	MAX CONC (UG/M**3)	DI ST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	6.026	35.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

C:\Users\oliviay\Desktop\Redwood SCREEN3\3Grading CO.scr

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0.112856E-05  
SOURCE HEIGHT (M) = 5.0000  
LENGTH OF LARGER SIDE (M) = 200.0000  
LENGTH OF SMALLER SIDE (M) = 200.0000  
RECEPTOR HEIGHT (M) = 2.0000  
URBAN/RURAL OPTION = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

ANGLE RELATIVE TO LONG AXIS = 150.0000

BUOY. FLUX = 0.000 M\*\*4/S\*\*3; MOM. FLUX = 0.000 M\*\*4/S\*\*2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
\*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3.00 M/S ONLY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DISCRETE DISTANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
25.	3.300	4	3.0	3.0	960.0	5.00	150.
30.	3.372	4	3.0	3.0	960.0	5.00	150.
35.	3.442	4	3.0	3.0	960.0	5.00	150.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	3.442	35.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

02/06/15

09:09:29

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

C:\Users\olivaiy\Desktop\Redwood SCREEN3\3 Grading NOX.scr

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0.166384E-05  
SOURCE HEIGHT (M) = 5.0000  
LENGTH OF LARGER SIDE (M) = 200.0000  
LENGTH OF SMALLER SIDE (M) = 200.0000  
RECEPTOR HEIGHT (M) = 2.0000  
URBAN/RURAL OPTION = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS  
ENTERED.

ANGLE RELATIVE TO LONG AXIS = 150.0000

BUOY. FLUX = 0.000 M\*\*4/S\*\*3; MOM. FLUX = 0.000 M\*\*4/S\*\*  
2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
\*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3.00 M/S ONLY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DISCRETE DISTANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR  
FOLLOWING DISTANCES \*\*\*

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
25.	4.865	4	3.0	3.0	960.0	5.00	150.
30.	4.972	4	3.0	3.0	960.0	5.00	150.
35.	5.074	4	3.0	3.0	960.0	5.00	150.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
-----	-----	-----	-----
SIMPLE TERRAIN	5.074	35.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

C:\Users\oliviay\Desktop\Redwood SCREEN3\3Grading PM25.scr

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0.233241E-06  
SOURCE HEIGHT (M) = 1.0000  
LENGTH OF LARGER SIDE (M) = 200.0000  
LENGTH OF SMALLER SIDE (M) = 200.0000  
RECEPTOR HEIGHT (M) = 2.0000  
URBAN/RURAL OPTION = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

ANGLE RELATIVE TO LONG AXIS = 150.0000

BUOY. FLUX = 0.000 M\*\*4/S\*\*3; MOM. FLUX = 0.000 M\*\*4/S\*\*2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
\*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3.00 M/S ONLY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DISCRETE DISTANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DI ST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DI R (DEG)
25.	1.114	4	3.0	3.0	960.0	1.00	150.
30.	1.130	4	3.0	3.0	960.0	1.00	150.
35.	1.146	4	3.0	3.0	960.0	1.00	150.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DI ST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	1.146	35.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

C:\Users\oliviay\Desktop\Redwood SCREEN3\3Grading PM10.scr

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0.378638E-06  
SOURCE HEIGHT (M) = 1.0000  
LENGTH OF LARGER SIDE (M) = 200.0000  
LENGTH OF SMALLER SIDE (M) = 200.0000  
RECEPTOR HEIGHT (M) = 2.0000  
URBAN/RURAL OPTION = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

ANGLE RELATIVE TO LONG AXIS = 150.0000

BUOY. FLUX = 0.000 M\*\*4/S\*\*3; MOM. FLUX = 0.000 M\*\*4/S\*\*2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
\*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3.00 M/S ONLY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DISCRETE DISTANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DI ST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DI R (DEG)
25.	1.808	4	3.0	3.0	960.0	1.00	150.
30.	1.835	4	3.0	3.0	960.0	1.00	150.
35.	1.861	4	3.0	3.0	960.0	1.00	150.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DI ST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	1.861	35.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

C: \Users\ol i vi ay\Desktop\Redwood SCREEN3\4Constructi onCO. scr

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0. 800981E-06  
SOURCE HEIGHT (M) = 5. 0000  
LENGTH OF LARGER SIDE (M) = 200. 0000  
LENGTH OF SMALLER SIDE (M) = 200. 0000  
RECEPTOR HEIGHT (M) = 2. 0000  
URBAN/RURAL OPTI ON = URBAN  
THE REGULATORY (DEFAULT) MIXING HEIGHT OPTI ON WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10. 0 METERS WAS ENTERED.

ANGLE RELATIVE TO LONG AXIS = 150. 0000

BUOY. FLUX = 0. 000 M\*\*4/S\*\*3; MOM. FLUX = 0. 000 M\*\*4/S\*\*2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
\*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3. 00 M/S ONLY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DI SCRETE DI STANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DI STANCES \*\*\*

DI ST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DI R (DEG)
25.	2. 342	4	3. 0	3. 0	960. 0	5. 00	150.
30.	2. 393	4	3. 0	3. 0	960. 0	5. 00	150.
35.	2. 443	4	3. 0	3. 0	960. 0	5. 00	150.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATI ON PROCEDURE	MAX CONC (UG/M**3)	DI ST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	2. 443	35.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

C: \Users\ol i vi ay\Desktop\Redwood SCREEN3\4Constructi on NOX. scr

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0. 123371E-05  
SOURCE HEIGHT (M) = 5. 0000  
LENGTH OF LARGER SIDE (M) = 200. 0000  
LENGTH OF SMALLER SIDE (M) = 200. 0000  
RECEPTOR HEIGHT (M) = 2. 0000  
URBAN/RURAL OPTI ON = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTI ON WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10. 0 METERS WAS ENTERED.

ANGLE RELATIVE TO LONG AXIS = 150. 0000

BUOY. FLUX = 0. 000 M\*\*4/S\*\*3; MOM. FLUX = 0. 000 M\*\*4/S\*\*2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
\*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3. 00 M/S ONLY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DI SCRETE DI STANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DI STANCES \*\*\*

DI ST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DI R (DEG)
25.	3. 608	4	3. 0	3. 0	960. 0	5. 00	150.
30.	3. 686	4	3. 0	3. 0	960. 0	5. 00	150.
35.	3. 763	4	3. 0	3. 0	960. 0	5. 00	150.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATI ON PROCEDURE	MAX CONC (UG/M**3)	DI ST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	3. 763	35.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

C: \Users\ol i vi ay\Desktop\Redwood SCREEN3\4Constructi onPM10. scr

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0. 852475E-07  
SOURCE HEIGHT (M) = 1. 0000  
LENGTH OF LARGER SIDE (M) = 200. 0000  
LENGTH OF SMALLER SIDE (M) = 200. 0000  
RECEPTOR HEIGHT (M) = 2. 0000  
URBAN/RURAL OPTI ON = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTI ON WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10. 0 METERS WAS ENTERED.

ANGLE RELATIVE TO LONG AXIS = 150. 0000

BUOY. FLUX = 0. 000 M\*\*4/S\*\*3; MOM. FLUX = 0. 000 M\*\*4/S\*\*2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
\*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3. 00 M/S ONLY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DI SCRETE DI STANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DI STANCES \*\*\*

DI ST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DI R (DEG)
25.	0. 4071	4	3. 0	3. 0	960. 0	1. 00	150.
30.	0. 4132	4	3. 0	3. 0	960. 0	1. 00	150.
35.	0. 4190	4	3. 0	3. 0	960. 0	1. 00	150.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATI ON PROCEDURE	MAX CONC (UG/M**3)	DI ST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	0. 4190	35.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

C: \Users\ol i vi ay\Desktop\Redwood SCREEN3\4Constructi onPM25. scr

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0. 800548E-07  
SOURCE HEIGHT (M) = 1. 0000  
LENGTH OF LARGER SIDE (M) = 200. 0000  
LENGTH OF SMALLER SIDE (M) = 200. 0000  
RECEPTOR HEIGHT (M) = 2. 0000  
URBAN/RURAL OPTI ON = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTI ON WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10. 0 METERS WAS ENTERED.

ANGLE RELATIVE TO LONG AXIS = 150. 0000

BUOY. FLUX = 0. 000 M\*\*4/S\*\*3; MOM. FLUX = 0. 000 M\*\*4/S\*\*2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
\*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3. 00 M/S ONLY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DI SCRETE DI STANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DI STANCES \*\*\*

DI ST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DI R (DEG)
25.	0. 3823	4	3. 0	3. 0	960. 0	1. 00	150.
30.	0. 3880	4	3. 0	3. 0	960. 0	1. 00	150.
35.	0. 3935	4	3. 0	3. 0	960. 0	1. 00	150.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATI ON PROCEDURE	MAX CONC (UG/M**3)	DI ST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	0. 3935	35.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

C:\Users\oliviay\Desktop\Redwood SCREEN3\5Paving CO. scr

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0.637409E-06  
SOURCE HEIGHT (M) = 5.0000  
LENGTH OF LARGER SIDE (M) = 200.0000  
LENGTH OF SMALLER SIDE (M) = 200.0000  
RECEPTOR HEIGHT (M) = 2.0000  
URBAN/RURAL OPTION = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

ANGLE RELATIVE TO LONG AXIS = 150.0000

BUOY. FLUX = 0.000 M\*\*4/S\*\*3; MOM. FLUX = 0.000 M\*\*4/S\*\*2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
\*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3.00 M/S ONLY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DISCRETE DISTANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
25.	1.864	4	3.0	3.0	960.0	5.00	150.
30.	1.905	4	3.0	3.0	960.0	5.00	150.
35.	1.944	4	3.0	3.0	960.0	5.00	150.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	1.944	35.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

C:\Users\oliviay\Desktop\Redwood SCREEN3\5Paving NOX.scr

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0.878439E-06  
SOURCE HEIGHT (M) = 5.0000  
LENGTH OF LARGER SIDE (M) = 200.0000  
LENGTH OF SMALLER SIDE (M) = 200.0000  
RECEPTOR HEIGHT (M) = 2.0000  
URBAN/RURAL OPTION = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

ANGLE RELATIVE TO LONG AXIS = 150.0000

BUOY. FLUX = 0.000 M\*\*4/S\*\*3; MOM. FLUX = 0.000 M\*\*4/S\*\*2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
\*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3.00 M/S ONLY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DISCRETE DISTANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
25.	2.569	4	3.0	3.0	960.0	5.00	150.
30.	2.625	4	3.0	3.0	960.0	5.00	150.
35.	2.679	4	3.0	3.0	960.0	5.00	150.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	2.679	35.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

C:\Users\oliviay\Desktop\Redwood SCREEN3\5Paving PM10.scr

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0.493311E-07  
SOURCE HEIGHT (M) = 1.0000  
LENGTH OF LARGER SIDE (M) = 200.0000  
LENGTH OF SMALLER SIDE (M) = 200.0000  
RECEPTOR HEIGHT (M) = 2.0000  
URBAN/RURAL OPTION = URBAN  
THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

ANGLE RELATIVE TO LONG AXIS = 150.0000

BUOY. FLUX = 0.000 M\*\*4/S\*\*3; MOM. FLUX = 0.000 M\*\*4/S\*\*2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
\*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3.00 M/S ONLY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DISCRETE DISTANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
25.	0.2356	4	3.0	3.0	960.0	1.00	150.
30.	0.2391	4	3.0	3.0	960.0	1.00	150.
35.	0.2425	4	3.0	3.0	960.0	1.00	150.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	0.2425	35.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

C: \Users\ol i vi ay\Desktop\Redwood SCREEN3\5Pavi ng PM25. scr

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0.454365E-07  
SOURCE HEIGHT (M) = 1.0000  
LENGTH OF LARGER SIDE (M) = 200.0000  
LENGTH OF SMALLER SIDE (M) = 200.0000  
RECEPTOR HEIGHT (M) = 2.0000  
URBAN/RURAL OPTION = URBAN  
THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

ANGLE RELATIVE TO LONG AXIS = 150.0000

BUOY. FLUX = 0.000 M\*\*4/S\*\*3; MOM. FLUX = 0.000 M\*\*4/S\*\*2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
\*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3.00 M/S ONLY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DISCRETE DISTANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DI ST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DI R (DEG)
25.	0.2170	4	3.0	3.0	960.0	1.00	150.
30.	0.2202	4	3.0	3.0	960.0	1.00	150.
35.	0.2233	4	3.0	3.0	960.0	1.00	150.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DI ST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	0.2233	35.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

02/05/15  
17:41:11

\*\*\* SCREEN3 MODEL RUN \*\*\*  
 \*\*\* VERSION DATED 96043 \*\*\*

C:\Users\oliviay\Desktop\Redwood SCREEN3\6Coating CO.scr

## SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
 EMISSION RATE (G/(S-M\*\*2)) = 0.809203E-07  
 SOURCE HEIGHT (M) = 5.0000  
 LENGTH OF LARGER SIDE (M) = 200.0000  
 LENGTH OF SMALLER SIDE (M) = 200.0000  
 RECEPTOR HEIGHT (M) = 2.0000  
 URBAN/RURAL OPTION = URBAN  
 THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.  
 THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

ANGLE RELATIVE TO LONG AXIS = 150.0000

BUOY. FLUX = 0.000 M\*\*4/S\*\*3; MOM. FLUX = 0.000 M\*\*4/S\*\*2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
 \*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3.00 M/S ONLY \*\*\*

\*\*\*\*\*  
 \*\*\* SCREEN DISCRETE DISTANCES \*\*\*  
 \*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
25.	0.2366	4	3.0	3.0	960.0	5.00	150.
30.	0.2418	4	3.0	3.0	960.0	5.00	150.
35.	0.2468	4	3.0	3.0	960.0	5.00	150.

\*\*\*\*\*  
 \*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
 \*\*\*\*\*

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	0.2468	35.	0.

\*\*\*\*\*  
 \*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
 \*\*\*\*\*

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

C:\Users\oliviay\Desktop\Redwood SCREEN3\6 Coating NOX.scr

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0.947676E-07  
SOURCE HEIGHT (M) = 5.0000  
LENGTH OF LARGER SIDE (M) = 200.0000  
LENGTH OF SMALLER SIDE (M) = 200.0000  
RECEPTOR HEIGHT (M) = 2.0000  
URBAN/RURAL OPTION = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

ANGLE RELATIVE TO LONG AXIS = 150.0000

BUOY. FLUX = 0.000 M\*\*4/S\*\*3; MOM. FLUX = 0.000 M\*\*4/S\*\*2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
\*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3.00 M/S ONLY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DISCRETE DISTANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
25.	0.2771	4	3.0	3.0	960.0	5.00	150.
30.	0.2832	4	3.0	3.0	960.0	5.00	150.
35.	0.2890	4	3.0	3.0	960.0	5.00	150.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	0.2890	35.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

C:\Users\oliviay\Desktop\Redwood SCREEN3\6Coating PM10.scr

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0.735639E-08  
SOURCE HEIGHT (M) = 1.0000  
LENGTH OF LARGER SIDE (M) = 200.0000  
LENGTH OF SMALLER SIDE (M) = 200.0000  
RECEPTOR HEIGHT (M) = 2.0000  
URBAN/RURAL OPTION = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

ANGLE RELATIVE TO LONG AXIS = 150.0000

BUOY. FLUX = 0.000 M\*\*4/S\*\*3; MOM. FLUX = 0.000 M\*\*4/S\*\*2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
\*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3.00 M/S ONLY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN DISCRETE DISTANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
25.	0.3513E-01	4	3.0	3.0	960.0	1.00	150.
30.	0.3565E-01	4	3.0	3.0	960.0	1.00	150.
35.	0.3616E-01	4	3.0	3.0	960.0	1.00	150.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	0.3616E-01	35.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

02/05/15  
17:42:08

\*\*\* SCREEN3 MODEL RUN \*\*\*  
 \*\*\* VERSION DATED 96043 \*\*\*

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## SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
 EMISSION RATE (G/(S-M\*\*2)) = 0.735639E-08  
 SOURCE HEIGHT (M) = 1.0000  
 LENGTH OF LARGER SIDE (M) = 200.0000  
 LENGTH OF SMALLER SIDE (M) = 200.0000  
 RECEPTOR HEIGHT (M) = 2.0000  
 URBAN/RURAL OPTION = URBAN  
 THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.  
 THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

ANGLE RELATIVE TO LONG AXIS = 150.0000

BUOY. FLUX = 0.000 M\*\*4/S\*\*3; MOM. FLUX = 0.000 M\*\*4/S\*\*2.

\*\*\* STABILITY CLASS 4 ONLY \*\*\*  
 \*\*\* ANEMOMETER HEIGHT WIND SPEED OF 3.00 M/S ONLY \*\*\*

\*\*\*\*\*  
 \*\*\* SCREEN DISCRETE DISTANCES \*\*\*  
 \*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
25.	0.3513E-01	4	3.0	3.0	960.0	1.00	150.
30.	0.3565E-01	4	3.0	3.0	960.0	1.00	150.
35.	0.3616E-01	4	3.0	3.0	960.0	1.00	150.

\*\*\*\*\*  
 \*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
 \*\*\*\*\*

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	0.3616E-01	35.	0.

\*\*\*\*\*  
 \*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
 \*\*\*\*\*





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calendar_year	season_mc	sub_area	vehicle_cla	fuel	temperature	relative_hu	process	speed_time	pollutant	emission_rate
2017	Annual	San Bernardino (SC)	HHDT	Dsl	79	38	RUNEX	10	PM	0.086217146
2017	Annual	San Bernardino (SC)	LHDT1	Dsl	79	38	RUNEX	10	PM	0.083688367
2017	Annual	San Bernardino (SC)	MHDT	Dsl	79	38	RUNEX	10	PM	0.237225206
2017	Annual	San Bernardino (SC)	HHDT	Dsl	51	71	RUNEX	10	PM	0.086217146
2017	Annual	San Bernardino (SC)	LHDT1	Dsl	51	71	RUNEX	10	PM	0.083688367
2017	Annual	San Bernardino (SC)	MHDT	Dsl	51	71	RUNEX	10	PM	0.237225206
2017	Annual	San Bernardino (SC)	HHDT	Dsl			IDLEX		PM	0.066726436
2017	Annual	San Bernardino (SC)	LHDT1	Dsl			IDLEX		PM	0.807220483
2017	Annual	San Bernardino (SC)	MHDT	Dsl			IDLEX		PM	0.336460733



# **EXHIBIT E**

## **Agency Letters**



CITY OF FONTANA  
CALIFORNIA

April 2, 2015

Jim Morrissey / Project Planner  
San Bernardino County  
Land Use Services Department/Planning Division  
385 N. Arrowhead Avenue  
San Bernardino, CA 92415-0182

RE: P201500064/CUP  
Atwell, John  
APN 0234-101-21

Dear Mr. Morrissey

Thank you for the opportunity to comment on the above-referenced project proposed in the County of San Bernardino and within the City of Fontana's Sphere of Influence. The City of Fontana's General Plan pre-zoned the project site for M-1 Light Industrial. The proposed industrial project for a warehouse is not a permitted or conditionally permitted use within the pre-zoned M-1 Light Industrial District. The City of Fontana has the following comments regarding the proposed project if the County processes the application:

1. Indicate all roof-mounted equipment to be screened by the parapet and provide a cross section also demonstrating screening of the roof equipment;
2. Please provide double-striping for all customer/employee parking;
3. The entire site shall be paved with asphalt paving;
4. Please break-up the proposed flat elevation of the building and wall faces by adding faux windows, expansion joints, reveals, and changes in textures and colors. This may also be accomplished with varying roof lines, decorative columns, false walls protruding from the building, etc.;
5. All tractors and trailers and equipment shall be screened from the right-of-way with a decorative solid wall;
6. A minimum of 15% landscaping of the entire site is required;
7. All new and existing structures are required to have a 5 foot landscape buffer between the building and drive aisle;
8. The project site will be required to have an approved Water Quality Management Plan (WQMP);
9. The drive approach should be modified to allow for a typical stacking distance of 75 feet from back of sidewalk for trailers. The proposed car parking spaces should be relocated out of the 75 foot stacking area;

10. Provide a decorative trash and recycling enclosure;

Thank you again for the opportunity to review this project and please contact me at (909) 350-6658 if you have any questions regarding this letter.

Respectfully,

COMMUNITY DEVELOPMENT DEPARTMENT  
Planning Division



Paul Gonzales  
Associate Planner

cc: Zai AbuBakar, Planning Manager  
File