Cohen Property SUBSEQUENT MITIGATED NEGATIVE DECLARATION



Lead Agency:

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ACRONYMS AND ABBREVIATIONS

A-1 Agriculture zone AB Assembly Bill

ACM asbestos-containing materials

ADT Average daily trips

af acre-feet

AM Ante meridian (morning)
APN Assessor's Parcel Number
AQMP Air Quality Management Plan
BMP best management practice
BNSF Burlington Northern Santa Fe

C-1 Limited Business zone

CAAQS California Ambient Air Quality Standards

CalARP California Accidental Release Prevention Program

CalEEMod California Emission Estimator Model

CalFire California Department of Forestry and Fire Prevention

CALGreen Code California Green Building Standards Code

CalOSHA California Occupational Safety and Health Administration
CalRecycle California Department of Resources Recycling and Recovery

Caltrans California Department of Transportation

CARB California Air Resources Board

CDFW California Department of Fish and Wildlife

CDMG California Department of Conservation, Division of Mines and Geology

CEQA California Environmental Quality Act

cfs cubic feet per second

CGS California Geological Survey

CH₄ methane

CMP Congestion Management Program CNEL community noise equivalent level

CO carbon monoxide CO₂ carbon dioxide

CO₂e carbon dioxide equivalent

CRHR California Register of Historical Resources

CWA Clean Water Act

DAMP Drainage Area Management Plan

dBA A-weighted decibel

d/D flow depth to diameter ratio
DOE Department of Education
DOF Department of Finance

DOGGR Division of Oil, Gas, and Geothermal Resources

DTSC Department of Toxic Substances Control

du/ac dwelling units per acre

DWR Department of Water Resources
EDR Environmental Data Resources
e.g. exempli gratia (for example)
ESA Environmental Site Assessment
et seq. et sequens (and what follows)

FEMA Federal Emergency Management Agency

FIND Facility Information Detail

FMMP Farmland Mapping and Monitoring Program

FTA Federal Transit Administration

GHG Greenhouse Gas gpd gallons per day

gpcd gallons per capita per day

Greenbook Standard Specifications for Public Works Construction

GWP global warming potential HCP Habitat Conservation Plan HFCs hydrofluorocarbons

HVAC Heating, Ventilation and Air Conditioning

HWCA Hazardous Waste Control Act
ICC International Code Council
i.e. id est (in other words)
in/sec inches per second
IS Initial Study

IS/MND Initial Study/Mitigated Negative Declaration ITE Institute of Transportation Engineers

JWA John Wayne Airport LBP lead-based paint lbs/day pounds per day

 $\begin{array}{ll} LDR & Low \ Density \ Residential \\ L_{eq} & equivalent \ noise \ level \\ LI & Light \ Industrial \end{array}$

 L_{max} highest A-weighted sound level

Lmax nignest A-weighted sound level

LMDR Low Medium Density Residential

Lmin lowest A-weighted sound level

LOS level of service

LST localized significance thresholds

M-1 Light Manufacturing zone

MATES IV Multiple Air Toxics Exposure Study IV

MBTA Migratory Bird Treaty Act
MEI maximally exposed individual
MH Mobile Home Residential zone

MLD most likely descendant MM Mitigation Measure

MND Mitigated Negative Declaration MPO Metropolitan Planning Organization

MRZ Mineral Resources Zone

MS4 Municipal Separate Storm Sewer System

msl mean sea level

MTCO₂e Metric tons of carbon dioxide equivalent

 N_2O nitrous oxide N/A Not Applicable

NAAQS National Ambient Air Quality Standards
NAHC Native American Heritage Commission
NCCP Natural Community Conservation Plan

NHMLAC Natural History Museum of Los Angeles County

No. number

NO₂ nitrogen dioxide

NOD Notice of Determination

NOI Notice of Intent NOx nitrogen oxides

NPDES National Pollutant Discharge Elimination System

NRHP National Register of Historic Places

 O_3 Ozone

OCALUC Orange County Airport Land Use Commission

OCSD Orange County Sanitation District

OCTA Orange County Transportation Authority

OCWD Orange County Water District

OEHHA Office of Environmental Health and Hazards Assessment

OFD Orange Fire Department
OPD Orange Police Department

OSHA Occupational Safety and Health Administration

OS-P Open Space Park

OUSD Orange Unified School District

P Public Institution zone PC Planned Community zone

PFCs perfluorocarbons

PHMSA Pipeline and Hazardous Materials Safety Administration

PM Post meridian (afternoon)

PM10 Respirable particulate matter with a diameter of 10 micrometers or less PM2.5 Fine particulate matter with a diameter of 2.5 micrometers or less

PPV peak particle velocity

PRD Permit Registration Documents R-1-5 Single-Family Residential zone

R-1-8 Single-Family Residential 8,000 sf zone
R-2-6 Duplex Residential 6000 sf zone
R-2-7 Duplex Residential 7000 sf zone
R-2-7 Duplex Residential 8000 sf zone
R-3 Multiple Family Residential zone

R-A Resource Area

RCP Regional Comprehensive Plan

RCRA Resource Conservation and Recovery Act recognized environmental condition RHNA Regional Housing Needs Assessment

RMS root-mean square RR Regulatory Requirement

RTP/SCS Regional Transportation Plan/Sustainable Communities Strategy

RWQCB Regional Water Quality Control Board

SB Senate Bill

SCAG Southern California Association of Governments SCAQMD South Coast Air Quality Management District

sf square feet

SF₆ sulfur hexafluoride S-G Sand and Gravel zone

SO₂ sulfur dioxide

SoCAB South Coast Air Basin

SOx sulfur oxides SR State Route

SRA Source Receptor Area

SRRE Source Reduction and Recycling Element

SWP State Water Project

SWPPP Stormwater Pollution Prevention Plan SWRCB State Water Resources Control Board

TAC toxic air contaminant

TDM transportation demand management

TGD Technical Guidance Document
TMDL Total Maximum Daily Load
TSF thousand square feet

tpd tons per day

TSIP Transportation System Improvement Program USEPA United States Environmental Protection Agency

USACE United States Army Corps of Engineers

USFS United States Forest Service

USFWS United States Fish and Wildlife Service

USGS United States Geological Survey UWMP Urban Water Management Plan

VdB vibration decibel

VHFHSZ Very High Fire Hazard Severity Zone

VOC volatile organic compound WAP Williamson Act Program

WDR Waste Discharge Requirements WQMP Water Quality Management Plan

ZC Zone Change

SECTION 1.0 INTRODUCTION

1.1 INTRODUCTION

Cohen Living Trust, as the Project Applicant, is proposing the development of the Cohen Property (proposed Project or Project), which would include the construction of 32 dwelling units, along with internal drive aisles and common open space, on a 2.9-acre parcel (Assessor's Parcel Number [APN] 374-431-17) in the City of Orange. The Cohen Property would be developed as Phase II of the Orange-Olive Specific Plan. The Orange-Olive Residential Development Project Mitigated Negative Declaration (MND No. 1837-14) was prepared for Phase I of the Orange-Olive Specific Plan, located adjacent and to the north of Phase II, which consisted of 25 residential units on 2.33 acres. MND No. 1837-14 was adopted with approval of the Phase I project on November 10, 2015, and Phase I has since been constructed.

The Project consists of (1) development of the Cohen Property (Phase II of the Orange-Olive Specific Plan) and (2) required changes to the Orange-Olive Specific Plan for development of the Phase II Project, including extending the southern boundary of the Specific Plan area to East Grove Avenue. For clarity, the proposed Cohen Property is referred to as the "proposed Project" and/or "Phase II", and changes to the Orange-Olive Specific Plan are referred to as Zone Change (ZC) No. 1297-19 (Amendment to the Orange-Olive Specific Plan). A subsequent Initial Study (IS) and Mitigated Negative Declaration (MND) is proposed for the Project. The subsequent IS/MND evaluates the proposed Project (Phase II) and the Orange-Olive Specific Plan Amendment in conjunction with the proposed entitlement requests, which include: (1) Zone Change (ZC) No. 1297-19 (Amendment to the Orange Olive Specific Plan); (2) Major Site Plan Review No. 0969-19; (3) Tentative Tract Map No. 0049-19; (4) Design Review No. 4969-19; and (5) Mitigated Negative Declaration (MND) No. 1865-19.

An action that has the potential for causing a physical change in the environment is considered a "project" under Section 21065 of the California Environmental Quality Act (CEQA) (*California Public Resources Code*, Section 21000 et seq.) and Section 15378 of the State CEQA Guidelines (*California Code of Regulations*, Title 14, Section 15000 et seq.). A "project" is required to go through an environmental review process in accordance with CEQA and the State CEQA Guidelines.

Pursuant to Section 15367 of the State CEQA Guidelines, the Lead Agency is the public agency that has the principal responsibility of carrying out or approving a project that may have a significant effect on the environment. The City of Orange (City) is the Lead Agency since the proposed Project would be located in the City and would require approvals from the City. As the Lead Agency, the City has the responsibility for completing the environmental review process for the Project in accordance with CEQA and certification or adoption of the environmental documentation prior to the approval of the Project.

1.2 CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE

In accordance with Section 15162 of the State CEQA Guidelines, and the City's Local CEQA Guidelines, an Initial Study (IS) has been prepared for the proposed Project and its associated discretionary approvals.

CEQA Guidelines Section 15162, Subsequent EIRs and Negative Declarations, states the following with respect to a Subsequent Negative Declaration:

- (a) When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:
 - (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
 - (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
 - (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
 - (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
 - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.
- (b) If changes to a project or its circumstances occur or new information becomes available after adoption of a negative declaration, the lead agency shall prepare a subsequent EIR if required under subdivision (a). Otherwise the lead agency shall determine whether to prepare a subsequent negative declaration, an addendum, or no further documentation.

The City has determined that a Subsequent IS/MND is the appropriate CEQA document for the proposed Cohen Property Project, because changes outside the scope of the original project are proposed and were not covered in the original MND (CEQA Guidelines Sections 15162, 15164). The IS indicates that the potentially significant impacts of the Project can be reduced to less than significant levels with implementation of mitigation measures, and therefore, the Project requires preparation of an MND.

This Subsequent IS/MND serves as the environmental document that presents the analysis of Project impacts on each of the environmental issue areas in the CEQA Environmental Checklist provided in Section 4.0. This document will serve to inform City decision makers, representatives of affected trustee and responsible agencies, and other interested parties of the potential environmental effects that may occur with approval and implementation of the proposed Project.

1.3 PROJECT SUMMARY

1.3.1 Location

The approximate 2.9-acre Project site (Phase II) is located in the City of Orange, in Orange County, California. The site is located east of North Orange Olive Road and north of East Grove Avenue in the northwestern section of the City. The site is 1.0 mile west of State Route (SR) 55, 1.4 miles east of SR 57, and 1.9 miles south of SR 91. The site is east of the Burlington Northern Santa Fe (BNSF) railroad tracks, across from North Orange Olive Road, and north of Shaffer Park (currently under renovation). Existing residential uses are located immediately to the north and east of the site. See Exhibit 1-1, Regional Location and Exhibit 1-2, Local Vicinity.

1.3.2 Project Proponent

David Cohen Cohen Living Trust 4922 East Somerton Avenue Orange, CA 92867 (714) 401-8200

1.3.3 Existing General Plan and Zoning

Land Use Designation:

LMDR - Low Medium Density Residential 6-15 du/ac

Zoning Classification:

C-1 - Limited Business

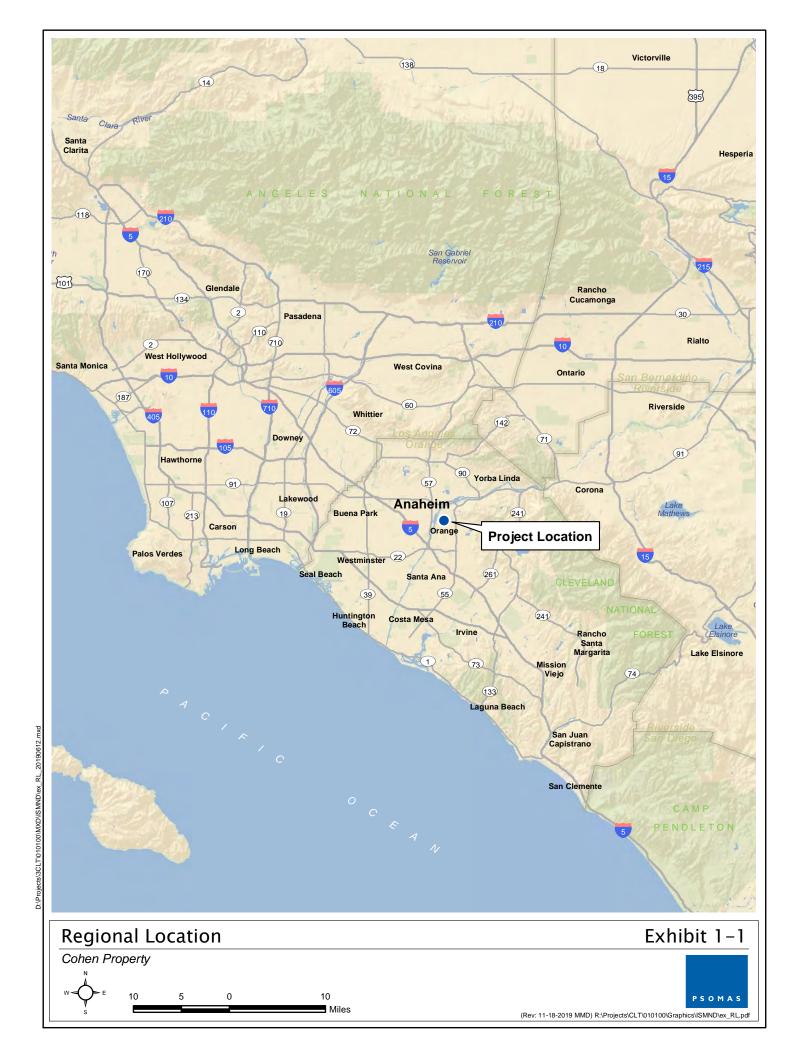
1.3.4 Existing Setting

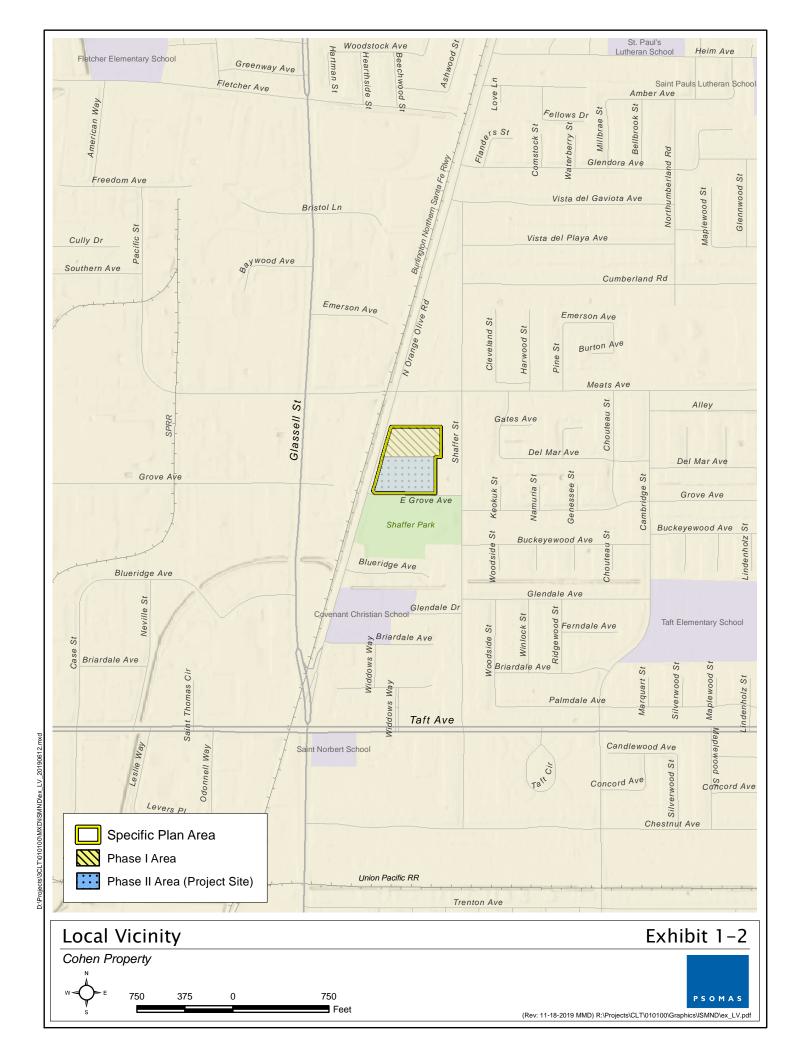
Project Site:

The Project site (Phase II) is currently developed with a shopping center (Shaffer Park Center) consisting of two commercial/retail buildings, with the larger building occupied by several thrift stores, offices (Orange County Department of Education), and an alternative school (Project Hope School) and the smaller building occupied by a thrift store (Earth Wise) and a restaurant (Taqueria Los Olivos). Site addresses include 1997 North Orange Olive Road and 301 through 343 East Grove Avenue.

Surrounding Land Uses:

The Project site (Phase II) is surrounded by residential uses to the north (Phase I of the Orange-Olive Specific Plan) and east, Shaffer Park to the south across East Grove Avenue, and light industrial uses to the west across from North Orange Olive Road and the BNSF railroad tracks. Section 2.4, Planning Context, provides a description of existing General Plan designations and zoning for the surrounding land uses.





1.3.5 Proposed Development

The proposed Cohen Property would involve construction of a 32-unit residential development at a density of 11.0 dwelling units per acre (du/ac). The existing commercial/retail buildings, drive aisles, and surface parking areas would be demolished to accommodate the proposed Project. The proposed two-story single-family detached dwelling units would consist of three different floor plans, with the units ranging in size from 1,891 to 2,050 square feet (sf). Furthermore, the proposed Project includes a total of 92 parking spaces and 19,535 sf of homeowners association (HOA) common open space. Additional details on the Project are provided in Section 3.0 of this Subsequent IS/MND.

1.3.6 Required Approvals

The City of Orange would approve the following discretionary actions for the implementation of the proposed Project:

- Zone Change No. 1297-19 (Amendment to the Orange Olive Specific Plan)
- Major Site Plan Review No. 0969-19
- Tentative Tract Map No. 0049-19
- Design Review No. 4969-19
- Subsequent Mitigated Negative Declaration No. 1865-19

In addition, the following ministerial permits would be sought from the City:

- Demolition Permit for existing buildings and site improvements
- Grading Permit
- Building Permits
- Occupancy Permits
- Encroachment Permit for driveway, sidewalk, and utility connections on adjacent streets

The Project also would require coverage under the National Pollutant Discharge Elimination System (NPDES) Construction General Permit from the State Water Resources Control Board (SWRCB).

1.4 SUMMARY OF FINDINGS

The State CEQA Guidelines and the City's Local CEQA Guidelines require the preparation of an IS/MND if a project would result in potentially significant effects, but (1) revisions to the project are made by or agreed to by the applicant before the IS/MND is released for public review and these revisions would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur and (2) there is no substantial evidence, in light of the whole record before the lead agency, that the project as revised may have a significant effect on the environment (State CEQA Guidelines, Section 15070[b]). As stated above under Section 1.2, the City has determined that a Subsequent IS/MND is the appropriate CEQA document for the proposed Project, because changes outside the scope of the original project are proposed and were not covered in the original MND.

Based on the environmental checklist prepared for the proposed Project and supporting environmental analysis (provided in Section 4.0 of this Subsequent IS/MND), with compliance with applicable regulations, the Project would have no impact or less than significant impacts on the following environmental issue areas: Aesthetics, Agriculture and Forestry Resources, Air Quality,

Energy, Greenhouse Gas (GHG) Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire.

The proposed Project's impacts on the following issue areas would be significant and would require the implementation of mitigation measures: Biological Resources, Cultural Resources, Geology and Soils, and Noise. All impacts would be avoided or reduced to less than significant levels after mitigation.

Per Section 21082.1(c) of CEQA and Section 15074(b) of the State CEQA Guidelines, the City of Orange, as the Lead Agency, has managed the preparation of this Subsequent IS/MND and, based on its review, has determined that the document reflects the City's independent judgement and analysis. According to the State CEQA Guidelines and the City's Local CEQA Guidelines, the City may adopt an MND for the proposed Project because, with the incorporation of the recommended mitigation measures, the Project's potentially significant environmental impacts would be eliminated or reduced to levels considered less than significant.

1.5 PROJECT REVIEW PROCESS

Upon completion of this Subsequent IS/MND, a Notice of Intent (NOI) to adopt the Subsequent IS/MND was distributed to responsible agencies and other potentially affected agencies and interested individuals. The NOI was published in the Anaheim Bulletin/Orange City News, on August 13, 2020. The NOI and Subsequent IS/MND are also available for public review on the City's website: https://www.cityoforange.org/292/Project-NoticesRelated-Environmental-Doc

Hard copies of the documents would be available for public review at the following locations:

City of Orange Community Development Department

300 E. Chapman Avenue Orange, California 92866 (714) 744-2225

Hours: 7:30 AM to 5:30 PM Monday through Thursday and alternating Fridays

Orange Public Library and History Center

407 E. Chapman Avenue Orange, California 92866 (714) 288-2400

Hours: 10:00 AM to 9:00 PM Monday through Wednesday 10:00 AM to 6:00 PM Thursday through Saturday Closed Sunday

• Taft Branch Library

740 E. Taft Avenue Orange, California 92865 (714) 288-2430

Hours: 2:00 PM to 9:00 PM Monday through Wednesday 1:00 PM to 6:00 PM Thursday through Saturday Closed Sunday A 30-day public review period has been established for the Subsequent IS/MND beginning on August 13, 2020 and ending on September 14, 2020, in accordance with Section 15073 of the State CEQA Guidelines. In reviewing the Subsequent IS/MND, affected public agencies and interested members of the public should focus on the adequacy of the document in identifying and analyzing the potential environmental impacts and the ways in which the potentially significant effects of the Project can be avoided or mitigated. Comments on the Subsequent IS/MND and the analysis contained herein may be sent to:

Monique Schwartz
Associate Planner
City of Orange
300 E. Chapman Avenue
Orange, California 92866
(714) 744-7224
mschwartz@cityoforange.org

Following receipt and evaluation of comments from agencies, organizations, and/or individuals, the City of Orange will determine whether any substantial new environmental issues have been raised or substantial comments have been provided that would require revisions to the Subsequent IS/MND. If so, further documentation may be required.

The proposed Project and the adequacy of this Subsequent IS/MND will be considered by the Orange Planning Commission and the City Council during scheduled public hearings. If the City finds, on the basis of the whole record before it (including this Subsequent IS/MND and any comments received) that there is no substantial evidence that the Project would have a significant effect on the environment, it may adopt the Subsequent MND. If the City Council adopts the Subsequent MND and approves the Project, a Notice of Determination (NOD) will be filed with the Orange County Clerk.

1.6 DOCUMENTS INCORPORATED BY REFERENCE

In preparation of this Subsequent IS/MND, relevant documents have been cited and incorporated, in accordance with Sections 15148 and 15150 of the State CEQA Guidelines. The following reports and/or studies are applicable to the proposed Project and are hereby incorporated by reference.

- City of Orange General Plan
- City of Orange Municipal Code, which includes the City's Zoning Code (Title 17)
- Orange-Olive Residential Development Project Mitigated Negative Declaration (MND No. 1837-14)

These documents are available for review at the Planning Division of the City of Orange, Community Development Department (refer to address and hours provided above). They are also available on the City's website at: https://www.cityoforange.org/292/Project-NoticesRelated-Environmental-Doc

1.7 SCHEDULED PUBLIC MEETINGS OR HEARINGS

Public meetings and hearings for the Project have not been scheduled at this time.

SECTION 2.0 PROJECT LOCATION, BACKGROUND AND ENVIRONMENTAL SETTING

2.1 PROJECT LOCATION

The approximate 2.9-acre proposed Project site (Phase II) is located at the northeast corner of the intersection of North Orange Olive Road and East Grove Avenue in the City of Orange in Orange County, California. The Project site is located immediately to the south of the existing Orange-Olive Specific Plan (Phase I). The Project site is located north of Shaffer Park, east of the BNSF railroad tracks across from North Orange Olive Road, and 160 feet west of Shaffer Street. The site consists of APN 374-431-17 and has approximately 263 feet of frontage on North Orange Olive Road and 487 feet of frontage on East Grove Avenue. A 5-foot wide easement along the northern property boundary has been granted to Pacific Telephone and Telegraph Company and an overlapping 10-foot easement has been granted to Southern California Edison Company (where overhead power lines on wooden poles are present and extend from North Orange Olive Road to Shaffer Street). The site is currently developed with a shopping center and associated improvements (i.e., drive aisles and parking areas). See Exhibit 2-1, Aerial Photograph.

2.2 BACKGROUND

The Orange-Olive Specific Plan (Specific Plan) is a regulatory document, adopted by ordinance by the City of Orange (City) and serves as the adopted zoning for the property located at 2025 North Orange-Olive Road (Phase I) and 301 East Grove Road (Phase II). The City of Orange has used specific plans as tools to achieve the customized development of individual parcels within a broader land use context. The purpose of the Orange-Olive Specific Plan is to regulate development within the specific plan boundaries in order to ensure orderly development and compatibility with existing uses in the surrounding areas. Uses, development plans, site plans and any subsequent development activity within the Project site must be consistent with both the Specific Plan and the City's Orange General Plan (General Plan).

The Orange-Olive Specific Plan was originally developed to accommodate a 25-unit detached residential development on a constrained infill development site (Phase I). An Initial Study/Mitigated Negative Declaration (IS/MND) was prepared for the Orange-Olive Residential Development (renamed to Irving House), which was approved on November 10, 2015 and has since been constructed. An amendment to the Specific Plan is proposed to incorporate the adjacent property to the south of Phase I, referred to as Phase II, or the proposed Project. Phase II of the Orange-Olive Specific Plan proposes a 32-unit detached residential development consistent with Phase I, for a total of 57 units within the amended boundary of the Specific Plan. The amended Orange-Olive Specific Plan incorporates the conceptual site plans, elevations, and landscape plans for each phase and establishes development standards and design guidelines to provide guidance and limits for future adjustments to the development plan.



The City of Orange was the lead agency responsible for preparing the IS/MND for the Irving House development and continues to be the lead agency with responsibility for approving the current Cohen Property Project. The City has determined that a Subsequent IS/MND is the appropriate CEQA document for the proposed Cohen Property Project. CEQA Guidelines require the completion of either a Subsequent Mitigated Negative Declaration or Addendum to a Mitigated Negative Declaration when changes outside the scope of the original project are proposed and were not covered in the original Mitigated Negative Declaration (CEQA Guidelines Sections 15162, 15164). This Subsequent IS/MND has been prepared in accordance with the requirements of CEQA and its guidelines for implementation. The IS/MND for the Orange-Olive Residential Development is hereby incorporated by reference and supports this Subsequent IS/MND.

This Subsequent IS/MND incorporates previously approved measures from the IS/MND for the Orange-Olive Residential Development. Proposed changes to these mitigation measures are shown with strikeout for deleted text and underline for new text. Where appropriate, new mitigation measures and regulatory requirements are provided to reduce Project impacts to a less than significant level.

2.3 EXISTING SITE AND AREA CHARACTERISTICS

2.3.1 Site Access

Vehicle access to the Cohen Property site is provided by two driveways on North Orange Olive Road and three driveways on East Grove Avenue. North Orange Olive Road is a four-lane undivided road that extends northeasterly for approximately 2.0 miles from Glassell Street (on the south) to Riverdale Avenue (on the north). Along the site, East Grove Avenue is a short two-lane local street from North Orange Olive Road to Shaffer Street. SR 55 is located approximately 1.0 mile east of the site, SR 57 is 1.4 miles to the west, and SR 91 is 1.9 miles to the north.

2.3.2 Existing Site Conditions

The Cohen Property site is developed with a multi-tenant shopping center consisting of two commercial/retail buildings: a single-story 34,720-square-foot building at the northern portion of the site and a single-story 2,630-square foot building at the southwestern corner (near the intersection of North Orange Olive Road and East Grove Avenue). The larger building is a wood-framed stucco structure on a concrete slab-on-grade foundation that was built in 1964 and is divided into multiple tenant spaces. The smaller building is also a wood-framed stucco structure on a concrete slab-on-grade foundation that was built in the late 1980s to early 1990s.

Table 2-1 lists the existing tenants of the Shaffer Park Center.

TABLE 2-1				
SHAFFER PARK CENTER - EXISTING TENANTS				

Address	Floor Area (sf)	Tenant		
Larger Retail Building				
301 Grove Ave	1,650	3-Day Thrift		
303 Grove Ave	10,000	Family Thrift Store/California Vintage Marketplace		
305 Grove Ave	5,650	Flashbacks Mercantile		
321 Grove Ave	1,200	Orange County Department of Education		
325 Grove Ave	2,000	Reclaimed		
335 Grove Ave	2,000	VC 305*		
337 Grove Ave	2,000	Creative Arts and Parties		
343 Grove Ave	10,220	Project Hope School		
Total	34,720			
Smaller Retail Building				
1997 Orange Olive Road, Unit A	1,315	Earth Wise Second-Hand Store		
1997 Orange Olive Road, Unit B	1,315	Taqueria Los Olivos		
Total	2,630			
sf – square feet; * - appears closed				

The southern section of the site consists of an asphalt-paved surface parking lot. A service drive aisle extends from the northern access driveway on North Orange Olive Road along the northern boundary of the site and turns south along the eastern boundary to the eastern access driveway on East Grove Avenue. The site contains ornamental trees (e.g., Mexican fan palm and ficus trees), shrubs (e.g., boxwood and day lilies) and groundcover along the setback areas on North Orange Olive Road and East Grove Avenue, at parking fingers/islands, and near the existing buildings. Jacaranda trees are also present in tree wells along East Grove Avenue. Block walls line the northern and eastern perimeters of the site, with a wrought iron fencing and sliding gate at the western end of the larger building and a gate across the northern section of the eastern drive aisle.

2.3.3 Site Topography

The Project site is relatively flat. According to USGS maps, the site has an elevation of approximately 200 feet above mean sea level (msl) and slopes slightly to the southwest.

2.3.4 Surrounding Land Uses and Development

The Project site is located within a highly urbanized portion of the City of Orange that includes a mix of residential, commercial, and industrial land uses. As shown in Exhibit 2-1, the Project site is bordered by North Orange Olive Road on the west and East Grove Avenue on the south. Farther west of North Orange Olive Road are the BNSF railroad tracks and light industrial uses (e.g., BASF Corporation, The SoCo Group, Troas Enterprises, Contract Installations, United Industries, Renegade Wheels, Positive Concepts, and Jergens). South of East Grove Avenue is Shaffer Park. Beyond Shafer Park to the south are Fire Station No. 3, and single- and multi-family units on Blueridge Avenue. As previously indicated, the proposed Project is Phase II of the Orange-Olive Specific Plan with Phase I located immediately to the north of the Project site. Phase I consists of the newly-constructed 25-unit Irving House development with for-sale, single-family, detached units. The Project site is bound by a lot developed with two single-family detached units and three lots developed with a single-

family detached unit each. Older single-family detached residences are found farther east, northeast and southeast of the site. Additionally, the site is located less than half a mile northwest of the Fairmeadow Eichler Tract, which is one of three mid-century modern Eichler tracts recognized as a historic district in the City. A multi-family residential development is located to the north of the Orange-Olive Specific Plan boundary.

2.4 PLANNING CONTEXT

2.4.1 General Plan Designation

The Project site is currently designated in the Land Use Policy Map of the City of Orange General Plan as LMDR (6-15 du/ac). This designation "provides for both detached and attached single-family homes on smaller lots, as well as duplexes and some mobile homes, multi-family townhouses, condominiums, and apartments" (Orange 2010a).

The land use designations in the vicinity of the Project site include OS-P (Open Space Park) to the south, LDR (Low Density Residential) to the east and northeast, LMDR to the north and east, and LI (Light Industrial) to the west. Exhibit 2-2 shows the existing land use designations on and near the site.

2.4.2 Zoning Designation

In the City's Zoning Map, the site is zoned as C-1 (Limited Business). This zone permits lower intensity office, general retail, and service commercial businesses (Orange Municipal Code [OMC] Section 17.18.020). Adjacent zoning designations include C-1 to the south, R-3 (Multiple Family Residential) to the north, M-1 (Light Manufacturing) to the west, R-2-6 (Residential Duplex 6000 sf) to the east, and R-1-8 (Single-Family Residential 8,000 sf) to the east and northeast. Exhibit 2-3 shows the existing zoning designations on and near the site.

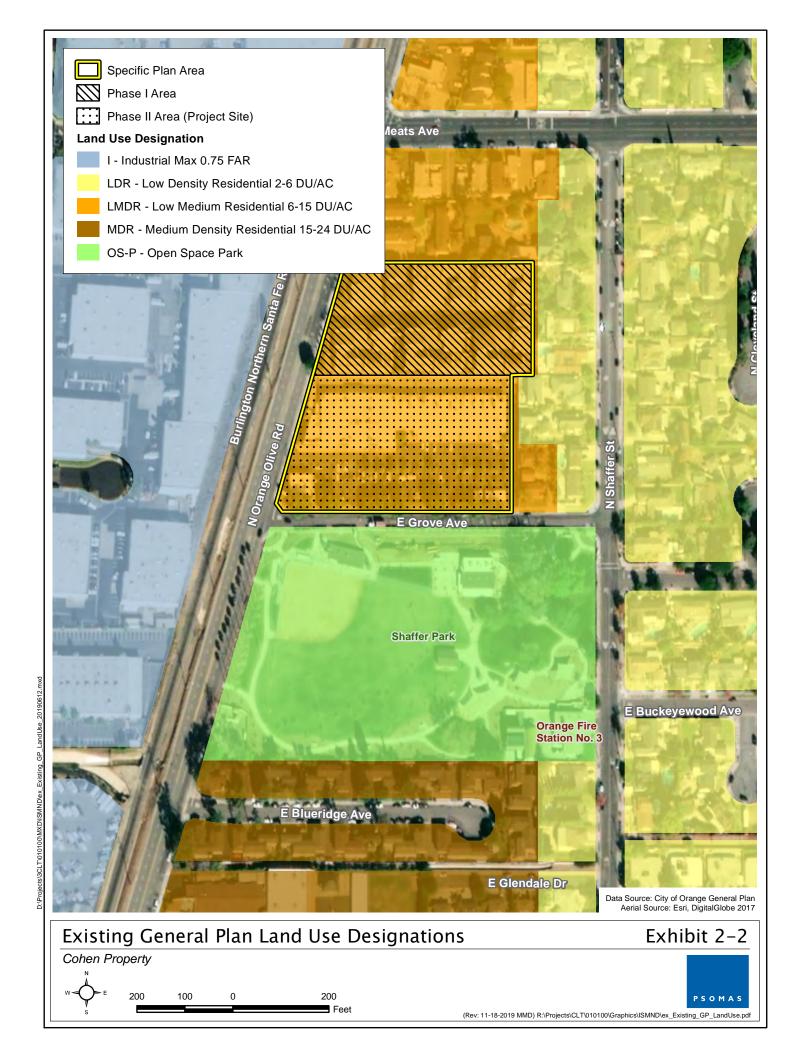
2.5 EXISTING ENVIRONMENTAL CHARACTERISTICS

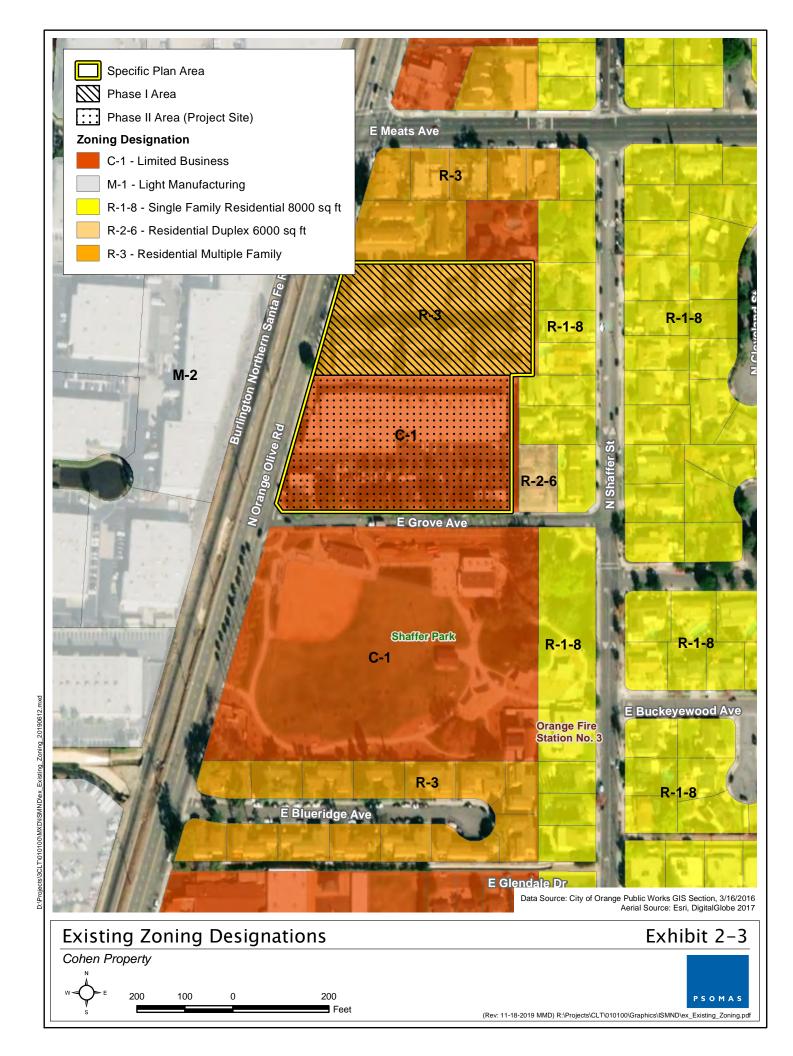
2.5.1 Air Quality

Air quality in Orange County is regulated by the South Coast Air Quality Management District (SCAQMD), which is the agency principally responsible for comprehensive air pollution control in the South Coast Air Basin (SoCAB). The SCAQMD has divided the SoCAB into 38 source receptor areas (SRA), with a designated ambient air monitoring station representative of each SRA. The site is within the Central Orange County SRA (SRA 17), which has a monitoring station in Anaheim-Pampas Lane Monitoring Station, located at 1603 West Pampas Lane, approximately 5 miles west of the Project site. Based on monitored air pollutant concentrations, the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) designate an area's status in attaining the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS), respectively, for selected criteria pollutants. The pollutants measured at the Anaheim-Pampas Lane Station include O_3 , NO2, PM10, and PM2.5.

2.5.2 Vegetation and Wildlife

The Project site is developed with commercial/retail buildings, drive aisles, and parking areas, with limited landscaped areas. On-site trees and landscaping include Mexican fan palm and ficus trees, boxwood, day lilies, and groundcover at scattered locations throughout the site. These landscaped





areas and vegetation provide habitat for common animal species, such as small mammals, birds, small reptiles, and insects that are typically found in urban areas.

2.5.3 Cultural Resources

While the smaller commercial/retail building was built in the late 1980s to early 1990s, the larger building was built in 1964 and is over 50 years of age. Both buildings are not included on the National Register of Historic Places (NRHP) or on the California Register of Historical Resources (CRHR), nor are they identified by the City as a historic object, historic site, or significant historic resource. The site is not located within proposed locally designated historic district (Orange 2018i).

2.5.4 Geology

The Project site is within the Peninsular Ranges geomorphic province in Southern California. Based on a subsurface investigation by Twining Consulting, the earth materials consist of an underlain by old alluvial fan deposits extending to the total depth of exploration. The alluvial deposits comprise predominantly of sandy lean clay, Silty Sand, and poorly-graded sand with silt (Twining 2019).

2.5.5 Hydrology

Under the existing conditions, drainage on the site consists of sheet flow from the buildings, drive aisles, and surface parking areas towards East Grove Avenue and through a ribbon gutter and catch basins at the northern drive aisle for discharge into North Orange Olive Road. Stormwater then flows along the street gutters into a catch basin at the north side of East Grove Avenue near North Orange Olive Road. This catch basin is connected to a 30-inch storm drain line in East Grove Avenue that connects to a 6-foot by 4-foot culvert on North Orange Olive Road and that, in turn, discharges into the Buckeye/Collins Channel southwest of the site. The Buckeye/Collins Channel flows westerly and southwesterly and eventually ties into the Santa Ana River.

According to Flood Insurance Rate Maps (FIRM) by the Federal Emergency Management Agency (FEMA), the Project site is within Flood Zone X (Other Areas), which indicates that the site is located outside of the 0.2 percent annual chance flood area (or 500-year floodplain) (FEMA 2009).

2.5.6 Rare and Unique Resources

Pursuant to State CEQA Guidelines Section 15125(c), the environmental setting should identify any inconsistencies between a proposed project and applicable general, specific, or regional plans, while focusing on rare or unique regional resources that would be impacted by the project. The Project proposes to demolish an existing shopping center and to construct 32 dwelling units on the site. The Project would not require a General Plan Amendment but would require a Zone Change from C-1 to R-3(SP) to make the zoning of the site consistent with its land use designation. Based on existing developed conditions of the Project site and surrounding area, the Project site does not contain any resources that are considered rare or unique to the region.

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SECTION 3.0 PROJECT DESCRIPTION

3.1 PURPOSE AND PROPOSED ACTIONS

As indicated above in Section 1.1, the proposed Project consists of (1) development of the Cohen Property (Phase II of the Orange-Olive Specific Plan) and (2) required changes to the Orange-Olive Specific Plan for development of the proposed Project (Phase II). For clarity, the proposed Cohen Property is referred to as the "proposed Project" and/or "Phase II", and changes to the Orange-Olive Specific Plan are referred to as Zone Change (ZC) No. 1297-19 (Amendment to the Orange Olive Specific Plan). A subsequent MND is proposed to evaluate the proposed Project (Phase II) and the Zone Change (Amendment to the Orange-Olive Specific Plan) in conjunction with the proposed entitlement requests, which include the following discretionary approvals required from the City of Orange: (1) Zone Change (ZC) No. 1297-19 (Amendment to the Orange Olive Specific Plan); (2) Major Site Plan Review No. 0969-19; (3) Tentative Tract Map No. 0049-19; (4) Design Review No. 4969-19; and (5) Mitigated Negative Declaration (MND) No. 1865-19.

Actions associated with the Zone Change (Amendment to the Orange Olive Specific Plan), which is required for development of the proposed Project (Phase II), are as follows:

- Adjust the Specific Plan boundary to include the Phase II area, which is defined as the 2.9-net-acre Project site located at 301 East Grove Avenue in the City of Orange.
- Update the Specific Plan text and associated exhibits to reflect any changes resulting from the proposed Project (Phase II). The changes are summarized below in Table 3-1 and the amended Orange-Olive Specific Plan is included in its entirety as Appendix A.

TABLE 3-1 SUMMARY OF CHANGES TO ORANGE-OLIVE SPECIFIC PLAN

Development Name	Phase I Irving House	Phase II Cohen Property	Zone Change (Amendment to the Orange Olive Specific Plan)	
Development	One residential development	One residential development	Two residential developments. Delineation of Phase I (initial development) and Phase II as proposed development.	
Net area	2.33 acres	2.90 acres	5.23 acres	
Total dwelling units	25	32	57	
Density	10.7 dus/ac	11.0 dus/ac	10.9 dus/ac	
Parking	Garage: 50 Guest parking: 22 Total: 72	Garage: 64 (minimum 2 spaces/unit) Guest Parking: 28 (0.88 spaces/unit) Total: 92 (2.88 spaces/unit)	Garage: 114 (Phase I + Phase II) Guest parking: 50 (Phase I + Phase II) Total: 164	
Source: Orange-Olive Specific Plan (Appendix A to this Initial Study).				

3.2 PROJECT COMPONENTS

3.2.1 Proposed Dwelling Units

The proposed Cohen Property Project involves demolition and removal of the existing shopping center and associated parking areas and site improvements; preparation of the site for redevelopment (e.g., clearing and grading); and construction of 32 single-family detached, two-story dwelling units; internal drive aisles; and common open space on the 2.9-acre site. Table 3-2 provides the breakdown of the proposed dwelling units. The proposed Project would have a development density of 11.0 units per acre, which is within the allowable density range for the LMDR designation of 6 to 15 units per acre.

TABLE 3-2 PROPOSED DEVELOPMENT (PHASE II)

Floor Plan	Number of Units	Floor Area (sf)	Total Floor Area (sf)	
P1	11	1,891	20,801	
P2	9	1,947	17,523	
Р3	12	2,050	24,600	
Total	32	Total	62,924	
sf – square feet				
Source: KTGY 2020.				

The proposed dwelling units would feature three different plans. The units with the P3 plan would be located along the northern and southern perimeters of the site, and the units with P1 and P2 plans would be interspersed at the eastern, western, and central portions of the site. The units along North Orange Olive Road would have either a side entrance or an entrance that faces toward an internal drive aisle. The units facing East Grove Avenue would have entrances that face East Grove Avenue; while all other proposed units would have side entrances or face the drive aisles internal to the site. Exhibits 3-1, Conceptual Site Plan, 3-2, Conceptual Landscape Plan, and 3-2a, Conceptual Planting Plan show the location of the proposed dwelling units, open space, landscape and planting, access driveway, and drive aisles. Exhibits 3-3a through 3-3c, Plan 1 Perspectives, Plan 2 Perspectives, and Plan 3 Perspectives, show design variations within each plan.

Open Space and Landscaping

The proposed Project's overall open space consists of common landscape areas, private open space (yard), and common open space area. Common open space would be provided at one centralized location while private open spaces would occur in the form of rear and front yards for each unit. Common landscaped areas would be located at the Project street frontages and entry along East Grove Avenue, as well as throughout the interior of the Project site, buffering the residences from the interior roadways. Table 3-3 provides the breakdown of the proposed open space areas and Exhibit 3-2c, Conceptual Open Space Plan, shows the types and acreage of open space throughout the Project site.

Additionally, the Project proposes a common open space area (1,563 sf) located directly at the end of the entry interior road. This common open space proposes amenities for the residences of the development, including shade structure, picnic tables, and barbeque. A total of 22,090 sf (approximately 690 sf per unit) of private open space is provided on the Project site. In addition, common landscape area, approximately 17,972 sf, in the form of frontage along Orange-Olive Road,

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Cohen Property



PSOMAS



LEGEND

- Central community open space area with built in BBQ Counter, wood shade structure, 2 sided gas fireplace, Bike racks and lounge furniture for small social events and group gatherings.

 Two community cluster mailboxes, per USPS review and approval.

 Proposed wall, pilaster, gate or fence, per Wall & Fence Plan.

 Enhanced paving at main project entry.

 Proposed and existing trees, per Planting Plan.

 Pedestrian natural color community sidewalk with light top-cast finish and saw-cut joints.

 Accessible parking stall and striping, per Civil plans.

 Guest parking stall.

- Guest parking stall.
- Natural colored concrete driveway, with light broom finish and tooled joints.

- 15. FDC's BFD's and Transformer to be screened with landscape, quantity and final locations to be determined per Civil Plans.







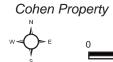


Source: Studio PAD Landscape Architecture, May 2020

Exhibit 3-2b

PSOMAS

Conceptual Landscape Plan







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FRONT ELEVATIONS PLAN 1A

FRONT ELEVATIONS PLAN 1B



36-07

FRONT ELEVATIONS PLAN 1C

FRONT ELEVATIONS PLAN 1D

Source: KTGY Architecture + Planning, June 2020

Plan 1 Front Elevations

Cohen Property



Exhibit 3-3a

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40-9°

FRONT ELEVATIONS PLAN 2A

FRONT ELEVATIONS PLAN 2B



FRONT ELEVATIONS PLAN 2C



FRONT ELEVATIONS PLAN 2D

Source: KTGY Architecture + Planning, June 2020

Plan 2 Front Elevations

Cohen Property



Exhibit 3-3b



FRONT ELEV. PLAN 3B





FRONT ELEV. PLAN 3C

FRONT ELEV. PLAN 3D

Source: KTGY Architecture + Planning, June 2020

Plan 3 Front Elevations

Cohen Property



Exhibit 3-3c

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entry along Grove Avenue, and interior of Project site to buffer residences from interior roadways, would be landscaped with drought tolerant trees and plants, similar to Phase I frontage landscaping to ensure a consistent landscape design. Landscaping and walkways would be provided between units and along both sides of the main drive aisle. Refer to Table 3-3 for a summary of open space for the proposed Project.

TABLE 3-3 PROPOSED OPEN SPACE (PHASE II)

Open Space	Location	Size (sf)	Improvements	
HOA Common Open Space (Landscape Area)	Project street frontages and entry along Grove Avenue and interior of Project site to buffer residences from interior roadways	17,972		
HOA Common Open Space	Center of the site	1,563	Landscaping and resident amenities including shade structure, picnic tables, and barbeque	
Private Open Space	Front, side, and rear yards of each unit	22,090 (approximately 690 sf per unit)	Homeowner installed and maintained	
Total Open Space Provided		41,625		
Notes:				
sf – square feet				

st – square feet Source: KTGY 2020.

The Orange Municipal Code Section 17.14.070 (R-3 zone) requires 250 sf of useable open space per dwelling unit or a total of 8,000 sf for the proposed Project. The Specific Plan does not carry forward the R-3 zone requirements for minimum open space dimensions, common open space, or amenities. As indicated above in Table 3-3, the Project would provide 19,535 sf of HOA common open space and 22, 090 sf of allowable private open space for a total of 41,625 sf of usable open space, which would exceed the City requirement by 33,625 sf.

3.2.2 Project Access/Parking

An entrance driveway is proposed with direct access from East Grove Avenue, along the southern boundary of the Project site. The driveway would connect to internal drive aisles (25 feet wide) that would create five "T" cul-de-sacs and one "L" cul-de-sac on the site, to provide vehicle and pedestrian access to the main entryways and garages of the dwelling units. Enclosed two-car garages would be provided for each unit in addition to 28 guest parking spaces, with 11 parallel spaces at various locations along the internal drive aisles and 17 spaces in motor courts.

Phase II provides 28 guest parking spaces, with 11 parallel spaces located along interior drive aisles and 17 in motor courts, providing for a guest parking ratio of 0.88 parking spaces per unit. Phase II provides 64 garaged spaces for the 32 residences withing Phase II, for a total of 92 spaces and parking ratio of 2.88 per unit.

The Orange Municipal Code Section 17.34.060.A (R-3 zone) requires 2.6 resident parking spaces per dwelling unit and 0.2 guest space per unit. Accordingly, the proposed Project is required to provide

99 parking spaces. However, based on the existing established Orange-Olive Specific Plan, the Project is required to provide 2.88 spaces per unit which would total 92 spaces. The Project meets this requirement by providing for 28 guest parking spaces at a guest parking ratio of 0.88 spaces per unit and 64 spaces per unit and provides for 2.88 spaces per unit (minimum 2.0 garage spaces per unit). Therefore, the Project would provide for an overall parking ratio of 2.88 spaces per unit, meeting the required parking ratio set by the existing established Orange-Olive Specific Plan.

3.2.3 Architectural Design

The proposed dwelling units would include two stories and would generally feature L-shaped footprints, with 9-foot floor-to-ceiling heights. The residential units are proposed at a maximum height of 27 feet 6 inches. Each unit would feature variations in buildings and roof planes and combinations of hip and gable and tile roofs. Each unit would also have a covered main entry, articulated windows, false upper balconies, and chimneys. Proposed building materials include concrete, stone, metal, stucco, wood, glass and/or other similar composites and would be high quality, durable and resistant to damage, defacing, and weathering. Exhibits 3-4a and 3-4b depict the Conceptual Building Elevations and Exhibit 3-5 depicts the Site Perspective.

Lighting

The Project would include various lights to provide illumination throughout the site. Exhibit 3-6 depicts the Lighting Plan which shows conceptual locations and lighting specifications for the proposed Project Proposed lighting would be shielded to prevent and minimize light spillover onto neighboring properties.

Walls and Fencing

The Project would include a 6-foot perimeter stucco wall with flat stucco cap along the North Orange-Olive Road frontage, and variable height (3 feet to 6 feet) stucco walls are proposed along East Grove Avenue frontage. The 17.9-foot front yard setback, established in the Specific Plan, fronts Orange Olive Road. Residential structures are not allowed in the front setback area; however, the Specific Plan allows for private rear yards and residential fences that are 6 feet tall to fall within the front setback area.

The existing 6-foot block walls along the northern and eastern boundaries between the proposed Project site and the Irving House development (Phase I) to the north and existing residential to the east would remain in place. Privacy fences would separate the units from one another and control access to the rear and side yards of each unit. The privacy fences would consist of 5 to 6 feet high tancolored vinyl fencing. As indicated above, the exterior 6-foot perimeter wall along North Orange Olive Road frontage and the variable height (3 feet to 6 feet) wall along East Grove Avenue frontage would have a stucco finish with either flat stucco cap (6-foot walls) or precast concrete cap (variable height walls). The low-lying walls are limited to the frontage on Grove Avenue and would be consistent with the pedestrian character of Grove Avenue. Exhibit 3-7, Conceptual Wall and Fence Plan depicts the location of the existing and proposed walls and fences and provides conceptual images of proposed walls and fences.



STREET SCENE FROM INTERNAL STREET

Conceptual Building Elevations

Exhibit 3-4a





STREET SCENE AT E. GROVE AVE.



ENLARGED NEIGHBORHOOD ENTRY



Exhibit 3-4b



STREET SCENE AT ORANGE OLIVE STREET

Conceptual Building Elevations

Exhibit 3-4c





Site Perspective

Cohen Property



Exhibit 3-5









Exhibit 3–7



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3.2.4 Conceptual Landscape Plan

The main Project site entry would use an enhanced pavement treatment such as, but not limited to, concrete pavers to provide a more visually appealing entrance. Landscaping along Orange-Olive Road includes a minimum 5-foot-wide landscape buffer, with vine-covered perimeter walls and the addition of large canopy trees. Landscaping along the Grove Avenue frontage includes a landscape buffer, along with six residential entry accesses conducive to a pedestrian street scene. Landscaping will be installed along the internal streets and the frontages of the new homes.

The proposed Project would preserve the eight parkway trees on East Grove Avenue and proposes on-site landscaping with trees, shrubs and groundcover along the front yards of each unit. Development of the proposed Project would remove one of the existing nine mature jacaranda trees on East Grove Avenue to allow for new Project entry. In addition to the eight preserved mature jacaranda trees, a total of 115 trees would be planted around the perimeter of the site, along the entry, and throughout the interior of the site. These trees include four date palms, one fruitless olive tree, eight Columbia trees, 17 African sumac trees, 15 bronze loquat trees, 31 Brisbane box trees, and 39 Italian cypress/boetica myrtle trees. Additionally, the proposed Project includes several species of vines and espaliers, including bougainvillea and cat's claw vine as well as shrubs and ground cover, including aeonium, blue glow agave, aloe, coyote brush, Mexican grass tree, flax lily, echeveria, juncus, La Jolla bougainvillea, Berkeley sedge, western redbud, 'new gold' lantana, wax leaf privet, purple needlegrass, coast rosemary, bright star yucca, yellow bells, 'blue chalk sticks', red Texas sage, 'Huntington carpet', and deer grass. Refer to Exhibit 3-2a, Conceptual Planting Plan for species names, location, size, and quantity proposed and Exhibit 3-2b, Conceptual Landscape Plan, for the overall schematic landscape plan.

3.2.5 Project Construction

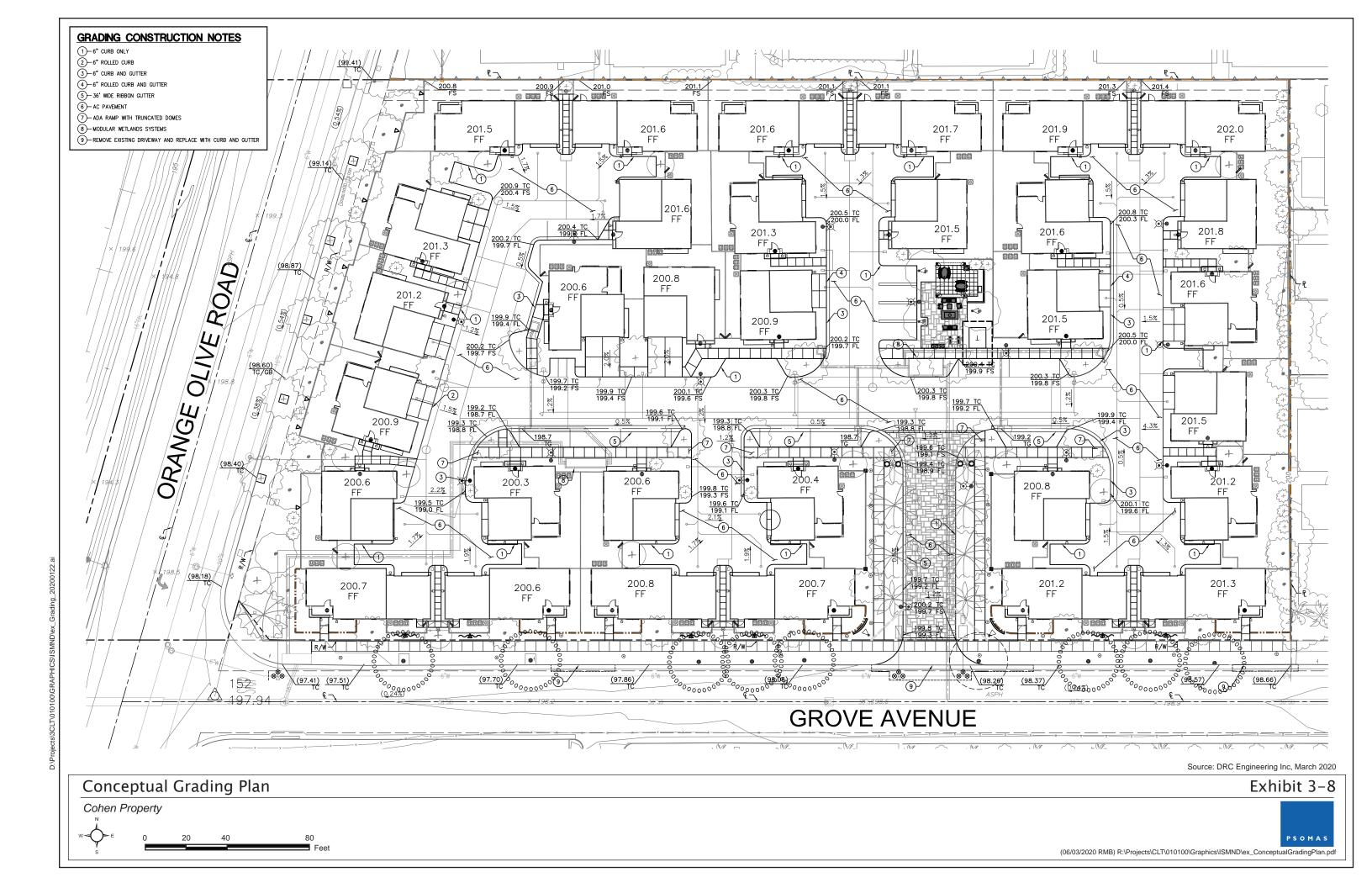
The Project construction schedule has not been determined at this time and any project-level specific construction phasing would occur as appropriate levels of infrastructure and required improvements are provided. However, a discussion of demolition, grading/construction and off-site improvements required of the Project are provided below.

Demolition

Implementation of the proposed Project would include demolition of the existing buildings and site improvements. A portion of the demolition and construction debris (65 percent) would be recycled, reused, and/or salvaged in compliance with Chapter 15.17 of the Orange Municipal Code, which adopts the California Green Building Standards Code (CALGreen Code) by reference. Materials that cannot be recycled, reused, or salvaged would be transported to a local landfill. Any hazardous materials (e.g., asbestos-containing materials and lead-based paint) encountered during demolition would be handled and disposed in accordance with SCAQMD rules and other pertinent regulations.

Grading/Construction

The proposed grading of the site would retain the relatively flat topography. Total earthwork proposed is approximately 500 cubic yards of export. The Conceptual Grading Plan is depicted on Exhibit 3-8. Project construction is anticipated to occur in a single phase. Construction activities would utilize standard construction equipment, including earth-moving equipment, trucks, cranes, and forklifts. Construction activities and construction staging would mainly occur within the Project site boundaries. Implementation of traffic control measures during demolition and construction activities would minimize obstruction of vehicle traffic on public roadways in the site vicinity.



Off-Site Improvements

Off-site improvements would include modifications to the sidewalks at existing and proposed driveways, parkway improvements, and utility connections (water, sewer, electricity, natural gas, and telecommunication lines) on North Orange Olive Road and East Grove Avenue. Exhibit 3-9 shows the Conceptual Utility Plan. The existing trees on East Grove Avenue would be maintained with the exception of one tree that would be removed to accommodate the entry to the site. These encroachments would occur in compliance with City regulations, as contained in Chapter 12.64 of the Orange Municipal Code. Any right-of-way dedication and public infrastructure improvements would also be done in accordance with Chapter 12.52 of the Orange Municipal Code.

3.2.6 Discretionary Approvals

Zone Change No. 1297-19 (Amendment to the Orange Olive Specific Plan)

As discussed above, the Project is permitted under the site's General Plan land use designation of LMDR. As stated in the Land Use Element of the General Plan, the LMDR land use designation is consistent with the R-1-5, R-2-6, R-2-7, R-2-8, R-3, MH, PC, A-1 and P zones (Orange 2010a). Thus, the C-1 zoning of the site is not consistent with its General Plan land use designation (LMDR) and requires a Zone Change.

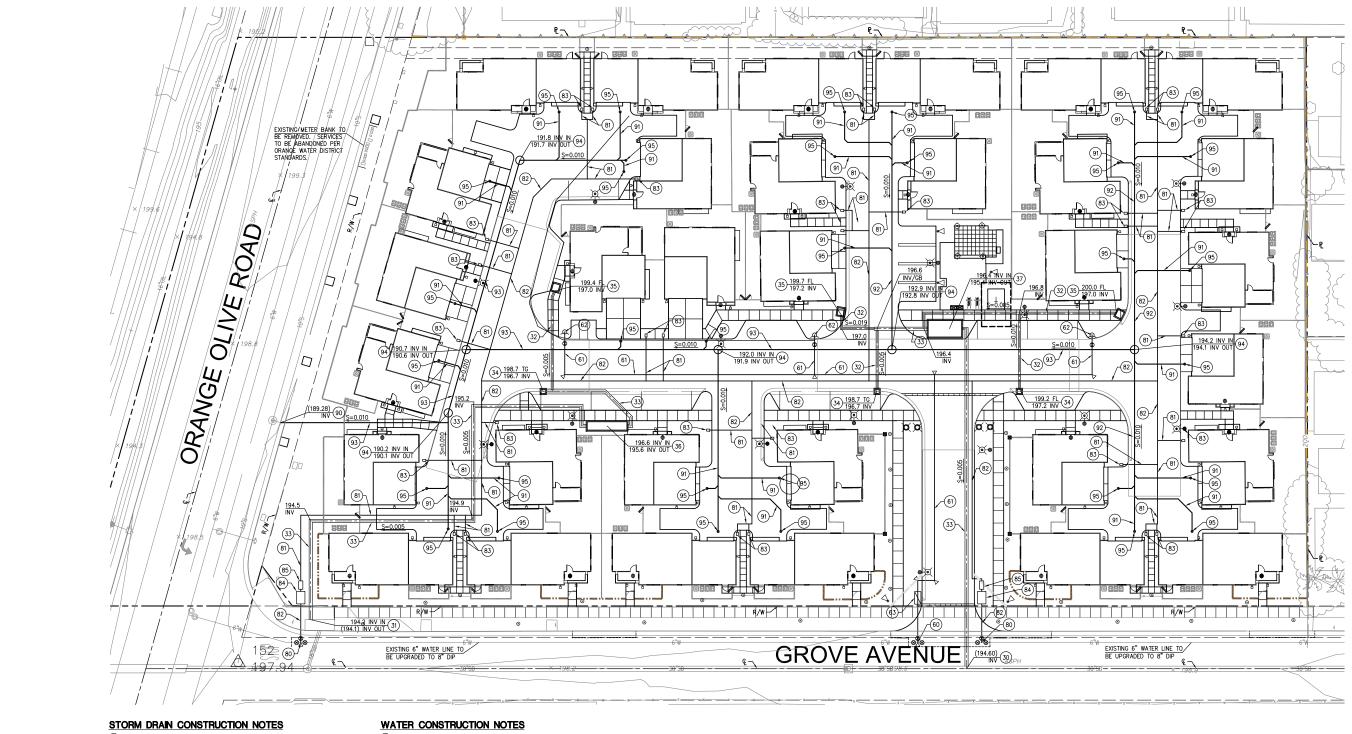
Since the recent development, immediately to the north of the site, involved a Zone Change from C-1 to R-3 (SP), the Project is also proposing a Zone Change for the site from C-1 to R-3 (SP). The proposed Zone Change would make the zoning designation of the site consistent with its LMDR General Plan land use designation, as shown in the Land Use Policy Map in the General Plan, and would, in turn, make the Project consistent with the Zoning Code. As proposed, the Project would comply with applicable zoning regulations for the R-3 (SP) zone. Refer to Exhibit 3-10 for the proposed Zone Change.

An amendment to the Orange-Olive Specific Plan is requested to allow for adjustment to the Specific Plan boundary to include the proposed Project area (Phase II), located to the south of the existing Orange-Olive Specific Plan area and to update the Specific Plan accordingly to allow for development of the proposed Project or Phase II. Changes associated with the Orange-Olive Specific Plan Amendment are proposed, only as needed, for development of Phase II. The Orange-Olive Specific Plan Amendment would be consistent with the *City of Orange General Plan*, as required under State law.

Major Site Plan Review No. 0969-19

Major Site Plan Review No. 0969-19 is required pursuant to Section 17.10.060, Site Plan Review, of the Orange Municipal Code to allow the construction of a project that is generally not categorically exempt from CEQA. As part of this review process for the Project, the City will review the following:

- Compatibility of the Project with surrounding development and neighborhoods
- Building and Site Planning Issues
- On and Off-Site Circulation and Traffic Safety
- City Services
- Environmental Protection



- (30)-CONNECT TO EXISTING STORM DRAIN LINE (INVERT TO BE FIELD VERIFIED)
- (31)—CONNECT TO EXISTING CATCH BASIN (INVERT TO BE FIELD VERIFIED)
- (32)-INSTALL 12" HDPE STORM DRAIN LINE
- (33)—INSTALL 18" HDPE STORM DRAIN LINE
- 34)—CONSTRUCT BROOKS 24"X24" DROP INLET, STENCIL WITH "NO DUMPING DRAINS TO OCEAN"
- 35)—CONSTRUCT 3.5' WIDE CATCH BASIN PER SPPWC STD. 300-3
- 36-INSTALL 4'X19' MODULAR WETLAND BIOFILTER 37)—INSTALL 8'X16' MODULAR WETLAND BIOFILTER

FIRE WATER CONSTRUCTION NOTES

- 60)-CONNECT TO EXISTING WATER LINE WITH T-FITTING AND THREE VALVES
- 61)-INSTALL 6" PVC C-900 PIPE CLASS 200 WITH BEDDING
- 62-INSTALL FIRE HYDRANT ASSEMBLY WITH GATE VALVE
- 63-INSTALL 6" DOUBLE CHECK DETECTOR ASSEMBLY

- (80)-CONNECT TO EXISTING WATER LINE WITH T-FITTING AND THREE VALVES
- (81)-INSTALL 1" PVC C-900 PIPE CLASS 200 WITH BEDDING
- 82)-INSTALL 4" PVC C-900 PIPE CLASS 200 WITH BEDDING
- (83)—INSTALL 1" DOMESTIC WATER SERVICE 84)—INSTALL 4" METER AND VAULT
- 85)—INSTALL 4" BACKFLOW PREVENTER
- * IF EXISTING SERVICE IS REUSED, AN APPROVED BACKFLOW PREVENTION DEVICE SHALL BE INSTALLED BEHIND THE METER WITHIN THE NEAREST SOFT-SCAPE.

SEWER CONSTRUCTION NOTES

- 91)-INSTALL 4" PVC SDR 35 SEWER LINE WITH BEDDING
- 92)—INSTALL 6" PVC SDR 35 SEWER LINE WITH BEDDING 93-INSTALL 8" PVC SDR 35 SEWER LINE WITH BEDDING
- CONSTRUCT 48" SEWER MANHOLE
- 95)- CONSTRUCT SEWER CLEANOUT

Source: DRC Engineering Inc, July 2020

Conceptual Utility Plan



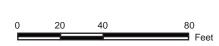
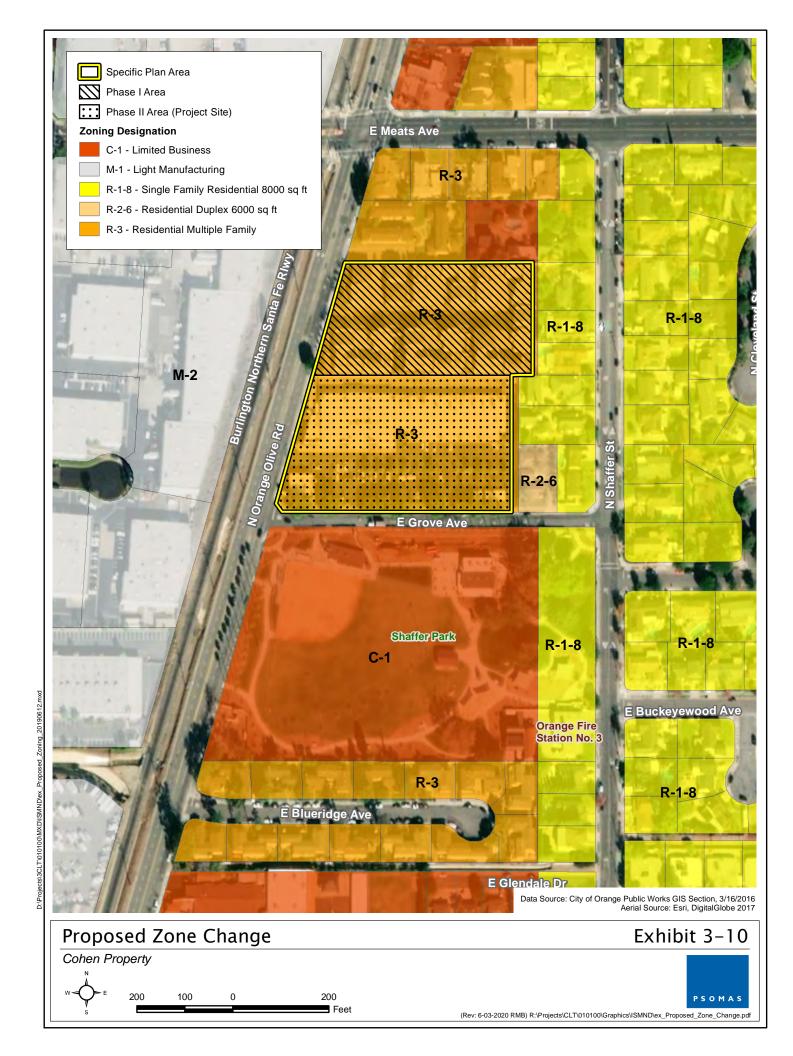


Exhibit 3-9



Design Review No. 4969-19

In accordance with Section 17.10.070, Design Review, of the Orange Municipal Code, the Project would be subject to design review by the Design Review Committee, as it requires Planning Commission or City Council approval and is subject to a Major Site Plan Review. Design review would ensure that the Project has an internally consistent, integrated design theme in terms of architectural features, landscaping, signage, and secondary functional and accessory features.

Subsequent Mitigated Negative Declaration No. 1865-19

In compliance with CEQA, the State CEQA Guidelines, and the City's Local CEQA Guidelines, the City would adopt Subsequent Mitigated Negative Declaration (MND) No. 1865-19, prior to approval of the proposed Project. The Subsequent MND serves as a finding that the Project would not have a significant effect on the environment, with the incorporation of mitigation measures.

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SECTION 4.0 ENVIRONMENTAL IMPACT ANALYSIS

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.

	Aesthetics		Agriculture & Forest Resources		Air Quality			
X	Biological Resources	X	Cultural Resources		Energy			
X	Geology/Soils		Greenhouse Gas Emissions		Hazards & Hazardous Materials			
	Hydrology/Water Quality		Land Use/Planning		Mineral Resources			
X	Noise		Population and Housing		Public Services			
	Recreation		Transportation		Tribal Cultural Resources			
	Wildfire	X	Mandatory Findings of Significance					
D	ETERMINATION. On the ba	sis (of this initial evaluation:					
1	1. I find that the proposed project could not have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.							
2	2. I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.							
3	3. I find that the proposed project may have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.							
4	4. I find that 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.							
5. I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR 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. Manual Summer of the Planner Date								
Γ	rume, Title 1/3700/01/01/01/11/01							

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each statement. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact". The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced, as discussed below).
- 5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a. Earlier Analysis Used. Identify and state where they are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9. The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

4.1 **AESTHETICS**

1	Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Have a substantial adverse effect on a scenic vista?				\boxtimes
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

August 2015 Orange-Olive Residential Development Project MND

The discussion in the MND for the Phase I Project determined that the site was not located within or near a scenic vista and would not have a significant impact on a scenic vista. The Project site was paved; used for storage of recreational vehicles, boats, and cars; and surrounded by developed urban uses. The analysis indicated that the nearest designated State scenic highway was two miles away and out of view from the Project site. Thus, it was concluded that Phase I Project development would not adversely impact scenic resources, including scenic resources in a State scenic highway, and impacts would be less than significant. The Phase I Project would meet the development standards and guidelines of the Orange-Olive Specific Plan, which set forth development standards for the Project site similar to those specified under the Multiple-Family Residential (R-3) Zone. The Phase I Project would be visually compatible with surrounding land uses. Thus, it was determined that, while the Phase I Project would change the visual character of the Project site, the change would be favorable and not adverse and would be a less than significant impact.

The potential light and glare impacts were also analyzed, and it was indicated that Phase I Project development would add nighttime lighting to the Project site such as internal streetlights and exterior building security lights. Such proposed lighting would be directed away from adjacent properties in accordance with the City of Orange Municipal Code. It was determined that Phase I Project development would not create a new source of substantial light or glare adversely affecting day or nighttime views in the area, and that such impacts would be less than significant.

Supplemental Analysis

Would the Project:

a) Have a substantial adverse effect on a scenic vista?

The Project site is developed with commercial/retail buildings and does not offer a scenic view nor is it part of a scenic vista. The Natural Resources Element of the General Plan calls for the preservation of ridgelines and steep hillsides in the City. The site is relatively flat and is not located on a ridgeline or steep hillside area.

The scenic resources in the City are generally located in the undeveloped Santiago Hills and the eastern portion of the City. Designated viewscape corridors in the City include SR-91 east of SR-55, Chapman Avenue/Santiago Canyon Road east of Newport Boulevard, and Newport Boulevard south of Chapman Avenue, as shown in the Natural Resources Element of the General Plan (Orange 2010a) and in the General Plan EIR (Orange 2010b). The nearest viewscape corridor is SR-91, approximately 2.0 miles northeast of the site. The Project site is not visible from this viewscape corridor due to distance and intervening structures and trees. Therefore, the proposed Project would not have any significant impacts on views from viewscape corridors. There would be no impact on a scenic vista, and no mitigation is required.

Significance Determination: No Impact
Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

State Route 91 east of SR-55 to Weir Canyon Road is an officially designated State Scenic Highway, and SR-91 east of Weir Canyon Road to the County Line is an eligible State Scenic Highway (Caltrans 2011). This segment of SR-91 is approximately 2.0 miles northeast of the site at its nearest point. The Project site is not part of the views along SR-91 and is not visible from SR-91 due to distance and intervening structures and trees. The Project would have no impacts on public views from the eligible State Scenic Highway segment of SR-91.

Additionally, the Project site is currently developed with commercial/retail buildings, a surface parking lot, and associated improvements and does not contain any scenic resources, including rock outcroppings or historic buildings listed or eligible for the NRHP or CRHR. Scenic resources within the City include Santiago Creek, Santa Ana River, and Santiago Oaks Regional Park. Also, given the distance from the eligible State Scenic Highway segment of SR-91, no views of the site would be visible such that would result in an impact.

Therefore, the Project would not result in any significant impacts to scenic resources within a State Scenic Highway, and no mitigation is required.

Significance Determination: No Impact
Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The proposed Project site is located within an urbanized portion of the City that is developed with commercial, industrial, and residential land uses. As such, the Project would not substantially degrade the visual character of public views of the site and surrounding area within a non-urbanized area. Therefore, no impacts would occur, and no mitigation is required.

The aerial photograph (Exhibit 2-1) previously presented, shows the Project site's relationship to the surrounding land uses. East Grove Avenue separates the site from Shaffer Park, and North Orange Olive Road separates the site from the BNSF railroad tracks. Due to the developed nature and flat topography of the Project area, the presence of mature trees and existing walls, views of the Project site are limited to immediately adjacent vantage points, as further described below. However, given the views to be analyzed are from public vantage points, only views from Shaffer Park across East Grove Avenue experienced by users of the park would be considered.

Existing Views and Visual Character

The Project site is currently developed with two single-story commercial/retail buildings, drive aisles, and surface parking. Exhibits 4-1a through 4-1f, Views of the Project Site, include photographs that depict the existing visual character of the Project site. More specifically, Views 1 through 11 on Exhibit 4-1a through Exhibit 4-1f are views of the on-site buildings and site improvements.

- **View 1**, looking east from the entrance driveway on North Orange Olive Road, shows an angled view of the front of the larger commercial/retail building and the adjacent drive aisle and parking area. The view depicts mature trees and parking lot lights.
- View 2, looking north from East Grove Avenue, shows the larger commercial/retail building, as visible from East Grove Avenue through the entry to the commercial center. This building has a cream and beige stucco façade with a false parapet roof and covered building entries. Heating, ventilation, and air conditioning (HVAC) units are partially visible at the top of the building. Surface parking lot with parked cars and some landscaping and trees are also depicted in this view.
- **View 3**, looking west from the southern section of the site, shows the eastern facade of the smaller commercial/retail building, with stucco walls, false parapet, and glass windows. A trash enclosure and parking spaces are in the foreground. Some onsite trees are visible in this view.
- **View 4**, looking west from the onsite surface parking, shows the view of the front of the northwest portion of the larger commercial/retail building and entrance from North Orange Olive Road.
- **View 5**, looking west from eastern most portion of the site, shows an angled view of the front of the larger commercial/retail building and the adjacent drive aisle and surface parking, featuring mature trees and parking lot lights.
- **View 6**, looking northeast from the intersection of East Grove Avenue and North Orange Olive Road, shows the smaller commercial/retail building at the southwestern corner of the site, as visible from East Grove Avenue. The building is characterized by a cream stucco façade with beige accents, a false parapet roof, and dark glass entry doors.
- **View 7**, looking west from the southeastern corner of the site, shows the southern surface parking area on the site and the sidewalk and jacaranda trees along East Grove Avenue. Views of the on-site buildings are partially blocked by existing on-site trees and parked cars.
- **View 8**, looking north from southeastern corner of the site from East Grove Avenue entrance, shows the eastern drive aisle, with a 6-foot block wall separating the site from the adjacent residences. Trees and landscaping along the drive isle are visible in this view.
- **View 9**, looking northeast from the northwester portion of the site along North Orange Olive Road, shows the northern drive aisle lined with overhead power lines on wooden poles and the rear facade of the larger commercial/retail building, with a 6-foot block wall separating



View 1 - Looking east at center drive aisles in from the North Orange Olive Road access driveway.



View 2 - Looking north at the western section of the larger retail building from Grove Avenue.

Exhibit 4-1a





View 3 - Looking west at the smaller retail building from the southern section of the site.



View 4 - Looking west at the northwest portion of the larger retail building.

Exhibit 4-1b

E Grove Ave





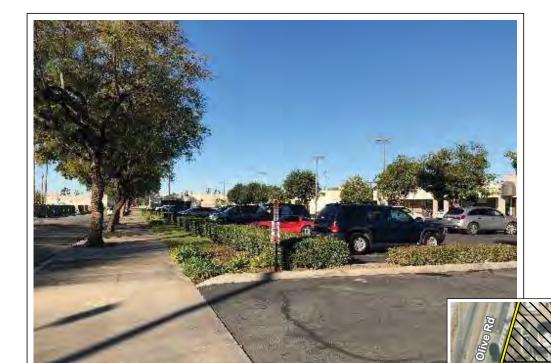
View 5 - Looking west at center drive aisles in from south of the larger retail building.



View 6 - Looking northeast at the site from the intersection of Grove Avenue and Orange Olive Road.

Exhibit 4-1c





View 7 - Looking west at the parking area at the southern section of the site (along Grove Avenue).

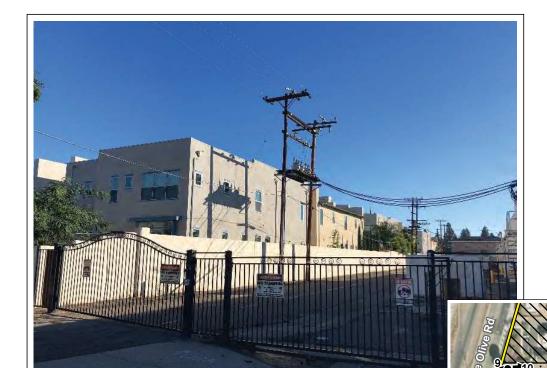


View 8 - Looking north at drive aisle along eastern edge of the site from Grove Avenue entrance.

Exhibit 4-1d

E Grove Ave





View 9 - Looking northeast at the northwestern corner of the site and adjacent 2-story residential units north of the site.



View 10 - Looking east at the northern drive aisle and the back of the larger retail building.

Exhibit 4-1e







View 11 - Looking east at Grove Avenue from the intersection of Orange Olive Road and Grove Avenue.

Exhibit 4-1f



the site from adjacent two-story residences. The wrought iron gate and fencing blocking entry to the rear of the site are visible in this view.

- **View 10**, looking east from the northwestern corner of the site, shows the recently constructed single-family homes to the north of the site (visible on the left side of the photograph), with the wooden utility poles with transformers and power lines in the foreground. The view depicts the rear of the existing onsite structure.
- **View 11**, looking east from the intersection of North Orange Olive Road and East Grove Avenue, shows East Grove Avenue, lined with street trees along the site (on the left side of the photograph) and green construction fencing along Shaffer Park to the south of the site (on the right side of the photograph).

Visual Changes

During demolition and construction activities at the Project site, views of construction equipment; ongoing demolition and construction activities; short-term stockpiles of building materials and debris; and haul trucks delivering building materials and removing debris would be visible from surrounding area. These views would be typical of construction sites in an urban environment and temporary nature. Therefore, the impacts would be less than significant, and no mitigation is required.

Once construction is completed, the proposed Project would alter views of the Project site by replacing the existing shopping center with surface parking and associated improvements, with 32 detached dwelling units, each 2 stories high, with internal drive aisles and landscaped areas. The units facing East Grove Avenue would have entrances that face East Grove Avenue, while all other proposed units would have side entrances or face the drive aisles internal to the site. The unit orientation to Grove Avenue will serve to create a neighborhood frontage interfacing the park. The individual units would be clustered around six cul-de-sacs internal to the site. First floor garages would be provided at the front of each unit with the exception of the six units that face East Grove Avenue, with main entries at the front or side facades. The visual characteristics of the units are presented in Exhibits 3-4a through 3-4c.

Private open space areas would be provided at the front, side and rear of each unit, with side and rear yards fenced in. Common open space would be provided at a single location, at the center of the Project site, which would be landscaped and visually appealing. Section 6.4, Landscape Architecture Guidelines of the Amendment to the Orange-Olive Specific Plan, provides guidelines that are intended to contribute to the enhancement of community character, create a landscaped environment that enhances the pedestrian experience along the street frontages, and provide a plant palette that is sensitive to the surrounding environment and complements the architecture. Given the quality of the design and architecture, the Project would be an improvement over the existing condition of the site. The visual effect of the proposed six-foot high perimeter wall along Orange Olive Road would be softened with the use of vines (Cat's claw vine). In addition, espaliers (Bougainvillea) would be planted at the three walkways along East Grove Avenue. In light of this, view of the site from a public vantage point (Shaffer Park across East Grove Avenue) would be of a high-quality development with landscaping, common, and private open space area visible from Shaffer Park and adjacent roadways.

The Natural Resources Element of the General Plan calls for boulevard landscaping and the preservation of street trees. The Project would preserve existing mature jacaranda street trees along East Grove Avenue (with the exception of one mature jacaranda tree that would be removed to accommodate the entry to the site) and would plant new street trees on North Orange Olive Road in accordance with the City's Street Tree Master Plan and Street Tree Ordinance. On-site trees would be

removed, replaced and/or maintained in accordance with the City's Tree Preservation Ordinance (Chapter 12.32, Tree Preservation, of the City's Municipal Code). The landscape plan would also comply with Chapter 16.50, Landscaping Requirements, of the Orange Municipal Code, as reviewed and approved by the City's Community Services Division, in coordination with the Planning Division. Compliance with these regulations is required under RR BIO-1 in Section 4.4, Biological Resources. In addition, all on-site utility infrastructure would be designed in accordance with the City's requirements. The Project would also comply with the sign regulations in the City's Zoning Code, as needed.

Additionally, to ensure the Project meets the City regulations, the Project would be subject to design review by the Design Review Committee, in accordance with Section 17.10.070, Design Review, of the Orange Municipal Code (see Regulatory Requirement [RR] AES-1). This review would ensure that the Project has an internally consistent, integrated design theme in terms of architectural features, landscaping, signage, and secondary functional and accessory features. Compliance with RR AES-1 would prevent degradation of the visual quality of the site.

While the proposed Project would alter the existing visual character of the Project site from a commercial land use to a residential development and would change views from surrounding public vantage point (i.e., Shaffer Park), this change would not be considered a substantial degradation of the Project site or its surroundings. The new development would replace older structures and increase visual interest and character of the site with quality design and landscaping. The introduction of 32 residences and associated site improvements would also be compatible with Phase I of the Orange-Specific Plan, and the existing residential uses east of the proposed Project.

In the absence of scenic resources in the vicinity of the site, the Project would not conflict with applicable zoning and other regulations governing scenic quality and resources. With Project compliance of City regulations through RR AES-1 and RR BIO-1, impacts would be less than significant, and no mitigation is required.

Regulatory Requirements: See RR AES-1 below and RR BIO-1 in Section 4.4, Biological Resources.

RR AES-1 As part of the entitlement and review by the Design Review Committee, the Project Applicant/Developer shall submit proposed site development and building plans for the review and approval by the City. The City shall review these plans for compliance with applicable requirements of Section 17.10.070, Design Review, of the Orange Municipal Code.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The Project site is located in an area that is already subject to ambient lighting from the existing shopping center, parking lot, and surrounding uses including the newly renovated Schaffer Park located across East Grove Avenue. Streetlights are also present on North Orange Olive Road. The onsite light sources include exterior building lights, parking lot pole lights, and interior building lights visible through glass windows.

With the demolition of the shopping center and removal of existing on-site light sources, new light sources would be provided with the proposed dwelling units, along the internal drive aisles, and in the common open space area as depicted in Exhibit 3-6, Conceptual Lighting Plan. This would change lighting levels at the Project site but would be consistent with the ambient and night-time lighting at the residential uses surrounding the site. All on-site light fixtures would be directed, controlled, screened or shaded to avoid spill-over onto surrounding land uses, in accordance with Section 17.12.030, Lighting, of the Orange Municipal Code (see RR AES-2). Additionally, the existing perimeter block walls located on the northern and eastern Project boundaries would provide screening of on-site lighting onto adjacent residential uses. The headlights of vehicles coming to and from the site would be directed south of the proposed driveway on East Grove Avenue and into the parking lot of Shaffer Park, and not into adjacent residences. Due to the urban nature of the Project site and surrounding areas and existing lighting at and near the Project site, impacts associated with new lighting from the proposed Project would be less than significant, and no mitigation is required.

Glare is a common daytime phenomenon and is due mainly to the occurrence of a high number of days per year with direct sunlight and the presence of large reflective surfaces. Excessive glare not only restricts visibility but also increases the ambient heat reflectivity in a given area. Glare is caused by light reflections from pavement, vehicles, and building materials such as reflective glass and polished surfaces. During daylight hours, the amount of glare depends on intensity and direction of sunlight. Glare can create hazards to motorists and nuisances for pedestrians and other viewers. As shown on the building elevations presented on Exhibits 3-4a through 3-4c, the proposed dwelling units would be constructed with primarily non-reflective materials such as stucco on the exterior facades and concrete or clay tile roofing. The use of glass would be confined to windows and is not such that would generate substantial glare affecting surrounding uses. Additionally, during nighttime, the proposed lighting would not be more intense than the surrounding uses, and no lighting that is considered of high intensity such as high wattage security lighting is proposed that would cause substantial nighttime glare. Furthermore, Chapter 17.12.030 of the Orange Municipal Code requires that lighting in residential properties be designed to prevent glare or direct illumination of any public sidewalk or thoroughfares (see RR AES-2). With Project compliance of City regulations (RR AES-2), less than significant impacts would occur, and no mitigation is required.

Regulatory Requirements:

RR AES-2 Exterior lighting for the Project shall be designed and constructed in compliance with Section 17.12.030, Lighting, of the Orange Municipal Code.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

4.2 AGRICULTURE AND FOREST RESOURCES

	Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				\boxtimes
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				
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])?				
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				\boxtimes
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?				

August 2015 Orange-Olive Residential Development Project MND

The potential impacts pertaining to Agricultural and Forestry Resources were analyzed in the MND for Phase I Project. As discussed, the Phase I Project site was mapped as Urban and Built-Up Land; was not in agricultural use or zoned for agricultural use; and was not under a Williamson Act contract. Therefore, the discussion concluded that no farmland impacts would occur, and no mitigation would be required. Additionally, no forest use or zoning for forest use was identified on the site. Therefore, Phase I Project development would not impact forest lands, and no mitigation would be required.

Supplemental Analysis

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?

Based on review of the Orange County Important Farmland 2016 prepared by the California Department of Conservation, Farmland Mapping and Monitoring Program (FMMP), there are no lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on or near the Project site. Rather, the Project site and surrounding areas are designated as Urban and Built-Up Land (FMMP 2018). Therefore, the proposed Project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses. There would be no impact on designated Farmland, and no mitigation is required.

Significance Determination: No Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

The Project site is zoned C-1 and the Project proposes a Zone Change to R-3 (SP). While the City has an Agriculture (A-1) zone, the site and the surrounding areas are zoned for commercial, industrial, and residential land uses (Orange 2016a). There are no nearby A-1 zones and there are no Williamson Act contracts in the City (WAP 2012). Therefore, the proposed Project would not conflict with existing zoning for agricultural use or a Williamson Act Contract. There would be no impact, and no mitigation is required.

Significance Determination: No Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

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])?

The Project site is not zoned as forest land and the proposed Zone Change from C-1 to R-3 (SP) would not lead to the rezoning of forest land or timberland to other uses. There is no designated forestland, timberland, or timberland zoned "Timberland Production" in the City of Orange (Orange 2016a). There would be no impact, and no mitigation is required.

Significance Determination: No Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

d) Result in the loss of forest land or conversion of forest land to non-forest use?

The Project site is not considered a forest land and is not located in or near any forest land. The nearest forest is the Cleveland National Forest, which is approximately 9.0 miles east of the Project site (USFS 2018). Therefore, the proposed Project would not result in the loss of forestland or the conversion of forestland to non-forest use. No impact would occur, and no mitigation is required.

Significance Determination: No Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

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?

The Project site is located in an urbanized area that is developed primarily with commercial, industrial, and residential land uses. There are no agricultural or forest land on or near the Project site. Therefore, the proposed Project would not result in the loss or conversion of Farmland to non-

agricultural use or the conversion of forest land to non-forest use. No impact would occur, and no mitigation is required.

Significance Determination: No Impact **Mitigation Measures:** None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

4.3 AIR QUALITY

	Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan?			\boxtimes	
b)	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?				
c)	Expose sensitive receptors to substantial pollutant concentrations?				
d)	Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?				

August 2015 Orange-Olive Residential Development Project MND

As analyzed in the MND for the Phase I, project construction and operation would not generate emissions exceeding South Coast Air Quality Management District (SCAQMD) significance thresholds. The Phase I Project, which proposed development of 25 residential units onsite, was consistent with the pre-existing Low Medium Density Residential (LMDR) General Plan designation. Thus, the MND concluded that the Phase I Project would not conflict with the SCAQMD's 2016 Air Quality Management Plan.

The MND analyzed the construction impacts of the Phase I Project and concluded that construction would not generate emissions exceeding SCAQMD regional or localized significance thresholds; and, thus, Phase I Project construction emissions impacts would be less than significant.

The MND determined that total Phase I Project operational emissions from area, energy, and mobile sources would not exceed SCAQMD significance thresholds, and that Phase I Project operational emissions impacts would be less than significant.

The MND concluded that Phase I Project construction and operation would not expose persons to substantial concentrations of criteria pollutants, toxic air contaminants, or carbon monoxide hotspots, and that impacts regarding exposure of persons to substantial pollutant concentrations would be less than significant. The Project would result in less than significant cumulative health impact.

Supplemental Evaluation

The City of Orange is located in the South Coast Air Basin (SoCAB), a 6,600-square-mile area bound by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SoCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area of Riverside County. The SoCAB's terrain and geographical location (i.e., a coastal plain with connecting broad valleys and low hills) determine its distinctive semi-arid climate, which is characterized by moderate temperatures, oceanic influence, and precipitation limited to a few storms during the winter (November through April).

Criteria Pollutants, Ambient Air Quality, and Attainment Status

The criteria pollutants for which federal standards have been promulgated and that are most relevant to this air quality impact analysis are ozone (O_3) , carbon monoxide (CO), nitrogen dioxide (NO_2) , and particulate matter (PM10 and PM2.5). Respirable particulate matter with an aerodynamic diameter of 10 micrometers or less is referred to as PM10. Fine particulate matter, PM2.5, is a subgroup of PM10 that consists of smaller particles that have an aerodynamic diameter of 2.5 micrometers or less. Ozone is a gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NOx)—both byproducts of internal combustion engine exhaust—undergo slow photochemical reactions in the presence of sunlight. Thus, VOCs and NOx are O_3 precursors. The State of California has ambient air quality standards for these pollutants and also for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles.

The SCAQMD has divided the SoCAB into 38 SRAs, with a designated ambient air monitoring station representative of each area. The Project site is in the area represented by measurements made at the Anaheim-Pampas Lane Monitoring Station located on 1630 West Pampas Lane, approximately 5 miles west of the Project site. The pollutants measured at the Anaheim-Pampas Lane Station include O_3 , O_3 , O_4 , O_4 , O_4 , O_5 , O_6 , O_7 , O_8 , O_8 , O_9 ,

Based on monitored air pollutant concentrations, the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) designate an area's status in attaining the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS), respectively, for selected criteria pollutants. These attainment designations are shown in Table 4-1.

These attainment designations are shown in Table 4-1.

TABLE 4-1
ATTAINMENT STATUS OF CRITERIA POLLUTANTS
IN THE SOUTH COAST AIR RASIN

Pollutant	State	Federal	
O ₃ (1 hour)	No nother recent	Nonattainment	
O ₃ (8 hour)	Nonattainment	Nonattainment	
PM10	Nonattainment	Attainment/Maintenance	
PM2.5	Nonattainment	Nonattainment	
СО	Attainment	Attainment/Maintenance	
NO ₂	Attainment	Attainment/Maintenance	
SO ₂	Attainment	Attainment	
Lead	Attainment	Attainment/Nonattainment ^a	
All others Attainment/Unclassifiedb		No standards	

 O_3 : ozone; PM10: particulate matter 10 microns or less in diameter; PM2.5: particulate matter 2.5 microns or less in diameter; CO: carbon monoxide; NO₂: nitrogen dioxide; SO₂: sulfur dioxide; SoCAB: South Coast Air Basin; CARB: California Air Resources Board.

- ^a Los Angeles County is classified nonattainment for lead; the remainder of the SoCAB is in attainment of the State and federal standards.
- b "Unclassified" designation indicates that the air quality data for the area are incomplete and do not support a designation of attainment or nonattainment.

Source: SCAQMD 2016.

Toxic Air Contaminants

The Multiple Air Toxics Exposure Study IV (MATES IV) is a monitoring and evaluation study conducted in the SoCAB and is part of the SCAQMD Governing Board's Environmental Justice Initiative (SCAQMD 2015a) and uses methods and guidelines established by the State Office of Environmental Health and Hazards Assessment (OEHHA) in 2003. The study focuses on the carcinogenic risk from exposure to air toxics and does not estimate mortality or other adverse health effects from particulate exposures. The MATES IV study uses 2012 monitored data to model risk throughout the SoCAB. The modeled carcinogenic risk for the area that includes the Project site is 1,019 per 1 million persons (SCAQMD 2015c). This risk is comparable to the calculated SoCAB population-weighted risk of 897 per 1 million persons for the air basin (SCAQMD 2019).

Air Quality Management Plan

The SCAQMD develops rules and regulations; establishes permitting requirements for stationary sources; inspects emissions sources; and enforces such measures through educational programs or fines, when necessary. The SCAQMD is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources. It has responded to this requirement by preparing a sequence of Air Quality Management Plans (AQMPs).

On March 3, 2017, the SCAQMD adopted the 2016 AQMP, which is a regional and multi-agency effort (SCAQMD, CARB, Southern California Association of Governments [SCAG], and USEPA). The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS); updated emission inventory methodologies for various source categories; and SCAG's latest growth forecasts (SCAQMD 2016). The main purpose of an AQMP is to bring an area into compliance with the requirements of federal and State air quality standards. For a project to be

consistent with the AQMP, the pollutants emitted from the project should not (1) exceed the SCAQMD CEQA air quality significance thresholds or (2) conflict with or exceed the assumptions in the AQMP.

Sensitive Receptors

Sensitive receptors include, but are not limited to children, the elderly, persons with preexisting respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. The Project site is located in a mixed-use neighborhood. The nearest sensitive receptors to the Project site are residences to the north and east of the Project and Shaffer Park, located south of the Project across East Grove Avenue.

Existing On-Site Emissions

The Project site is currently occupied by a shopping center (Shaffer Park Center). As such, existing operations generate air pollutant emissions from a variety of sources such as the vehicle trips generated by the land use (mobile); natural gas used for heating and hot water; landscape and building maintenance equipment; and consumer products. Existing emissions from the site were estimated using the California Emission Estimator Model (CalEEMod) version 2016.3.2 computer program (CalEEMod 2013). CalEEMod is designed to model construction and operational emissions for land development projects and allows for the input of Project- and County-specific information. The CalEEMod model input was based on the building area and the vehicle trip generation rate provided in the Traffic Memorandum (See Appendix G). Existing criteria pollutant emissions are shown in Table 4-2.

TABLE 4-2 EXISTING EMISSIONS

	Emissions (lbs/day)					
Source	VOC	NOx	CO	SOx	PM10	PM2.5
Area sources	1	<1	<1	<1	<1	<1
Energy sources	<1	<1	<1	<1	<1	<1
Mobile sources	2	9	22	<1	6	2
Total Existing Operational Emissions	3	9	22	<1	6	2

lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter with a diameter of 10 microns or less; SOx: sulfur oxides; PM2.5: fine particulate matter with a diameter of 2.5 microns or less

Some totals do not add due to rounding.

Note: CalEEMod model data sheets are included in Appendix B.

Thresholds of Significance

The SCAQMD provides significance thresholds for both construction and operation of projects within the SCAQMD jurisdictional boundaries. The SCAQMD recommends that projects be evaluated in terms of the quantitative thresholds established to assess both the regional and localized impacts of Project-related air pollutant emissions. The City of Orange uses the SCAQMD thresholds to determine whether a proposed Project would have a significant impact. These SCAQMD thresholds are identified in Table 4-3.

TABLE 4-3
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
AIR QUALITY SIGNIFICANCE THRESHOLDS

Mass Daily Thresholds (lbs/day)						
Pollutant	Operation					
VOC	75	55				
NOx	100	55				
СО	550	550				
PM10	150	150				
PM2.5	55	55				
SOx	150	150				
Lead	3	3				

SCAQMD: South Coast Air Quality Management District; lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; and, SOx: sulfur oxides.

Source: SCAQMD 2015b.

Would the Project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Pursuant to the SCAQMD CEQA Handbook, there are two key indicators of AQMP consistency:

- 1. Whether the Project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay timely attainment of air quality standards or the interim emissions reductions in the AQMP.
- 2. Whether the Project will exceed the assumptions in the AQMP based on the year of Project buildout.

With respect to the first criterion, the following analyses demonstrate that the construction and operation of the proposed Project would not result in significant impacts based on Project emissions being below the SCAQMD thresholds of significance and, therefore, would not increase the frequency or severity of existing air quality violations nor delay the timely attainment of air quality standards or the interim emissions reductions in the AQMP. The proposed Project is not expected to contribute to the exceedance of any air pollutant concentration standards.

Construction Emissions

The proposed Project would include demolition of on-site buildings and removal of asphalt paving resulting in the export of approximately 3,004 tons of demolition debris and construction of 32 residential units. Air pollutant emissions would include construction equipment exhaust; fugitive dust from demolition and site grading; exhaust and particulate emissions from trucks hauling demolition debris; soil and materials to and from the Project site and from vehicles driven to and from the Project site by construction workers; and volatile emissions from painting and asphalt paving operations.

A project with daily emission rates below the SCAQMD's established air quality significance thresholds (shown in Table 4-3) would have a less than significant impact on regional air quality. Emissions were

estimated using CalEEMod. The CalEEMod model input was based on the Project's construction assumptions and are included in Appendix B.

Mass Emissions Thresholds - Maximum Daily Regional Emissions

Table 4-4 presents the estimated maximum daily emissions during construction of the proposed Project and compares the estimated emissions with the SCAQMD daily mass emission thresholds. As shown in Table 4-4, Project construction mass daily emissions would be less than the SCAQMD thresholds for all criteria air pollutants. Emissions from proposed construction would not violate any air quality standard or substantially contribute to an existing or projected air quality violation. Impacts would be less than significant; and no mitigation is required.

TABLE 4-4
ESTIMATED MAXIMUM DAILY CONSTRUCTION EMISSIONS (LBS/DAY)

Year	VOC	NOx	СО	SOx	PM10	PM2.5
2019	3	27	16	<1	4	2
2020	40	18	15	<1	1	1
Maximum Emissions	40	27	16	<1	4	2
SCAQMD Thresholds (Table 4-3)	75	100	550	150	150	55
Exceeds SCAQMD Thresholds?	No	No	No	No	No	No

lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; SCAQMD: South Coast Air Quality Management District.

See Appendix B for CalEEMod model outputs.

Localized Significance Thresholds/Ambient Air Quality

In addition to the mass daily emissions thresholds established by the SCAQMD, short-term local impacts to nearby sensitive receptors from on-site emissions of NO₂, CO, PM10, and PM2.5 are examined based on SCAQMD's Localized Significance Thresholds (LST) methodology. To assess local air quality impacts for development projects without complex dispersion modeling, the SCAQMD developed screening (lookup) tables to assist lead agencies in evaluating local impacts.

The LST method is recommended for projects of five acres or less. For the purposes of an LST analysis, the SCAQMD considers receptors where it is possible that an individual could remain for 1 hour (for NO_2 and CO) and where an individual could be exposed for 24 hours (for PM). The emission limits in the lookup tables are based on the Ambient Air Quality Standards. The closest receptors to the Project site are the residences to the north and east of the site.

Table 4-5 shows the maximum daily on-site emissions for construction activities compared with the SCAQMD LSTs with receptors at 25 meters (82 feet); the SCAQMD method prescribes the use of the 25-meter minimum distance for all receptors within 25 meters. The highest emissions generated for NOx and CO would occur during the demolition phase, and the highest emissions generated for PM10 and PM2.5 would occur during the grading phase. The thresholds shown are based on a construction disturbance area of 1 acre. As shown in Table 4-5, the local emissions from the proposed Project would be less than the thresholds. Therefore, no significant impacts would occur, and no mitigation is required.

¹ The LST methodology uses the metric system for receptor distances.

TABLE 4-5					
LOCAL SIGNIFICANCE THRESHOLD E	EMISSIONS				

	Emissions (lbs/day)				
	NOx	co	PM10	PM2.5	
Project maximum daily on-site emissions	22.7	14.9	3.6	2.3	
LST: 1-acre site threshold	81	486	4	3	
Exceed threshold?	No	No	No	No	

NOx: nitrogen oxides; CO: carbon monoxide; PM10: particulate matter with a diameter of 10 microns or less; PM2.5: particulate matter with a diameter 2.5 microns or less; lbs/day: pounds per day; LST: localized significance threshold.

Note: Data is for SCAQMD Source Receptor Area 17, Central Orange County.

Source: SCAQMD 2009 (thresholds). See Appendix B for CalEEMod model outputs.

Operational Emissions

Operational emissions are comprised of area, energy, and mobile source emissions. The primary area source of VOC emissions associated with the proposed Project would result from the use of consumer products; the major area source of CO emissions would be landscaping equipment. Mobile source emissions are based on estimated Project-related trip generation forecasts, as contained in the Project traffic impact analysis; the proposed Project would generate 302 trips daily. Emissions were calculated with the CalEEMod model. Estimated peak daily operational emissions are shown in Table 4-6, which also includes the existing emissions data to produce a resultant net change in long-term emissions attributable to the proposed Project.

As shown in Table 4-6, the operational emissions for the proposed Project would be less than the SCAQMD CEQA significance thresholds for all criteria pollutants, and less than existing emissions for all criteria pollutants. Because the Project would result in a net reduction in air pollutant emissions when compared to existing uses, the Project would result in a beneficial impact to air quality during the operations phase. Therefore, the operational impact of the proposed Project on regional emissions would be less than significant, and no mitigation is required.

TABLE 4-6
PEAK DAILY OPERATIONAL EMISSIONS

	Emissions (lbs/day)					
Source	VOC	NOx	СО	SOx	PM10	PM2.5
Project Operational Phase Emissions						
Area sources	1	<1	3	<1	<1	<1
Energy sources	<1	<1	<1	<1	<1	<1
Mobile sources	1	3	7	<1	2	1
Total Operational Emissions*	2	3	10	<1	2	1
Existing Emissions (Table 4-2)	3	9	22	<1	6	2
Net Change in Emissions (Project minus Existing)	-1	-6	-12	<1	-4	-1
SCAQMD Significance Thresholds (Table 4-3)	55	55	550	150	150	55
Significant Impact?	No	No	No	No	No	No

lbs/day: pounds per day; VOC: volatile organic compounds; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter with a diameter of 10 microns or less; PM2.5: fine particulate matter with a diameter of 2.5 microns or less; SOx: sulfur oxides.

CalEEMod model data sheets are included in Appendix B.

With respect to the second criterion, the proposed Project would change the existing commercial land use of the site to a residential use. As discussed in Section 3.6, Discretionary Approvals, no change in the land use designation for the Project site is necessary. However, a Zone Change is proposed to make the land use designation and zoning consistent. As discussed in Section 4.17, Transportation, the proposed Project would result in a reduction in trip generation compared to the existing shopping center. As discussed in Section 4.14, Population and Housing, the 32 units provided by the proposed Project would be occupied by approximately 98 persons. This minimal increase would not induce substantial population growth in the City and would not exceed SCAG's projected growth for the City and the region. As the AQMP used the growth assumptions by SCAG and the proposed Project would not exceed growth assumptions by SCAG, it would not conflict with the AQMP. This impact would be less than significant, and no mitigation is required.

Regulatory Requirements:

- RR AQ-1 All demolition and construction activities shall be conducted in compliance with South Coast Air Quality Management District's Rule 403, Fugitive Dust, for controlling fugitive dust and avoiding nuisance. Contractor compliance with Rule 403 requirements shall be mandated in the contractor's specifications.
- RR AQ-2 All demolition and construction activities shall be conducted in compliance with South Coast Air Quality Management District Rule 402, Nuisance, which states that a project shall not "discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property".

Significance Determination: Less Than Significant Impact

^{*} Some totals do not add due to rounding.

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

b) 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?

As identified in Table 4-1, Orange County is a nonattainment area for O_3 , PM10, and PM2.5. The proposed Project would generate PM10, PM2.5, and O_3 precursors (NOx and VOC) during short-term construction and long-term operations.

Construction Activities

Construction activities associated with the proposed Project would result in less than significant construction-related regional and localized air quality impacts, as quantified above in Tables 4-4 and 4-5, respectively. Short-term cumulative impacts related to air quality could occur if construction of the proposed Project and other projects in the surrounding area were to occur simultaneously. In particular, with respect to local impacts, the consideration of cumulative construction particulate (PM10 and PM2.5) impacts is limited to cases when projects constructed simultaneously are within a few hundred yards of each other because of (1) the combination of the short range (distance) of particulate dispersion (especially when compared to gaseous pollutants) and (2) the SCAQMD's required dust-control measures, which further limit particulate dispersion from a project site. Shaffer Park, located to the south of the site, across East Grove Avenue, recently underwent extensive renovations to upgrade park facilities and infrastructure. The newly renovated park was re-opened in April 2019. No other projects within the proposed Project vicinity would be under construction concurrent with the proposed Project. Therefore, local construction emissions would not be cumulatively considerable, and the Project's cumulative impact would be less than significant, and no mitigation is required.

Operational Activities

As shown in Table 4-6, operational emissions would be well below the SCAQMD CEQA significance thresholds and all criteria pollutant emissions would be less than existing emissions. Because the Project would result in a net reduction in air pollutant emissions as compared to existing uses, the Project would result in a beneficial impact to air quality during the operations phase. Therefore, the proposed Project would not contribute to a cumulatively considerable net increase of a pollutant for which the SoCAB is in nonattainment. Emissions of nonattainment pollutants or their precursors would not be cumulatively considerable and would be less than significant, no mitigation is required.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

c) Expose sensitive receptors to substantial pollutant concentrations?

A significant impact may occur when a project would generate pollutant concentrations to a degree that would significantly affect sensitive receptors, which include populations that are more susceptible to the effects of air pollution than the population at large. Exposure of sensitive receptors is addressed for the following situations: CO hotspots; criteria pollutants and toxic air contaminants (TACs, specifically diesel particulate matter [diesel PM]) from on-site construction; exposure to off-

site TAC emissions; and asbestos and lead-based paint during demolition. Operational, long-term TACs may be generated by some industrial land uses; commercial land uses (e.g. gas stations and dry cleaners); and diesel trucks on freeways. Residential land uses do not generate substantial quantities of TACs and therefore, TACs produced during the operations phase of the Project are not addressed further in this Subsequent IS/MND.

Carbon Monoxide Hotspot

A CO hotspot is an area of localized CO pollution caused by severe vehicle congestion on major roadways, typically near intersections. As outlined in the Traffic Memorandum, vehicle trips generated by the proposed Project would be less than the trips per day associated with the existing shopping center. Therefore, the proposed Project would not increase congestion or result in a significant impact related to CO hotspots.

Criteria Pollutants from On-Site Construction

Exposure of persons to construction period NO_2 , CO, PM10, and PM2.5 emissions is discussed in response to Threshold b) above. There would be no significant impacts, and no additional mitigation is required.

Toxic Air Contaminant (Diesel Particulate Matter) Emissions from On-Site Construction

Construction activities would result in short-term emissions of diesel PM from the exhaust of offroad, heavy-duty diesel equipment used for site preparation (e.g., demolition, excavation, and grading); paving; building construction; and other miscellaneous activities. CARB has identified diesel PM as a TAC. The dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Thus, the risks estimated for a maximally exposed individual (MEI) are higher if a fixed exposure occurs over a longer time period. According to the Office of Environmental Health Hazard Assessment, health risk assessments—which determine the exposure of sensitive receptors to TAC emissions—should be based on a 30 to 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the Project.

There would be relatively few pieces of off-road, heavy-duty diesel equipment in operation,² and the construction period (estimated to be 1 year) would be relatively short when compared to a 30 to 70-year exposure period. Combined with the highly dispersive properties of diesel PM and additional reductions in particulate emissions from newer construction equipment, as required by USEPA and CARB regulations, construction emissions of TACs would not expose sensitive receptors to substantial emissions of TACs. The impact would be less than significant, and no mitigation is required.

Exposure to Off-Site Toxic Air Contaminant Emissions

The CARB Air Quality and Land Use Handbook: A Community Health Perspective provides guidance concerning land use compatibility with TAC sources (CARB 2005). While not a law or adopted policy, the handbook offers advisory recommendations for siting sensitive receptors near uses associated with TACs (such as freeways and high-traffic roads, commercial distribution centers, rail yards, ports,

² The equipment assumed for the most intense phase, two months of grading, includes one grader, one bulldozer, and one loader.

refineries, dry cleaners, gasoline stations, and industrial facilities) to help keep children and other sensitive populations out of harm's way.

Projects of concern for mobile sources of TACs are typically those located within 500 feet of a freeway, near urban roads with more than 100,000 vehicles per day (ADT), or rural roads with more than 50,000 ADT (CARB 2005). While there are more than 100,000 vehicles per day on SR 55, SR 91 and SR 57 near the site, the Project site is not located within 500 feet of these freeways.

Based on the truck volume data on adjacent roadways, it is concluded that a quantitative health risk assessment is not necessary and the TAC impact to the Project site would be less than significant.

With respect to proximity to emissions from railroad sources, CARB recommends avoiding siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard; the Project site is east of the BNSF railroad tracks but is not located within 1,000 feet of a service or maintenance yard. CARB also recommends avoiding siting residences within 300 feet of a large gas station or within 500 feet of dry-cleaning operations with two machines using perchloroethylene. There are no dry cleaners within 500 feet or gas stations within 300 feet of the Project site.

The SCAQMD has developed the Facility INformation Detail (FIND), a web tool that allows a search for SCAQMD-regulated facilities that are required to have a permit to operate equipment that releases pollutants into the air. According to FIND, there are permitted emission sources primarily to the west of the Project site (SCAQMD 2019). The permitting process requires that emissions that have the potential to affect human health be evaluated for potential health effects at nearby sensitive receptors. Because there are existing residential uses to the north of the Project site, permits to operate that have the potential to affect human health would have considered residential uses proximate to the Project site and mitigation measures would have been incorporated to ensure that there are no significant issues related to these permitted air pollutant sources.

Consequently, the proposed Project would not have the potential to expose sensitive receptors to substantial TACs from stationary or mobile sources. The impact would be less than significant, and no mitigation is required.

Exposure to Asbestos and Lead Paint During Demolition

Exposure of persons to asbestos-containing materials (ACM) and lead-based paint (LBP) during demolition is addressed in Section 4.9, Hazards and Hazardous Materials, of this Subsequent IS/MND. As identified, the buildings on site were built in 1964 and the late 1980s to early 1990s. Demolition of these structures are anticipated to contain ACM and LBP and the presence of ACM and LBP would be confirmed prior to demolition activities. These materials would then be handled in accordance with applicable regulations (RR HAZ-2 through RR HAZ-4). The impacts would be less than significant, and no mitigation is required.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?

According to the South Coast Air Quality Management District's (SCAQMD's) *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, refineries, landfills, dairies, and composting and fiberglass molding facilities (SCAQMD 1993). The proposed Project does not include any of these uses and the proposed residential development would not produce objectionable odors.

The potential odors emitted during demolition and construction activities would be associated with construction equipment exhaust and the application of asphalt and architectural coatings. In compliance with CARB policy, on-site vehicles and engines may not idle for more than 5 consecutive minutes (CARB 2009). This will reduce potential odors from vehicle/equipment exhaust at the site. Also, these odors would be temporary and sporadic in nature, would readily dissipate with distance, and would cease upon completion of Project construction.

Odors emitted during long-term occupancy of the dwelling units would be limited to those generated by kitchen activities, use of stationary equipment (such as lawnmowers), and solid waste storage. These odors would be similar to those generated by adjacent residential uses and would not affect a substantial number of people. Also, solid wastes would be stored in compliance with the Orange Municipal Code Chapter 8.28, Garbage, which includes storage requirements and regular waste collection and off-site disposal. Therefore, the proposed Project would have no significant impact associated with objectionable odors. Other sources of emissions such as toxics were previously addressed. Impacts would be less than significant, and no mitigation is required.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

4.4 BIOLOGICAL RESOURCES

	Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Have a substantial adverse effect, 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 Wildlife or U.S. Fish and Wildlife Service?				
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?				\boxtimes
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				\boxtimes
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?		\boxtimes		
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			\boxtimes	
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?				

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The Phase I Project MND determined that the Project site was mostly paved and did not contain habitat suitable for sensitive species and that Project development would involve only minor vegetation removal within the Orange-Olive setback. It was concluded that the site did not support any riparian habitat, wetlands, or other sensitive natural community. The Project site was not identified as being in or near a wildlife movement corridor. The MND concluded that the Project site was not located within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Therefore, the MND concluded that the Phase I Project would not result in impacts to biological resources, and no mitigation was identified.

Supplemental Evaluation

Would the Project:

a) Have a substantial adverse effect, 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 Wildlife or U.S. Fish and Wildlife Service?

The Project site is located within an urban area and surrounded by commercial, residential, and industrial uses and a park. The site is developed and largely paved, and existing vegetation on the site includes Mexican fan palm and ficus trees, boxwood, day lilies, and groundcover at scattered locations. Jacaranda trees are present in tree wells along East Grove Avenue. The existing landscaping provide potential habitats for common animal species that are typically found in urban areas, such as small mammals, birds, small reptiles, and insects. However, these do not provide natural habitats for sensitive plant and animal species.

Review of the USFWS' Critical Habitat for Threatened and Endangered Species shows there are no designated critical habitat areas on or near the site. The nearest critical habitat is located in the El Modena Open Space, approximately 3.3 miles to the southeast, which supports the coastal California gnatcatcher (USFWS 2018a).

Since there are no natural or sensitive biological resources on the Project site, the proposed Project would not impact any candidate, sensitive, or special status species, as identified in the local or regional plans, policies, or regulations by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS). There would be no impact on sensitive species, and no mitigation is required.

Significance Determination: No Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

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 Wildlife or US Fish and Wildlife Service?

The Project site is currently developed, and stormwater sheet flows across the asphalt pavement, ribbon gutters, and catch basins toward abutting streets. The site supports ornamental landscaping at scattered locations but does not contain riparian habitat or sensitive natural vegetation communities identified by CDFW and USFWS. There would be no impact to riparian habitats or sensitive natural vegetation communities, and no mitigation is required.

Significance Determination: No Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

The site is largely paved and does not support state or federally protected wetlands, or other areas under the jurisdiction of the CDFW, the Santa Ana Regional Water Quality Control Board (RWQCB), or U.S. Army Corps of Engineers (USACE). Review of the USFWS' National Wetlands Inventory shows there are no wetlands or riparian areas on the site. The nearest wetland area is the Buckeye Channel,

approximately 750 feet south of the site (USFWS 2018b). There would be no impact to this channel or wetlands, and no mitigation is required.

Significance Determination: No Impact
Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

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?

The Project site is developed and is surrounded by residential uses on two sides and roadways on two other sides. While Shaffer Park is an open space area south of the site, this park is surrounded by residential and industrial developments and roadways on all sides. Therefore, the Project site and adjacent areas are not part of or adjacent to a wildlife corridor. As indicated in the General Plan EIR, functional wildlife corridors within the City include the Santiago Creek through the center of the City; the northeastern portion of the City and the Southern California Edison (SCE) utility corridors; and preserved hillsides and ridgelines in the southeastern portion of the City that link with Peters Canyon Park. Therefore, the Project would not affect the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, as the Project is part of none. Also, there are no native wildlife nursery sites on or near the site.

Due to the presence of trees and vegetation on the Project site, there is the potential for birds protected by the Federal Migratory Bird Treaty Act (MBTA) and Sections 3503, 3503.5, and 3513 of the California Fish and Game Code to nest at the site. The MBTA protects common and special status migratory birds and their nests and eggs. Bird species protected under the provisions of the MBTA are identified by the List of Migratory Birds (50 *Code of Federal Regulations* [CFR] Section 10.13, as amended). Since the 1970s, the MBTA has been interpreted to prohibit the accidental or "incidental" take of migratory birds. However, in December 2017, the acting Solicitor of the Department of the Interior issued a new memorandum disclaiming the interpretation of the MBTA as prohibiting incidental take of migratory birds (DOI 2017). In response to the federal changes in interpretation of the MBTA, the CDFW and the California Attorney General have issued an advisory affirming California's protection for migratory birds (CDFW and Attorney General 2018).

Multiple sections of *California Fish and Game Code* provide protection for nesting birds and raptors. Section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 specifically addresses raptors (i.e., birds of prey in the orders *Falconiformes* and *Strigiformes*) and makes it unlawful to take, possess, or destroy these birds or their nest or eggs. Section 3513 prohibits the take or possession of migratory non-game birds as designated by the MBTA or any part of such bird.

If demolition and site clearing activities occur during the nesting season, active bird nests on the site may be disturbed or destroyed by the proposed Project, resulting in a significant impact. Therefore, MM BIO-1 is recommended to avoid impacts to nesting birds and their fledglings.

Upon completion of construction and landscaping activities on the site, newly planted trees and landscaping would provide nesting habitat for migratory birds. Therefore, impacts to migratory birds would occur during the construction phase but would be less than significant with implementation of MM BIO-1.

Significance Determination: Less Than Significant Impact with Mitigation **Mitigation Measures:**

- **MM BIO-1** Prior to the issuance of any grading permits, the Community Development Director or designee shall verify that the following requirements for nesting birds and preconstruction survey are completed by the Project Applicant:
 - The start of demolition and site-preparation activities shall be scheduled outside of the bird nesting and breeding season (typically February 1 through August 15). If demolition or site-preparation activities start during the nesting season, a qualified Biologist shall conduct a nesting bird survey in potential bird nesting areas within 200 feet of any proposed disturbance. The survey shall be conducted no more than three days prior to the start of ground disturbance activities (i.e., grubbing or grading).
 - If active nests of bird species protected by the Migratory Bird Treaty Act (MBTA) and/or the California Fish and Game Code (which, together, apply to all native nesting bird species) are present in the impact area or within 200 feet of the impact area, a temporary buffer fence shall be erected a minimum of 200 feet around the nest site. This temporary buffer may be greater or lesser depending on the bird species and type of disturbance, as determined by the Biologist.
 - Clearing and/or construction within temporarily fenced areas shall be
 postponed or halted until juveniles have fledged from the nest and there is no
 evidence of a second nesting attempt. The Biologist shall serve as a
 construction monitor during those periods when disturbance activities will
 occur near active nest areas to ensure that no inadvertent impacts on these
 nests will occur.

Significance Determination After Mitigation: Less Than Significant Impact

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The proposed Project would retain the existing mature jacaranda street trees along the southern property line on East Grove Avenue, with the exception of one mature jacaranda tree that would be removed to accommodate the entry to the site. On-site trees and vegetation would be removed and replaced by a variety of trees, shrubs and groundcovers. The landscape plan would comply with Chapter 16.50, Landscaping Requirements, of the Orange Municipal Code, as reviewed and approved by the City's Community Services Division together with the Planning Division.

Chapter 12.28, Street Trees, of the City's Municipal Code regulates the planting or removal of any tree or shrub, stakes or tree guards in, or upon, any public street or right-of-way. Proposed trees on the parkway along North Orange Olive Road would comply with City requirements, including a permit from the Public Works Director/City Engineer and use of trees in the City's list of recommended street trees.

Chapter 12.32, Tree Preservation, of the City's Municipal Code regulates the removal of trees, including historical trees, from undeveloped property or public interest property without a permit and requires the planting of replacement trees for those removed. Should the on-site trees be

considered historic requiring a permit for removal, the new trees to be planted are expected to provide adequate replacement in accordance with City requirements.

Compliance with these regulations is required under RR BIO-1. Thus, the Project would not conflict with City regulations pertaining to the preservation of trees. Impacts would be less than significant and, no mitigation is required.

Regulatory Requirements:

RR BIO-1 The proposed on-site and off-site trees shall be planted, preserved, removed, replaced and/or maintained in accordance with Chapter 12.28, Street Trees, Chapter 12.32, Tree Preservation, and Chapter 16.50, Landscaping Requirements, of the Orange Municipal Code.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

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?

The Orange County Central-Coastal Natural Community Conservation Plan (NCCP) and Habitat Conservation Plan (HCP) covers a 208,000-acre area at the central and coastal portions of Orange County, which includes a portion of the City of Orange. However, the Project site itself is not located within this NCCP/HCP area (CDFW 2018a). The entire Orange County is within the boundaries of the Orange County Transportation Authority (OCTA) NCCP/HCP, but no transportation improvements under this NCCP/HCP are proposed on or near the site (CDFW 2018b). The Orange County Southern Subregion HCP covers the southeastern portion of Orange County and does not include land in the vicinity of the Project site (USFWS 2006).

The site is not within the habitat reserve area or areas proposed for conservation in these NCCPs/HCPs. The site is fully developed with commercial/retail buildings, associated surface parking, and site improvements. It supports ornamental landscaping and vegetation and does not contain any habitat for any sensitive plant or animal species. Therefore, there is no potential for conflict with an NCCP or HCP. No impact would occur, and no mitigation is required.

Significance Determination: No Impact

Mitigation Measures: None required

4.5 CULTURAL RESOURCES

	Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?				
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		\boxtimes		
c)	Disturb any human remains, including those interred outside of formal cemeteries?				

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(Impacts to paleontological resources were analyzed in the cultural resources section of the MND in accordance with the CEQA Guidelines Appendix G Checklist in effect at that time).

As analyzed in the Phase I Project MND, no historical resources were identified onsite, and Phase I Project development would not impact historical resources. It was determined that, although the Project site was located less than half a mile northwest of the Eichler Fairmeadow Tract (recognized by the City as an area with unique architectural character), Phase I Project development would not impact the historical significance of the Fairmeadow Tract.

The MND concluded that the Project site was in areas of historical sensitivity for Early American Development (1860-1875) and Farmstead Development (1870s- 1920); thus ground-disturbing activities could encounter archaeological resources. Phase I Project impacts to archaeological resources were identified as less than significant after implementation of MM-CR-1. The MND determined that it was not anticipated that human remains would be encountered during ground disturbing activities. Potential impacts to human remains were identified as less than significant after compliance with California Health and Safety Code §7050.5, California Public Resources Code §5097.98 and the California Code of Regulations (CCR) §15064.5(e).

The MND concluded that Phase I Project ground-disturbing activities could damage paleontological resources that might be buried in site soils, and that impacts to paleontological resources would be less than significant with implementation of MM CULT-2.

Supplemental Evaluation

Would the Project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

Psomas conducted an archaeological record search on July 19, 2017, at the South-Central Coastal Information Center (SCCIC) at California State University, Fullerton. An inquiry was made to the Native American Heritage Commission (NAHC) to request a review of the Sacred Lands File database. The NAHC completed its Sacred Lands File, and a Sacred Lands record search was on December 19, 2018. The results of the literature review from SCCIC are presented below in Table 4-7.

TABLE 4-7
ARCHAEOLOGICAL AND HISTORIC STUDIES NEAR THE PROJECT SITE

Report No.	Author (Year)	Title	Affiliation	Location
OR-2256	Carol Demcak (1999)	Cultural Resources Assessments for Orange County Sanitation Districts	Archaeological Resource Management Corp.	0.5 mile
OR-3287	Roger Mason (2002)	Historic Property Survey Report for Tustin Branch Trail Network, City of Orange, Orange County, California	Chambers Group, Inc.	0.5 mile
OR-3458	Wayne Bonner (2006)	Cultural Resource Records Search and Site Visit Results for T-Mobile Candidate La02881d (Anillo Industries), 2090 North Glassell Avenue, Orange, Orange County, California	Michael Brandman Associates	0.5 mile
OR-3916	Bai "Tom" Tang (2010)	Preliminary Historical/Archaeological Resources Study, Olive Subdivision Positive Train Control (PTC) Project, Southern California Regional Rail Authority (SCRRA) Cities of Anaheim, Orange, and Placentia, Orange County, California	CRM Tech	0.5 mile

The City's Historic Building Survey was conducted in 1982 with updates in 1992 and 2005 and was used to support nominations to the NRHP and CRHR. It constitutes a recognized list of historic resources in the City and is reflected in the Cultural Resources and Historic Preservation Element of the General Plan (Orange 2006). The Cultural Resources and Historic Preservation Element identifies 11 historical resources and 2 historic districts in the City that are included in the NRHP. The majority of these historic resources are located within the Old Towne Orange Historic District. The City has also designated a local historic district (Old Towne District) that partially overlaps with the Old Towne Orange Historic District. Various other structures and sites in the City are identified as potentially eligible for the NRHP, CRHR and/or the Local Register, and there are three proposed local historic districts and three proposed neighborhood conservation areas (Orange 2010a). At the November 13, 2018 meeting, the City Council approved historic district designations for the three Orange Eichler tracts (Fairhaven, Fairhills, and Fairmeadow) and adopted the Orange Eichler Design Standards. The Eichler Historic Districts went into effect on January 11, 2019 (Orange 2019). The Project site is not situated in a historic district or conservation area. Therefore, no direct impacts to contributing elements to a historic district would occur, and no mitigation is required.

In terms of existing structures on the site, the larger building on the site was built in 1964 (over 50 years old), while the smaller building was built in the late 1980s to early 1990s (about 30 years old). The on-site buildings are not listed in the NRHP or the CRHR and are not considered as a historic object, historic site, or significant historic resource by the City; nor is the site located within an existing or proposed historic or a neighborhood conservation area. The architectural style of the two commercial/retail buildings is generally nondescript (e.g., one-story, wood-frame construction with stucco walls and false parapet on flat roofs, cloth/metal awnings, glass doors/windows).

However, a Craftsman style single-family home immediately east of the site (at 2000 N. Shaffer Street) was built in 1914 and is considered by the City as a significant historic resource. Another Craftsman style single-family home northeast of the site (at 2056 N. Shaffer Street) was built in 1909 and is also considered by the City as a significant historic resource (Orange 2018i). The Project would not disturb the single-family home east of the site or the other residence to the northeast. Thus, no direct impacts to historic resources would occur, and no mitigation is required.

Significance Determination: No Impact

Mitigation Measures: None required.

Significance Determination After Mitigation: Not applicable, as no mitigation is required

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

The Project site is located within an urbanized area and has been previously graded and developed. Thus, no archaeological resources are expected to be present on the Project site. No known archaeological sites are located on the Project area or in the immediately surrounding area, as indicated by an archaeological and historic record search through the SCCIC and a Sacred Lands File Search through the NAHC. Although no known resources have been recorded within the Project boundaries, the area surrounding the Project area was occupied by Gabrieliño and Juaneño tribes during the prehistoric period. As such, any earth-moving activities within native sediment may adversely impact unknown buried archaeological resources. This potential impact would be mitigated to a less than significant level with implementation of MM CULT-1.

Significance Determination: Less Than Significant Impact After Mitigation

Previously Approved Mitigation Measures:

MM CULT-1

In the event a previously unrecorded archaeological deposit is encountered during construction, all activity on site shall cease, and the City shall be immediately notified. An Archeologist meeting the Secretary of Interior's Professional Qualifications for Archaeology as defined at 36 CFR Part 61, Appendix A (Professional Archaeologist) shall be retained by the developer to flag the area in the field and determine if the archaeological deposits meet the CEQA definition of historical (State CEQA Guidelines 15064.5(a)) and/or unique archaeological resource (Public Resources Code 21083.2(g)). If the find is considered a "resource" the Qualified Professional shall prepare a plan and pursue either protection in place or recovery, salvage, and treatment of the deposits. Recovery, salvage, and treatment protocols shall be developed in accordance with applicable provisions of Public Resource Code Section 21083.2 and State CEQA Guidelines 15064.5 and 15126.4. If unique archaeological resources cannot be preserved in place or left in an undisturbed state, recovery, salvage, and treatment shall be required at the Applicant's expense. All recovered and salvaged resources shall be prepared to the point of identification and permanent preservation by the Qualified Professional. Resources shall be identified and curated into an established accredited professional repository. The Oualified Professional shall have a repository agreement in hand prior to initiating recovery of the resource. Excavation as a treatment option will be restricted to those parts of the unique archaeological resource that would be damaged or destroyed by the project. In the event of an accidental discovery or recognition of human remains, there shall be no further excavation or disturbance

of the site or nearby area reasonably suspected to overlie adjacent remains until the coroner is contacted. If the remains are determined to be Native American, the Native American Heritage Commission will be contacted within 24 hours and the most likely descendent contacted. Any further actions will be determined at that point. The Applicant shall implement all recommendations made by the Archaeologist. On-site activity may continue at the direction of the Qualified Professional and the City.

Following recovery, a final report containing site forms, a summary of resource significance, and recovery and treatment documentation shall be submitted immediately to the Community Development Department and SCCIC. All information regarding site locations, Native American human remains, and associated funerary objects shall be in a separate confidential addendum and not made available for public disclosure. The final written report shall be submitted to the appropriate regional archaeological Information Center prior to Building Permit Final. (*Orange-Olive Residential Development Project No. 1837-14 Previously Approved Measure MM-CR-1*)

Significance Determination After Mitigation: Less Than Significant Impact

c) Disturb any human remains, including those interred outside of formal cemeteries?

The Project site is fully developed, is largely paved, and has been subject to past disturbance. There are no nearby cemeteries and no human remains are known to be present on the site. Thus, demolition of existing structures and site improvements and construction of the Project is not expected to disturb human remains. *California Health and Safety Code* Section 7050.5 states that if human remains are discovered on site, no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to *Public Resources Code* Section 5097.98. Since compliance with State regulations is required for all development (refer to RR CULT-1), no additional mitigation is required in the unlikely event human remains are discovered on site. Impacts associated with this issue are expected to be less than significant, and mitigation is not required. Compliance with RR CULT-1 would ensure that potential impacts on human remains would be less than significant. No mitigation is required.

Regulatory Requirements:

RR CULT-1

If human remains are encountered during the conduct of ground-disturbing activities, Section 7050.5 of the *California Health and Safety Code* states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition of the materials pursuant to Section 5097.98 of the *California Public Resources Code*. The provisions of Section 15064.5 of the California Environmental Quality Act (CEQA) Guidelines shall also be followed. The County Coroner shall be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner shall notify the Native American Heritage Commission (NAHC). The NAHC shall determine and notify a Most Likely Descendent (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The descendent must complete the inspection within 24 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. These requirements shall be included as notes on the contractor specification and

verified by the Community Development Department prior to issuance of grading permits.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

4.6 ENERGY

	Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				

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The topic of Energy was added to the CEQA Guidelines Appendix G (Environmental Checklist) in December 2018.

The Phase I Project MND did not directly address Phase I Project impacts respecting this topic. The Phase I Project MND Greenhouse Gas (GHG) Emissions section determined that Phase I Project development would not conflict with plans or policies for reducing GHG emissions. Among actions encouraged or required by such plans and policies were increasing use of zero-carbon renewable energy and increasing energy efficiency. However, no direct conclusion can be made respecting Phase I Project impacts on wasteful or inefficient energy use or conflicts with plans for renewable energy or energy efficiency.

Supplemental Evaluation

Would the Project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Section 21100(b)(3) of the *California Public Resources Code* and Appendix F to the State CEQA Guidelines require a discussion of potential energy impacts of proposed projects. Appendix F states:

The goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include:

- (1) Decreasing overall per capita energy consumption,
- (2) Decreasing reliance on fossil fuels such as coal, natural gas and oil, and
- (3) Increasing reliance on renewable energy sources.

Southern California Edison (SCE) and the Southern California Gas Company (SCGC) are utility companies that currently provide and would continue to provide electrical and natural gas services to the Project site. Compliance with energy efficiency and conservation policies and regulations is discussed in this section.

The Natural Resources Element of the General Plan provides for the following policies relative to energy use in the City of Orange (City of Orange 2015a).

- Policy 2.7: Coordinate with energy suppliers to ensure adequate energy supplies to meet community needs, and to promote energy conservation and public education programs for that purpose.
- Policy 2.9: Promote City operations as a model for energy efficiency and green building.
- Policy 2.17: Educate City residents and businesses on the effects of urban runoff, and water and energy conservation strategies.

The State of California has also adopted efficiency design standards within the Title 24 Building Standards and CALGreen requirements. Title 24 of the California Code of Regulations (CCR, specifically, Part 6) is California's Energy Efficiency Standards for Residential and Non-residential Buildings. Title 24 was established by the California Energy Commission (CEC) in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and to provide energy efficiency standards for residential and non-residential buildings. The 2013 California Green Building Standards Code (24 CCR, Part 11), also known as the CALGreen Code, contains mandatory requirements for new residential and nonresidential buildings throughout California. The development of the CALGreen Code is intended to (1) cause a reduction in GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor. In short, the Code is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction. The regulation of energy efficiency for residential and non-residential structures is established by the CEC and its California Energy Code. Starting on January 1, 2020, all new singlefamily residential uses will be required to offset their annual electrical demand through the use of energy efficiency and solar photovoltaic panels. These new homes are expected to reduce energy use by more than 50 percent. The proposed Project would be consistent with these objective and policies.

Construction

Project construction would require the use of construction equipment for grading and building activities. All off-road construction equipment is assumed to use diesel fuel. Construction also includes the vehicles of construction workers and vendors traveling to and from the Project site.

Off-road construction equipment use was calculated from the equipment data (mix, hours per day, horsepower, load factor, and days per phase) provided in the CalEEMod construction output files included in Appendix B of this Subsequent IS/MND. The total horsepower hours for the Project was then multiplied by fuel usage estimates per hours of construction activities included in the Off-Road Model.

Fuel consumption from construction worker, vendor, and delivery/haul trucks was calculated using the trip rates and distances provided in the CalEEMod construction output files. Total vehicle miles traveled (VMT) was then calculated for each type of construction-related trip and divided by the corresponding miles per gallon factor using CARB's EMFAC 2014 model. EMFAC provides the total annual VMT and fuel consumed for each vehicle type. Construction vendor and delivery/haul trucks were assumed to be heavy-duty diesel trucks.

As shown in Table 4-8, a total 18,975 gallons of diesel fuel and 55 gallons of gasoline is estimated to be consumed during Project construction.

TABLE 4-8
ENERGY USE DURING CONSTRUCTION

Source	Gasoline - gallons	Diesel Fuel - gallons		
Off-road Construction Equipment	0	17,957		
Worker commute	43	0		
Vendors	1	0		
On-road haul	11	1,018		
Totals	55	18,975		
Sources: Psomas 2019 based on data from CalEEMod, OffRoad and EMFAC2014.				

Fuel energy consumed during construction would be temporary in nature and would not represent a significant demand on energy resources. The Project would also implement best management practices such as requiring equipment to be properly maintained and minimize idling and where feasible, use electric or clean alternative fuel equipment. Furthermore, there are no unusual Project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the State. Energy used in the construction of the Project would enable the development of buildings that meet the latest energy efficiency standards as detailed in California's Title 24 building standards. Therefore, the proposed construction activities would not result in inefficient, wasteful, or unnecessary fuel consumption.

Operations

The proposed Project would promote building energy efficiency through compliance with energy efficiency standards (Title 24 and CALGreen). The Project site is currently occupied by commercial/retail uses. Energy associated with transportation and onsite usage by these existing commercial uses were quantified and compared to uses that would occur under the proposed Project. The net change in emissions are shown in Table 4-9 below.

TABLE 4-9
ENERGY USE DURING OPERATIONS

Land Use	Gasoline	Diesel	Natural Gas (kBTU/yr)	Electricity (kWh/yr)
Existing Land Uses	85,060	16,339	509,641	406,853
Project Land Uses	40,507	3,049	825,757	256,593
Net Difference (Project minus Existing)	-44,553	-13,290	316,116	-150,260
Sources: Psomas 2019				

As shown in Table 4-9 above, energy consumption associated with existing land uses exceed those for the proposed Project for every transportation fuel (gasoline and diesel) as well as for electricity. Only the Project's natural gas consumption used for heating needs exceeds that of existing conditions. In addition, the Project would be required to comply with the latest Title 24 energy efficiency standards. The CEC anticipates the new 2019 Building Energy Efficiency Standards would result in a reduction of energy use by more than 50 percent as compared to previous energy standards (CEC 2018). Therefore, the new buildings would be more energy efficient than the existing buildings to be

demolished. With respect to energy use associated with transportation, the Project would result in substantially less vehicle trips (1,103 Existing vs. 302 Project trips) and consequently use less fuel.

In terms of whether the operations phase would result in a wasteful, inefficient, or unnecessary consumption of energy resources, during Project operation, the Project would add new units to the housing inventory within Orange County. According to the Resolution of the Board of Supervisors of Orange County – Orange County's Declaration on Housing, "Whereas, Orange County is experiencing a substantial shortage of housing, which is creating a significant negative impact on household budgets and the quality of life of its residents, as well as diminishing our county's workforce…" (Orange County 2018). Because the Project would address the deficiency in housing stock within Orange County, it would provide additional housing options to the City of Orange and potentially reduce the use of transportation fuels. As such, increasing the housing inventory within Orange County is not considered a wasteful, inefficient or unnecessary consumption of energy resources. Therefore, the proposed Project would not result in an inefficient, wasteful, or unnecessary consumption of energy.

Significance Determination: Less than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The Project would be required to comply with the State of California's Title 24 Building Standards. As discussed previously, the latest building standards will incorporate the CEC's building energy efficiency standards which would reduce energy consumption by over half. Because the Project complies with the latest energy efficiency standards, addresses the housing deficiency within the County and incorporates renewable energy, the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. It should be noted that the proposed Project would comply with the applicable building code standards at the time of submittal of building permits.

Significance Determination: No Impact

Mitigation Measures: None required

4.7 GEOLOGY AND SOILS

	Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Directly or indirectly cause 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?				\boxtimes
	ii) Strong seismic groundshaking?		\boxtimes		
	iii) Seismic-related ground failure, including liquefaction?				\boxtimes
	iv) Landslides?				\boxtimes
b)	Result in substantial soil erosion or the loss of topsoil?			\boxtimes	
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?		\boxtimes		
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?				
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		\boxtimes		

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The Phase I Project MND determined that the potential for surface rupture of a known active fault onsite was very low. The MND concluded that several active faults were present in the Project region; thus, strong ground shaking would be likely in the design lifetime of the proposed buildings, and that hazards from ground shaking would be less than significant after compliance with the adopted *California Building Code* (CBC) seismic safety requirements. The MND determined that the potential for liquefaction in subsurface site sediments was negligible.

The MND concluded that Phase I Project development would not cause significant soil erosion impacts, as the Project would reduce impervious surfaces onsite, thus reducing runoff. Additionally, the Project would comply with City and State regulatory requirements minimizing soil erosion during Project construction and operation.

The MND found that site soils within five feet of the ground surface could be collapsible, but also noted that the Phase I Project included a Project Design Feature requiring the removal of the top five feet of soil below the ground surface or the three feet below the bottom of the foundations. Impacts arising from collapsible soils were identified as less than significant.

The MND determined that the expansion potential of subsurface site soils was low and that impacts arising from expansive soils would be less than significant.

Supplemental Evaluation

A Geotechnical Engineering Evaluation Report (Geotechnical Report) has been prepared by Twining Consulting (January 2019) for the proposed Project to assess the geotechnical conditions on the site and provide structural design recommendations for the construction of the Project. The findings of the Geotechnical Evaluation are summarized below, and the report is included as Appendix C to this Subsequent IS/MND.

Would the Project:

- a) Directly or indirectly cause 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?

Ground rupture occurs when movement on a fault breaks through the surface. The State of California has established Earthquake Fault Zones for the purpose of mitigating the hazard of fault rupture by prohibiting the location of most human occupancy structures across the traces of active faults. According to the Orange General Plan Safety Element, no known Alquist-Priolo fault zone is located in the City of Orange. Therefore, there is no impact associated with surface rupture from an Alquist Priolo Fault Zone.

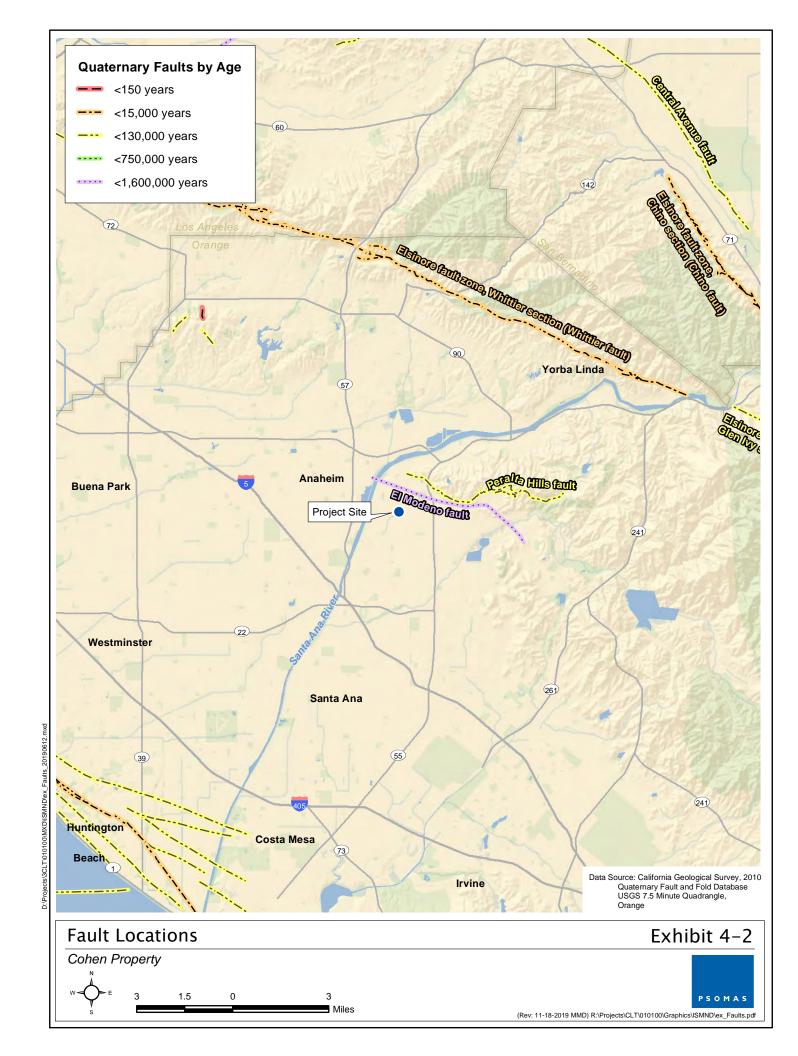
Significance Determination: No Impact
Mitigation Measures: None required

Significance Determination After Mitigation: Not Applicable, as no mitigation is required

ii) Strong seismic groundshaking?

The City of Orange and the rest of California are located within a seismically active region. There are no known active or potentially active faults on the Project site; however, portions of the City are traversed by two potentially active local faults: The Peralta Hills fault and the El Modeno Fault (Orange 2010b). Both are located to the northeast of the Project site with the El Modeno Fault at an approximate distance of 0.7 miles and the Peralta Hills fault at an approximate distance of 1.2 miles from the Project site. The nearest known active fault to the Project site is the Whittier Fault, located approximately 6.8 miles northeast of the Project site (USGS and CGS 2006). The Project site is also within an area identified a potential groundshaking zone associated with the San Andreas Fault. Exhibit 4-2, Fault Locations, shows the locations of the nearest faults. Figure PS-2, Potential Groundshaking Zones – 8.3 San Andreas Earthquake, in the Public Safety Element of the General Plan shows the generalized groundshaking zones associated with the San Andreas Fault. It is anticipated that because the Project site is located within a seismically active region, the Project site would experience ground shaking during the life of the Project.

Geotechnical design considerations for construction in the City of Orange are governed by the Title 15, Buildings and Construction, of the City's *Municipal Code*, which incorporates by reference the *California Building Code* (CBC) (Chapter 15.04). All buildings and other structures constructed as part of the proposed project would be designed in accordance with applicable requirements of the



CBC in effect at the time of grading plan submittal, and any applicable building and seismic codes in effect at the time the grading plans are submitted (RR GEO-1). The Geotechnical Report includes 2016 CBC Seismic Design Parameters in its evaluation (MM GEO-1) and concludes that the proposed Project is feasible from a geotechnical standpoint, with incorporation of the Geotechnical Report recommendations into the design and construction of the Project and compliance with applicable building and seismic codes.

Regulatory Requirements:

RR GEO-1 The Project shall be designed and constructed in compliance with the 2016 California Building Code (CBC) Design Parameters, adopted by reference in Chapter 15.04 of the Orange Municipal Code, or the most current CBC adopted in the City's Municipal Code.

Significance Determination: Less Than Significant Impact After Mitigation Mitigation Measures:

MM GEO-1 Prior to issuance of a grading permit, site preparation and building design specifications shall follow the recommendations in the *Geotechnical Engineering Evaluation Report for the Proposed North Orange Olive Development* prepared by Twining Consulting (dated January 7, 2019) and additional future site-specific, design-level geotechnical investigations of the Project. Based on the Geotechnical Engineering Evaluation Report, recommendations to be included in the Project specifications pertain to General Considerations, Expansive and Collapsible Soils, Corrosive Soils, Earthwork and Site Preparation, Concrete Slabs-On-Grade, Drainage Control, Preliminary Flexible Pavement Design, Rigid Pavement Design, Stormwater Quality Control Measures, Design Review, and Construction Monitoring.

Significance Determination After Mitigation: Less Than Significant Impact

iii) Seismic-related ground failure, including liquefaction?

Liquefaction occurs when the pore pressures generated within a soil mass approach the effective overburden pressure. Liquefaction of soils may be caused by cyclic loading such as that imposed by ground shaking during earthquakes. The increase in pore pressure results in a loss of strength, and the soil then can undergo both horizontal and vertical movements, depending on the site conditions. Other phenomena associated with soil liquefaction include sand boils, ground oscillation, and loss of foundation bearing capacity. Liquefaction is generally known to occur in loose, saturated, relatively clean, fine-grained cohesionless soils at depths shallower than approximately 50 feet. Factors to consider in the evaluation of soil liquefaction potential include groundwater conditions, soil type, grain size distribution, relative density, degree of saturation, and both the intensity and duration of ground motion.

As indicated in the Geotechnical Report (Appendix C), based on a review of the State of California Official Map of Earthquake Zones of Required Investigation for the Orange Quadrangle, the site is not located within a Zone of Required Investigation for Liquefaction.

Additionally, the California Geological Survey (CGS) does not designate the site and the surrounding area as Liquefaction Zones, which include areas where historical occurrence of liquefaction or local geological, geotechnical, and groundwater conditions indicate a potential for permanent ground displacement (CGS 1998). Also, according to Figure PS-1, Environmental and Natural Hazard Policy

Map, of the Public Safety Element of the General Plan, the Project site is not located in a Liquefaction Hazard Area (Orange 2010a).

Therefore, the Project would not result in a substantial adverse effect, including the risk of loss, injury, or death, due to seismic-related ground failure, including liquefaction. No impacts would occur, and no mitigation is required.

Significance Determination: No Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

iv) Landslides?

The Project site and surrounding area are located in a generally flat, urbanized portion of the City, with the ground elevations on the Project site at approximately 200 feet above msl (USGS 2018). The CGS does not designate the site and the surrounding area as Earthquake-Induced Landslide Zones, which include areas where historical occurrence of landslide movement has occurred or where local topographic, geological, geotechnical, and subsurface water conditions indicate a potential for permanent ground displacement (CGS 1998). As indicated in the Geotechnical Report (Appendix C), no landslides or related features underlie or are adjacent to the Project site. Additionally, according to Figure PS-1, Environmental and Natural Hazard Policy Map, of the Public Safety Element of the City of Orange General Plan, the Project site is not located in a Landslide Hazard Area (Orange 2010a).

Therefore, the Project would not result in a substantial adverse effect, including the risk of loss, injury, or death, due to landslides. No impact would occur, and no mitigation is required.

Significance Determination: No Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

b) Result in substantial soil erosion or the loss of topsoil?

The Project site is fully developed with a shopping center, surface parking lot, and associated site improvements and has a relatively flat topography. During demolition and construction activities, temporary soil erosion may occur due to soil disturbance and the removal of buildings and paved surfaces. In addition, soil erosion due to rainfall and wind may occur if unprotected soils are exposed during construction. The Phase 1 ESA for the site states that the underlying soils consists of Myford sandy loam, which has slow runoff potential and a moderate erosion hazard (Ceres 2015).

As the Project site has over one acre of land area, it would be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for construction activities or coverage under the NPDES Construction General Permit. The Construction General Permit requires preparation of a Stormwater Pollution Prevention Plan (SWPPP) and implementation of erosion control, sediment control, tracking, waste management, and construction site maintenance best management practices (BMPs) to reduce the potential for soil and wind erosion during construction activities (see RR HYD-1 below). Further, the proposed Project must comply with the City's grading ordinance, which requires preparation of an erosion and sediment control plan for City approval prior to issuance of a grading permit (see RR GEO-2). With compliance with these regulations, construction-related soil erosion would be less than significant, and no mitigation is required.

As indicated in the WQMP (Appendix E), the Project site is currently 6 percent pervious and 94 percent impervious. Following construction of the proposed Project, the site would be 17 percent pervious and 83 percent impervious (DRC 2019a). While the proposed Project would increase the amount of pervious surfaces at the Project site, the pervious surface at the common open space area in the center of the site would be landscaped, to prevent potential erosion. There would be minimal areas of exposed soils following completion of the proposed Project where erosion could occur. Site improvements and landscaping would also prevent long-term erosion (RR HYD-2). With increased pervious surfaces on the site, the runoff volume and rate are expected to decrease; resulting in less potential for downstream erosion. Therefore, operation-related soil erosion would be less than significant, and no mitigation is required.

Regulatory Requirements: See RR GEO-2, below, and RR HYD-2 (provided in Section 4.10, Hydrology and Water Quality)

RR GEO-2 Prior to issuance of a grading permit, the Project Applicant shall prepare an erosion and sediment control plan in compliance with City's Grading Ordinance, as approved by the City.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

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?

As discussed above, the Project site is not located in a potential landslide or a potential liquefaction area. Based on the Geotechnical Report (Appendix C), groundwater was not encountered in the exploratory borings placed on the site during the geotechnical investigation. The historical high depth to groundwater is reportedly at approximately 50 feet at the Project site (Twining 2019). In light of the depth of water and low potential for liquefaction as discussed under item (iii), above, lateral spreading also has a low potential of occurrence.

As indicated in the Geotechnical Report, although the soil expansion is classified as very low, the consolidation test results show existing collapsible soil at various depths (Appendix C). In order to control the settlement for hydro-collapsible soils, the report recommends an over-excavation and recompaction of the building pad area to a depth of 6 feet below the adjacent grade or 4 feet below the bottom of foundation, whichever is deeper. This, along with the remaining recommendations, as outlined in the Geotechnical Report (MM GEO-1) and adherence to the City's grading code (RR GEO-1) would reduce the potential for expansion and collapse. The Geotechnical Report concludes that the proposed Project is feasible from a geotechnical standpoint, provided the recommendations provided in the Geotechnical Report are incorporated into the design and construction of the proposed Project, in its entirety, as required by MM GEO-1. Therefore, potential impacts would be less than significant.

Regulatory Requirements: See RR GEO-1 above

Significance Determination: Less Than Significant Impact with Mitigation

Mitigation Measures: See MM GEO-1 above

Significance Determination After Mitigation: Less Than Significant Impact

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Expansive soils are characterized by their ability to undergo significant volume changes (shrink or swell) due to variations in moisture content. Changes in soil moisture content can result from rainfall, landscape irrigation, utility leakage, roof drainage, perched groundwater, drought, or other factors, and may cause unacceptable settlement or heave of structures, concrete slabs supported on-grade, or pavements supported over these materials. Depending on the extent and location below finished subgrade, these soils could have a detrimental effect on the proposed construction.

As indicated above, based on the field soil classification, as stated in the Geotechnical Report, while the expansion index classified as "very low" expansion potential, the consolidations test results show existing collapsible soil at various depths. However, with recommendations included in the Geotechnical Report (MM GEO-1), impacts would be less than significant.

Additionally, Project construction would be required to comply with Title 15, Buildings and Construction, of the City's Municipal Code, which adopts the CBC by reference (RR GEO-1). Also, the Geotechnical Engineering Evaluation Report concludes that the proposed Project is feasible from a geotechnical standpoint, provided the recommendations provided in the Geotechnical Engineering Evaluation Report are incorporated into the design and construction of the proposed project, in its entirety, as required by MM GEO-1. Therefore, Project impacts related to expansive soils would be less than significant with compliance with RR GEO-1, and MM GEO-1.

Regulatory Requirements: See RR GEO-1 above

Significance Determination: Less Than Significant Impact After Mitigation

Mitigation Measures: See MM GEO-1 above

Significance Determination After Mitigation: Less Than Significant Impact

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?

There is no evidence of septic tanks and cesspools on the site (Ceres 2015). The Project would connect to the existing 10-inch sewer line on North Orange Olive Road, which is part of the City's municipal sewer system for the disposal of wastewater into the Orange County Sanitation District (OCSD) system. The use of septic tanks or alternative wastewater disposal systems is not proposed by the Project. Therefore, no impact would result, and no mitigation is required.

Significance Determination: No Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not Application, as No Mitigation is Required

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

A paleontological records search was requested of Dr. Sam McLeod at the Natural History Museum (LACM) of Los Angeles County, Vertebrate Paleontology Department; and results were received on December 18, 2018. In addition, an online paleontological records search and literature review were conducted to determine if any fossil localities have been recorded in the Project area or in the general

vicinity. Sources for the records search included the PaleoBiology Database (PaleoBioDB 2018), University of California Museum of Paleontology NEOMAP Database (2018), and the database of Late Pleistocene vertebrate localities for California (Jefferson 1991).

The paleontological record search results indicate that no vertebrate fossil localities are directly within the boundaries of the Project segment; however, one fossil-bearing locality is recorded near the Project segment. Results of the records search are detailed in Table 4-10 below.

TABLE 4-10 FOSSIL LOCALITIES NEAR THE PROJECT SITE

Locality Number	Resource Type	Taxa	Proximity to Area of Potential Effect	Depth
LACM 4943	Vertebrate Fossils	Equus sp. (horse)	Outside (~.75 miles from APE)	8-10 feet below surface

The Project site is fully developed and has already been disturbed. However, the possibility exists that unidentified paleontological sites are present within native sediment beneath the site. As indicated above, based on the paleontological records search results (Table 4-10), there is one known resource located 0.75 mile from the Project site. According to the soils and geologic formations within the City, including the Project area, the Project site has a moderate potential to contain significant paleontological resources. Similar to archaeological resources, ground-disturbing activities associated with construction have potential to encounter native soils and previously undiscovered paleontological resources. This impact would be mitigated to a less than significant level by implementation of MM GEO-2.

Significance Determination: Less Than Significant Impact After Mitigation

Mitigation Measures:

MM GEO-2

In the event paleontological resources are encountered during construction, ground-disturbing activity shall cease. It is recommended that a Qualified Paleontologist be retained by the Developer to examine the materials encountered, assess the nature and extent of the find, and recommend a course of action to further investigate and protect or recover and salvage those resources that have been encountered. Criteria for discard of specific fossil specimens shall be made explicit. If a Qualified Paleontologist determines that impacts to a sample containing significant paleontological resources cannot be avoided by project planning, then recovery may be applied. Actions may include recovering a sample of the fossiliferous material prior to construction; monitoring work and halting construction if an important fossil needs to be recovered; and/or cleaning, identifying, and cataloging specimens for curation and research purposes. The cost associated with recovery, salvage, and treatment shall be borne by the Developer. All recovered and salvaged resources shall be prepared to the point of identification and permanent preservation by the Qualified Professional. Resources shall be identified and curated into an established accredited professional repository. The Qualified Professional shall have a repository agreement in hand prior to initiating recovery of the resource. (Orange-Olive Residential Development Project MND No. 1837-14 Previously Approved Measure *MM-CR-2*)

Significance Determination After Mitigation: Less Than Significant Impact

4.8 GREENHOUSE GAS EMISSIONS

	Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			\boxtimes	
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			\boxtimes	

August 2015 Orange-Olive Residential Development Project MND

The Phase I Project MMD concluded that the GHG emissions would be well below the City's 3,000 MTCO₂e per year significance threshold. The MND also determined that the Project would comply with plans, policies, and regulations intended to reduce GHG emissions. Thus, GHG emissions impacts were identified as less than significant and no mitigation was required.

Supplemental Evaluation

Greenhouse gases (GHG) are global pollutants and are therefore unlike criteria air pollutants such as 03, particulate matter (PM10 and PM2.5), and TACs, which are pollutants of regional and local concern (refer to Section 4.3, Air Quality, of this Subsequent IS/MND). While pollutants with localized air quality effects have relatively short atmospheric lifetimes (generally in the order of a few days), GHGs have relatively long atmospheric lifetimes, ranging from one year to several thousand years. Long atmospheric lifetimes allow for GHGs to disperse around the globe. Therefore, GHG effects are global, as opposed to the local and/or regional air quality effects of criteria air pollutant and TAC emissions.

GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). GHGs vary widely in the power of their climatic effects; therefore, climate scientists have established a unit called global warming potential (GWP). The GWP of a gas is a measure of both potency and lifespan in the atmosphere as compared to CO_2 . Carbon dioxide equivalent (CO_2e) is a quantity that enables all GHG emissions to be considered as a group despite their varying GWP. The GWP of each GHG is multiplied by the prevalence of that gas to produce CO_2e .

The Project site is currently occupied by a shopping center, which would be demolished. Existing commercial/retail activities generate GHG emissions from a variety of sources, such as the vehicle trips generated by employees, patrons, and visitors of the shopping center; electricity consumption; disposal of solid wastes; conveyance of water for on-site use; and treatment of wastewater. Existing GHG emissions were estimated using the CalEEMod model (as described in Section 4.3, Air Quality), and are shown in Table 4-11.

TABLE 4-11 EXISTING GREENHOUSE GAS EMISSIONS

Source	Emissions (MTCO2e/year)		
Area	<1		
Energy	157		
Mobile	900		
Waste	27		
Water	20		
Total	1,105		
MTCO ₂ e/year: Metric tons of carbon dioxide equivalent per year			
Notes: Totals may not add due to rounding variances. Detailed calculations in Appendix B.			

Would the Project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

It is accepted as very unlikely that any individual development project would have GHG emissions of a magnitude to directly impact global climate change; therefore, any impact would be considered on a cumulative basis.

Future Greenhouse Gas Emissions

Based on the proposed construction activities as described in Section 4.3, Air Quality, of this Subsequent IS/MND, the principal source of GHG emissions from the Project would be the internal combustion engines of construction equipment, on-road construction vehicles and trucks, and construction crew vehicles. The estimated construction GHG emissions of the proposed Project would be 306 MTCO2e, as obtained from the CalEEMod model and shown in Table 4-12.

TABLE 4-12 ESTIMATED GREENHOUSE GAS EMISSIONS FROM CONSTRUCTION

Year	Emissions (MTCO ₂ e)
2019	261
2020	45
Total	306

 $MTCO_2e$: metric tons of carbon dioxide equivalent

 $Notes: \ \ \, Totals \, may \, not \, add \, due \, to \, rounding \, variances.$

Detailed calculations in Appendix B.

Because GHG impacts from construction activities occur over a relatively short period of time, they contribute a relatively small portion of the overall lifetime Project-generated GHG emissions. In addition, available GHG emission reduction measures for construction equipment are relatively limited. Consequently, SCAQMD staff recommends that construction GHG emissions be amortized over a 30-year project lifetime, so that GHG reduction measures can address construction GHG

emissions as part of the operational GHG reduction strategies (SCAQMD 2008). Therefore, construction GHG emissions are combined with operational GHG emissions by amortizing the construction operations over an assumed 30-year Project lifetime.

The operational GHG emissions of the Project would come primarily from vehicle trips; other sources include electricity and water consumption, natural gas for space and water heating, and use of gasoline-powered landscaping and maintenance equipment. Estimated operational GHG emissions from the Project are shown in Table 4-13, along with the amortized construction GHG emissions.

To quantify the net Project GHG emissions, the emissions attributed to the proposed Project would be reduced by the existing GHG emissions from existing shopping center operations that would be demolished as part of the Project. Estimated net Project GHG emissions are also shown in Table 4-13.

TABLE 4-13 ESTIMATED GROSS AND NET ANNUAL GREENHOUSE GAS **EMISSIONS FROM PROJECT OPERATION**

Source	GHG Emissions (MTCO2e/yr)	
Area	7	
Energy	126	
Mobile	395	
Waste	19	
Water	16	
Amortized Construction Emissions	10 ^a	
Total Proposed Project Emissions	573	
Total Existing Use Emissions (Table 4-8)	1,105	
Net Change in GHG emissions (Project minus Existing)	-532	
MTCO ₂ e/yr: Metric tons of carbon dioxide equivalent per year; GHG: greenhouse gas		

^a Total derived by dividing construction emissions (see Table 4-9) by 30 years.

Note: Detailed calculations in Appendix B.

There are no adopted quantitative federal, State, regional, or local CEQA significance criteria for GHG emissions for residential or commercial development projects. The SCAQMD has proposed, but not adopted a threshold of 3,000 MTCO2e per year for non-industrial development projects. As shown, the estimated gross GHG emissions from the proposed Project, -532 MTCO2e per year. This net reduction in GHG emissions associated with the Project would be substantially less than the 3,000 MTCO₂e per year threshold. Because there would be an overall reduction in GHG emissions with implementation of the proposed Project and GHG emissions are less than the SCAOMD significance threshold, GHG impacts would be less than significant, and no mitigation is required.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

c) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

On June 1, 2005, the California Governor signed Executive Order S-3-05, which calls for a reduction in GHG emissions to year 2000 levels by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. The principal overall State plan and policy adopted for the purpose of reducing GHG emissions is Assembly Bill (AB) 32 (California Global Warming Solutions Act of 2006). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020, through its 2008 Scoping Plan.

Senate Bill (SB) 375, signed in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocations. SB 375 requires Metropolitan Planning Organizations (MPO) to adopt a sustainable communities strategy or alternative planning strategy that will address land use allocation in their regional transportation plans. SB 375 is being addressed at the State and regional levels, and the principles of SB 375 have been incorporated in SCAG's 2016-2040 RTP/SCS.

California Executive Order B-30-15 set an "interim" statewide emission target to reduce GHG emissions to 40 percent below 1990 levels by 2030 and directed State agencies with jurisdiction over GHG emissions to implement measures pursuant to their statutory authority to achieve this 2030 target and the 2050 target of 80 percent below 1990 levels.

The SCAQMD and the City of Orange have not adopted standards for the purpose of reducing GHG emissions. However, the City has an Interim Guidance for Greenhouse Gas Emissions Analysis. This memorandum provides guidance for the evaluation of GHG emissions in CEQA documents. In terms of evaluating project consistency with applicable City plans and polices related to GHGs, projects should be consistent with the climate change-related policies outlined in Table NR-1 (Climate Change Related Policies) of the City's General Plan Natural Resources Element, including but not limited to:

Land Use Element Policy 6.9: Maximize landscaping along streetscapes and within development projects.

• **Consistent**. The Project would have private open space uses along streetscapes with landscaping within these areas, as described in Section 3.2, Project Components, of this Subsequent IS/MND. The frontage along Orange-Olive Road would be landscaped with drought tolerant trees and plants, similar to Phase I frontage landscaping to ensure a consistent landscape design, and as shown in Exhibit 3-2b, Conceptual Landscape Plan.

Urban Design Element Policy 2.4: Building design and orientation to promote active street life.

• **Consistent**. The proposed dwelling units along Orange Olive Road and East Grove Avenue would face towards the street, with private open space areas at the front of the unit.

Urban Design Policy 4.6: Pedestrian linkages between commercial districts and neighborhoods.

• **Consistent**. The Project would provide pedestrian access with sidewalks to adjacent neighborhoods and nearby commercial districts.

Economic Development Element Policy 5.4: Redevelop and rehabilitate underutilized and vacant lands and public right-of-way.

• **Consistent**. The proposed Project is a redevelopment project that would locate residences close to schools and parks.

Growth Management Element Policy 2.4: Infill development and mixed-use opportunities wherever possible as developable space becomes more limited,

• **Consistent**. The Project would provide infill development with residential uses.

Natural Resources Element Policy 2.2: Alternative transportation modes, alternative technologies, and bicycle- and pedestrian-friendly neighborhoods.

• **Consistent.** The Project would have driveways that would connect to internal drive aisles that would create five "T" cul-de-sacs and one "L" cul-de-sac on the site, to provide vehicle and pedestrian access to the main entryways and garages of the dwelling units. The sidewalks would be retained by the Project and would continue to accommodate pedestrians and bicyclists.

Natural Resources Element Policy 2.3: Native and drought-tolerant plants, proper soil preparation, and efficient irrigation systems for landscaping.

• **Consistent.** The Project would be landscaped with drought-tolerant trees and plants, as shown in Exhibit 3-2a, Schematic Planting Plan.

Natural Resources Element Policy 2.6: Sustainable building and site designs for new construction and renovation projects.

• Consistent. The Project will comply with the latest Title 24 Building energy efficiency standards. Single-family homes built with the 2019 Title 24 building standards will use approximately 53 percent less energy than single-family homes built under the 2016 standards, with incorporation of mandatory rooftop solar electricity generation factored in (CEC 2018). Additionally, the standards encourage demand responsible technologies, such as battery storage and heat pump water heaters to improve the building's thermal envelope through high-performance attics, walls, and windows. The Title 24 standards would enable the use of highly efficient air filters to capture particulates from outdoor and indoor systems (CEC 2018). Compliance with SCAQMD Rule 1114 would limit the use of paints with high volatile organic compounds (VOCs) for architectural coating during construction of the residences.

Natural Resources Element Policy 2.15: Minimize impervious surfaces and associated urban runoff pollutants in new development and redevelopment.

• **Consistent**. The Project would not result in a net increase of impervious surfaces from existing uses. A Preliminary Water Quality Management Plan (WQMP) has been prepared to address long-term stormwater pollution from the proposed Project, and the Final WQMP would be approved by the City prior to issuance of the Demolition Permit. Based on the Preliminary WQMP, the proposed Project site would be regraded for drainage to flow to different specified catch basins and drop inlets, as described further in Section 4.10, Hydrology and Water Quality.

As discussed previously, the State policy and standards adopted for the purpose of reducing GHG emissions that are applicable to the proposed Project are Executive Order S-3-05, AB 32, SB 375, and EO B-30-15. The quantitative goal of these regulations is to reduce GHG emissions to 1990 levels by 2020, to 40 percent below 1990 levels by 2030, and to 80 percent below 1990 levels by 2050. Statewide plans and regulations (such as GHG emissions standards for vehicles, the Low Carbon Fuel Standard, Cap-and-Trade, and renewable energy) are being implemented at the statewide level, and compliance at a project level is generally not addressed. However, for purposes of this analysis, a consistency analysis is provided for the applicable portions of the Scoping Plan Reduction Measures (CARB 2008).

- 3. Energy Efficiency. Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.
 - **Consistent**. This measure is for the State to increase its energy efficiency standards. However, the Project would be consistent with this, because it is required to comply with 2019 Title 24 standards.
- 9. Million Solar Roofs Program. Install 3,000 megawatts of solar-electric capacity under California's existing solar programs.
 - Consistent. This measure is for the State to increase solar throughout California, which is being done by electricity providers and existing solar programs. Additionally, the Project would comply with 2019 Title 24 standards, which require solar photovoltaic systems for new homes.
- 13. Green Building Strategy. Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.
 - **Consistent**. The Project would comply with the California Energy Code (CEC), and would therefore incorporate applicable energy efficiency features designed to reduce energy consumption.
- 15. Recycling and Waste. Reduce CH₄ emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero waste.
 - **Consistent**. The Project would reduce waste with implementation of State-mandated recycling and reuse requirements for construction and operations activities.
- 17. Water. Continue efficiency programs and use cleaner energy sources to move and treat water.
 - **Consistent**. This measure is for State and local agencies; however, the Project would comply with the California Green Building Standards Code. Compliance with the Green Building Standards Code would increase efficiency for energy and water consumption.

State regulations, plans, and policies adopted for the purpose of reducing GHG emissions that are directly applicable to the proposed Project include California Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings and the Title 24 California Green Building Standards Code (CALGreen Code). The proposed Project would be constructed in compliance with applicable requirements of these regulations.

SCAG's 2016-2040 RTP/SCS includes goals for reducing vehicle miles traveled and encourages the building of infill projects (SCAG 2016a). The proposed Project is a redevelopment project that would locate residences in a highly urbanized area, close to schools and parks. OCTA bus service is available on Taft Avenue, less than 2,000 feet from the site. As discussed previously, the Project would also result in less GHG emissions than those produced from the existing uses. Thus, the proposed Project would be consistent with the 2016-2040 RTP/SCS.

The proposed Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. The impact would be less than significant, and no mitigation is required.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

4.9 HAZARDS AND HAZARDOUS MATERIALS

	Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			\boxtimes	
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?				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			\boxtimes	
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?				\boxtimes
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 or excessive noise for people residing or working in the project area?				\boxtimes
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			\boxtimes	
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				

August 2015 Orange-Olive Residential Development Project MND

The analysis in the MND indicated that Phase I Project construction would involve transport, use, and storage of hazardous materials. But it was found that after compliance with regulations, hazards from routine use of hazardous materials would be less than significant. The MND concluded that Project development would not increase the likelihood of accidental release of hazardous materials.

As discussed in the MND, the Project site was used as a vehicle storage site since the 1960's and as farmland from approximately 1938 to 1963. Soil sampling and testing was conducted to evaluate the potential presence of organochlorine pesticides (OCPs) and arsenic from past agricultural use. OCP and arsenic concentrations detected were below the California Human Health screening levels for residential properties. The MND did not identify potential hazardous materials contamination affecting the site and requiring further investigation.

The MND determined that the Project site was outside of areas surrounding Fullerton Municipal Airport and John Wayne Airport where land uses are regulated to minimize aviation-related hazards to people on the ground, and that Phase I Project development would not cause significant aviation-related hazards.

Additionally, the MND concluded that Phase I Project development would not interfere with implementation of the City of Orange's Emergency Operations Plan.

The MND determined that the Project site was not in a Fire Hazard Severity Zone; and that no wildland vegetation was present on or next to the Project site. The MND concluded that Project development would not exacerbate wildfire risks.

Supplemental Evaluation

A Phase 1 Environmental Site Assessment (ESA) was prepared by CERES, Corp. in 2015 and is summarized below; the report is included as Appendix D1 to this Subsequent IS/MND. A database records search through Environmental Data Resources (EDR) was also conducted in 2018 to provide current documentation on potential issues pertaining to hazardous materials on and near the Project site. The EDR Report is summarized below and the report is included as Appendix D2 to this Subsequent IS/MND.

Would the Project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Demolition and construction activities for the proposed Project would involve the use of chemical substances such as solvents, paints, fuel for equipment, and other potentially hazardous materials. Hazards to the environment or the public would typically occur with the transport, use, storage, or disposal of hazardous materials. Demolition and construction activities would be relatively short-term and the transport, use, and disposal of hazardous materials as part of these activities would be temporary. The contractor would be required to comply with existing regulations for the transport, use, storage and disposal of hazardous materials to prevent public safety hazards. These regulations include the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act (RCRA), California Hazardous Waste Control Act (HWCA), and California Accidental Release Prevention Program (CalARP), among others. Impacts would be less than significant, and no mitigation is required.

Once constructed, the proposed dwelling units would use hazardous materials (e.g., paint, pesticides, cleansers, and solvents) for maintenance activities but any use would be in limited household quantities. The dwelling units would not utilize, store, or generate hazardous materials or wastes in quantities that would pose a significant hazard to the public. Impacts would be less than significant, and no mitigation is required.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

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?

Review of historical aerial photographs indicate the site was planted with trees (part of an orchard) as early as 1938 until it was developed with the existing shopping center in 1964. The smaller commercial/retail building was added in the late 1980s to early 1990s.

The Phase 1 ESA did not identify the presence of previous or current hazardous materials or wastes on the site. No underground or aboveground storage tanks were observed, and no stains, corrosion, drains, sumps, pits, or wells are present on the site. The shopping center's current tenants include retail stores, office, alternative school, and a restaurant. Former tenants included a grocery store, liquor store, laundry, pharmacy, hardware store, beauty shop, hobby shop, cleaners, car rental, flooring company, and various other retail stores, restaurants, and offices. A leaking underground storage tank was reported at 2010 North Orange Olive Road (north of the site) in 1987, but the case was closed in 1988. Commercial and industrial uses near the site do not represent a significant environmental concern due to their distances or case status. No evidence of recognized environmental conditions (RECs) (either historical or controlled) was found on the site, and no additional assessment was recommended (Ceres 2015).

Based on the 2018 EDR record search, the Project site is not listed as a facility that handled hazardous materials or generated hazardous wastes (EDR 2018). The nearest facility that is listed in government databases is the Orange Fire Station on Shaffer Street. Various other industrial uses west of the BNSF railroad tracks are listed as hazardous materials users and generators. These uses would not be disturbed by the Project and would not pose a significant hazard to the Project due to distance.

Adjacent to the site are residential land uses to the north and east, and Shaffer Park to the south, which do not store, use, or dispose of hazardous materials in quantities that may pose hazards to the public. The adjacent BNSF railroad may transport hazardous materials in large quantities. However, the Project does not propose ground disturbance or construction activities within the railroad right-of-way and occupancy of the proposed dwelling units would not affect rail operations.

A natural gas pipeline owned by Southern California Gas Company runs along North Orange Olive Road, west of the site (PHMSA 2018). Excavation activities on Orange Olive Road (for utility connections for the Project) may potentially occur over or near this pipeline. The *California Code of Regulations* (Title 8; Section 1541, General Requirements) requires excavators to identify subsurface installations prior to opening an excavation and to ensure that the underground lines are marked. The excavators must inform all known owners/operators of subsurface installations and lines and must meet with owners/operators of high priority subsurface installations (e.g., high pressure pipelines, natural gas/petroleum pipelines, electrical lines greater than 60,000 volts) that may be located within 10 feet of a proposed excavation, before starting the excavation (see RR HAZ-1). Contractor compliance with this regulation would prevent the potential disturbance of the nearby pipeline during excavation activities on North Orange Olive Road. Impacts would be less than significant, and no mitigation is required.

Because of the age of the shopping center, asbestos and lead are likely to have been used for construction (Ceres 2015). As part of the demolition activities, ACM and LBP may be disturbed and contact with these materials would pose hazards to the construction crew and other persons near the construction site. Demolition, removal, and disposal of ACM and LBP are required to comply with existing regulatory requirements, including the Federal and State Occupational Safety and Health Regulations (OSHA and CalOSHA); SCAQMD Regulation X, Subpart M – National Emission Standards For Asbestos and Rule 1403 – Asbestos Emissions (see RR HAZ-3); and California Code of Regulations Title 8, Section 1532.1 – Lead and Section 1529 – Asbestos (see RR HAZ-2 and RR HAZ-4). Compliance with these regulations would be included on the contractor specifications and verified by the City's Community Development Director, or designee in conjunction with the issuance of the Demolition Permit. Compliance with RR HAZ-2 through RR HAZ-4 would ensure that no impacts pertaining to demolition would occur. Impacts would be less than significant, and no mitigation is required.

Regulatory Requirements:

- **RR HAZ-1** In accordance with Title 8; Section 1541, General Requirements, of the California Code of Regulations, excavators shall identify subsurface installations and inform all known owners/operators of subsurface installations and lines prior to opening an excavation. The excavators shall meet with owners/operators of high-pressure pipelines, natural gas/petroleum pipelines, electrical lines greater than 60,000 volts, and other high priority subsurface installations that are located within 10 feet of a proposed excavation, before starting the excavation.
- RR HAZ-2 The demolition contractor shall comply with the requirements of Title 8 of the *California Code of Regulations* (Section 1532.1-Lead) regarding the removal of lead-based paint or other materials containing lead. The regulations set exposure limits, exposure monitoring, respiratory protection, and good working practices by workers exposed to lead. Lead-contaminated debris and other wastes shall be removed and monitored by contractors with appropriate certifications from the California Department of Health Services and disposed of in accordance with the applicable provisions of the *California Health and Safety Code*.
- RR HAZ-3 The demolition contractor shall comply with the South Coast Air Quality Management District's (SCAQMD's) Rule 1403, which provides guidelines for the proper removal and disposal of asbestos-containing materials. In accordance with Rule 1403, prior to the demolition, renovation, rehabilitation or alteration of structures that may contain asbestos, an asbestos survey shall be performed by a Certified Asbestos Consultant (certified by the California Occupational Safety and Health Administration [CalOSHA]) to identify building materials that contain asbestos. Removal of the asbestos shall then include prior notification of the SCAQMD and compliance with removal procedures and time schedules; asbestos handling and clean-up procedures; and storage, disposal, and landfilling requirements under Rule 1403.
- **RR HAZ-4** The demolition contractor shall comply with the *California Health and Safety Code* (Section 39650 et seq.) and the *California Code of Regulations* (Title 8, Section 1529), which prohibit emissions of asbestos from asbestos-related demolition or construction activities; require medical examinations and monitoring of employees engaged in activities that could disturb asbestos; specify precautions and safe work practices that must be followed to minimize the potential for the release of asbestos fibers; and require notice to federal and local government agencies prior to beginning renovation or demolition that could disturb asbestos.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Existing schools located within a 0.25-mile radius of the Project site include the Project Hope School (at the Project site), Covenant Christian School (0.14 mile to the south) and International School of Orange County (0.18 mile also to the south). Other nearby schools, farther than 0.25-mile radius, include Early Childhood Montessori Preschool (0.26 mile to the north), Taft Elementary School (0.35

mile to the southeast), Saint Norbert Catholic Church and School (0.35 mile to the south), and Tec-Canal Street Elementary School/Olive Crest Academy (0.46 mile to the northeast).

With the exception of the Project Hope School, which would relocate prior to Project construction, there is a potential to expose children at these nearby schools to hazardous substances through accidental releases during demolition and construction activities. However, during demolition, existing hazardous materials and wastes would be removed and disposed in accordance with pertinent regulations, including RR HAZ-2 through RR HAZ-4, as discussed above. During construction, a potential exists for the accidental release or spill of hazardous substances such as gasoline, oil, hydraulic fluid, diesel fuel, or other liquids associated with construction equipment operation and maintenance. However, use of these materials would be in limited quantities as typical during the operation and maintenance of construction equipment and would be conducted in compliance with applicable federal, State and local regulations. Additionally, the contractor would be required to use standard construction controls and safety procedures, which would avoid and minimize the potential for accidental release or spill of such substances into the environment. With compliance with pertinent regulations (RR HAZ-2 through RR HAZ-4), the level of risk associated with the accidental release of hazardous substances during demolition and construction would be less than significant, and no mitigation is required.

Residential activities associated with occupancy of the proposed dwelling units would be similar to other residential uses surrounding the site and would not generate hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste in quantities that may impact students at schools within 0.25 mile of the site. No long-term impact would occur, and no mitigation is required.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

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?

According to the Phase I ESA, 2018 EDR record search, and review of the California Department of Toxic Substances Control (DTSC) Hazardous Waste and Substances Site List – Site Cleanup (Cortese List), the Project site is not included on a list of hazardous material sites compiled pursuant to *California Government Code* Section 65962.5 (Ceres 2015, EDR 2018, DTSC 2018). Therefore, the Project does not have the potential to create a significant hazard to the public or the environment due to presence of an existing hazardous materials site identified on the Cortese List. No impact would occur, and no mitigation is required.

Significance Determination: No Impact

Mitigation Measures: None required

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 or excessive noise for people residing or working in the project area?

The Project site is not located within two miles of an airport. The nearest public airports are the Fullerton Municipal Airport, located 7.8 miles northwest of the Project site, and the John Wayne Airport (JWA), located approximately 9.3 miles south of the site. The Project site is not located within the planning areas (including the Runway Protection Zones, Safety Compatibility Zones, and Airport Impact Zones) for these airports (OCALUC 2008, 2004). Thus, the Project would not result in a safety hazard or excessive noise for people residing on the site, as it relates to exposure to airport or aircraft hazards in areas within an airport land use plan or within two miles of a public airport. No impact would occur, and no mitigation is required.

Significance Determination: No Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The City of Orange has an emergency plan, called an "Emergency Operations Plan," prepared in accordance with the State Office of Emergency Services guidelines for multi-hazard functional planning (Orange 2010a). The Project site is not in the vicinity of any emergency evacuation corridors, and North Orange Olive Road and East Grove Avenue are not designated evacuation corridors in the Public Safety Element of the Orange General Plan. Temporary lane closures on adjacent streets (Orange Olive Road and East Grove Avenue) may be required during the short-term construction period in order to connect the proposed Project to the existing utility infrastructure within these roadways. However, Project construction would not involve full closure of any public roadway during construction. Implementation of traffic control measures during construction in accordance with the City of Orange Department of Public Works Standard Plans & Specifications (City Standard Plans) and Chapter 12.02, Standard Specifications for Public Works Construction, of the Municipal Code, which adopts the Greenbook by reference (see RR HAZ-5), would reduce the potential for traffic hazards and the obstruction of access to adjacent parcels. Impacts would be short-term and less than significant, and no mitigation is required.

In the long-term, the Project would provide an access driveway off East Grove Avenue that would be used for emergency response to the site and for emergency evacuation of the site. The Project would not affect emergency response or emergency evacuation of adjacent land uses. Additionally, as indicated above, North Orange Olive Road and East Grove Avenue are not designated evacuation corridors in the Public Safety Element of the Orange General Plan. No long-term impacts would occur, and no mitigation is required.

Regulatory Requirements:

RR HAZ-5 All construction on public rights-of-way shall include the implementation of traffic control measures in accordance with the City of Orange Department of Public Works Standard Plans & Specifications (City Standard Plans) and Orange Municipal Code Chapter 12.20, Street Excavation, and Chapter 12.02, Standard Specifications for Public Works Construction, which adopts the Greenbook by reference.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

The Project site is located in a highly urbanized area of the City, and there are no large, undeveloped areas and/or steep slopes on or near the site that may pose wildfire hazards. The site and the surrounding areas are not located in designated Very High Fire Hazard Severity Zones (VHFHSZ), as identified by the California Department of Forestry and Fire Prevention (CalFire). Rather, the site is within a Non-VHFHSZ area, with the nearest VHFHSZ located approximately 2.1 miles northeast of the site (CalFire 2011). Additionally, based on review of Figure PS-1, Environmental and Natural Hazard Policy Map in the Public Safety Element of the General Plan, the Project site is not located within designated Wildland Very High Fire Hazard Areas or Wildland High Fire Hazard Areas (Orange 2010a). Implementation of the proposed Project would not expose people or structures directly or indirectly to a significant risk of loss, or death associated wildland fires. No impact would occur, and no mitigation is required.

Significance Determination: No Impact

Mitigation Measures: None required

4.10 HYDROLOGY AND WATER QUALITY

	Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?				
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project impede sustainable groundwater management of the basin?			\boxtimes	
c)	Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: i) result in substantial erosion or siltation on- or offsite; ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv) impede or redirect flood flows?				
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				\boxtimes
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			\boxtimes	
f)	Potentially impact stormwater runoff from construction activities?			\boxtimes	
g)	Potentially impact stormwater runoff from post-construction activities?			\boxtimes	
h)	Result in a potential for discharge of stormwater pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas, loading docks or other outdoor work areas?				
i)	Result in the potential for discharge of stormwater to affect the beneficial uses of the receiving waters?				
j)	Create the potential for significant changes in the flow velocity or volume of stormwater runoff to cause environmental harm?			\boxtimes	
k)	Create significant increases in erosion of the project site or surrounding areas?				

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The Phase I Project MND determined that Project construction and operation were each expected to generate suspended soils, nutrients, heavy metals, pathogens, pesticides, oil and grease, toxic organic

compounds, and trash and debris. The MND noted that Project construction would comply with the Statewide General Construction Permit through preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP), which would specify BMPs to be used during construction to minimize storm water pollution. Construction water quality impacts were identified as less than significant after regulatory compliance. Project design incorporated Best Management Practices (BMPs) including dry wells; minimizing impervious areas; and creating reduced or "zero discharge" areas. Operational water quality impacts were determined to be less than significant after compliance with City of Orange water quality requirements.

The MND concluded that the Project site was outside of 100-year flood hazard zones and that the west edge of the Project site was in the dam inundation area of Prado Dam. The MND determined that recent improvements to Prado Dam would reduce dam inundation hazard, and that Project flood hazard impacts would be less than significant.

Supplemental Evaluation

A Preliminary Water Quality Management Plan (WQMP) was prepared by DRC Engineering, Inc. for the proposed Project in compliance with the requirements of the County of Orange NPDES Stormwater Program. The Preliminary WQMP (DRC 2019a) is summarized below, and the report is included as Appendix E to this Subsequent IS/MND.

Would the Project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Short-Term Water Quality Impacts

Implementation of the proposed Project would involve demolition of the existing shopping center, surface parking lot, and associated site improvements, in addition to construction of the proposed dwelling units and site improvements. Therefore, the Project has the potential to result in short-term construction impacts to surface water quality from demolition, grading, and construction-related activities. Storm water runoff from the construction site would contain loose soils, organic matter, and sediments. Spills or leaks from heavy equipment and machinery, such as fuel, oil and grease, and heavy metals, could also enter the runoff. Building construction would involve the use of hazardous materials (e.g., paints, solvents, cleansers) that, if not properly handled, may enter the stormwater runoff.

The Clean Water Act (CWA) establishes a framework for regulating potential water quality impacts from construction activities, as well as new development and major redevelopment, through the NPDES program. Construction activities that disturb one acre or more of land are required to obtain an NPDES permit or coverage under the NPDES Construction General Permit. This is accomplished by completing and filing Permit Registration Documents (PRD) (including a Notice of Intent, a SWPPP, an annual fee, and a signed certification) with the SWRCB prior to start of construction activities. The BMPs in the SWPPP are implemented during construction to reduce storm water pollutants to the maximum extent practicable. Coverage under the NPDES Construction General Permit and implementation of the Project's SWPPP (see RR HYD-1) would ensure that short-term, construction-related water quality impacts would be less than significant. No mitigation is required.

Long-Term Water Quality Impacts

Stormwater pollutants that would be generated by the Project in the long-term include sediment, trash and debris, oil and grease, bacterial, nutrients, and pesticides that would come from landscaped areas, drive aisles, parking areas, and outdoor residential activities.

In accordance with the NPDES program, the Orange County Municipal Separate Storm Sewer System (MS4) Permit and Drainage Area Management Plan (DAMP), and Chapter 7.01, Water Quality and Stormwater Discharges, of the Orange Municipal Code, the proposed Project is considered a Priority Project as it would create impervious surfaces exceeding 5,000 sf. It should be noted that the Project site is currently comprised of 94 percent impervious surface and the proposed Project would not result in a net increase of impervious surfaces. However, because the Project would result in impervious surfaces exceeding 5,000 sf, preparation of a project WQMP is required, pursuant to the Orange County Model WQMP and Technical Guidance Document (TGD). A Preliminary WQMP (Appendix E) has been prepared to address long-term stormwater pollution from the proposed Project, and the Final WQMP would be approved by the City prior to issuance of the Demolition Permit.

Based on the Preliminary WQMP, the proposed Project site would be regraded for drainage to flow to different specified catch basins and drop inlets. This captured discharge would be treated through one of two on-site modular wetlands biofiltration units before the runoff would be discharged to the storm drain line in East Grove Avenue.

With the Project, stormwater pollutants from the shopping center (including pollutants from landscaped areas, loading areas, drive aisles, and surface parking areas) would be replaced with pollutants from residential uses (landscaped areas, internal drive aisles, and outdoor parking spaces). As discussed above, stormwater from the Project would be treated prior to off-site discharge. The Project would also have to comply with the City's stormwater regulations in Chapter 7.01, Water Quality and Stormwater Discharges, of the Orange Municipal Code, related to prohibited connections and discharges. Thus, with implementation of permanent BMPs in the WQMP, the Project site would generate less stormwater pollutants than under existing conditions. The Project's potential to generate substantial amounts of polluted runoff would be less than significant.

Regarding groundwater, although the Project site overlies the Coastal Plain of Orange County Groundwater Basin, there are no groundwater wells on the Project site and no wells are proposed as part of the Project. The Project site offers limited opportunities for groundwater recharge because the majority of the site is currently developed with impervious surfaces and would remain paved with the Project. Due to the surface water quality regulations identified above, the proposed Project would not substantially degrade groundwater quality or interfere with groundwater quality.

The demolition and construction activities of the proposed Project would result in pollutants that may enter the stormwater runoff from the site. However, as discussed above in the response to Threshold a), implementation of BMPs in the SWPPP for the Project would reduce these pollutants (RR HYD-1). As outlined in the Preliminary WQMP for the Project, permanent on-site treatment of stormwater would be provided by one of two onsite modular wetlands biofiltration units (RR HYD-2), which does not currently occur with the existing shopping center. Thus, beneficial impacts on stormwater quality would occur with the Project. With compliance of RR HYD-1 and RR HYD-2, and based on the above information, the Project would not violate any water quality standards and would not degrade surface or ground water quality by contributing pollutants or discharge. Impacts would be less than significant, and no mitigation is required.

Regulatory Requirements:

RR HYD-1 Prior to demolition and construction activities on the site, the Contractor shall prepare and file a Permit Registration Document (PRD) with the State Water Resources Control Board in order to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No 2009-009-DWQ, NPDES No. CAS000002) or the latest approved Construction General Permit. The PRD shall consist of a Notice of Intent (NOI); a Risk Assessment; a Site Map; a Storm Water Pollution Prevention Plan (SWPPP); an annual fee; and a signed certification statement. Pursuant to permit requirements, the Project Applicant/Developer shall implement the Best Management Practices (BMPs) in the SWPPP to reduce or eliminate construction-related pollutants in site runoff. The BMPs shall be implemented during all demolition and construction activities on the site.

RR HYD-2 In accordance with Chapter 7.01, Water Quality and Stormwater Discharges, of the Orange Municipal Code, the Project shall be constructed and operated in accordance with the Water Quality Management Plan (WQMP) prepared for the Project and approved by the City.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project impede sustainable groundwater management of the basin?

The Coastal Plain of Orange County Groundwater Basin underlies the northern and central sections of Orange County within the Lower Santa Ana River Watershed, which includes the Project site (Orange 2010a). The Orange County Water District (OCWD) manages this Groundwater Basin to prevent overdraft conditions, seawater intrusion, land subsidence, and groundwater quality degradation. The recharge basins for the Orange County Groundwater Basin are located in and adjacent to the Santa Ana River and Santiago Creek. The Natural Resources Element of the City of Orange General Plan does not show the site as adjacent to these waterways or recharge facilities (Orange 2010a).

As indicated above in Response 4.10a, there are no groundwater wells on the Project site and no wells are proposed as part of the Project. The Project site offers limited opportunities for groundwater recharge because approximately 94 percent of the site is currently developed with impervious surfaces and would decrease to 83 percent impervious with the Project (Appendix E). The proposed Project would not involve direct withdrawals of groundwater, nor would it interfere with groundwater recharge such that it would result in a net deficit in aquifer volume or lowering of the local groundwater table levels. Excavation activities would not extend into the underlying groundwater, which was last measured at 172 feet below the ground surface (DWR 2018a).

Domestic water service to the Project would be provided by the City of Orange, as described in Section 4.19, Utilities and Service Systems, of this Subsequent IS/MND, with water derived from groundwater, surface water, and imported water supplies. Indirect impacts on local groundwater supplies due to water consumption by the Project (estimated at 15,190 gallons per day [gpd] or 17

acre-feet) would not be large enough to measurably affect the City's annual water supplies (28,643 acre-feet) (Orange 2016b). Also, the groundwater resources in the Coastal Plain of Orange County Groundwater Basin are managed by the OCWD to maintain withdrawals within a safe basin operating range to protect the basin's long-term sustainability. With OCWD incentives to limit groundwater pumping by the City and other water suppliers and with the water conservation measures required in new developments, the proposed Project would not substantially deplete groundwater supplies, interfere with groundwater recharge, or impede sustainable groundwater management of the Groundwater Basin. Indirect impacts would be less than significant, and no mitigation is required.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

- c) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - i) result in substantial erosion or siltation on- or off-site;

As indicated in Response 4.7b, Geology and Soils, the Project would be required to obtain coverage under the NPDES Construction General Permit. The Construction General Permit requires preparation of a SWPPP and implementation of erosion control, sediment control, tracking, waste management, and construction site maintenance BMPs to reduce the potential for soil and wind erosion during construction activities (see RR HYD-1). Further, the proposed Project must comply with the City's grading ordinance, which requires preparation of an erosion and sediment control plan for City approval prior to issuance of a grading permit (see RR GEO-2). With compliance with these regulations, construction-related erosion would be less than significant, and no mitigation is required.

While the proposed Project would increase the amount of pervious surfaces at the Project site, the pervious surfaces such as the common open space area in the center of the site, would be landscaped, to prevent potential erosion. There would be minimal areas of exposed soils following completion of the proposed Project where erosion could occur. Site improvements and landscaping would also prevent long-term erosion (RR HYD-2). With increased pervious surfaces on the site, the runoff volume and rate are expected to decrease; resulting in less potential for downstream erosion. Therefore, operation-related erosion would be less than significant, and no mitigation is required.

Regulatory Requirements: See RR HYD-2 above.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Based on the City's 2015 UWMP, which showed a 2015 average consumption of 155 gallons per capita per day and 98 residents.

⁴ One acre-foot is equivalent to 325,851 gallons.

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

Currently, 94 percent of the Project site is covered with impervious surfaces, which would decrease to 83 percent with implementation of the proposed Project. The Preliminary WQMP indicates that the proposed Project site would be regraded for drainage to flow to different specified catch basins and drop inlets. This captured discharge would be treated through one of two on-site modular wetlands biofiltration units before the runoff would be discharged to the storm drain line in East Grove Avenue.

A hydrologic conditions of concern analysis was conducted for the Preliminary WQMP and evaluated the 2-year storm. Based on this evaluation, it was determined that while the peak flow would increase with the proposed Project from 4.27 cfs to 4.79 cfs, the volume of the 2 year storm would remain the same at 0.44 cfs.

Based on this information, while the peak flow would increase slightly with the proposed Project, the overall volume would remain the same as under existing conditions. The proposed changes resulting from the Project site would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite. Impacts would be less than significant, and no mitigation is required.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Currently, 94 percent of the Project site is covered with impervious surfaces, which decrease to 83 percent with implementation of the proposed Project. The proposed BMPs, as included in the Preliminary WQMP, would provide storm water treatment, where no treatment occurs under existing conditions. Thus, the proposed Project would not result in substantial additional sources of polluted runoff. Additionally, the Project would not result in increased off-site flows, and therefore no exceedance of the capacity of off-site storm drainage infrastructure would occur. Impacts would be less than significant, and no mitigation is required.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

iv) impede or redirect flood flows?

As previously mentioned, the Project site is located within Flood Zone X, which includes areas determined to be outside the 100-year and 500-year floodplains (FEMA 2009). Based on review of Figure PS-1, Environmental and Natural Hazard Policy Map in the Public Safety Element of the General Plan, the Project site is not located within the 100-year flood area. Because the Project site is not located within the 100-year floodplain and does not receive stormwater runoff from adjacent areas, the Project would not substantially alter the existing drainage pattern of the site or area and

would not impede or redirect flood waters. No impacts related to the redirection of flood flows would occur, and no mitigation is required.

Under the existing condition, site drainage consists of sheet flow from the buildings and surface parking areas towards East Grove Avenue and through a ribbon gutter and catch basins at the northern drive aisle for discharge into North Orange Olive Road. Runoff then flows along the street gutters toward the existing catch basin on East Grove Avenue and into underground storm drain lines that tie into Collins Channel and eventually flows into the Santa Ana River.

According to the Preliminary WQMP, the proposed Project site would be regraded for drainage to flow to different specified catch basins and drop inlets. This captured discharge would be treated through one of two on-site modular wetlands biofiltration units before the runoff would be discharged to the storm drain line in East Grove Avenue. The runoff would subsequently be conveyed to Collins Channel, the Santa Ana River, and the Pacific Ocean. Based on the Project stormwater flows, shown in Table 4-14, Hydrologic Conditions of Concern, the Project would slightly increase the 2-year peak storm flow but would not increase its 2-year storm volume. This increase in the 2-year peak storm flow would not alter the course of this channel and other downstream facilities. Implementation of temporary and permanent erosion control BMPs in the Project's SWPPP and WQMP (see RR HYD-1 and RR HYD-2) would ensure that substantial erosion or siltation would not occur on- or off-site during short-term construction and long-term occupancy of the dwelling units. The increase in pervious surfaces on the site is expected to reduce the runoff volume and rate; resulting in less potential for downstream erosion. Thus, the Project would not result in erosion or siltation that would alter the drainage pattern of the area. Project impacts would be less than significant, and no mitigation is required.

TABLE 4-14
HYDROLOGIC CONDITIONS OF CONCERN

	2 Year Peak Flow Q ₂ (CFS)	2 Year Volume V ₂ (CF)	Time of Concentration Tc (Min)
Existing	4.27	0.44	10.36
Proposed	4.79	0.44	10.06
DRC 2019a			

Regulatory Requirements: See RR HYD-1 and RR HYD-2 above

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

A seiche is the resonant oscillation of a body of water caused by earthquake shaking (waves). Seiche hazards exist where groundshaking causes water to splash out of the body of water and inundate nearby areas and structures. The site is not located near a large body of water that may be subject to seiche. Tsunamis are seismic sea waves generated by undersea earthquakes or landslides. The City of Orange is not located along the coast, and the Project site is approximately 14.3 miles from the Pacific Ocean. The Orange County Tsunami Inundation Maps also do not identify the site as being within the Tsunami Inundation Area (CGS 2018b).

The Project site is relatively flat. There are no hillside areas on site or in the surrounding area that could generate mudflow. As a result, no impacts related to seiche, tsunami or mudflow would occur, and no mitigation is required.

Significance Determination: No Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

As discussed above in Response 4.10a, the Project would be in compliance with applicable water quality regulations for short-term and long-term impacts. Specifically, the Project would have coverage under the NPDES Construction General Permit and implementation of the Project's SWPPP (see RR HYD-1) would ensure that short-term, construction-related water quality impacts would be less than significant. For long-term water quality impacts, in accordance with the NPDES program, the Orange County Municipal Separate Storm Sewer System (MS4) Permit and Drainage Area Management Plan (DAMP), and Chapter 7.01, Water Quality and Stormwater Discharges, of the Orange Municipal Code, a Preliminary WQMP has been prepared and stormwater from the Project would be treated prior to off-site discharge. The Project would also comply with the City's stormwater regulations in Chapter 7.01, Water Quality and Stormwater Discharges, of the Orange Municipal Code, related to prohibited connections and discharges. Thus, with implementation of permanent BMPs in the WQMP, the Project site would generate less stormwater pollutants than under existing conditions.

As indicated above in Response 4.10a, there are no groundwater wells on the Project site and no wells are proposed as part of the Project. The proposed Project would not involve direct withdrawals of groundwater, nor would it interfere with groundwater recharge such that it would result in a net deficit in aquifer volume or lowering of the local groundwater table levels. Excavation activities would not extend into the underlying groundwater, which was last measured at 172 feet below the ground surface (DWR 2018a).

Therefore, the Project will not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts are less than significant, and no mitigation is required.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

f) Potentially impact stormwater runoff from construction activities?

Storm water runoff from construction and demolition activities on the site could contain pollutants such as soils and sediments that are released during grading and excavation activities and petroleum-related pollutants due to spills or leaks from heavy equipment and machinery. Other common pollutants include solid or liquid chemical spills; concrete and related cutting or curing residues; wastes from paints, stains, sealants, solvents, detergents, glues, acids, lime, plaster, and cleaning agents; and heavy metals from equipment.

Construction pollutants from the site would need to be reduced by preparation and implementation of a SWPPP, as required under the Construction General Permit from the State Water Resources Control Board (SWRCB). The SWPPP will include BMPs for erosion control, sediment control, wind erosion control, soil, and debris tracking control; waste management; material storage; wastewater; liquids; hazardous materials; stockpiles; equipment and other site conditions in order to prevent pollutants from entering the storm drain system. Inspections, reporting, and storm water sampling and analysis are also required in the SWPPP to ensure that visible and non-visible pollutants are not discharged off site. Implementation of the SWPPP (refer to RR HYD-1) would reduce storm water pollutants during construction to less than significant levels and no mitigation is required.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

g) Potentially impact stormwater runoff from post-construction activities?

Operation of the proposed Project would generate pollutants (including loose soils, organic materials, fertilizers, pesticides and herbicides from landscaped areas, trash and debris, oil and grease, and heavy metals from paved areas) that may enter storm water. As indicated in Checklist Responses (a) and (f) above, the proposed Project would be required to comply with the State General Construction Permit during construction. The City of Orange LID regulations, which require preparation of a WQMP, also include the requirement for BMPs such as LID features to minimize the discharge of pollutants. On-site modular wetlands bioinfiltration units are proposed to filter storm water and irrigation water, slightly reducing runoff flows over existing conditions. Operation and maintenance practices and public education programs to reduce pollutants in the storm water would also be implemented, as part of the WQMP. With implementation of the BMPs contained in the WQMP for the Project (refer to RR HYD-2), the impact to storm water runoff from post-construction activities would be less than significant, and no mitigation is required.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

h) Result in a potential for discharge of stormwater pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas, loading docks or other outdoor work areas?

Construction and demolition activities on the site would include BMPs for waste management, material storage, wastewater, liquids, hazardous materials, stockpiles, equipment, and other site conditions in order to prevent pollutants from entering the storm drain system. Implementation of these BMPs as part of the SWPPP would reduce storm water pollutants during construction and demolition.

Post construction activities will be limited to standard residential activities not to include the listed activities of concern. The on-site biofiltration units would filter site runoff and provide pollutant removal prior to the release of runoff, which would be discharged to the storm drain line in East Grove Avenue. With implementation of the Project BMPs, RR HYD-1 and RR HYD-2, impacts would be less than significant, no mitigation is required.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

i) Result in the potential for discharge of stormwater to affect the beneficial uses of the receiving waters?

As indicated in Threshold Responses 4.10.c.ii and 4.10.c.iv, runoff from the Project site would subsequently be conveyed to the Collins Channel, the Santa Ana River Reach 2, and ultimately the Pacific Ocean. The Project would not alter the course of Collins Channel and other downstream facilities. Implementation of temporary and permanent erosion control BMPs in the Project's SWPPP and WQMP (see RR HYD-1 and RR HYD-2) would ensure that substantial erosion or siltation would not occur on- or off-site during short-term construction and long-term occupancy of the dwelling units. The increase in pervious surfaces on the site is expected to reduce the runoff volume and rate; resulting in less potential for downstream erosion. Thus, the Project would not result in erosion or siltation that would alter the drainage pattern of the area. Project impacts would be less than significant, and no mitigation is required.

Beneficial uses of waters in the Santa Ana River include agricultural supply; groundwater recharge; water contact and non-water contact recreation; warm freshwater habitat; wildlife habitat; and habitat for Rare, Threatened, or Endangered species. The Santa Ana River Reach 2 was listed in 2010 as an impaired water body per Section 303(d) of the Clean Water Act but was delisted in 2016. Storm water pollutants from construction and demolition activities at the site would be reduced by the implementation of BMPs identified in the Project SWPPP. Storm water pollutants during operation and use of the proposed Project would also be reduced with implementation of BMPs (modular wetlands System biofiltration unit), implemented as part of the WQMP for the Project. With implementation of the BMPs identified in the SWPPP and WQMP (RR HYD-1 and RR HYD-2), pollutants would be reduced on the Project site and prevented from entering the storm water system to minimize their impacts on downstream beneficial uses. Therefore, storm water pollutants from the Project site are not expected to adversely affect the beneficial uses of these waters, and the impact would be less than significant, and no mitigation is required.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

j) Create the potential for significant changes in the flow velocity or volume of stormwater runoff to cause environmental harm?

The site is currently developed with a commercial structure, including driveways and a parking lot. Reconstruction of the site would replace existing structures with the proposed Project. As indicated in the WQMP (Appendix E), the Project site is currently 6 percent pervious and 94 percent impervious. Following construction of the proposed Project, the site would be 17 percent pervious and 83 percent impervious (DRC 2019a). The proposed Project would increase the amount of pervious surfaces at the Project site, which would result in greater site infiltration of storm water within these areas. Therefore, no increase in runoff volume or velocity is anticipated with the proposed Project, and no mitigation is required.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

k) Create significant increases in erosion of the project site or surrounding areas?

As discussed above, erosion may occur on site during demolition and construction activities. This would be reduced by the implementation of erosion-control BMPs, as outlined in the Project SWPPP. Long-term erosion is not expected since the site will be paved or built over and open areas landscaped. The proposed Project would also provide one of two on-site biofiltration units that would prevent long-term erosion at the site. Erosion impacts would be less than significant with implementation of the SWPPP and WQMP (RR HYD-1 and RR HYD-2). No mitigation is required.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

4.11 LAND USE AND PLANNING

	Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Physically divide an established community?				\boxtimes
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			\boxtimes	

August 2015 Orange-Olive Residential Development Project MND

The MND determined that Phase I Project development would not divide an established community or conflict with a habitat conservation plan or natural community conservation plan. As discussed in the MND, the construction of 25 single-family residential units would be consistent with the General Plan land use designation of LMDR, which would allow construction of 14 to 35 residential units of a variety of single-family and/or multifamily types. The MND identified the site zoning as Limited Business (C-1) and indicated that the zoning was non-conforming with the General Plan designation.

The Phase I Project included a Specific Plan (i.e., Orange-Olive Specific Plan. Development standards for the Project site under the Specific Plan would be similar to the standards specified under the City's Multiple-Family Residential (R-3) Zone. Adoption of the Specific Plan was required as part of Project approval. Upon adoption of the Specific Plan, the Phase I Project would be consistent with both the General Plan designation (Specific Plan) and the development standards for the Project site under the Specific Plan. It was determined that Project development would not conflict with applicable plans, policies, and regulations and land use impacts would be less than significant.

Supplemental Evaluation

Would the Project:

a) Physically divide an established community?

As shown in the aerial photograph provided in Exhibit 2-1, the Project site is currently developed with the Shaffer Park Center that consists of two commercial/retail buildings and associated surface parking areas and site improvements. The Project site is bordered by North Orange Olive Road on the west, with the BNSF railroad tracks and light industrial uses farther west, across North Orange Olive Road. East Grove Avenue defines the southern boundary of the site, with Shaffer Park across the street and residential uses farther south. The Project site is bound by Phase I of the Orange-Olive Specific Plan (existing residential uses to the north) and existing residential to the east. Thus, the site is located at the edge of a residential community in the City of Orange.

The Project is Phase II of the Orange-Olive Specific Plan and proposes to redevelop the site with 32 dwelling units. The proposed dwelling units would generally be similar to Phase I to the north and existing residential land uses to the east. Therefore, the Project would not divide or disrupt the physical arrangement of an established community but would serve as an extension of an existing residential area. No impact would on occur on an established community, and no mitigation is required.

Significance Determination: No Impact
Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

With respect to regional planning, SCAG is the MPO for Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial counties. As the designated MPO, the federal government mandates SCAG to prepare plans for growth management, transportation, air quality, and hazardous waste management. In addition, SCAG reviews projects of regional significance for consistency with regional plans. SCAG's regional planning programs, including the Regional Comprehensive Plan (RCP), Regional Housing Needs Assessment (RHNA), and RTP/SCS, are not directly applicable to the proposed Project because the Project is not of Statewide, regional or area-wide significance, as defined by Section 15206 of the CEQA Guidelines. However, the Project would contribute to new housing development in the City of Orange; thus, contributing to the City's RHNA housing goal of 363 new dwelling units between 2014 and 2021 (SCAG 2012).

Local plans and programs relevant to the Project and the consistency of the proposed Project with these plans and programs, which include the Orange-Olive Specific Plan, City of Orange General Plan and Zoning Code/Municipal Code, are discussed below.

Orange-Olive Specific Plan

The Project is proposed as Phase II of the Orange-Olive Specific Plan, which would require a Specific Plan Amendment to include the parcel that comprises the 2.9-acre Phase II Project site, as described in Section 3.0, Project Description. The proposed discretionary actions as described in Section 3.0 would allow for (1) the Specific Plan boundary to be adjusted to include the 2.9-acre parcel that is outside of the Specific Plan boundary and (2) other changes to the Specific Plan's land use, design and development regulations and standards, and infrastructure systems to allow for development of the proposed Project.

The proposed Zone Change would make the zoning designation of the site consistent with its LMDR General Plan land use designation, as shown in the Land Use Policy Map in the General Plan, and would, in turn, make the Project consistent with the Zoning Code.

City of Orange General Plan

The City of Orange General Plan was adopted on March 9, 2010 and is organized into 11 elements: (1) Land Use, (2) Circulation and Mobility, (3) Growth Management, (4) Natural Resources, (5) Public Safety, (6) Noise, (7) Cultural Resources and Historic Preservation, (8) Infrastructure, (9) Urban Design, (10) Economic Development, and (11) Housing (which was adopted under separate cover on April 13, 2010). Each element contains the City's goals and policies related to that element. An analysis of how the Project is applicable to each element is described below. Additionally, an evaluation of the Project's consistency with applicable goals and policies from the City's General plan is Provided in Table 4-15, Proposed Project General Plan Consistency Analysis.

Land Use Element	
GOAL 1.0: Meet the present and future needs of all resbalanced mix of land uses.	idential and business sectors with a diverse and
Policy 1.4: Ensure that new development reflects existing design standards, qualities, and features that are in context with nearby development.	Consistent. The Project is located in a primarily residential area with residential uses to the north (Irving House) and east. Schaffer Park is located to the south and light industrial uses are located to the west, across North Orange Olive Road. The proposed Project is Phase II of the previously City-approved Irving House development to the north. The Project is consistent with the development standards identified in the amended Specific Plan for the Irving House development. Additionally, the Project would be subject to design review by the City's Design Review Committee, which would ensure that the Project has an internally consistent, integrated design theme in terms or architectural features, landscaping, signage, and secondary functional and accessory features, compatible with the existing development.
Policy 1.6: Minimize effects of new development on the privacy and character of surrounding neighborhoods.	Consistent. There are single family residential uses to the north and east. An existing wall located on the northern and eastern boundaries of the Project site would remain to provide a visual buffer from adjacent properties. Also, new landscaping, setbacks and additional walls and fencing would further create buffering from adjacent properties.
GOAL 6.0: Advance development activity that is mutual community.	ally beneficial to both the environment and the
Policy 6.1: Ensure that new development is compatible with the style and design of established structures and the surrounding environment.	Consistent. As indicated above under Policy 1.4, the proposed Project is Phase II of the previously Cityapproved Irving House development to the north. The proposed Project is consistent with the development standards identified in the amended Specific Plan for the Irving House development. Additionally, the Project would be subject to design review by the City's Design Review Committee, which would ensure that the Project has an internally consistent, integrated design theme in terms or architectural features, landscaping, signage, and secondary functional and accessory features.
Policy 6.5: Reduce pollutant runoff from new development and urban runoff to the maximum extent practicable.	Consistent. The Project site is currently 6 percent pervious and 94 percent impervious; however, post construction, the site would be 17 percent pervious and 83 percent impervious. With a decrease in impervious surface, the runoff volume and rate are expected to decrease resulting in less runoff. In addition, a Preliminary Water Quality Management Plan (WQMP) was prepared to address long-term

Land Use Element	
	stormwater pollution from the proposed Project, and the Final WQMP would be approved by the City prior to issuance of the Demolition Permit.
Policy 6.8: Maximize landscaping along streetscapes and within development projects to enhance public health and environmental benefits.	Consistent. The Project would include private open space along streetscapes with landscaping within these areas. The frontage along Orange-Olive Road would be landscaped with drought tolerant trees and plants, like the Phase I Irving House frontage landscaping to ensure a consistent landscape design.
Policy 6.10: Mitigate adverse air, noise, circulation, and other environmental impacts caused by new development adjacent to existing neighborhoods through use of sound walls, landscaping buffers, speed limits, and other traffic control measures.	Consistent. The proposed Project includes noise mitigation measures (MM NOI-1 through MM NOI-6) to mitigate potential short- (construction) and long-term (operation) noise impacts. Air quality and traffic impacts were determined to be less than significant with no mitigation.
Growth Management Element	
Policy 2.4: Explore infill development or mixed-use opportunities wherever possible as developable space becomes more limited.	Consistent. The Project is an infill residential development compatible with land uses surrounding the Project.
Natural Resources Element	
GOAL 2.0: Protect air, water, and energy resources fro	om pollution and overuse.
Policy 2.13: Control surface runoff water discharges into the stormwater conveyance system to comply with the City's National Pollutant Discharge Elimination System (NPDES) Municipal Permit and other regional permits issued by the Santa Ana Regional Water Quality Control Board.	Consistent. The Project would comply with the NPDES requirements under the NPDES Construction General Permit, which requires preparation of a SWPPP (RR HYD-1). A WQMP was prepared to address long-term stormwater pollution from the proposed Project, and the Final WQMP would be approved by the City prior to issuance of the Demolition Permit.
Policy 2.14: Reduce pollutant runoff from new development by requiring use of the most low development impact practices and effective Best Management Practices (BMPs) currently available.	Consistent . The Project would implement BMPs identified in the SWPPP and WQMP to reduce pollutant runoff.
Policy 2.15: Minimize the amount of impervious surfaces and associated urban runoff pollutants in new development and significant redevelopment throughout the community.	Consistent. The Project site is currently 6 percent pervious and 94 percent impervious; however, post construction, the site would be 17 percent pervious and 83 percent impervious. With a decrease in impervious surface, the runoff volume and rate are expected to decrease resulting in less runoff. In addition, a Preliminary WQMP was prepared to address long-term stormwater pollution from the proposed Project, and the Final WQMP would be approved by the City prior to issuance of the Demolition Permit.

Land Use Element	
Noise Element	
GOAL 1.0: Promote a pattern of land uses compatible	with current and future noise levels.
Policy 1.2: Encourage new development projects to provide sufficient spatial buffers to separate excessive noise generating land uses and noisesensitive land uses.	Consistent. The Project includes common landscape area along street frontages, entry along East Grove Avenue, and interior of Project site to buffer proposed residences from adjacent streets and interior roadways. An existing perimeter wall along the north and east boundaries of the Project site would provide an additional buffer between the proposed Project and surrounding residences.
Policy 1.4: Ensure that acceptable noise levels are maintained near noise-sensitive uses.	Consistent. The proposed Project includes noise mitigation measures (MM NOI-1 through MM NOI-6) to mitigate potential short- and long-term noise impacts. With implementation of mitigation, noise impacts would be reduced to less than significant.
Policy 1.6: Require an acoustical study for proposed developments in areas where the existing and projected noise level exceeds or would exceed the maximum allowable levels identified in Table N-3. The acoustical study shall be performed in accordance with the requirements set forth within this Noise Element.	Consistent. MM NOI-5 requires a noise analysis demonstrating that interior noise levels would be 45 dBA CNEL or less and exterior common use areas proximate to North Orange Olive Road would be located behind the buildings or shielded by a sound wall or other barrier to ensure exterior noise levels do not exceed 65 dBA CNEL.
GOAL 7.0: Minimize construction, maintenance vehicl noise-sensitive land uses.	e, and nuisance noise in residential areas and near
Policy 7.2: Require developers and contractors to employ noise minimizing techniques during construction and maintenance operations.	Consistent. The proposed Project includes noise mitigation measures (MM NOI-1 through MM NOI-6) to mitigate potential short- and long-term noise impacts. With implementation of mitigation, noise impacts would be reduced to less than significant.
Policy 7.3: Limit the hours of construction and maintenance operations located adjacent to noise-sensitive land uses.	Consistent. The Project would be consistent with Chapter 8.24, Noise Control, of the City's Noise Ordinance, which requires construction activities to occur between the hours of 7:00 a.m. and 8:00 p.m. on any day except for Sunday or a Federal holiday, or between the hours of 9:00 a.m. and 8:00 p.m. on Sunday or a Federal holiday. Additionally, MM NOI-3 requires construction contractors to restrict the operation of any construction equipment that is powered by a greater than 150-horsepower-engine from operating within 15 feet of any off-site residential structure.
Infrastructure Element	
GOAL 4.0: Ensure adequate provision of electricity, na television.	itural gas, telephone and data services and cable
Policy 4.2: Continue to require utilities to be placed underground for new development.	Consistent. The proposed Project would place underground any overhead utility lines that currently serve the Project site.

Land Use Element	
Urban Design Element	
GOAL 6.0: Encourage contextually appropriate infill de	evelopment projects and property renovations.
Policy 6.1: Encourage consistent high quality design of development projects, and provide development standards that ensure building and site design that is well integrated with infrastructure and circulation system	Consistent. The proposed Project is Phase II of the previously City-approved Irving House development to the north. The proposed Project is consistent with the development standards identified in the amended Specific Plan for the Irving House development. Additionally, the Project would be subject to design review by the City's Design Review Committee, which would ensure that the Project has an internally consistent, integrated design theme in terms or architectural features, landscaping, signage, and secondary functional and accessory features.
Policy 6.2: Ensure that new infill development contributes positively to the quality of the surrounding corridor or neighborhood, including the potential to provide additional park space, and minimize the visibility of on-site parking.	Consistent. The Project includes 19,535 square feet (sf) of homeowner's association (HOA) common open space in addition to 22,090 sf of private yard open space for each residential unit. Guest parking spaces are internal to the development and not visible from E. Grove Avenue or North Orange Olive Road.

Land Use Element

The Land Use Element in the General Plan identifies the City's objectives, goals and policies related to development and land use and includes a Land Use Policy Map that establishes allowable land uses throughout the City. The current land use designation for the Project site is Low Medium Density Residential (6-15 du/ac) (LMDR), which allows small lot or zero lot line single-family subdivisions, duplexes and mobile home parks, as well as lower intensity apartment and condominium complexes. The Project proposes a small-lot single-family subdivision at a density of 11.0 units per acre. This is allowed under the site's LMDR land use designation and is consistent with the permitted development density range. The site is not within a Land Use Focus Area or Urban Mixed-Use Site in the City. As described above, the site is proposed as Phase II of the Orange-Olive Specific Plan Specific Plan and would require a Zone Change to allow for the zoning designation of the site to be consistent with its LMDR General Plan land use designation.

Circulation and Mobility Element

The Circulation and Mobility Element addresses the transportation and circulation needs of the City. The North Orange Olive Road is designated as a Secondary Arterial (4 lanes undivided) in the Master Plan for Streets and Highways in the Circulation and Mobility Element. Along the site, North Orange Olive Road is a 4-lane, undivided road and no change to this road is proposed as part of the Project. In the Plan for Recreational Trails and Bikeways in the Circulation and Mobility Element, no existing or proposed bikeways or recreational trails are located on North Orange Olive Road and East Grove Avenue near the site.

Growth Management Element

The Growth Management Element addresses the provision of traffic improvements for orderly growth and development in the City. It sets a level of service (LOS) standard of D. The Project does not include roadway and traffic improvements and would not lead to the operation of roadways and intersections at levels worse than LOS D.

Natural Resources Element

The Natural Resources Element promotes the conservation and preservation of open space resources; air; water and energy resources; ecological, biological and mineral resources; recreational facilities and programs; trails; and visual and aesthetic resources in the City. The site is not located in an area with identified natural resources.

Public Safety Element

The Public Safety Element addresses natural and human-caused hazards, crime, and homeland security, including hazards from geologic and seismic activity, floods, fire, hazardous materials, and aircraft operations. Other public safety issues addressed in the Element include inter-jurisdictional cooperation, homeland security, urban design as a crime prevention tool, and issues related to the City's hillsides and waterways. The site is not located in an area with identified hazards or public safety concerns.

Noise Element

The Noise Element establishes policies and programs that will limit community exposure to excessive noise levels. Occupancy of the Project and associated residential activities would not generate excessive noise levels. Additionally, features, including but not limited to, site boundary walls and double-pane windows would reduce noise levels at the site.

Cultural Resources and Historic Preservation Element

The Cultural Resources and Historic Preservation Element seeks to preserve the City's culture and history. The site is not developed with a historic object (even though one of the existing structures on the site is more than 50 years old, it is not considered historic), historic site, or significant historic resource and is not located within an existing or proposed local historic district or neighborhood conservation area.

Infrastructure Element

The Infrastructure Element includes guidelines and policies that address the community's existing and future needs for public utilities and infrastructure, such as water, sewer, storm drain systems, solid waste services, natural gas, electrical, telephone, data, and cable television services. The Project would connect to existing utility infrastructure on abutting streets and would be adequately served by existing infrastructure.

Urban Design Element

The Urban Design Element seeks to enhance the image of the City and to provide guidance for new growth and redevelopment. Based on review of Figure UD-1, Urban Design Plan, in the Urban Design Element, the site is not located in or near a public facility, ridgeline, resource area, mixed-use area, activity node/urban green zone, city gateway, city entrance sign, major or minor streetscape,

commercial corridor, Old Towne, City Hall, or Community Center. However, the site is near an open space park – Shaffer Park. The Project would not affect the visual character of Shaffer Park.

Economic Development Element

The Economic Development Element seeks to cultivate economic growth and maintain a strong economic base in the City. While the Project would result in the loss of jobs at the existing shopping center, the Project would redevelop an underutilized commercial site and would create temporary construction jobs, as well as provide housing for the City's work force.

Therefore, in light of the above, there would be no conflict with the goals and policies of the General Plan or the land use designation for the site in the Land Use Policy Map. Thus, the proposed Project would not conflict with the Orange General Plan.

Orange Zoning Code

The Orange Zoning Code is the primary tool for implementing the General Plan. The Zoning Code provides development standards (i.e., setbacks, building height, site coverage, parking, and sign requirements) for development in all areas of the City. In addition, the Zoning Code includes a Zoning Map that identifies the zoning of individual parcels, with corresponding permitted, conditionally permitted, and prohibited land uses.

The Project site is zoned C-1 (Limited Business), which allows for the development of various commercial, retail, service, and office uses. Per the Land Use Element, this zone is not consistent with the LMDR land use designation of the site. Thus, as part of the Project, a Zone Change is needed from C-1 to R-3 (SP), which is one of the zones that is consistent with the LMDR designation. With the Zone Change, the site zoning would be consistent with the land use designation in the General Plan, and the Project would become consistent with both the land use designation and zoning of the site. The R-3 zone would also be similar to the R-3 zone of the parcels north of the site. As indicated earlier, the Project would comply with applicable zoning regulations for the R-3 (SP) zone. With the proposed Zone Change, the Project would not conflict with any local land use plan, policy, or regulation.

In light of the above analysis, the Project would not cause a significant environmental impact, as the Project would not conflict with any land use plan, policy, or regulation, including the City's General Plan and Zoning. Impacts would be less than significant, and no mitigation is required.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

4.12 MINERAL RESOURCES

	Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				

August 2015 Orange-Olive Residential Development Project MND

As discussed in the Phase I Project MND,

The MND identified that the Project site was not in a Mineral Resource Zone designating the presence or likely presence of aggregate mineral resources valuable to the region and was not in a Resource Area designated in the City of Orange General Plan. The MND concluded that Phase I Project development would not cause the loss of a mineral resource valuable to the City, the region, or the State, and that no impact would occur.

Supplemental Evaluation

Would the Project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

The CGS designates Mineral Resources Zones (MRZs) according to the presence of or potential for underlying mineral resources. MRZ-1 is an area with no significant mineral deposits; MRZ-2 is an area with significant mineral deposits; and MRZ-3 is an area containing known mineral resources of undetermined significance. The site is located in MRZ-3 (CDMG 1995, 1981). However, there are no mining activities on or near the site. Considering the small size of the site and the presence of urban developments on and near the site, it is unlikely that mining activities would be feasible or would occur on the site.

The Project site is not underlain by an oil, gas or geothermal field, although several small oil fields are present along the Santa Ana River (DOGGR 2001). There are no past or ongoing oil or gas drilling activities on or near the site. Review of the California Division of Oil, Gas, and Geothermal Resources' (DOGGR's) Well Finder shows no oil or gas wells are located on the Project site or in the vicinity of the site. The nearest wells are dry holes approximately 0.34 mile to the north and 0.61 mile to the southeast of the site (DOGGR 2018). Thus, redevelopment of the site with residential uses would not result in the loss or availability of regional mineral resources. No impacts would occur, and no mitigation is required.

Significance Determination: No Impact
Mitigation Measures: None required

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?

The Natural Resources Element of the General Plan calls for the preservation of significant mineral resources in the City by protecting the Santiago Creek and Santa Ana River corridors. The Project site is not located near Santiago Creek or the Santa Ana River nor is it designated as Resource Area (R-A), where mining activities are ongoing. The site is also not zoned S-G (Sand and Gravel) in the City's Zoning Map (Orange 2016a). In addition, there are no mining activities on or near the site. Thus, the Project would not result in the loss or availability of locally-important mineral resources. No impacts would occur, and no mitigation is required.

Significance Determination: No Impact
Mitigation Measures: None required

4.13 NOISE

	Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		\boxtimes		
b)	Generation of excessive groundborne vibration or groundborne noise levels?				
c)	For a project located within the vicinity of a private airstrip or 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?				

August 2015 Orange-Olive Residential Development Project MND

As discussed in the Phase I Project MND, Project construction hours would be limited to 7:00 AM to 8:00 PM Monday through Saturday excepting federal holidays, when construction activities are exempt from the City's noise standards. The MND concluded that Project construction noise impacts would be less than significant after such compliance. The MND identified construction vibration impacts to existing residences next to the Project site as less than significant after implementation of MM NOI-3.

The MND identified that operational traffic noise impacts would be less than significant. The MND concluded that noise impacts from traffic on Orange-Olive Road and trains on a BNSF railroad track, both of which are adjacent to the Project site would be potentially significant. However, it was determined that with implementation of MM NOI-1 and NOI-2, impacts would be less than significant. No airport-related noise impacts were identified.

Supplemental Evaluation

Noise and Vibration Descriptors

Several rating scales (or noise "metrics") are used to analyze the effects of noise on a community. These scales include the equivalent noise level (L_{eq}) and the community noise equivalent level (CNEL). Average noise levels over a period of minutes or hours are usually expressed as A-weighted decibels (dBA) L_{eq} , which is the equivalent noise level for that period of time. The period of time averaging may be specified; where $L_{eq(3)}$ would be a 3-hour average. When no period is specified, a 1-hour average is assumed. Noise of short duration (i.e., substantially less than the averaging period) is averaged into ambient noise during the period of interest. Thus, a loud noise lasting several seconds or a few minutes may have minimal effect on the measured sound level averaged over a one-hour period.

To evaluate community noise impacts, CNEL was developed to account for human sensitivity to evening and nighttime noise. CNEL separates a 24-hour day into three periods: daytime (7:00 AM to 7:00 PM), evening (7:00 PM to 10:00 PM), and nighttime (10:00 PM to 7:00 AM). The evening sound

levels are assigned a 5-dBA penalty, and the nighttime sound levels are assigned a 10-dBA penalty prior to averaging them with daytime hourly sound levels.

Several statistical descriptors are also often used to describe noise, including L_{max} and L_{min} , which are the highest and lowest A-weighted sound levels that occur during a noise event, respectively.

Vibration amplitudes are commonly expressed in peak particle velocity (PPV) or root-mean square (RMS) vibration velocity. PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV and RMS vibration velocity are normally described in inches per second. Similar to airborne sound, vibration velocity can be expressed in decibel notation as vibration decibels (VdB).

Existing Conditions

To evaluate the existing noise environment, noise level measurements were collected at 4 locations on January 7-8, 2019. Measurements were collected for 24-hours along the western Project boundary (North Orange Olive Road) and southern Project boundary (East Grove Avenue), as well as 20-minute durations for the eastern and northern Project boundaries where noise levels are not substantial. The energy average ($L_{\rm eq}$), maximum noise level ($L_{\rm max}$), and minimum noise level ($L_{\rm min}$) values were taken at each ambient noise measurement location, as shown in Table 4-16, below. The complete noise monitoring results are included in Appendix F.

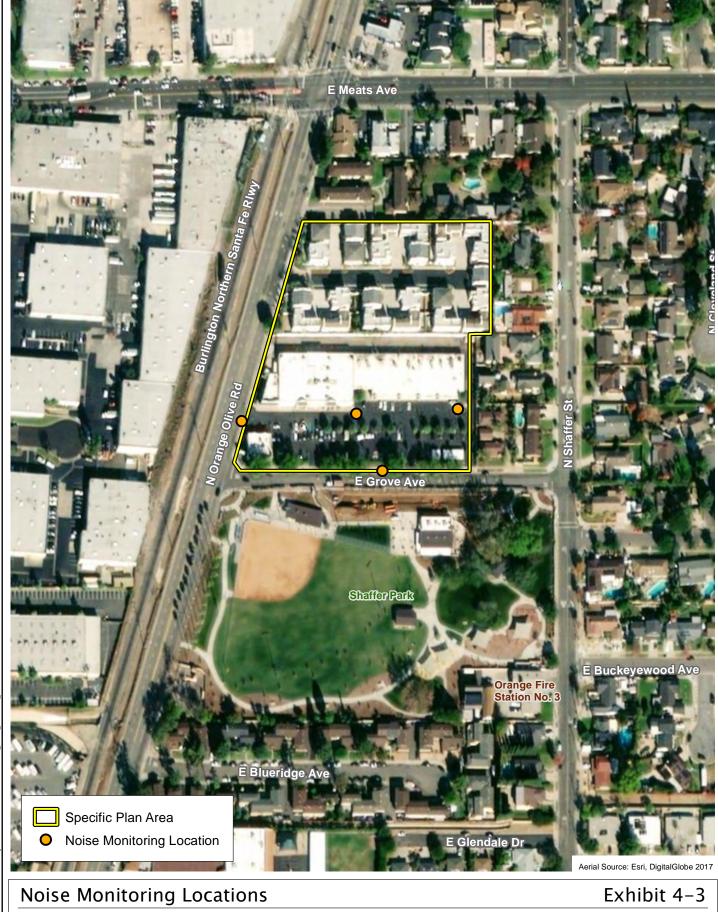
TABLE 4-16
SUMMARY OF SHORT-TERM AMBIENT NOISE LEVEL MEASUREMENTS

Measurement			Noise Levels (dBA)			Primary	
Numbera	Location	Time	$\mathbf{L}_{\mathbf{eq}}$	L _{max}	L_{min}	Noise Source	
1	Northern Project Boundary	7:33 - 7:53 pm	56	75	49	Roadway traffic and train noise	
2	Eastern Project Boundary	7:08 – 7:30 pm	53	65	48	Roadway traffic and train noise	

dBA: A-weighted decibels; L_{eq} : equivalent noise level; L_{max} : maximum noise level; L_{min} : minimum noise level. ^a See Exhibit 4-3 for noise measurement locations

As shown in Table 4-16, the average daytime noise levels near the site range from 53 to 56 dBA $L_{\rm eq}$. Traffic from North Orange Olive Road and East Grove Avenue are the primary noise sources in the Project area. Intermittent noise is generated by trains along the BNSF railroad tracks. Noise levels at the northern and eastern property boundaries are below the noise compatibility standards for residential uses.

Noise Monitoring Locations (Exhibit 4-3) along the Project boundary lines adjacent to North Orange Olive Road and East Grove Avenue were measured for 24-hours. Extended monitoring was conducted at these locations, as they are adjacent to noise sources. As shown in Exhibit 4-4, Hourly Noise Levels at Western Project Boundary, average daytime noise levels in the study area range from 59 to 75 dBA L_{eq} . The 24-hour weighted noise level at this location is 75 dBA CNEL. The measured noise levels are representative of an urban environmental setting.







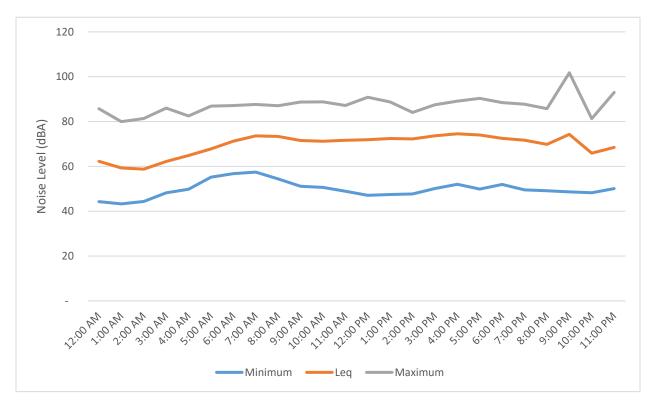


Exhibit 4-5, shown below, provides the 24-hour measurements conducted at the southern Project property line adjacent to East Grove Avenue. Hourly Noise Levels at Noise Monitoring along East Grove Avenue had average daytime noise levels, which range from 48 to 64 dBA L_{eq} . The 24-hour weighted noise level at this location is 64 dBA CNEL.

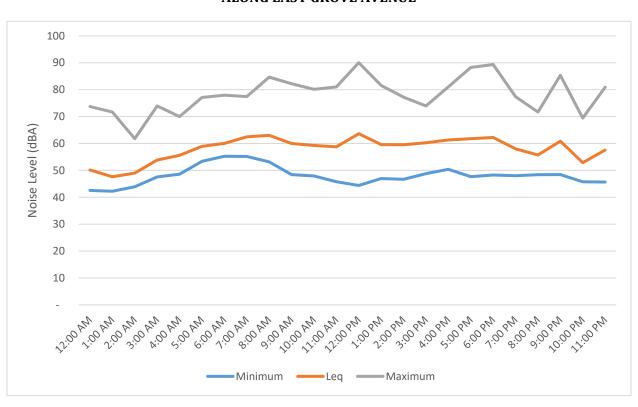


EXHIBIT 4-5 HOURLY NOISE LEVELS AT THE SOUTHERN PROJECT BOUNDARY ALONG EAST GROVE AVENUE

Sensitive Receptors

Noise-sensitive receptors are generally considered to be humans who are engaged in activities that may be subject to the stress of significant interference from noise. These would include residents within the Project site that may be sleeping, resting, or involved in other activities that are not conducive to loud noise.

City of Orange Noise Element and Municipal Code

The City of Orange has established guidelines and standards in the General Plan and the Municipal Code.

General Plan Noise Element

The City of Orange is affected by several different sources of noise, including automobile traffic, trains, commercial activity, and periodic nuisances such as construction, loud parties, and other events. The Noise Element is intended to identify these sources and provide objectives and policies that ensure that noise from these sources does not create an unacceptable noise environment (Orange 2015). The Noise Element contains guidelines for noise compatible land use for long-term operations as shown in Table 4-17.

TABLE 4-17 LAND USE NOISE COMPATIBILITY MATRIX

Lar	nd Use	CNEL	(dBA)
Designations (as shown on Figure LU-5)	Uses	Interior _{1,3}	Exterior2
Estate Low Density Residential	Single-family, duplex, and multiple-family	45	65
Low Density Residential Low Medium Density Residential	Mobile home park	N/A	65
Medium Density Residential Neighborhood	Single-family	45	65
Mixed-use	Mobile home park	N/A	65
Neighborhood Office Professional Old Towne Mixed-use	Multiple-family, mixed-use	45	654,5
General Commercial	Transient lodging—motels, hotels	45	65
Yorba Commercial Overlay	Sports arenas, outdoor spectator sports	N/A	N/A
Urban Mixed-use Urban Office Professional	Auditoriums, concert halls, amphitheaters	45	N/A
orban onice Processional	Office buildings, business, commercial and professional	50	N/A
Light Industrial and Industrial	Manufacturing, utilities, agriculture	N/A	N/A
Public Facilities and Institutions	Schools, nursing homes, day care facilities, hospitals, convalescent facilities, dormitories	45	65
	Government Facilities—offices, fire stations, community buildings	45	N/A
	Places of Worship, Churches	45	N/A
	Libraries	45	N/A
	Utilities	N/A	N/A
	Cemeteries	N/A	N/A
Recreation Commercial	Playgrounds, neighborhood parks	N/A	70
Open Space Open Space—Park Open Space—Ridgeline Resource Area	Golf courses, riding stables, water recreation, cemeteries	N/A	N/A

Notes:

- (1) Interior habitable environment excludes bathrooms, closets and corridors.
- (2) Exterior noise level standard to be applied at outdoor activity areas; such as private yards, private patio or balcony of a multi-family residence. Where the location of an outdoor activity area is unknown or not applicable, the noise standard shall be applied inside the property line of the receiving land use.
- (3) Interior noise standards shall be satisfied with windows in the closed position. Mechanical ventilation shall be provided per Uniform Building Code (UBC) requirements.
- (4) Within the Urban Mixed-Use, Neighborhood Mixed-Use, Old Towne Mixed-use, and Medium Density Residential land use designations, exterior space standards apply only to common outdoor recreational areas.
- (5) Within Urban Mixed-Use and Medium Density Residential land use designations, exterior noise levels on private patios or balconies located within 250 feet of freeways (I-5, SR-57, SR-55, SR-22, or SR-241) and Smart Streets and Principal Arterials identified in the Circulation & Mobility Element that exceed 70 dB should provide additional common open space.

N/A=Not Applicable to specified land use category or designation

Source: City of Orange General Plan Noise Element, Table N-3, 2015.

The Noise Element of the General Plan acknowledges that noise from major roadways may affect sensitive receptors and identifies roadways proximate to the Project site. The following goals and polices are applicable to the Project:

- GOAL 1.0: Promote a pattern of land uses compatible with current and future noise levels.
 - Policy 1.1: Consider potential excessive noise levels when making land use planning decisions.
 - Policy 1.2: Encourage new development projects to provide sufficient spatial buffers to separate excessive noise generating land uses and noise-sensitive land uses.
 - Policy 1.3: Incorporate design features into residential and mixed-use projects that can be used to shield residents from excessive noise.
 - Policy 1.4: Ensure that acceptable noise levels are maintained near noise-sensitive uses.
 - Policy 1.5: Reduce impacts of high-noise activity centers located near residential areas.
 - Policy 1.6: Require an acoustical study for proposed developments in areas where the existing and projected noise level exceeds or would exceed the maximum allowable levels identified in Table N-3 (shown as Table 4-17). The acoustical study shall be performed in accordance with the requirements set forth within this Noise Element.

The Noise Element recognizes that noise generated by vehicular traffic can affect adjacent residential areas and other sensitive land uses. The following goals and polices are applicable to the Project:

- GOAL 2.0: Minimize vehicular traffic noise in residential areas and near noise-sensitive land uses.
 - Policy 2.1: Encourage noise-compatible land uses along existing and future roadways, highways, and freeways.
 - Policy 2.2: Encourage coordinated site planning and traffic control measures that minimize traffic noise in noise-sensitive land use areas.
 - Policy 2.3: Encourage the use of alternative transportation modes such as walking, bicycling, mass transit, and alternative fuel vehicles to minimize traffic noise.
 - Policy 2.4: Continue to work with the California Department of Transportation (Caltrans), the Orange County Transit Authority (OCTA), and Transportation Corridor Agencies (TCA) to install, maintain, and update freeway and highway rights-of-way buffers and soundwalls.
 - Policy 2.5: Work toward understanding and reducing traffic noise in residential neighborhoods with a focus on analyzing the effects of traffic noise exposure throughout the City.
- GOAL 3.0: Minimize train noise in residential areas and near noise-sensitive land uses.
 - Policy 3.1: Encourage noise-compatible land uses and incorporate noise-reducing design features within transit oriented, mixed-use development near rail corridors.

The City has also established goals and policies related to construction activities based on Goal 7.

- GOAL 7.0: Minimize construction, maintenance vehicle, and nuisance noise in residential areas and near noise-sensitive land uses.
 - Policy 7.1: Schedule City maintenance and construction projects so that they generate noise during less sensitive hours.
 - Policy 7.2: Require developers and contractors to employ noise minimizing techniques during construction and maintenance operations.
 - Policy 7.3: Limit the hours of construction and maintenance operations located adjacent to noise-sensitive land uses.
 - Policy 7.4: Encourage limitations on the hours of operations and deliveries for commercial, mixed-use, and industrial uses abutting residential zones.

City of Orange Exterior Noise Standards

As shown in Table 4-18, the City has developed noise limits for stationary noise sources, which apply to noise exposure at all residential properties. These standards are codified in the City of Orange *Municipal Code* Title 8 (Health and Safety), Chapter 8.24 (Noise Control), Section 8.24.040 (Exterior Standards).

TABLE 4-18
EXTERIOR NOISE STANDARDS

	Noise Level	Time Period
Hourly Average (L _{eq})	55 dB (A)	7:00 a.m.—10:00 p.m.
	50 dB (A)	10:00 p.m.—7:00 a.m.
Maximum Level	70 dB (A)	7:00 a.m.—10:00 p.m.
	65 dB (A)	10:00 p.m.—7:00 a.m.
Source: City of Orange Municipal Code, 2018.		

City of Orange Significance Thresholds

Transportation

The Noise Element of the General Plan (Orange 2015) states the following for assessments of potential noise impacts:

For City analysis of noise impacts and determining appropriate mitigation under the California Environmental Quality Act (CEQA), in addition to the maximum allowable noise level standards outlined in Tables N-3 and N-4, an increase in ambient noise levels is assumed to be a significant noise impact if a project causes ambient noise levels to exceed the following:

- Where the existing ambient noise level is less than 65 dBA, a project related permanent increase in ambient noise levels of 5 dBA CNEL or greater.
- Where the existing ambient noise level is greater than 65 dBA, a project related permanent increase in ambient noise levels of 3 dBA CNEL or greater.

Would the Project:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Project Related Temporary Noise Increases

Temporary noise increases associated with the Project occurs during the construction phase. Chapter 8.24, Noise Control, of the Orange Municipal Code is the City's Noise Ordinance. Section 8.24.050.E provides an exemption to the City's noise limits provided construction activities are consistent with the following:

"E. Noise sources associated with construction, repair, remodeling, or grading of any real property, provided said activities take place between the hours of 7:00 a.m. and 8:00 p.m. on any day except for Sunday or a Federal holiday, or between the hours of 9:00 a.m. and 8:00 p.m. on Sunday or a Federal holiday. Noise generated outside of the hours specified are subject to the noise standards identified in Table 8.24.040."

Construction activities are anticipated to involve demolition of existing structures and pavement, grading and excavation for utilities and building foundations, and building construction. Construction activities are anticipated to start in 2019 and end in 2020. All construction activities would occur within the hours specified by the Noise Ordinance. It is estimated that a total of approximately 3,000 tons of debris would be exported off site during demolition. During the demolition and grading activities, trucks are expected to enter and leave the Project site on a regular basis during working hours. The number of truck trips traveling along the City-designated truck routes (e.g., North Orange Olive Road, Meats Avenue, Taft Avenue, and Tustin Street) would vary daily depending on the nature of the construction activity at the site. Demolition debris removal from the Project site would generate an estimated 300 round trips over a 20-day demolition phase. On average it is anticipated that 15 truck hauls per day or approximately 2 round trips per hour would occur during that phase. The addition of 2 round haul truck trips per hour would increase traffic noise levels by less than 3 dBA, which would not result in a substantial change in noise levels. Thus, this impact would be less than significant.

In typical construction projects (such as the proposed Project), demolition and grading activities generate the highest noise levels since they involve the use of the largest equipment. During demolition and grading, persons in the immediate vicinity of the construction site would experience short-term noise impacts related to the operation of heavy construction equipment such as bulldozers, hoe-rams, excavators, and dump trucks. Noise levels would fluctuate depending on equipment type, duration of use, and distance between noise source and receiver. The operation of heavy equipment may occur as close as 10 feet to the residences to the north and east of the Project site. Noise from localized point sources, such as construction equipment, decreases by approximately 6 dBA with each doubling of distance from the source to receptor.

Local residents would be subject to elevated noise levels due to the operation of Project-related construction equipment. Construction activities are carried out in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise levels surrounding the construction site as work progresses. Construction noise levels reported in the USEPA's *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances* were used to estimate future construction noise levels for the Project (USEPA 1971). Typically, the estimated construction noise levels are

governed primarily by equipment that produces the highest noise levels. Construction noise levels for each generalized construction phase (ground-clearing/demolition, excavation, foundation construction, building construction, paving, and site cleanup) are based on a typical construction equipment mix for an industrial project and do not include use of atypical, very loud, and vibration-intensive equipment (e.g., pile drivers).

The degree to which noise-sensitive receptors are affected by construction activities depends heavily on their proximity. Estimated noise levels attributable to the development of the proposed Project are shown in Table 4-19, and calculations are included in Appendix F, Noise Calculations.

TABLE 4-19 CONSTRUCTION NOISE LEVELS AT NOISE-SENSITIVE USES

		Noise Levels (L _{eq} dBA)						
	0	al Uses to th of the ct Site	Industrial U West of the Site	e Project	Shaffer Pa South of the Si	he Project	Residential Uses to the East of the Project Si	
Construction Phase	Max (10 ft)	Avg (130 ft)	Max (170 ft)	Avg (380 ft)	Max (60 ft)	Avg (190 ft)	Max (10 ft)	Avg (240 ft)
Ground Clearing/Demolition	97	75	72	65	81	71	97	69
Excavation	102	80	77	70	86	76	102	74
Foundation Construction	95	73	70	63	79	69	95	67
Building Construction	95	73	70	63	79	69	95	67
Paving and Site Cleanup	102	80	77	70	86	76	102	74

Leq dBA: Average noise energy level; Max: maximum; avg: average; ft: feet

Note: Noise levels from construction activities do not take into account attenuation provided by intervening structures.

Source: USEPA 1971.

Table 4-19 shows both the maximum and average noise levels for construction equipment. Maximum noise levels represent the noise levels from construction equipment occurring nearest to the noise sensitive use/receptor. Average noise levels represent the noise exposure to sensitive uses based on the distance to the center of the Project site. Noise levels from general Project-related construction activities would range from 70 to 102 dBA L_{eq} for the maximum noise levels and 63 to 80 dBA L_{eq} for the average noise levels. Noise level reductions from existing masonry walls were not included.

The development of the proposed Project would comply with Orange Municipal Code Section 8.24.050, which establishes restrictions for construction activities. With the incorporation of the restrictions in Orange Municipal Code Section 8.24.050, MM NOI-3, previously approved mitigation measure from the Orange-Olive Residential Development Project MND, and MM NOI-4, which incorporates MM 5.10-3 from the City of Orange General Plan EIR, impacts would be less than significant.

Permanent Project Related Noise Increases

Permanent sources of noise associated with the Project involves vehicle trips traveling to and from the Project site, property maintenance activities (landscaping) as well as mechanical sources of noise.

Noise Generated by Project Traffic

As discussed in Section 4.17, Transportation, the proposed Project would result in a reduction in trip generation compared to the existing commercial uses. Thus, it is presumed that Project-generated

traffic volumes on nearby streets with adjacent sensitive receptors would be less than the traffic generated by the existing onsite uses. The impact would be less than significant, and no mitigation is required.

Noise Generated by On-Site Sources

The primary noise sources generated by operation of the proposed Project would be heating, ventilation, and air conditioning (HVAC) equipment, landscape maintenance, and trash collection. Noise generated by HVAC equipment is regulated by the Municipal Code, Section 8.24.040, which requires that noise exposure at offsite uses not exceed the exterior noise standards shown in Table 8.24.040 (Table 4-18, above).

For maintenance and landscaping activities, Section 8.24.050 of the Orange Municipal Code provides an exemption to the noise limits provided within 8.24.040 provided that: "Noise sources associated with the maintenance of real property, provided such activities take place between the hours of 7:00 a.m. and 8:00 p.m. on any day except Sunday or a Federal holiday, or between the hours of 9:00 a.m. and 8:00 p.m. on Sunday or a Federal holiday. Operation of leaf blowers are regulated under OMC Chapter 8.26;" Activities associated with maintenance of property will comply with Sections 8.24.040 and 8.24.050.

Noise and Land Use Compatibility

California Code of Regulations

The CBC establishes building standards applicable to all occupancies throughout the State. Section 1207.4 requires that "Interior to exterior noise sources shall not exceed 45 db in any habitable room. The noise metric shall be either the day-night average sound level (L_{dn}) or the community noise equivalent level (CNEL), consistent with the noise element of the general plan."

City of Orange Noise Element

Table N-3 (Table 4-17, above) of the City's Noise Element presents criteria used to assess the compatibility of proposed land uses with the noise environment. As previously described, the existing noise level on the Project site is estimated at 75 dBA CNEL proximate to the western Project boundary and 64 dBA CNEL proximate to the southern Project boundary. Noise levels along the western boundary are anticipated to exceed the 65 dBA CNEL noise compatibility standard identified within Table N-3 of the City's Noise Element (Table 4-17, above). However, Note 4 within Table 4-17 states: "Within the Urban Mixed-Use, Neighborhood Mixed-Use, Old Towne Mixed-use, and Medium Density Residential land use designations, exterior space standards apply only to common outdoor recreational areas." Therefore, MM NOI-1 and MM NOI-2, previously approved measures from the Orange-Olive Residential Development Project MND, and MM NOI-5 would be incorporated into the Project to ensure noise compatibility. MM NOI-5 requires a noise analysis demonstrating that interior noise levels would be 45 dBA CNEL or less and exterior common use areas proximate to North Orange Olive Road would be located behind the buildings or shielded by a sound wall or other barrier to provide exterior noise levels not exceeding 65 dBA CNEL.

Significance Determination: Less Than Significant Impact with Mitigation Applicable Previously Approved Mitigation Measures

MM NOI-1: The Applicant shall provide a "windows closed" condition for each proposed residential unit project. A "windows closed" condition requires a means of mechanical ventilation per Chapter 12, Section 1205 of the Uniform Building Code.

This shall be achieved with a standard forced air conditioning and heating system with a filtered outside air intake vent for each residential unit, to be confirmed at the time of Building Plan check. (Orange-Olive Residential Development Project MND No. 1837-14 Previously Approved Measure MM-NO-1)

- **MM NOI-2:** The Applicant shall provide windows with at least a 30 STC rating for all second floor windows in homes that are adjacent to Orange-Olive Road. These homes are labeled as 2, 3, 4, and 5 on Figure 11. (Orange-Olive Residential Development Project MND No. 1837-14 Previously Approved Measure MM-NO-2)
- **MM NOI-3:** The Applicant shall require that all construction contractors restrict the operation of any construction equipment that is powered by a greater than 150 horsepower engine from operating within 15 feet of any off-site residential structure. (Orange-Olive Residential Development Project MND No. 1837-14 Previously Approved Measure MM-NO-3)

New Mitigation Measures:

- **MM NOI-4** The City shall require construction contractors to implement the following measures during construction activities through contract provisions and/or conditions of approval as appropriate:
 - 1. Construction equipment shall be properly maintained per manufacturers' specifications and fitted with the best available noise suppression devices (i.e., mufflers, silencers, wraps, etc.).
 - 2. Shroud or shield all impact tools, and muffle or shield all intake and exhaust ports on power equipment.
 - 3. Construction operations and related activities associated with the proposed Project shall comply with the operational hours outlined in the City of Orange following noise attenuation measures as listed from the Municipal Code Noise Ordinance or mitigate noise at sensitive land uses to below Orange Municipal Code standards.
 - 4. Construction equipment should not be idled for extended periods of time in the vicinity of noise sensitive receptors.
 - Locate fixed and/or stationary equipment as far as possible from noise sensitive receptors (e.g., generators, compressors, rock crushers, cement mixers). Shroud or shield all impact tools, and muffle or shield all intake and exhaust ports on powered construction equipment.
 - 6. Where feasible, temporary barriers shall be placed as close to the noise source or as close to the receptor as possible and break the line of sight between the source and receptor where modeled levels exceed applicable standards. Acoustical barriers shall be constructed material having a minimum surface weight of 2 pounds per square foot or greater, and a demonstrated Sound Transmission Class (STC) rating of 25 or greater as defined by American Society for Testing and Materials (ASTM) Test Method E90. Placement, orientation, size, and density of acoustical barriers shall be specified by a qualified acoustical consultant. (City of Orange General Plan EIR MM 5.10-3)

MM NOI-5

Prior to the issue of the building permit for the proposed Project, the Applicant shall submit an acoustical analysis acceptable to the City's Community Development Director, that demonstrates that the proposed architectural design would provide an interior noise level of 45 dBA CNEL or less (based on buildout traffic noise conditions) in all habitable rooms of the proposed buildings facing North Orange Olive and East Grove Avenue. The Applicant shall also submit plans and specifications showing that:

- All residential units shall be provided with a means of mechanical ventilation, as required by the California Building Code for occupancy with windows closed.
- Demonstrate that the exterior noise exposure limits of 65 dBA CNEL are met for common outdoor recreational areas.

Significance Determination After Mitigation: Less Than Significant Impact

b) Generation of excessive groundborne vibration or groundborne noise levels?

There are no applicable City standards for structural damage from vibration. The California Department of Transportation (Caltrans) vibration damage potential guideline thresholds are shown in Table 4-20.

TABLE 4-20 VIBRATION DAMAGE THRESHOLD CRITERIA

	Maximum ppv (in/sec)			
Structure and Condition	Transient Sources	Continuous/Frequent Intermittent Sources		
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08		
Fragile buildings	0.20	0.10		
Historic and some old buildings	0.50	0.25		
Older residential structures	0.50	0.30		
New residential structures	1.00	0.50		
Modern industrial/commercial buildings	2.00	0.50		

ppv: peak particle velocity; in/sec: inch(es) per second.

Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Source: Caltrans 2013.

The nearest structures to the Project site are the residences located approximately 8 feet from the Project's property lines to the north. Older residential buildings are located within a few feet of the eastern property line. In terms of classifications in Table 4-13, the structures to the east are conservatively considered "historic and some old buildings" for purposes of this analysis. The new residential structures to the north of the Project site are evaluated under the "New residential structures" vibration threshold. Therefore, the criterion for a significant impact for continuous/frequency intermittent sources is 0.25 ppv in/sec for the historic residential uses and 0.5 for the new residential uses. Similar to structural damage from vibration, there are no applicable

standards in the City's Municipal Code for human annoyance from construction vibration. The Caltrans vibration annoyance potential guideline thresholds are shown in Table 4-21. Based on the guidance in Table 4-21, the "strongly perceptible" vibration level of 0.9 ppv in/sec is used in this analysis as the threshold for a potentially significant vibration impact for human annoyance.

TABLE 4-21 VIBRATION ANNOYANCE CRITERIA

Average Human Response	ppv (in/sec)
Severe	2.000
Strongly perceptible	0.900
Distinctly perceptible	0.240
Barely perceptible	0.035
ppv: peak particle velocity; in/sec: inch(es) per se	cond.
Source: Caltrans 2013.	

Conventional construction equipment would be used for demolition and grading activities, with no pile driving or blasting equipment. Table 4-22 summarizes typical vibration levels measured during construction activities for various vibration-inducing equipment at a distance of 25 feet.

TABLE 4-22 VIBRATION LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	ppv at 25 ft (in/sec)
Vibratory roller	0.210
Large bulldozer	0.089
Caisson drilling	0.089
Loaded trucks	0.076
Jackhammer	0.035
Small bulldozer	0.003
ppv: peak particle velocity; ft: feet; in/sec: inches per seco	nd.
Source: Caltrans 2013; Federal Transit Administration 20	06.

Demolition, grading, and construction would occur up to the property lines and, as noted above, offsite land uses are relatively close to the property lines. Table 4-23, Vibration Annoyance Criteria at Sensitive Uses, shows the vibration annoyance criteria from construction-generated vibration activities proposed at the Project site. Table 4-23 shows the ppv relative to uses proximate to the Project site.

TABLE 4-23 VIBRATION ANNOYANCE CRITERIA AT SENSITIVE USES

		Vibratio	on Levels (ppv)	
	Residential Uses to the North of the Project Site	Industrial Uses to the West of the Project Site	he West of the South of the Project Residential 1	
Equipment	(ppv @ 10 ft)	(ppv @ 170 ft)	(ppv @ 30 ft)	(ppv @ 10 ft)
Vibratory roller	0.83	0.01	0.06	0.83
Large bulldozer	0.35	0.01	0.02	0.35
Small bulldozer	0.01	0.00	0.00	0.01
Jackhammer	0.14	0.00	0.01	0.14
Loaded trucks	0.30	0.00	0.02	0.30
Criteria	0.9	0.9	0.9	0.9
Exceeds Criteria?	No	No	No	No

ppv: peak particle velocity; Max: maximum; avg: average; ft: feet

Note: Calculations can be found in Appendix F).

Source: USEPA 1971

As shown in Table 4-23, ppv would not exceed the criteria threshold when construction activities occur under maximum (i.e., closest to the receptor) exposure conditions. These vibration levels represent conditions when construction activities occur closest to receptor locations. Construction-related vibration would be substantially less under average conditions when construction activities are located further away. Because vibration levels would be below the significance thresholds, vibration generated by the Project's construction equipment would not be expected to generate strongly perceptible levels of vibration at the nearest uses and would result in less than significant vibration impacts related to vibration annoyance.

Table 4-24, Structural Damage Criteria at Sensitive Uses, shows the peak particle velocity levels (ppv) relative to structural damage to sensitive uses from vibration activities.

	TABLE 4-24	
STRUCTURAL	DAMAGE CRITERIA	AT SENSITIVE USES

		Vibration	Levels (ppv)	
	Residential Uses to the North of the Project Site	orth of to the West of the South of the		Residential Uses to the East of the Project Site
Equipment	(ppv @ 10 ft)	(ppv @ 170 ft)	(ppv @ 30 ft)	(ppv @ 10 ft)
Vibratory roller	0.83	0.01	0.06	0.83
Large bulldozer	0.35	0.01	0.02	0.35
Small bulldozer	0.01	0.00	0.00	0.01
Jackhammer	0.14	0.00	0.01	0.14
Loaded trucks	0.30	0.00	0.02	0.30
Criteria	0.5	0.5	0.5	0.25
Exceeds Criteria?	Yes	No	No	Yes

ppv: peak particle velocity; Max: maximum; avg: average; ft: feet

Source: USEPA 1971 (Calculations can be found in Attachment B).² Jackhammering assumed to maintain a clearance of at least 5 feet from adjacent offsite buildings.

ppv: peak particle velocity; Max: maximum; avg: average; ft: feet

Note: Calculations can be found in Appendix F).

Source: USEPA 1971

As shown in Table 4-24, all ppv levels would be below the structural damage threshold at adjacent off-site structures with the exception of vibratory rollers. At this point in the planning process, the types of construction equipment that would be used are unknown. MM NOI-6 would reduce vibration generated by construction equipment to levels that would avoid cosmetic structural damage to offsite buildings. As such, with implementation of mitigation measures, potential impacts associated with cosmetic structural damage would be less than significant.

Significance Determination: Less Than Significant Impact After Mitigation **Mitigation Measures:**

MM NOI-6 The Applicant shall require that all construction contractors restrict the operation of the following construction equipment to beyond the following distances from off-site buildings: (1) vibratory rollers and large bulldozers – 25 feet, and (2) loaded trucks and other large equipment – 15 feet).

Significance Determination After Mitigation: Less Than Significant Impact

c) For a project located within the vicinity of a private airstrip or 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?

The Project site is not located within 2.0 miles of an airport. There are no private airstrips in the project area or in the City. The nearest public airports are the Fullerton Municipal Airport, which is located 7.8 miles northwest of the site, and the JWA, which is located approximately 9.3 miles south of the site. The Project site is not located within the planning areas (including the Runway Protection Zones, Safety Compatibility Zones, and Airport Impact Zones) for these airports. In addition, the 60-

dBA CNEL noise contours for these airports do not extend to the site or areas near the site (OCALUC 2008, 2004). Therefore, the Project would not expose people residing or working in the project area to excessive noise levels from airport operations. No impact related to excessive airport noise levels would occur and no mitigation is required.

Significance Determination: No Impact
Mitigation Measures: None required

4.14 POPULATION AND HOUSING

	Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				

August 2015 Orange-Olive Residential Development Project MND

The Phase I Project MND discussed that development of the 25 residential units would add 77 residents to the City of Orange. The MND determined that the increases in residential units and residents were consistent with population growth projections for the City and with the City's Regional Housing Needs Assessment, and thus would be a less than significant impact. Additionally, the MND determined that no residents or residential units were on that site and, as such the Project development would not displace residents or housing.

Supplemental Evaluation

Would the Project:

a) Induce substantial unplanned 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)?

The Project involves the construction of 32 dwelling units that would replace the existing shopping center on the site. Using the City' 2018 average household size of 3.07 persons per household (DOF 2018), the Project would directly generate approximately 98 residents. This would increase the City's 2018 resident population of 141,952 persons and its 2018 housing stock of 45,719 units (DOF 2018) by 0.07 percent to 142,050 residents and 45,751 units, respectively. Jobs at the existing businesses on the site would be lost with the Project, and the jobs that would be created during construction would be short-term and would not increase the City's job base permanently. However, the temporary construction crew and long-term residents of the Project, coupled with the loss of jobs, goods and services at the existing shopping center, would not create a significant change in demand for goods and services that may induce business investment, growth, or development in the area. Additionally, these increases would be within anticipated growth for the City as projected by SCAG at 153,000 residents, 49,300 households, and 105,500 jobs by 2040 (SCAG 2016b).

The site is currently served by existing roads and utility infrastructure, and no extension of roads or infrastructure is proposed by the Project such that would indirectly induce growth. Thus, the Project would not result in substantial unplanned population growth, directly or indirectly. The impacts would be less than significant, and no mitigation is required.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The Project site is currently developed with two commercial/retail buildings occupied by retail, office, alternative school, and restaurant uses. There are no existing housing and associated residents on the site that would be displaced by the development of the residential Project. The proposed Project would develop 32 dwelling units and help meet the City's housing goals under SCAG's RHNA, as identified in the Housing Element of the General Plan. Demolition of the existing commercial/retail buildings would not lead to the loss of existing housing. Thus, no impact related to displacement of housing and related residents would occur, and no replacement housing is required.

Significance Determination: No Impact
Mitigation Measures: None required

4.15 PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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:				
i) Fire protection?			\boxtimes	
ii) Police protection?			\boxtimes	
iii) Schools?			\boxtimes	
iv) Parks?			\boxtimes	
v) Other public facilities?			\boxtimes	

August 2015 Orange-Olive Residential Development Project MND

As discussed in the MND, Phase I Project development would cause an incremental increase in demands for fire protection; such increase would not require construction of a new or expanded fire station. Thus, impacts on fire protection were identified as less than significant.

The MND concluded that Project development would cause a very slight increase in demands for police protection. Such increase would not require construction of a new or expanded police station and impacts on police protection were identified as less than significant.

The MND determined that Project development would add approximately 13 students to Orange Unified School District (OUSD) schools. However, the Project would pay school development impact fees authorized under Senate Bill 50 (California Government Code Sections 65995 et seq.); such fees were deemed to be "full and complete school facilities mitigation." It was concluded that impacts to school facilities would be less than significant after payment of development impact fees.

The MND determined that Project development would generate slight increases in demands for library materials and library facility space. However, the Project would pay the required City Library Facilities Development Impact Fee. Thus, it was concluded that Project impacts to libraries would be less than significant after payment of such fee.

Supplemental Evaluation

Would the Project:

a) 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:

i) Fire protection?

Fire protection services in the City, including the Project site, are provided by the Orange Fire Department (OFD). The services include fire suppression; expanded advanced life support and medical transportation; increased responses for hazardous materials and environmental monitoring; technical rescue operations including urban search and rescue, swift water rescue, confined space and trench rescue; disaster preparedness; public education; fire prevention; and fire/arson investigation (Orange 2018c). A total of eight fire stations are located throughout the City with a total of 124 sworn firefighting personnel. OFD also works with the cities of Anaheim, Santa Ana, and Garden Grove, and the Orange County Fire Authority based on an aid agreement with the said entities. The nearest Fire Station to the site is Station No. 3, located approximately 405 feet south of the Project site at 1910 Shaffer Street.

The proposed Project would result in a resident population of 98 persons, which is a nominal increase in the total number of City residents (estimated at 141,952 persons in 2018) served by OFD. The proposed Project would replace an existing shopping center, which currently generates a demand for fire protection services. Given the size of the Project and the net increase in demand for fire protection services, the incremental demand of the Project for fire protection services would not result in the need for new firefighters and other personnel, nor would it require the construction of new or the alteration of existing fire protection facilities to maintain an adequate level of fire protection service in the City.

The proposed Project would be required to comply with all applicable codes, ordinances, and regulations (including the City's Municipal Code, which adopts by reference the CBC and the California Fire Code, with amendments) regarding fire prevention and suppression measures, fire hydrants and sprinkler systems, emergency access, and other fire safety requirements (see RR PS-1). The internal drive aisles would serve as fire access lanes and have been designed to meet OFD access width and turnaround requirements in the City's Fire Code and would be constructed in compliance with the CBC (see RR PS-1).

Additionally, in accordance with Chapter 15.38 of the Orange Municipal Code, the Project Applicant would be required to pay the applicable fire protection facility fee for the Project's demand on fire protection services and to help fund the construction, expansion, or renovation of needed fire protection facilities in the City (see RR PS-2).

Although the Project's demand for fire protection services would be nominal, compliance with pertinent regulations would further avoid the Project's increased demand for such services. The building and site improvements plans of the Project would be subject to review and approval by the Orange Building Division and OFD, to ensure that adequate fire safety, fire alarm, emergency exit and access, fire hydrant availability, and sufficient fire flows would be provided in compliance with

applicable codes and standards. Thus, no physical impacts associated with the provision of fire protection services would occur as a result of the Project, and no mitigation is required.

Regulatory Requirements: See RR GEO-1 above

- **RR PS-1** The Project shall be designed and constructed in accordance with applicable regulations in Chapter 15.32, City of Orange Fire Code, of the Orange Municipal Code and the California Building Code (CBC), which is adopted by reference in Chapter 15.04 of the Orange Municipal Code.
- **RR PS-2** The Project Applicant shall pay the applicable fire protection facility fee in accordance with Chapter 15.38, Fire Protection Facilities Program, of the Orange Municipal Code.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

ii) Police protection?

Police protection services in the City, including the Project site, are provided by the Orange Police Department (OPD) from their station at 1107 N. Batavia Street, approximately 1.1 miles southwest of the Project site (Orange 2018d). The OPD consists of three divisions, including the Support Services Division, Investigative Services Division, and the Field Services Division. The City participates in a mutual aid program among all Orange County law enforcement agencies at various levels. The mutual aid agreement provides back-up assistance to member departments, as needed.

The Project would generate a demand for police protection services, once the proposed dwelling units are occupied. However, the dwelling units would replace a shopping center that currently generates a demand for police protection services. Thus, the incremental demand of the Project for police protection services is not anticipated to increase OPD response times to the Project site or surrounding area. The net increase in demand for police protection services is also not anticipated to generate the need for new sworn officers, nor would it require construction of new or physically altered police protection facilities to maintain an adequate level of service to the Project site and surrounding areas.

In accordance with Chapter 3.13, Police Facility Development Fee, of the Orange Municipal Code, the Project Applicant would be required to pay the applicable police facility fee for the Project's impact on police protection services and to help fund the acquisition of land and construction of police facilities and expansion of services and infrastructure in the City (see RR PS-3). Additionally, Project plans would be reviewed and approved by the Crime Prevention Unit of the Police Department to ensure safety and crime prevention measures (for locks, frames, jambs, hinges, doors, windows, lighting, fencing, and gates) are incorporated in accordance with Chapter 15.52, Building Security Standards, of the Municipal Code (see RR PS-4). To ensure adequate services are provided and to minimize the demands on police service, security and design measures that employ Defensible Space concepts will be utilized in development and construction plans. These measures incorporate the concepts of Crime Prevention through Environmental Design (CPTED), which involves consideration such as placement and orientation of structures, access and visibility of common areas, placement of doors, windows, addressing and landscaping. CPTED promotes public safety, physical security and allows residents the ability to monitor activity in neighboring areas. Adherence to CPTED principles and City of Orange Building Security Ordinance No. 6-18 standards will help ensure that a less than significant impact would occur. Compliance with these City regulations would reduce Project impacts to police protection services. Therefore, no physical impacts associated with the provision of police protection services to the proposed Project would occur, and no mitigation is required.

Regulatory Requirements:

- **RR PS-3** The Project Applicant shall pay the applicable police facility fee in accordance with Chapter 3.13, Police Facility Development Fee, of the Orange Municipal Code.
- **RR PS-4** The Project shall be designed and constructed in accordance with applicable regulations in Chapter 15.52, Building Security Standards, of the Orange Municipal Code.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

iii) Schools?

The proposed Project involves the development of 32 dwelling units that would be occupied by approximately 98 residents and include school-aged children requiring school services from the Orange Unified School District (OUSD). The site is within the service boundaries of Fletcher Elementary School, Cerro Villa Middle School, and Villa Park High School (OUSD 2018a). The 2017-2018 enrollments were 435 students at Fletcher Elementary School; 1,019 students at Cerro Villa Middle School; and 2,342 students at Villa Park High School (DOE 2018).

The OUSD estimates student generation for residential uses at 0.3539 student per single-family detached unit (OUSD 2018b). The proposed 32 single-family detached dwelling units would generate 12 students (6 elementary school students, 2 middle school students, and 4 high school students). These students would make up less than 1.0 to 1.5 percent of the current enrollment at schools serving the site. The Project would pay school development fees to the OUSD for the improvement of school facilities that would be needed to serve the Project's demand for school services and facilities (see RR PS-5). As provided under Section 17620 of the *California Education Code* and Section 65970 of the *California Government Code*, the payment of statutory school development fees would fully mitigate a project's impacts on schools. Thus, impacts would be less than significant, and no mitigation is required.

Regulatory Requirements:

RR PS-5 The Project Applicant shall pay the applicable school development fee to the Orange Unified School District, in accordance with Section 17620 of the California Education Code.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

vi) Parks?

The proposed 32-unit residential development would generate a total of 98 residents, which would increase demand for and use of existing parks and recreational facilities. However, given the nominal

increase in population and payment of Park and Recreational Facilities Development Impact Fee (see RR PS-6), the potential impact would be less than significant, and no mitigation is required. Please refer to Section 4.16, Recreation, below for a detailed discussion of potential park impacts,

Regulatory Requirements:

RR PS-6 The Project Applicant shall dedicate parkland or pay the applicable Park and Recreational Facilities Development Impact Fee, in accordance with Chapter 16.60, Park Dedication and Fees, and Chapter 3.40, Park Facilities Fees, of the Orange Municipal Code.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

vi) Other public facilities?

The Orange Public Library and Historic Center, El Modena Branch Library, and Taft Branch Library provide library services in the City of Orange. The nearest public library to the Project site is the Taft Branch Library (740 East Taft Avenue), located approximately 0.4 mile southeast of the Project site. This library has book and media collections for children, teens, and adults, along with book drops, wi-fi, public computers, printers, and a copy machine (Orange 2018b).

The Project would generate a demand for library services that would be served by existing libraries in the City and other nearby libraries. Due to the limited number of residents from the Project (98 residents), compared to the City's total 2018 population of 141,952 persons, the increase in library service demand is expected to be proportionately 0.07 percent of existing demand and would not result in the need for construction of new or expanded facilities. Chapter 3.50, Library Facilities Fees, of the Orange Municipal Code requires residential developments to pay library facilities fees for impacts to library services and to help fund the acquisition of land and construction of library facilities and the expansion of library services and infrastructure in the City (see RR PS-7). Payment of the necessary library fees by the Project Applicant would provide funds for the improvement of library facilities that would be utilized by Project residents.

The Project Applicant and future residents would also pay for any future need for City services or facilities in accordance with the City's adopted fee schedule. Therefore, impacts would be less than significant, and no mitigation is required.

Regulatory Requirements:

RR PS-7 The Project Applicant shall pay the applicable library facilities fee in accordance with Chapter 3.50, Library Facilities Fees, of the Orange Municipal Code.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

4.16 RECREATION

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			\boxtimes	
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?			\boxtimes	

August 2015 Orange-Olive Residential Development Project MND

The Phase I Project MND identified that Project development would generate a slight increase in demands for parkland, exacerbating an existing shortfall of parkland in the City. However, the Project would be required to pay a City Park and Recreational Facilities Development Impact Fee. Therefore, it was concluded that impacts on parkland and park facilities would be less than significant after payment of such fee.

Supplemental Evaluation

Would the Project:

a) 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?

The proposed 32 dwelling units would result in a population of approximately 98 residents, which would generate a demand for parks and recreational facilities. The Project proposes one on-site common open space area at the center of the site for a total of 1,563 sf. The Orange Municipal Code requires 250 sf of useable open space per dwelling unit or a total of 8,000 sf for the proposed Project. As indicated in Table 3-3 in Section 3.0, Project Description, the Project would provide 19,535 sf of HOA common open space and 22,090 sf of allowable private open space for a total of 41,625 sf of usable open space, which would exceed the City requirement by 33,625 sf. These on-site open space areas are expected to meet some of the demand for recreation facilities generated by residents of the Project.

Project residents would also use nearby City parks and other public and regional parks. Shaffer Park is located south of the site across East Grove Avenue and is likely to be used by residents of the Project. This park was built in 1963 and recently completed renovations. The updated park, reopened in April 2019, and includes a tot lot, picnic shelter and tables, concession building, restrooms, community building, baseball field, open fields, exercise areas, and a parking lot. Other nearby parks and recreational facilities that may be used include Killefer Park, Belmont Park, Eisenhower Park and Lake, Olive Park, Steve Ambriz Memorial Park, and Fred Barrera Park (Orange 2018a).

Due to the small number of residents that would be introduced by the Project, the increase in the use of existing public park facilities by the Project would not be at a level that would result in physical

deterioration of existing parks and other recreational facilities, nor would it require the need for new or physically altered facilities. However, since the City is not currently in compliance with the standard of three acres of improved parkland per 1,000 residents, the Project would further contribute to shortage of parkland. This potential impact would be offset by payment of fee. Chapter 16.60, Park Dedication and Fees, of the Orange Municipal Code requires residential developments to dedicate parkland or pay in-lieu fees, and Chapter 3.40, Park Facilities Fees requires residential developments to pay fees for the provision, expansion, or improvement of parks and recreational facilities in the City (see RR PS-6). Payment of the necessary park and recreational facilities development impact fees by the Project Applicant would provide funds for park acquisition, development, or improvements to offset the use of these facilities by Project residents. Therefore, impacts would be less than significant, and no mitigation is required.

Regulatory Requirements: See RR PS-6 above

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

Policy 5.6 of the Natural Resources Element of the Orange General Plan sets a minimum of 3 acres of parkland per 1,000 persons and a goal of 5 acres of parkland per 1,000 persons in the City, as well as a goal of 10 acres of regional parkland per 1,000 persons in the County (Orange 2010a). The estimated 98 residents of the Project would require a minimum of 0.29 acre and a goal of 0.49 acre of parkland. The Project Applicant would pay the Park and Recreational Facilities Development Impact Fee to provide funds for park acquisition, development, or improvements to serve Project residents (see RR PS-6, above). The Project would also include an on-site common open space area (1,563 sf or 0.03 acre) that would provide recreational areas and facilities for residents of the Project. The impacts of the proposed on-site open space areas have been included in the analysis of Project impacts in this Subsequent IS/MND.

Since the recreation needs of the residents would be partially met on site and through payment of the necessary park fees, the proposed Project would not result in a substantial increased demand for recreational facilities, requiring the construction of new parks that would adversely affect the environment. There are also adequate regional parks and recreational facilities in that would serve the Project. Therefore, impacts would be less than significant, and no mitigation is required.

Regulatory Requirements: See RR PS-6 above

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

4.17 TRANSPORTATION

	Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			\boxtimes	
b)	Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			\boxtimes	
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			\boxtimes	
d)	Result in inadequate emergency access?			\boxtimes	

August 2015 Orange-Olive Residential Development Project MND

The Phase I Project MND analyzed traffic conditions for with-project scenario, existing conditions plus project, on segments of three roadways: Orange-Olive Road, Meats Avenue, and Taft Avenue. Roadway segment operations were characterized in terms of Level of Service (LOS). As discussed in the Phase I Project MND, the addition of Project-generated traffic to local roadways would not cause a significant impact to the operation of any roadway segment analyzed.

The MND concluded that the configuration of the intersection of the proposed Project driveway with Orange-Olive Road would not cause hazards and inadequate emergency access. No airport-related hazards were identified. The MND determined that Project implementation would not result in adverse impacts to pedestrian or bicycle facilities or public transit facilities or services.

Supplemental Evaluation

A Traffic Memorandum was prepared by Psomas to evaluate the change in trip generation associated with the existing shopping center compared to the proposed 32 dwelling units, and to determine if additional analysis is required pursuant to the City's Traffic Impact Analysis Guidelines (Psomas 2020). Based on the City's guidelines, a Traffic Impact Analysis is required if a project meets any of the following criteria:

- When either the AM or PM peak hour trip generation is expected to exceed 100 vehicle trips from the proposed development.
- Projects on the Arterial Highway System which generate 1,600 Average Daily Trips (ADT);
- Projects that will add 51 or more trips during either the AM or PM peak hours to any intersection;
- Any project where variations from the standards and guidelines provided in the *City of Orange Traffic Impact Analysis* Guidelines are being proposed.

The Project would not exceed any of these criteria, as identified below; therefore, a Traffic Impact Analysis is not required. The findings of the Traffic Memorandum are incorporated in the following analyses, and the report is included as Appendix G to this Subsequent IS/MND.

Trip Generation

The new trips to be generated by the proposed Project were estimated using the 10th Edition of the Institute of Transportation Engineers (ITE) Trip Generation Manual and are shown in Table 4-25. As seen in the table, the Project is expected to generate 302 trips per day, including 24 trips in the AM peak hour and 32 trips in the PM peak hour.

There are multiple existing uses on site that will be replaced with the Project, including a K-8 school which serves homeless children, a casual restaurant (with dine-in and take-out services), and partially occupied retail spaces.

Because the number of trips currently generated by the site is likely to be lower than what would be calculated with the ITE trip generation rates, it was assumed that the Project site is currently unoccupied. Further, this provides a conservative assumption because the proposed Project would be replacing trips instead of generating completely new trips on the site.

ITE LU 210 - Single-Family Detached Housing Units 32 **Period** Trips/Unit % Out **Trips** % In **Trips In Trips Out** AM Peak 0.74 24 25% 75% 18 6 PM Peak 0.99 32 63% 37% 20 12 302 9.44 50% 50% 151 151 Daily

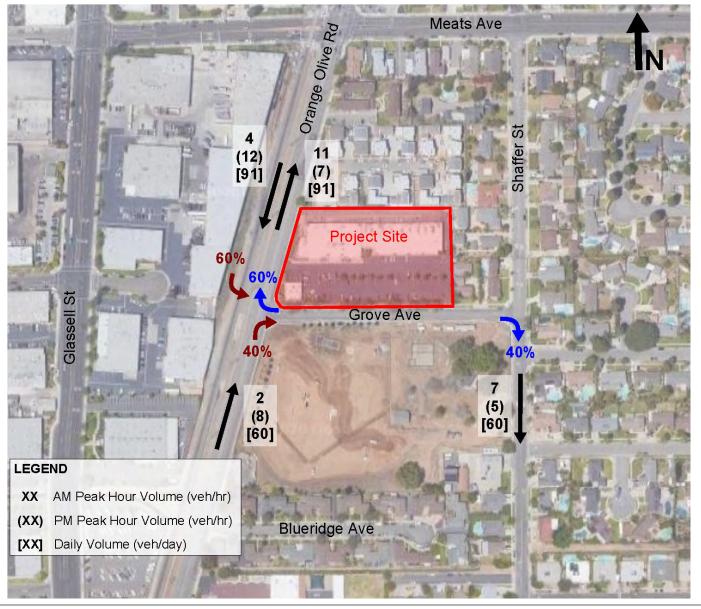
TABLE 4-25 PROJECT TRIP GENERATION

Trip Distribution

Source: Psomas 2020.

Although the proposed Project is expected to add a minimal amount of traffic to the network, the trip distribution was estimated to help visualize where traffic generated by the Project may travel. The Project site will be served by a single driveway located on Grove Avenue. The intersection of East Grove Avenue and Orange Olive Road provides access to the north and south; however, based on discussions with the City, it was assumed that all traffic intending to travel south from the Project would turn left onto East Grove Avenue, then would travel south on Shaffer Street to access the signalized intersection at Taft Avenue. This is a conservative assumption, as it is likely that some or all of the site traffic intending to travel south would make the left turn onto Orange Olive Road from East Grove Avenue.

Exhibit 4-6, Trip Distribution, shows the anticipated trip distribution out of and into the Project site and the projected AM peak hour, PM peak hour, and daily trips expected to make each movement. As shown in Exhibit 4-6, most of the Project traffic is expected to use East Grove Avenue and Orange Olive Road to travel to and/or from the site. Using a conservative assumption of 40 percent of traffic exiting the site will travel along Shaffer Street results in only 7 vehicles in the peak hour along that roadway. Further, Shaffer Street between East Grove Avenue and Taft Avenue includes one stop sign for southbound traffic immediately south of East Grove Avenue and three speed humps, both of which will help deter cut-through traffic.



Trip Distribution Exhibit 4–6

Cohen Property





Source: Psomas 2020

Would the Project:

a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Short-Term Construction-Related Traffic

Construction traffic is not expected to create any significant impact due to the size of the proposed Project. It is anticipated that construction traffic (particularly heavy trucks) would access the site either directly from North Orange Olive Road or via East Grove Avenue from North Orange Olive Road. No construction traffic would travel along Shaffer Street within the residential area immediately east of the Project site.

To facilitate the movement of construction traffic and to minimize potential disruptions, a traffic control measures would be implemented in accordance with the City requirements and followed during construction (RR HAZ-5). With compliance with City requirements, the Project would not conflict with applicable plans, ordinance, or policy, and Project's impact would be less than significant.

Project Trip Generation

Trip generation represents the amount of traffic that would be generated by a development. Traffic generation rates for the existing use on site and the proposed Project have been derived from the Institute of Transportation Engineers' (ITE's) *Trip Generation Manual*, 10th Edition.

As described above, because the number of trips currently generated by the site is likely to be lower than what would be calculated with the ITE trip generation rates, it was assumed that the Project site is currently unoccupied. Further, this provides a conservative assumption because the proposed Project would be replacing trips instead of generating completely new trips on the site. Based on the Traffic Memorandum and as shown in Table 4-25, the Project is expected to generate 302 trips per day, including 24 trips in the AM peak hour and 32 trips in the PM peak hour.

Project Trip Distribution

As described above and shown in Exhibit 4-26, Trip Distribution, most of the Project traffic is expected to use Grove Avenue and Orange Olive Road to travel to and/or from the site. Using a conservative assumption of 40 percent of traffic exiting the site will travel along Shaffer Street results in only 7 vehicles in the peak hour along that roadway. Further, Shaffer Street between Grove Avenue and Taft Avenue includes one stop sign for southbound traffic immediately south of Grove Avenue and three speed humps, both of which will help deter cut-through traffic.

Based on the above evaluation, and in light of the limited number of vehicle trips generated by the proposed Project, limited distribution of Project vehicles on Schaffer Street, the Project would not cause significant impacts at roadways and intersections near the site and in the surrounding area. Therefore, the Project would not conflict with applicable policies, plans, ordinance, or programs related to the circulation systems, nor would it affect the performance of the surrounding intersections. Impacts would be less than significant, and no mitigation is required.

In terms of public transportation, it should be noted that OCTA buses do not run on North Orange Olive Road or East Grove Avenue near the site. The nearest bus routes are on Tustin Street, Taft Avenue, and Glassell Street. While the Project residents may utilize OCTA bus services, considering

the size of the Project and the distance of nearby bus stops, the Project is unlikely to create a major increase in bus ridership in the area.

The Metrolink commuter trains (Inland Empire-Orange County Line) run along the BNSF railroad tracks west of the site across North Orange Olive Road. However, there are no train stations near the site, and the closest is the Anaheim Canyon Station, located 2.3 miles to the north, and the Orange Station, located 2.2 miles to the south. The Anaheim Regional Transportation Intermodal Center is also located 1.5 miles southwest of the site and serves OCTA buses, Amtrak and Metrolink trains, and other bus and taxi services (Metrolink 2018, Anaheim 2018). The Project would not result in any measurable increase in commuter train, bus or taxi passengers, due to the limited size of the Project.

Figure CM-3, Plan for Recreational Trails and Bikeways, in the Circulation and Mobility Element of the General Plan does not show existing or proposed bikeways or recreational trails on North Orange Olive Road and East Grove Avenue near the site. The nearest bikeways to the site are a Class III bikeway on Taft Avenue to the south and a Class II bike lane on Cambridge Street to the east. The nearest trail is along the Santa Ana River to the west (Orange 2010a).

Sidewalks are present on North Orange Olive Road and East Grove Avenue, which would be retained by the Project and would continue to accommodate pedestrians and bicyclists. The Project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. Impacts would be less than significant, and no mitigation is required.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

The CEQA Guidelines Section 15064.3(b) state that if the vehicle miles traveled (VMT) generated by a project exceed an applicable threshold of significance, it may indicate a significant impact. The guidelines also state that projects, which decrease VMT in the project area when compared to existing conditions should be presumed to have a less than significant impact. Per the 2018 CEQA Statute and Guidelines, VMT is "the most appropriate measure of transportation impacts."

The City has a screening tool to determine if a project can be screened out from further VMT analysis. One of the criteria states that if the project is within a low VMT generating zone, the project would not be required to conduct further VMT analysis. In addition, a secondary criterion for projects within low VMT generating zones is that it should be confirmed that the project is consistent with the existing land use within the Transportation Analysis Zone (TAZ). This Project is in a low VMT generating zone and is consistent with the TAZ, so no further VMT analysis is required (Psomas 2020). Therefore, the proposed Project would not conflict with CEQA Guidelines Section 15064.3(b), and no mitigation is required.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?

Construction of the Project would require the transport of construction equipment and building materials to and from the site, as well as the hauling of demolition and construction debris from the site. Large trucks used for these activities would have to use designated truck routes in the City, in compliance with Chapter 10.66, Truck Routes, and Chapter 10.67, Movement of Vehicles and Equipment, of the Municipal Code (RR TRA-2). Roadway hazards from these trucks and equipment would be less than significant.

The on-site driveway, drive aisles, and cul-de-sacs would have to comply with City roadway standards for adequate sight distance (City Standard Plan 126) (RR TRA-3). Compliance with City standards would ensure that no traffic hazards are created by the proposed Project. City review and approval of the Major Site Plan for the proposed Project would verify compliance. The Project does not propose uses or design that would create traffic safety hazards due to a geometric design feature. Thus, it would not interfere with access, circulation, or activities at the surrounding land uses. Additionally, the Project would not introduce an incompatible use that may create a traffic hazard to surrounding residences and the park. Therefore, no impacts would occur, and no mitigation is required.

Regulatory Requirements: See RR HAZ-5 and RR PS-1 above

- **RR TRA-2** All trucks used during demolition and construction and during long-term occupancy of the Project shall use designated truck routes, in compliance with Chapter 10.66, Truck Routes, and Chapter 10.67, Movement of Vehicles and Equipment, of the Orange Municipal Code.
- **RR TRA-3** The Project shall be designed and constructed to provide adequate sight distance for drivers at all entrances and exits (driveways), drive aisles, and roadways, per City Standard Plan 126.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

d) Result in inadequate emergency access?

During demolition and construction, construction equipment would be staged on the Project site and would not block the roadways surrounding the Project site. Construction on and obstruction of public rights-of-way associated with utility connections to existing utility infrastructure would be made in accordance with applicable City regulations, including City Standard Plans, Chapter 12.20, Street Excavation, and Chapter 12.02 of the Municipal Code (Greenbook) (see RR HAZ-5). No full road closures would occur during construction phase of the Project. Accordingly, temporary construction activities would not impede the use of surrounding roadways for emergency evacuation or access for emergency response vehicles. Adjacent streets would also be returned to their original conditions after construction activities. Impacts would be temporary and less than significant, and no mitigation is required.

The Project would not include any off-site roadway and intersection improvements. Primary vehicular access to the proposed Project would be provided by an entry driveway off East Grove

Avenue and the Project would eliminate driveways off North Orange Olive Road, as well as other driveways off East Grove Avenue. Access to individual dwelling units on the site would be provided by internal drive aisles and cul-de-sacs. These would be subject to review and approval by the OFD to ensure adequate access for emergency vehicles, as required under RR PS-1 in Section 4.15, Public Services. The internal circulation system for the proposed Project would be reviewed for adequacy to accommodate service and delivery trucks, trash trucks, and fire trucks by the Orange Building Division and OFD. In addition, the drive aisles and cul-de-sacs would comply with City roadway standards for adequate sight distance (see RR TRA-2). As designed, the proposed Project would provide adequate emergency access. Impacts would be less than significant, and no mitigation is required.

Regulatory Requirements: See RR HAZ-5, RR PS-1 and RR TRA-3 above

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

4.18 TRIBAL CULTURAL RESOURCES

	Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a)	Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
	1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or				\boxtimes
	2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

August 2015 Orange-Olive Residential Development Project MND

This topic was not addressed in the 2015 MND, as it was not included in the CEQA Environmental Checklist (Appendix G).

Supplemental Evaluation

Would the Project:

- a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - 1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

The existing onsite structures were built in 1964 and in the late 1980s to early 1990s and are not considered tribal cultural resources. The existing buildings are also not listed or eligible for listing in the NRHP, CRHR, or the City's local register of historical resources. The SCCIC record search did not identify any known prehistoric resources on the site. Thus, demolition of these structures would not result in a substantial adverse change to a tribal cultural resource. No impact would occur, and no mitigation is required.

Significance Determination: No Impact
Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

As indicated in Section 4.5, Cultural Resources, Checklist Response 4.5(a), an inquiry was made to the Native American Heritage Commission (NAHC) to request a review of the Sacred Lands File database. The NAHC completed its Sacred Lands File, and a Sacred Lands record search was conducted on December 19, 2018. A summary of the record search is provided in Checklist Response 4.5(a). The NAHC also provided a list of Native American tribes and individuals that may have knowledge of the religious and/or cultural significance of resources that may be on and/or near the Project site. Each of the groups and individuals identified by the NAHC was mailed a project notification letter on July 9, 2020, describing the project and requesting any information regarding resources that may exist on or near the project site. The letters were sent to the following groups:

- Andrew Salas, Chairman, Gabrielino Band of Mission Indians Kizh Nation
- Anthony Morales, Chief, San Gabriel Band of Mission Indians
- Michael Mirelez, Cultural Coordinator, Torres Martinez Desert Cahuilla Indians
- Samuel Dunlap, Cultural Resources Director, Gabrielino/Tongva Nation

A letter dated July 9, 2020, was received from Andrew Salas, Chairman, of the Gabrielino Band of Mission Indians-Kizh Nation. The response indicates that proposed Project location is within their Ancestral Tribal Territory and therefore requests to schedule a consultation with the City to discuss the Project and the surrounding location in further detail. On July 13, 2020, Robert Garcia, Senior Planner; and on July 22, 2020, Monique Schwartz, Associate Planner sent emails to Mr. Salas to follow-up on his request for consultation. On July 22, 2020, Mr. Salas confirmed a consultation appointment on September 10, 2020 at 3:00 p.m. No further responses have been received to date.

Significance Determination: To be provided upon completion of the consultation process.

Mitigation Measures: To be provided upon completion of the consultation process.

Significance Determination After Mitigation: To be provided upon completion of the consultation process.

4.19 UTILITIES AND SERVICE SYSTEMS

	Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			\boxtimes	
c)	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?				
d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			\boxtimes	
e)	Comply with federal, state, and local statutes and regulations related to solid waste?			\boxtimes	

August 2015 Orange-Olive Residential Development Project MND

As discussed in the Phase I Project MND, Project water demands were estimated at approximately 19.3 acre-feet per year. It was determined that the City of Orange would have water supply surpluses over demands during the 2015-2035 period. As such, Project impacts on water supplies were identified as less than significant.

The Phase I Project MND estimated Project wastewater generation as approximately 13,475 gallons per day (gpd) or 0.01 million gallons per day (mgd). The MND identified the Orange County Sanitation District (OCSD) as responsible for wastewater treatment for much of Orange County including the Project site. As OCSD operated two wastewater treatment facilities with total capacity identified as 276 mgd and total wastewater flows of 221 mgd, the MND determined that OCSD had adequate wastewater treatment capacity for Project-generated wastewater, and that Project impacts on wastewater treatment would have been less than significant.

The Phase I Project MND determined that as Project development would decrease impervious surfaces on the Project site, runoff from the site would decrease. The MND concluded that Project implementation would not involve or require construction of new or expanded storm drainage facilities, and that impacts to such facilities would be less than significant.

The Phase I Project MND estimated Project solid waste generation at approximately 300 pounds per day. The MND identified that solid waste from the City of Orange was disposed of at three landfills in Orange County that had adequate remaining capacity for Project-generated solid waste. Project impacts on solid waste disposal capacity were determined to be less than significant.

Supplemental Evaluation

Would the Project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Water

Water services within the City are provided by the City of Orange, Irvine Ranch Water District, Golden State Water Company, Serrano Water District, and East Orange County Water District. The Project site is located within the service area of the City of Orange and would connect to the existing water line on East Grove Avenue (refer to Exhibit 3-9, Conceptual Utility Plan). The proposed development is estimated to create a demand of 15,190 gpd of water, based on the 2015 average water consumption in the City of 155 gallons per capita per day (gpcd) (Orange 2016b). With the elimination of water demand from the existing shopping center, the net water demand is not anticipated to be significantly different, and upgrades to existing water lines would not be anticipated. Water service to the Project would also be provided in compliance Chapter 13.04 et seq. of the Orange Municipal Code, which sets regulations for service connections, water rates, and other water system provisions (see RR UTL-1).

A Fire Flow Study (Appendix H) was prepared for the Project to evaluate the proposed private water system for use to meet required fire hydrant flow. Fire flow service to the Project's proposed fire hydrants would be connected at a proposed 8-inch service off of the public main that serves a portion of East Grove Avenue. The Fire Flow Study confirmed that the private water system is capable of delivering the demand flow at more than 20 psi, which is sufficiently sized to meet the flow/pressure requirements of the Orange Fire Department (DRC 2019b).

Based on the analysis above and as shown in Exhibit 3-9, Conceptual Utility Plan, the existing 6-inch water pipe on East Grove Avenue would be expanded to an 8-inch pipe. The increase in pipe diameter would not require or result in the relocation or construction of new or expanded water facilities, which would cause significant environmental effects. The Project would comply with RR UTL-1. Impacts would be less than significant, and no mitigation required.

Wastewater Treatment/Storm Drainage

Wastewater collection services within the City are provided by the City's local collection system, which ties into the OCSD's trunk lines and two reclamation/treatment plants. In 2015-2016, OCSD's Plant No. 1 received an average of 117 mgd of wastewater and Plant No. 2 received 67 mgd (OCSD 2018a). The Project would connect to existing 10-inch sewer line on North Orange Olive Road, that serves the site and ties into larger sewer lines south and southwest of the site (Orange 2018g). The Project is estimated to generate 10,008 gpd of wastewater, based on OCSD's wastewater generation factor of 3,451 gpd per acre for medium density residential uses (8-16 du/ac). With the elimination of water demand from the existing shopping center (estimated at 6,560 gpd, based on OCSD's wastewater generation factor of 2,262 gpd per acre for commercial and office uses), the net increase in water demand is expected to be 3,448 gpd. Based on the City's Master Plan of Sewer Study, the sewer line near the site in North Orange Olive Road has a design flow of 0.9127 cubic feet per second (cfs), a current flow of 0.0405 cfs, and a flow depth to diameter (d/D) ratio of 0.1029. The wastewater flow that would be contributed by the Project to this pipe estimated at 10,008 gpd, with a peaking

factor of 2.5, is equal to 0.039 cfs.⁵ Considering the addition in sewage flows from the recently completed 25-unit development to the north (estimated at 0.029 cfs) and the reduction in flows from demolition of the existing shopping center on the site, the increase in flows from the Project would be well below the 0.9127 design flow and would only create a minor increase in the d/D ratio. Therefore, it is anticipated that no upgrades to the existing sewer lines serving the Project site are required. Sewer service to the Project would also be in compliance with Chapter 13.56 et seq. of the Orange Municipal Code, which sets regulations for sewer mains, service charges, and wastewater discharges (see RR UTL-2). Based on correspondence from OCSD, the additional wastewater volume from the Project is within the existing wastewater treatment capacity of the treatment plants, and OCSD has sufficient capacity to meet the wastewater treatment demand of the proposed Project (OCSD 2019). Payment of the OCSD capital facilities capacity charges would also provide funds for the incremental increase in demand for wastewater treatment that would occur with the Project (see RR UTL-3).

Under existing conditions, drainage on site consists of sheet flow from the buildings, drive aisles, and surface parking areas towards East Grove Avenue and through a ribbon gutter and catch basins at the northern drive aisle for discharge into North Orange Olive Road. Then it flows along the gutters on North Orange Olive Road and East Grove Avenue toward the existing catch basin on East Grove Avenue, the storm drain line in East Grove Avenue, the culvert in North Orange Olive Road, the Buckeye/Collins Channel, and ultimately the Santa Ana River. As discussed under Response 4.10c, Hydrology and Water Quality, of this Subsequent IS/MND, the Preliminary WQMP indicates that the proposed Project site would be regraded for drainage to flow to different specified catch basins and drop inlets. This captured discharge would be treated through one of two on-site modular wetlands biofiltration units before the runoff would be discharged to the storm drain line in East Grove Avenue. The proposed changes resulting from the Project would not require the construction of a new storm water drainage facility or the expansion of existing facilities that could result in significant impacts. Thus, impacts would be less than significant.

The storm water runoff from the Project site would not exceed the capacity of the existing storm drain system, and no infrastructure improvements would be required beyond the installation of onsite storm drain facilities. The construction of the on-site water quality BMPs and storm drain lines within the Project site has the potential for temporary construction-related impacts. Since utility installations are within the construction impact limits identified for the proposed Project, the potential impacts associated with the construction of storm drain lines have been addressed in the respective sections of this Subsequent IS/MND. No impacts would occur, and no mitigation is required.

Electricity

Southern California Edison (SCE) currently provides electricity to the City of Orange, including the Project Site (SCE 2019). The Project's projected electricity usage is shown in Table 4-9, Energy Use During Operations. The Project would result in a decrease in electricity usage compared to the existing land use (shopping center). Electrical service to the Project site would be provided in accordance with SCE's policies and extension rules on file with the California Public Utilities Commission. Therefore, a significant impact related to the need for new systems or supplies or substantial alterations related to electricity would not occur. Additionally, the property Developer will coordinate with SCE to ensure avoidance of any notable service disruptions during the extension

⁵ Based on the methodology used in the sewer study for Phase I of the Orange-Olive Specific Plan Residential Development Project, immediately adjacent to the north and already constructed.

of, relocation of, upgrade of, or connection to services. Impacts are considered less than significant, and mitigation is not required.

Natural Gas

The Southern California Gas Company (SCGC) currently provides natural gas service to the City of Orange, including the Project Site (SCGC 2019). The Project's projected natural gas usage is shown in Table 4-9, Energy Use During Operations. The Project would result in an increased demand for natural gas usage compared to the existing land use (shopping center). However, the service would be provided in accordance with SCGC's policies and extension rules on file with the California Public Utilities Commission. Therefore, a significant impact related to the need for new systems or supplies or substantial alterations related to natural gas would not occur. Additionally, the property Developer will coordinate with SCGC to ensure avoidance of any notable service disruptions during the extension of, relocation of, upgrade of, or connection to services. Impacts are considered less than significant, and mitigation is not required.

Telecommunications

AT&T currently provides telecommunications service to the City of Orange, including the Project Site (AT&T 2019). The service would be provided in accordance with AT&T's policies and extension rules on file with the California Public Utilities Commission. Therefore, a significant impact related to the need for new systems or supplies or substantial alterations related to telecommunications would not occur. Additionally, the property Developer will coordinate with AT&T to ensure avoidance of any notable service disruptions during the extension of, relocation of, upgrade of, or connection to services. Impacts are considered less than significant, and mitigation is not required.

The Project would not require the construction or expansion of water or wastewater infrastructure and treatment facilities, storm water drainage, electric power, natural gas, or telecommunications facilities. Impacts would be less than significant, and no mitigation is required.

Regulatory Requirements:

- **RR UTL-1** Water service to the Project, including application for water service, service connections, water rates, fire service, and water mains, shall be constructed and provided in accordance with Chapter 13.04 et seq., Water System, of the Orange Municipal Code.
- **RR UTL-2** Sewer service to the Project, including sewer mains, sanitation and sewage charges, fats, oils and grease regulations, shall be constructed and provided in accordance with Chapter 13.56 et seq., Sewer System, of the Orange Municipal Code.
- **RR UTL-3** The Project Applicant shall pay the applicable capital facilities capacity charges to the Orange County Sanitation District (OCSD), in accordance with Article 7 of the OCSD's Wastewater Discharge Regulations.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple years?

As identified in City's Urban Water Management Plan (UWMP), the City's water system consists of 15 groundwater wells, 8 connections to imported water supplies, 16 reservoirs with over 40 million gallons of capacity, 16 pumping stations, and 450 miles of pipelines. In 2015, the City's potable water supply consisted of 28,643 acre-feet (af) of water. Groundwater makes up 70 percent of the City's water supply and comes from 15 wells in the Orange County Groundwater Basin. Imported water includes Colorado River water and State Water Project (SWP), which makes up 26 percent of the City's supply. Surface water purchased from the Serrano Water District makes up 4 percent of the City's supply (Orange 2016b).

Using the City's 2015 average water consumption of 155 gpcd, the Project's 98 residents would create a demand for 15,190 gpd of water or 17 af per year. This demand is less than 0.1 percent of the City's total 2015 water supply (28,643 af) and projected 2020 (28,000 af) and 2040 (29,500 af) water supplies (Orange 2016b). With the elimination of water demand from the existing shopping center, the net water demand would be less than 15,190 gpd.

The City's 2015 UWMP serves as a long-range planning document for water supply and demand within City's service area. The UWMP identifies the water supplies needed to meet future demand and includes current and planned conservation measures to reduce water demand. It takes into consideration projected growth in the City and availability of future water supplies. As discussed in the 2015 UWMP, the City is capable of meeting future water demands during normal, single-dry, and multiple-dry years between 2015 and 2040 (Orange 2016b).

The Project would comply with Sections 4.303 and 4.304 of the CALGreen Code (as adopted by the City), which require indoor and outdoor water conservation measures such as low flush toilets, aerators on sinks and showerheads, other water-efficient appliances, and water-efficient automatic irrigation system controllers. The Project would also be required to comply with Chapter 7.02, Water Conservation and Water Supply Shortage, of the Orange Municipal Code, related to prohibitions on water waste and measures under various water conservation stages and other programs for reducing water use. Compliance with these regulations and programs is provided as RR UTL-4.

The increase in water demand generated by the proposed Project would be minimal; would be served by the City with minor impacts on current water supplies; and is within the projected growth and increased water demand within City's service area. With compliance with the City's water conservation measures, the proposed Project would not significantly impact the City's domestic water supply. Impacts would be less than significant, and no mitigation is required.

Regulatory Requirements:

RR UTL-4 The Project shall be designed and constructed with water-efficient fixtures and systems, as required by the CALGreen Code, which has been adopted by reference into Chapter 15.17, California Green Building Code, of the Orange Municipal Code. In addition, the Project shall comply with the water conservation measures in Chapter 7.02, Water Conservation and Water Supply Shortage, of the Municipal Code.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

c) 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?

As estimated above, the proposed Project would generate approximately 10,008 gpd of wastewater, while the existing shopping center's wastewater generation is estimated at 6,560 gpd. The net increase in wastewater volume from the proposed Project would be approximately 3,448 gpd (or 0.003 mgd).

As discussed above, the OCSD has indicated that it has sufficient capacity to meet the wastewater treatment demand of the proposed Project (OCSD 2019). Wastewater service to the Project would be in compliance Chapter 13.56 et seq. of the Orange Municipal Code, which sets regulations for service connections, sewage charges, and wastewater discharge regulations (see RR UTL-2). The Project would also pay OCSD capital facilities capacity charges to fund wastewater treatment that would be needed by the Project (see RR UTL-3).

The Project would not exceed the capacities of OCSD's wastewater treatment facilities. Impacts would be less than significant, and no mitigation is required.

Regulatory Requirements: See RR UTL-2 and RR UTL-3 above

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

The Olinda Alpha Sanitary Landfill, Frank R. Bowerman Landfill, and Prima Deshecha Landfill are owned and operated by Orange County (OC) Waste & Recycling (County of Orange). The Olinda Alpha Sanitary Landfill accepts a maximum of 8,000 tons per day (tpd). As of November 2014, it had a remaining capacity of 148.8 million cubic yards. Closure of this landfill is anticipated in 2021. The Bowerman Landfill accepts a maximum of 11,500 tpd. As of February 2008, it had a remaining capacity of 266 million cubic yards. Closure of this landfill is anticipated in 2053 (CalRecycle 2018a, 2018c).

The proposed Project involves demolition of the existing structures and paved surfaces on the Project site, which would generate debris to be hauled off site. In accordance with Section 4.408 of the CALGreen Code, at least 65 percent of demolition and construction debris would need to be diverted from landfills by recycling, reuse, and/or salvage (see RR UTL-5). Solid waste generation during demolition and construction activities for the proposed Project would be short-term and could be accommodated within the remaining capacities of the landfills owned and operation by OC Waste & Recycling (Arnau 2018).

Solid waste collection services in the City are provided by CR&R, which would provide automated three cart system weekly service to the Project, with wastes brought to their transfer and material recovery facilities in Stanton and San Juan Capistrano (CR&R 2018). The City of Orange implements 44 waste diversion programs, including residential curbside, residential drop-off, residential buyback, residential curbside green waste collection, public education program, and special collection events (CalRecycle 2016d). The residents of the Project are expected to participate in these programs.

OC Waste & Recycling has indicated that the Project would be served by the Olinda Alpha Landfill located at 1942 North Valencia Avenue in Brea (Arnau 2018). According to California Department of Resources Recycling and Recovery (CalRecycle), the City of Orange had disposal rates of 6.0 pounds per resident per day (CalRecycle 2018b). Using this rate, the proposed Project's estimated 98 residents would generate approximately 588 pounds of solid wastes per day (or 107.3 tons per year). This solid waste volume (0.29 ton or 25.9 cubic yards per day) would be considered a negligible amount of the daily capacity (8,000 and 11,500 tpd) of the Olinda Alpha Landfill and Frank R. Bowerman Landfill and their remaining capacities (148.8 and 266 million cubic yards).

The existing shopping center currently generates solid wastes that would be eliminated with the proposed Project. OC Waste & Recycling has also indicated that the Orange County landfill system has sufficient capacity to accommodate the solid wastes generated by the proposed Project on a project-specific and cumulative basis (Arnau 2018). No significant impacts would occur, and no mitigation is required.

Regulatory Requirements:

RR UTL-5 The Project contractor shall recycle, reuse, and/or salvage at least 65 percent of demolition and construction debris, in accordance with Section 4.408 of the CALGreen Code.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

State, County, and local agencies with regulatory authority related to solid waste disposal include CalRecycle, OC Waste & Recycling, and the City of Orange. Regulations specifically applicable to the proposed Project include the California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939), California Solid Waste Re-use and Recycling Access Act, AB 341, Mandatory Commercial Organics Recycling (AB1826), and the CALGreen Code, as adopted by the City.

AB 939, which requires every County and City in the State to prepare a Source Reduction and Recycling Element (SRRE) to its Solid Waste Management Plan, identifies how each jurisdiction will meet the State's mandatory waste diversion goal of 50 percent by and after the year 2000. According to CalRecycle, the City of Orange has disposal rate targets of 10.1 pounds per resident per day and 14.4 pounds per employee per day. In 2017, the City's actual disposal rates were 6.0 pounds per resident per day and 7.1 pounds per employee per day (CalRecycle 2018b). Thus, in compliance with AB 939, the City of Orange is consistently diverting more than 50 percent of its waste stream since 2007.

The California Solid Waste Re-use and Recycling Access Act of 1991 (*California Public Resources Code*, Sections 42900–42911) directs the California Integrated Waste Management Board (now CalRecycle) to draft a "model ordinance" for the disposal of construction waste associated with development projects. Section 4.408 of the CALGreen Code, as adopted by the City by reference, requires preparation of a construction waste management plan that outlines ways in which the contractor would recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous

⁶ Assuming 8.88 cubic yards per ton, the Project would generate 952.8 cubic yards of wastes per year.

construction and demolition debris. During the demolition and construction phase, the proposed Project would comply with the CALGreen Code through the recycling and reuse of at least 65 percent of the nonhazardous construction and demolition debris from the Project (see RR UTL-5).

On October 6, 2011, the California Governor signed AB 341, establishing a State policy goal that no less than 75 percent of solid waste generated be source reduced, recycled, or composted by 2020. The bill also mandates local jurisdictions to implement commercial recycling by July 1, 2012 for businesses and public entities generating four cubic yards of trash or more and multi-family residential dwellings with five or more units. Solid waste storage and collection at the Project would comply with Chapter 8.28, Garbage, of the Municipal Code. The proposed residences would have regular waste collection services; be provided with recycling bins for residential solid waste, recyclables, and organics recycling to promote residential recycling; and be encouraged to participate in the City's solid waste diversion programs.

As discussed in Section 4.9, Hazards and Hazardous Materials, of this Subsequent IS/MND, hazardous wastes generated during demolition and construction activities would be disposed of in accordance with existing regulations (including RR HAZ-3 and RR HAZ-4 for the handling of ACM wastes and RR HAZ-2 for the handling of LBP). Similarly, hazardous material use during construction and occupancy of the proposed Project, including maintenance activities, would be conducted in compliance with applicable regulations.

No conflict with statutes and regulations related to solid waste would occur, and no mitigation is required.

Regulatory Requirements: See RR HAZ-2 through RR HAZ-4 and RR UTL-5 above

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

4.20 WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?				
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				\boxtimes
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				\boxtimes

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This topic as a stand-alone section was not included in the 2015 MND, based on the CEQA Environmental Checklist (Appendix G). A summary of wildfire is provided in Section 4.9, Hazards and Hazardous Materials.

Supplemental Evaluation

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

The proposed Project is not within a designated Very High Fire Hazard Severity Zones (VHFHSZ) as defined by the California Department of Forestry and Fire Prevention (CalFire). As stated in Checklist Response 4.9.f, Hazards and Hazardous Materials, the City of Orange has an emergency plan, termed an "Emergency Operations Plan," prepared in accordance with the State Office of Emergency Services guidelines for multi-hazard functional planning (Orange 2010a). However, the Project site is not in the vicinity of any emergency evacuation corridors, and North Orange Olive Road and East Grove Avenue are not designated evacuation corridors in the Public Safety Element of the Orange General Plan. Temporary lane closures on adjacent streets (North Orange Olive Road and East Grove Avenue) may be required during the short-term construction period in order to connect the proposed Project to the existing utility infrastructure within these roadways. However, Project construction would not involve full closure of any public roadway during construction. Implementation of traffic control measures during construction in accordance with the City of Orange Department of Public Works Standard Plans & Specifications (City Standard Plans) and Chapter 12.02, Standard Specifications for Public Works Construction, of the Municipal Code, which adopts the Greenbook by reference (see RR HAZ-5), would reduce the potential for traffic hazards and the obstruction of access to adjacent parcels. Additionally, because Checklist Response thresholds 4.20a through 4.20d apply only to those projects that are "located in or near state responsibility areas or lands classified as very high fire

hazard severity zones", no impacts related to these thresholds would occur, and no mitigation is required.

In the long-term, the Project would provide an access driveway off East Grove Avenue that would be used for emergency response to the site and for emergency evacuation of the site. The Project would not affect emergency response or emergency evacuation of adjacent land uses. Additionally, as indicated above, North Orange Olive Road and East Grove Avenue are not designated evacuation corridors in the Public Safety Element of the Orange General Plan. Additionally, because Checklist Response thresholds 4.20a through 4.20d apply only to those projects that are "located in or near state responsibility areas or lands classified as very high fire hazard severity zones", no impacts related to these thresholds would occur, and no mitigation is required.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

As indicated in Checklist Response IX.g, Hazards and Hazardous Materials, the Project site is located in a highly urbanized area of the City, and there are no large, undeveloped areas and/or steep slopes on or near the site that may pose wildfire hazards. The site and the surrounding areas are not located in designated VHFHSZ, as identified by the CalFire. Rather, the site is within a Non-VHFHSZ area, with the nearest VHFHSZ located approximately 2.1 miles northeast of the site (CalFire 2011). Additionally, based on review of Figure PS-1, Environmental and Natural Hazard Policy Map in the Public Safety Element of the General Plan, the Project site is not located within designated Wildland Very High Fire Hazard Areas or Wildland High Fire Hazard Areas (Orange 2010a). Therefore, the Project is not expected to exacerbate wildfire risks and create pollutants associated with wildfire or uncontrolled spread of wildfire. Additionally, because Checklist Response thresholds 4.20a through 4.20d apply only to those projects that are "located in or near state responsibility areas or lands classified as very high fire hazard severity zones", no impacts related to these thresholds would occur. No mitigation is required.

Significance Determination: No Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

As previously described, the proposed Project is not within a designated VHFHSZ as defined by CalFire. As discussed in Section 3.0, Project Description, the site is located in a highly urbanized area and surrounded by developed land on all sides. While Project construction would result in temporary lane closures, it would not involve full closure of any public roadway during construction. Implementation of traffic control measures during construction in accordance with the City of Orange Department of Public Works Standard Plans & Specifications (City Standard Plans) and Chapter 12.02, Standard Specifications for Public Works Construction, of the Municipal Code, which

adopts the Greenbook by reference (see RR HAZ-5), would reduce the potential for traffic hazards and the obstruction of access to adjacent parcels. All proposed structures would be constructed to meet current building and fire codes. Implementation of the proposed Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Additionally, because Checklist Response thresholds 4.20a through 4.20d apply only to those projects that are "located in or near state responsibility areas or lands classified as very high fire hazard severity zones", no impacts related to these thresholds would occur. No mitigation is required.

Significance Determination: No Impact
Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

As previously described, the proposed Project is not within a designated VHFHSZ as defined by CalFire. The Project is located in a highly urbanized area that is located in a generally flat topographical area away from downslope or landslide areas. Proposed drainage changes are described in Section 4.10, Hydrology and Water Quality. Specifically, implementation of the Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. No impacts would occur, and no mitigation is required.

Significance Determination: No Impact
Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Does the project have the potential to substantially 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, substantially 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?		\boxtimes		
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)?		\boxtimes		
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		\boxtimes		

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Because the Phase I Project MND site was an infill development project occupied by a vehicle storage facility at the time of preparation of the Phase I MND, it was determined that the site was not populated or used by any species identified as a candidate, sensitive, or special status, and did not contain habitat that would support sensitive species.

It was also determined that there were no historical resources located within Phase I MND site. However, the Phase I MND identified two mitigation measures in the event unknown resources were discovered during ground disturbing activities. With implementation of mitigation measures, impacts to cultural and paleontological resources were less than significant.

All potential Phase I Project MND impacts were identified and mitigation measures were identified, where applicable, to reduce all potential impacts to less than significant. In addition, cumulative impacts were determined to be less than significant.

Supplemental Evaluation

Would the Project:

a) Have the potential to substantially 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, substantially 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 sensitive biological resources, habitats, or species on the Project site that would be affected by the Project. As indicated in Section 4.4, Biological Resources, of this Subsequent IS/MND, given the current developed condition and the existing trees and shrubs on the site, migratory birds may nest on the vegetation on-site. However, MM BIO-1 would avoid impacts to active bird nests during construction of the Project. Impacts on migratory birds would be less than significant after mitigation.

There are no historic resources on the Project site that would be impacted by the proposed Project. Additionally, implementation of MM CULT-1 would prevent or reduce impacts on buried archaeological resources and tribal cultural resources that may be uncovered during grading and excavation activities. Implementation of MM GEO-2 would also mitigate impacts on paleontological resources. With implementation of these mitigation measures, the Project's potential impacts on cultural resources and tribal cultural resources would be less than significant.

Therefore, the Project would not substantially 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. Impacts would be less than significant after mitigation.

Significance Determination: Less Than Significant Impact with Mitigation

Mitigation Measures: MM BIO-1, MM CULT-1, and MM GEO-2

Significance Determination After Mitigation: Less Than Significant Impact

b) 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)?

As identified in the preceding analyses, all Project-level impacts have been determined to be less than significant with or without compliance with regulatory requirements or mitigated to a level considered less than significant with incorporation of mitigation measures. While the Project would contribute to potential environmental effects related to Biological Resources, Cultural Resources, Geology and Soils, and Noise, these impacts would not be cumulatively considerable, since mitigation measures would be implemented to avoid or reduce potential impacts associated with these environmental issues. As discussed in Section 4.3, Air Quality, and Section 4.8, Greenhouse Gas Emissions, of this Subsequent IS/MND, the Project's air quality and GHG impacts would be less than significant and its impacts would not be considered cumulatively considerable. The residential development to the north is expected to be fully occupied by the time the proposed Project is planned to begin construction in 2019. Similarly, the renovations at Shaffer Park were completed and the Park reopened in April 2019. Since the construction of these adjacent projects would not overlap with the Project, the construction-related impacts of the Project (e.g., pollutant emissions, GHG emissions, demolition and construction noise and debris, construction traffic and roadway encroachments) would not lead to cumulative impacts on the same sensitive receptors and intersections in the area.

Review of the City's pending land use applications shows that no new development or redevelopment is planned adjacent to the site and projects proposed within a mile of the site include office projects

and an industrial remodel west and southwest of the site (west of the BNSF railroad tracks); an assisted living facility and a market to the northeast, and two single-family homes to the southeast (Orange 2018j). These development projects would be subject to environmental review by the City, pursuant to CEQA, the State CEQA Guidelines, and the City's Local CEQA Guidelines, to determine if they would lead to cumulative environmental effects as part of the appropriate CEQA analysis for each project. Since the proposed Project would not have significant impacts after mitigation, the impacts of the Project are not expected to result in cumulatively considerable impacts when added to the impacts of other projects planned or proposed in the vicinity of the site. Cumulative impacts would be less than significant, and no mitigation is required.

Significance Determination: Less Than Significant Impact

Mitigation Measures: None required

Significance Determination After Mitigation: Not applicable, as no mitigation is required

c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Based on the environmental analyses above, with compliance with applicable regulatory requirements and/or the implementation of mitigation measures, the Project would have less than significant impacts on humans, as it relates to the following environmental issue areas: Aesthetics, Agriculture and Forestry Resources, Air Quality, Energy, Greenhouse Gas (GHG) Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire.

The proposed Project's impacts on the following issue areas would be significant and would require the implementation of mitigation measures: Biological Resources, Cultural Resources, Geology and Soils, and Noise. All impacts would be avoided or reduced to less than significant levels after mitigation.

Therefore, with implementation as identified below, the proposed Project would not result in environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly, with the implementation of mitigation measures. All impacts would be less than significant after mitigation.

Significance Determination: Less Than Significant Impact with Mitigation

Mitigation Measures: MM BIO-1, MM CULT-1, MM GEO-1, MM GEO-2, MM NOI-1 through MM NOI-6

Significance Determination After Mitigation: Less Than Significant Impact

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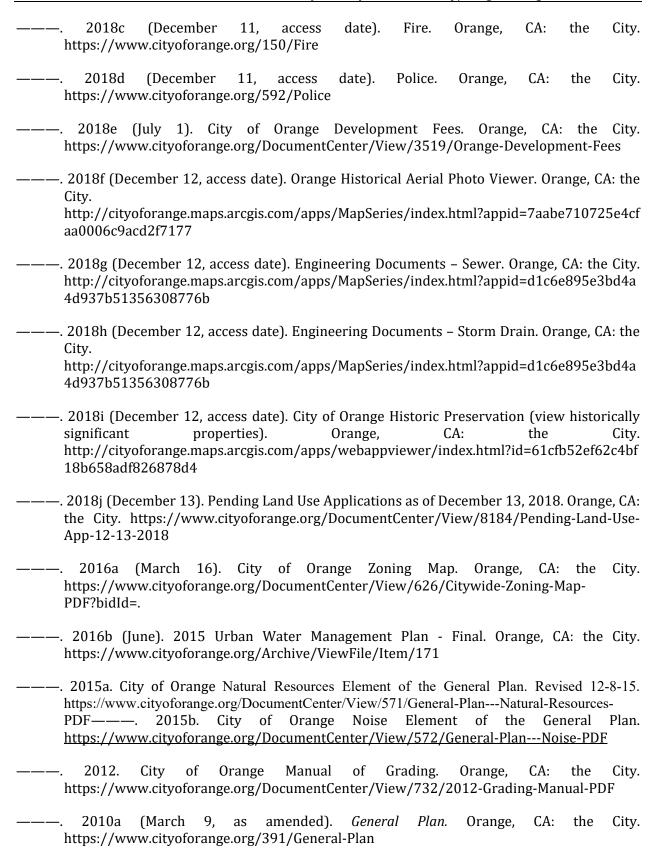
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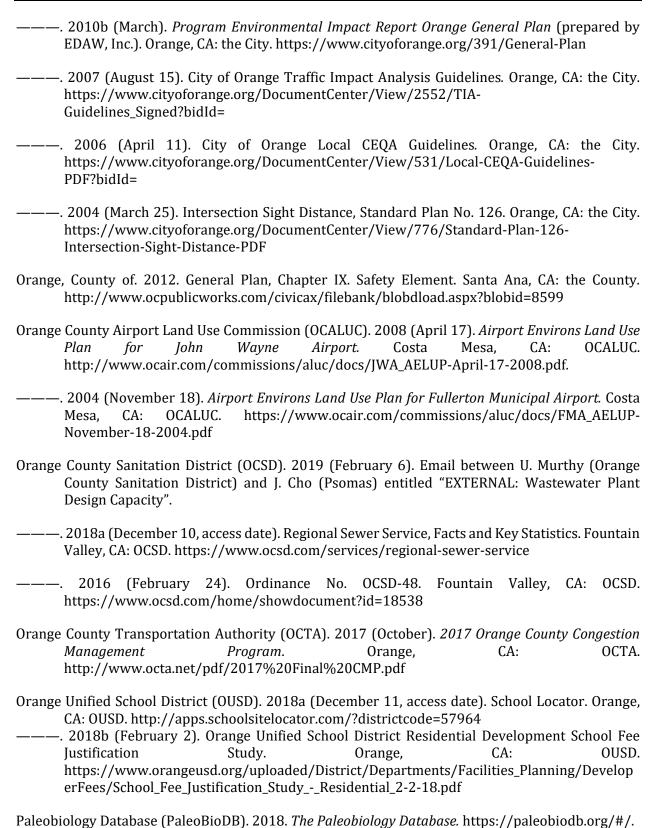
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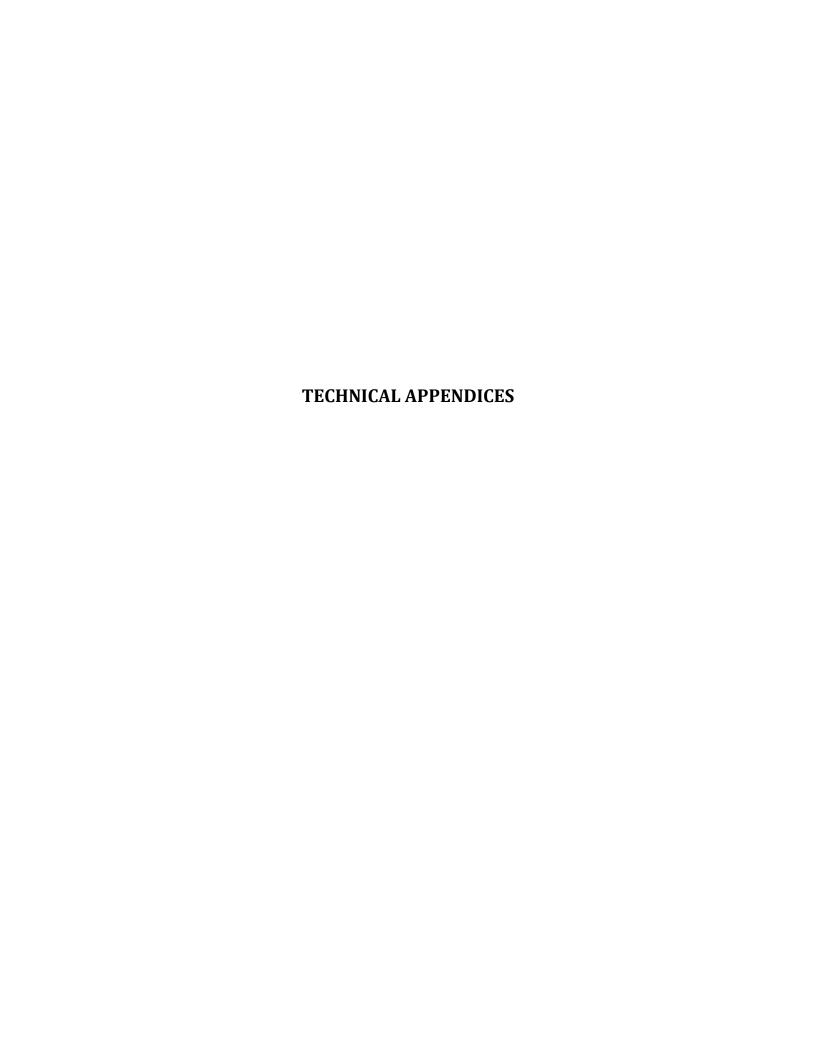
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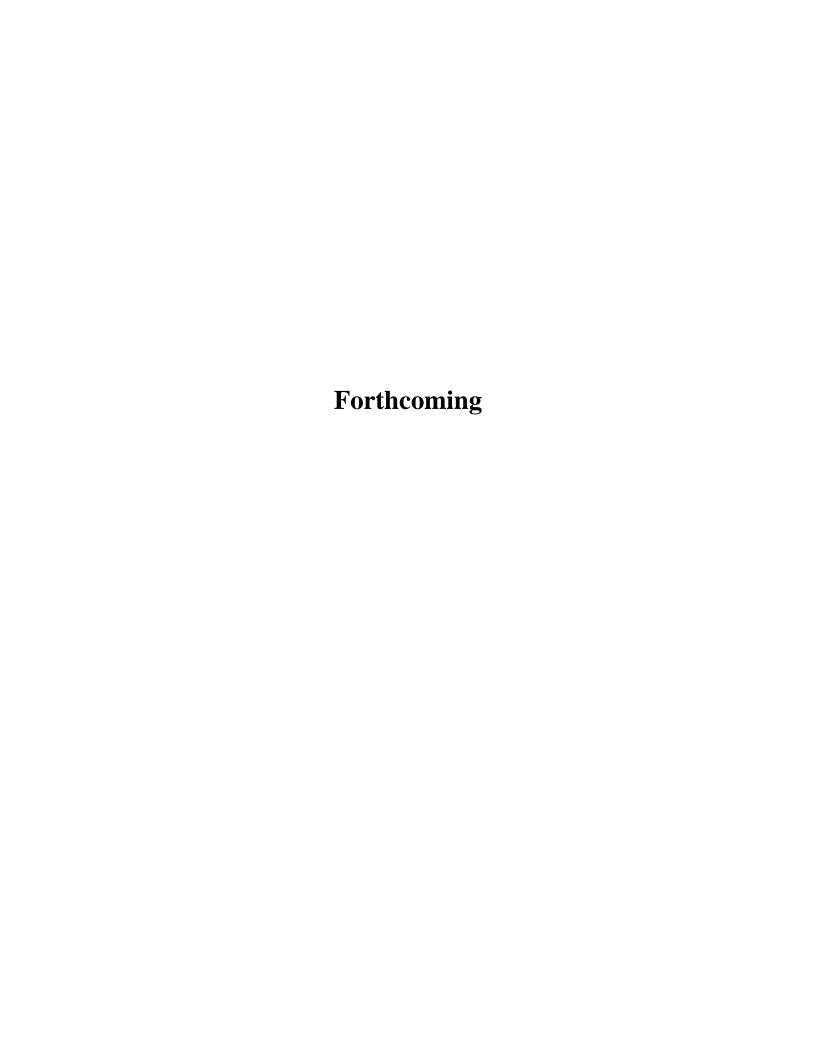
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APPENDIX A ORANGE-OLIVE SPECIFIC PLAN (REVISED JULY 2020)



APPENDIX B AIR QUALITY, ENERGY AND GHG MODELING DATA



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North Orange Olive Existing Uses - Orange County, Winter

North Orange Olive Existing Uses Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	10.22	1000sqft	0.23	10,220.00	0
Parking Lot	69.43	1000sqft	1.59	69,430.00	0
High Turnover (Sit Down Restaurant)	1.31	1000sqft	0.03	1,315.00	0
Regional Shopping Center	23.82	1000sqft	0.55	23,815.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)30Climate Zone8Operational Year2019

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on Traffic Data and site aerial estimates

Construction Phase - No Construction (Existing Uses)

Vehicle Trips -

Off-road Equipment - No Construction (Existing Uses)

Trips and VMT - No Construction (Existing Uses)

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North Orange Olive Existing Uses - Orange County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblFleetMix	HHD	0.02	0.01
tblFleetMix	HHD	0.02	0.01
tblFleetMix	HHD	0.02	0.01
tblFleetMix	LDA	0.55	0.64
tblFleetMix	LDA	0.55	0.75
tblFleetMix	LDA	0.55	0.75
tblFleetMix	LDT1	0.04	0.06
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.21	0.13
tblFleetMix	LDT2	0.21	0.06
tblFleetMix	LDT2	0.21	0.06
tblFleetMix	LHD1	0.02	0.05
tblFleetMix	LHD1	0.02	0.04
tblFleetMix	LHD1	0.02	0.04
tblFleetMix	LHD2	5.7970e-003	0.01
tblFleetMix	LHD2	5.7970e-003	0.01
tblFleetMix	LHD2	5.7970e-003	0.01
tblFleetMix	MCY	4.8300e-003	5.1610e-003
tblFleetMix	MCY	4.8300e-003	5.1610e-003
tblFleetMix	MCY	4.8300e-003	5.1610e-003
tblFleetMix	MDV	0.12	0.05
tblFleetMix	MDV	0.12	0.03
tblFleetMix	MDV	0.12	0.03
tblFleetMix	MH	1.0410e-003	1.1120e-003

North Orange Olive Existing Uses - Orange County, Winter

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tblFleetMix	MH	1.0410e-003	1.1120e-003
tblFleetMix	MH	1.0410e-003	1.1120e-003
tblFleetMix	MHD	0.02	0.01
tblFleetMix	MHD	0.02	0.01
tblFleetMix	MHD	0.02	0.01
tblFleetMix	OBUS	1.6370e-003	0.00
tblFleetMix	OBUS	1.6370e-003	0.01
tblFleetMix	OBUS	1.6370e-003	0.01
tblFleetMix	SBUS	5.8300e-004	0.01
tblFleetMix	SBUS	5.8300e-004	0.01
tblFleetMix	SBUS	5.8300e-004	0.01
tblFleetMix	UBUS	1.6330e-003	0.01
tblFleetMix	UBUS	1.6330e-003	0.01
tblFleetMix	UBUS	1.6330e-003	0.01
tblLandUse	LandUseSquareFeet	1,310.00	1,315.00
tblLandUse	LandUseSquareFeet	23,820.00	23,815.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblVehicleTrips	ST_TR	158.37	140.18
tblVehicleTrips	ST_TR	49.97	44.18
tblVehicleTrips	SU_TR	131.84	116.70
tblVehicleTrips	SU_TR	25.24	22.31
tblVehicleTrips	WD_TR	15.43	5.58
tblVehicleTrips	WD_TR	127.15	112.55
tblVehicleTrips	WD_TR	42.70	37.75

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North Orange Olive Existing Uses - Orange County, Winter

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/d	day							lb/c	lay		
2019	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
Maximum	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

Mitigated Construction

	ROG	NOx	СО	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/e	day							lb/d	lay		
2019	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
Maximum	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

North Orange Olive Existing Uses - Orange County, Winter

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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North Orange Olive Existing Uses - Orange County, Winter

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	СО	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/d	day							lb/d	day		
Area	0.8206	1.0000e- 004	0.0108	0.0000		4.0000e- 005	4.0000e- 005		4.0000e- 005	4.0000e- 005		0.0229	0.0229	6.0000e- 005		0.0245
Energy	0.0151	0.1369	0.1150	8.2000e- 004		0.0104	0.0104	 	0.0104	0.0104		164.2677	164.2677	3.1500e- 003	3.0100e- 003	165.2439
Mobile	2.0443	9.1995	22.1066	0.0635	5.9793	0.0808	6.0601	1.6319	0.0760	1.7079		6,574.379 2	6,574.379 2	0.6511		6,590.657 2
Total	2.8799	9.3365	22.2324	0.0643	5.9793	0.0912	6.0705	1.6319	0.0865	1.7184		6,738.669 8	6,738.669 8	0.6543	3.0100e- 003	6,755.925 6

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/d	day							lb/d	day		
Area	0.8206	1.0000e- 004	0.0108	0.0000		4.0000e- 005	4.0000e- 005		4.0000e- 005	4.0000e- 005		0.0229	0.0229	6.0000e- 005		0.0245
Energy	0.0151	0.1369	0.1150	8.2000e- 004		0.0104	0.0104		0.0104	0.0104		164.2677	164.2677	3.1500e- 003	3.0100e- 003	165.2439
Mobile	2.0443	9.1995	22.1066	0.0635	5.9793	0.0808	6.0601	1.6319	0.0760	1.7079		6,574.379 2	6,574.379 2	0.6511		6,590.657 2
Total	2.8799	9.3365	22.2324	0.0643	5.9793	0.0912	6.0705	1.6319	0.0865	1.7184		6,738.669 8	6,738.669 8	0.6543	3.0100e- 003	6,755.925 6

North Orange Olive Existing Uses - Orange County, Winter

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Numbe	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/5/2019	1/4/2019	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.59

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor Trip	Hauling Trip	Worker Vehicle	Vendor	Hauling
	Count	Number	Number	Number	Length	Length	Length	Class	Vehicle Class	Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

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North Orange Olive Existing Uses - Orange County, Winter

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

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/d	day							lb/c	lay		
Off-Road	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
Total	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

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/d	day							lb/c	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	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	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
Total	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

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North Orange Olive Existing Uses - Orange County, Winter

3.2 Demolition - 2019

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	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/e	day							lb/c	lay		
	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
Total	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

Mitigated Construction Off-Site

	ROG	NOx	СО	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/d	day							lb/c	lay		
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	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
Total	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

4.0 Operational Detail - Mobile

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North Orange Olive Existing Uses - Orange County, Winter

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/d	day							lb/c	lay		
Mitigated	2.0443	9.1995	22.1066	0.0635	5.9793	0.0808	6.0601	1.6319	0.0760	1.7079		6,574.379 2	6,574.379 2	0.6511		6,590.657 2
Unmitigated	2.0443	9.1995	22.1066	0.0635	5.9793	0.0808	6.0601	1.6319	0.0760	1.7079		6,574.379 2	6,574.379 2	0.6511	 	6,590.657 2

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	57.03	0.00	0.00	140,385	140,385
High Turnover (Sit Down Restaurant)	147.44	183.64	152.88	209,042	209,042
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	899.21	1,052.37	531.42	1,878,528	1,878,528
Total	1,103.67	1,236.00	684.30	2,227,955	2,227,955

4.3 Trip Type Information

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North Orange Olive Existing Uses - Orange County, Winter

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		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.641114	0.064111	0.128223	0.053426	0.053426	0.010685	0.010685	0.010685	0.000000	0.010685	0.005161	0.010685	0.001112
High Turnover (Sit Down Restaurant)	0.747966	0.042741	0.064111	0.032056	0.042741	0.010685	0.010685	0.010685	0.010685	0.010685	0.005161	0.010685	0.001112
Parking Lot	0.552373	0.044229	0.211123	0.119112	0.017503	0.005797	0.024455	0.015685	0.001637	0.001633	0.004830	0.000583	0.001041
Regional Shopping Center	0.747966	0.042741	0.064111	0.032056	0.042741	0.010685	0.010685	0.010685	0.010685	0.010685	0.005161	0.010685	0.001112

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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North Orange Olive Existing Uses - Orange County, Winter

	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/d	day							lb/c	lay		
NaturalGas Mitigated	0.0151	0.1369	0.1150	8.2000e- 004		0.0104	0.0104		0.0104	0.0104		164.2677	164.2677	3.1500e- 003	3.0100e- 003	165.2439
NaturalGas Unmitigated	0.0151	0.1369	0.1150	8.2000e- 004		0.0104	0.0104		0.0104	0.0104		164.2677	164.2677	3.1500e- 003	3.0100e- 003	165.2439

5.2 Energy by Land Use - NaturalGas Unmitigated

PM2.5 Total Bio- CO2 NBio- CO2 Total CO2 CH4 NaturalGa ROG NOx CO SO2 Fugitive Exhaust PM10 Fugitive Exhaust N2O CO2e s Use PM10 PM10 Total PM2.5 PM2.5 Land Use kBTU/yr lb/day lb/day 331.52 3.5800e-0.0325 0.0273 2.0000e-2.4700e-2.4700e-2.4700e-2.4700e-39.0024 39.0024 7.5000e-7.2000e-39.2341 Elementary 004 School 003 003 003 003 004 004 High Turnover (Sit 934.262 0.0101 0.0916 0.0769 5.5000e-6.9600e-6.9600e-109.9132 109.9132 2.0200e-110.5664 6.9600e-6.9600e-2.1100e-Down Restaurant) 004 003 003 003 003 003 003 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 0.0108 8.0000e-9.7000e-2.8000e-Regional 130.493 1.4100e-0.0128 9.7000e-9.7000e-9.7000e-15.3521 15.3521 2.9000e-15.4434 Shopping Center 005 004 003 004 004 004 004 0.1369 0.0151 0.1150 8.3000e-0.0104 0.0104 0.0104 0.0104 164.2677 164.2677 3.1500e-3.0200e-165.2439 Total 004 003

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North Orange Olive Existing Uses - Orange County, Winter

5.2 Energy by Land Use - NaturalGas Mitigated

	NaturalGa s Use	ROG	NOx	СО	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/d	day							lb/d	lay		
Elementary School	0.33152	3.5800e- 003	0.0325	0.0273	2.0000e- 004		2.4700e- 003	2.4700e- 003		2.4700e- 003	2.4700e- 003		39.0024	39.0024	7.5000e- 004	7.2000e- 004	39.2341
High Turnover (Sit Down Restaurant)		0.0101	0.0916	0.0769	5.5000e- 004		6.9600e- 003	6.9600e- 003		6.9600e- 003	6.9600e- 003		109.9132	109.9132	2.1100e- 003	2.0200e- 003	110.5664
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
Regional Shopping Center	0.130493	1.4100e- 003	0.0128	0.0108	8.0000e- 005		9.7000e- 004	9.7000e- 004		9.7000e- 004	9.7000e- 004		15.3521	15.3521	2.9000e- 004	2.8000e- 004	15.4434
Total		0.0151	0.1369	0.1150	8.3000e- 004		0.0104	0.0104		0.0104	0.0104		164.2677	164.2677	3.1500e- 003	3.0200e- 003	165.2439

6.0 Area Detail

6.1 Mitigation Measures Area

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North Orange Olive Existing Uses - Orange County, Winter

	ROG	NOx	СО	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/d	day							lb/d	day		
Mitigated	0.8206	1.0000e- 004	0.0108	0.0000		4.0000e- 005	4.0000e- 005		4.0000e- 005	4.0000e- 005		0.0229	0.0229	6.0000e- 005		0.0245
Unmitigated	0.8206	1.0000e- 004	0.0108	0.0000		4.0000e- 005	4.0000e- 005	i i	4.0000e- 005	4.0000e- 005		0.0229	0.0229	6.0000e- 005		0.0245

6.2 Area by SubCategory

<u>Unmitigated</u>

	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	bCategory lb/day								lb/d	day						
Architectural Coating	0.0951					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7245	 				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0200e- 003	1.0000e- 004	0.0108	0.0000		4.0000e- 005	4.0000e- 005		4.0000e- 005	4.0000e- 005		0.0229	0.0229	6.0000e- 005		0.0245
Total	0.8206	1.0000e- 004	0.0108	0.0000		4.0000e- 005	4.0000e- 005		4.0000e- 005	4.0000e- 005		0.0229	0.0229	6.0000e- 005		0.0245

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North Orange Olive Existing Uses - Orange County, Winter

6.2 Area by SubCategory

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	bCategory lb/day								lb/d	day						
Architectural Coating	0.0951					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7245					0.0000	0.0000		0.0000	0.0000		;	0.0000			0.0000
Landscaping	1.0200e- 003	1.0000e- 004	0.0108	0.0000		4.0000e- 005	4.0000e- 005		4.0000e- 005	4.0000e- 005		0.0229	0.0229	6.0000e- 005	 	0.0245
Total	0.8206	1.0000e- 004	0.0108	0.0000		4.0000e- 005	4.0000e- 005		4.0000e- 005	4.0000e- 005		0.0229	0.0229	6.0000e- 005		0.0245

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
= 4	110111001	110 011 011 019	, -, -,	***************************************		, , , ,

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

North Orange Olive Existing Uses - Orange County, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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North Orange Olive Existing Uses - Orange County, Summer

North Orange Olive Existing Uses Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	10.22	1000sqft	0.23	10,220.00	0
Parking Lot	69.43	1000sqft	1.59	69,430.00	0
High Turnover (Sit Down Restaurant)	1.31	1000sqft	0.03	1,315.00	0
Regional Shopping Center	23.82	1000sqft	0.55	23,815.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)30Climate Zone8Operational Year2019

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on Traffic Data and site aerial estimates

Construction Phase - No Construction (Existing Uses)

Vehicle Trips -

Off-road Equipment - No Construction (Existing Uses)

Trips and VMT - No Construction (Existing Uses)

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North Orange Olive Existing Uses - Orange County, Summer

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Table Name	Column Name	Default Value	New Value	
tblConstructionPhase	NumDays	20.00	0.00	
tblFleetMix	HHD	0.02	0.01	
tblFleetMix	HHD	0.02	0.01	
tblFleetMix	HHD	0.02	0.01	
tblFleetMix	LDA	0.55	0.64	
tblFleetMix	LDA	0.55	0.75	
tblFleetMix	LDA	0.55	0.75	
tblFleetMix	LDT1	0.04	0.06	
tblFleetMix	LDT1	0.04	0.04	
tblFleetMix	LDT1	0.04	0.04	
tblFleetMix	LDT2	0.21	0.13	
tblFleetMix	LDT2	0.21	0.06	
tblFleetMix	LDT2	0.21	0.06	
tblFleetMix	LHD1	0.02	0.05	
tblFleetMix	LHD1	0.02	0.04	
tblFleetMix	LHD1	0.02	0.04	
tblFleetMix	LHD2	5.7970e-003	0.01	
tblFleetMix	LHD2	5.7970e-003	0.01	
tblFleetMix	LHD2	5.7970e-003	0.01	
tblFleetMix	MCY	4.8300e-003	5.1610e-003	
tblFleetMix	MCY	4.8300e-003	5.1610e-003	
tblFleetMix	MCY	4.8300e-003	5.1610e-003	
tblFleetMix	MDV	0.12	0.05	
tblFleetMix	MDV	0.12	0.03	
tblFleetMix	MDV	0.12	0.03	
tblFleetMix	МН	1.0410e-003	1.1120e-003	

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North Orange Olive Existing Uses - Orange County, Summer

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tblFleetMix	МН	1.0410e-003	1.1120e-003
tblFleetMix	MH	1.0410e-003	1.1120e-003
tblFleetMix	MHD	0.02	0.01
tblFleetMix	MHD	0.02	0.01
tblFleetMix	MHD	0.02	0.01
tblFleetMix	OBUS	1.6370e-003	0.00
tblFleetMix	OBUS	1.6370e-003	0.01
tblFleetMix	OBUS	1.6370e-003	0.01
tblFleetMix	SBUS	5.8300e-004	0.01
tblFleetMix	SBUS	5.8300e-004	0.01
tblFleetMix	SBUS	5.8300e-004	0.01
tblFleetMix	UBUS	1.6330e-003	0.01
tblFleetMix	UBUS	1.6330e-003	0.01
tblFleetMix	UBUS	1.6330e-003	0.01
tblLandUse	LandUseSquareFeet	1,310.00	1,315.00
tblLandUse	LandUseSquareFeet	23,820.00	23,815.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblVehicleTrips	ST_TR	158.37	140.18
tblVehicleTrips	ST_TR	49.97	44.18
tblVehicleTrips	SU_TR	131.84	116.70
tblVehicleTrips	SU_TR	25.24	22.31
tblVehicleTrips	WD_TR	15.43	5.58
tblVehicleTrips	WD_TR	127.15	112.55
tblVehicleTrips	WD_TR	42.70	37.75

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North Orange Olive Existing Uses - Orange County, Summer

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/d	day							lb/d	day		
2019	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
Maximum	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

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/e	day							lb/d	day		
2019	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
Maximum	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

North Orange Olive Existing Uses - Orange County, Summer

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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North Orange Olive Existing Uses - Orange County, Summer

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/d	day							lb/d	day		
Area	0.8206	1.0000e- 004	0.0108	0.0000		4.0000e- 005	4.0000e- 005		4.0000e- 005	4.0000e- 005		0.0229	0.0229	6.0000e- 005		0.0245
Energy	0.0151	0.1369	0.1150	8.2000e- 004		0.0104	0.0104		0.0104	0.0104		164.2677	164.2677	3.1500e- 003	3.0100e- 003	165.2439
Mobile	2.0585	8.9540	22.4533	0.0663	5.9793	0.0802	6.0595	1.6319	0.0755	1.7074		6,853.070 6	6,853.070 6	0.6506		6,869.336 5
Total	2.8942	9.0910	22.5791	0.0671	5.9793	0.0907	6.0699	1.6319	0.0859	1.7178		7,017.361 2	7,017.361 2	0.6539	3.0100e- 003	7,034.604 9

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/d	day				lb/d	day					
Area	0.8206	1.0000e- 004	0.0108	0.0000		4.0000e- 005	4.0000e- 005		4.0000e- 005	4.0000e- 005		0.0229	0.0229	6.0000e- 005		0.0245
Energy	0.0151	0.1369	0.1150	8.2000e- 004		0.0104	0.0104		0.0104	0.0104		164.2677	164.2677	3.1500e- 003	3.0100e- 003	165.2439
Mobile	2.0585	8.9540	22.4533	0.0663	5.9793	0.0802	6.0595	1.6319	0.0755	1.7074		6,853.070 6	6,853.070 6	0.6506		6,869.336 5
Total	2.8942	9.0910	22.5791	0.0671	5.9793	0.0907	6.0699	1.6319	0.0859	1.7178		7,017.361 2	7,017.361 2	0.6539	3.0100e- 003	7,034.604 9

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North Orange Olive Existing Uses - Orange County, Summer

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Numbe	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/5/2019	1/4/2019	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.59

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	8.00	97	0.37

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
De	molition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

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North Orange Olive Existing Uses - Orange County, Summer

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

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/d	day							lb/d	day		
	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
Total	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

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/d	day							lb/c	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	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	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
Total	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

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North Orange Olive Existing Uses - Orange County, Summer

3.2 Demolition - 2019

<u>Mitigated Construction On-Site</u>

	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/d	day							lb/c	lay		
Off-Road	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
Total	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

Mitigated Construction Off-Site

	ROG	NOx	СО	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/d	day							lb/c	lay		
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	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
Total	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

4.0 Operational Detail - Mobile

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North Orange Olive Existing Uses - Orange County, Summer

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/d	day							lb/c	lay		
Mitigated	2.0585	8.9540	22.4533	0.0663	5.9793	0.0802	6.0595	1.6319	0.0755	1.7074		6,853.070 6	6,853.070 6	0.6506		6,869.336 5
Unmitigated	2.0585	8.9540	22.4533	0.0663	5.9793	0.0802	6.0595	1.6319	0.0755	1.7074	, 	6,853.070 6	6,853.070 6	0.6506		6,869.336 5

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	57.03	0.00	0.00	140,385	140,385
High Turnover (Sit Down Restaurant)	147.44	183.64	152.88	209,042	209,042
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	899.21	1,052.37	531.42	1,878,528	1,878,528
Total	1,103.67	1,236.00	684.30	2,227,955	2,227,955

4.3 Trip Type Information

North Orange Olive Existing Uses - Orange County, Summer

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.641114	0.064111	0.128223	0.053426	0.053426	0.010685	0.010685	0.010685	0.000000	0.010685	0.005161	0.010685	0.001112
High Turnover (Sit Down Restaurant)	0.747966	0.042741	0.064111	0.032056	0.042741	0.010685	0.010685	0.010685	0.010685	0.010685	0.005161	0.010685	0.001112
Parking Lot	0.552373	0.044229	0.211123	0.119112	0.017503	0.005797	0.024455	0.015685	0.001637	0.001633	0.004830	0.000583	0.001041
Regional Shopping Center	0.747966	0.042741	0.064111	0.032056	0.042741	0.010685	0.010685	0.010685	0.010685	0.010685	0.005161	0.010685	0.001112

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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North Orange Olive Existing Uses - Orange County, Summer

	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/d	day							lb/d	lay		
NaturalGas Mitigated	0.0151	0.1369	0.1150	8.2000e- 004		0.0104	0.0104		0.0104	0.0104		164.2677	164.2677	3.1500e- 003	3.0100e- 003	165.2439
NaturalGas Unmitigated	0.0151	0.1369	0.1150	8.2000e- 004		0.0104	0.0104		0.0104	0.0104		164.2677	164.2677	3.1500e- 003	3.0100e- 003	165.2439

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s 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/d	day							lb/c	lay		
Elementary School	331.52	3.5800e- 003	0.0325	0.0273	2.0000e- 004		2.4700e- 003	2.4700e- 003		2.4700e- 003	2.4700e- 003		39.0024	39.0024	7.5000e- 004	7.2000e- 004	39.2341
High Turnover (Sit Down Restaurant)		0.0101	0.0916	0.0769	5.5000e- 004		6.9600e- 003	6.9600e- 003		6.9600e- 003	6.9600e- 003		109.9132	109.9132	2.1100e- 003	2.0200e- 003	110.5664
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
Regional Shopping Center		1.4100e- 003	0.0128	0.0108	8.0000e- 005		9.7000e- 004	9.7000e- 004		9.7000e- 004	9.7000e- 004		15.3521	15.3521	2.9000e- 004	2.8000e- 004	15.4434
Total		0.0151	0.1369	0.1150	8.3000e- 004		0.0104	0.0104	·	0.0104	0.0104		164.2677	164.2677	3.1500e- 003	3.0200e- 003	165.2439

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North Orange Olive Existing Uses - Orange County, Summer

5.2 Energy by Land Use - NaturalGas Mitigated

	NaturalGa s 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/d	day							lb/d	lay		
Elementary School	0.33152	3.5800e- 003	0.0325	0.0273	2.0000e- 004		2.4700e- 003	2.4700e- 003		2.4700e- 003	2.4700e- 003		39.0024	39.0024	7.5000e- 004	7.2000e- 004	39.2341
High Turnover (Sit Down Restaurant)		0.0101	0.0916	0.0769	5.5000e- 004		6.9600e- 003	6.9600e- 003		6.9600e- 003	6.9600e- 003		109.9132	109.9132	2.1100e- 003	2.0200e- 003	110.5664
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
Regional Shopping Center	0.130493	1.4100e- 003	0.0128	0.0108	8.0000e- 005		9.7000e- 004	9.7000e- 004		9.7000e- 004	9.7000e- 004		15.3521	15.3521	2.9000e- 004	2.8000e- 004	15.4434
Total		0.0151	0.1369	0.1150	8.3000e- 004		0.0104	0.0104		0.0104	0.0104		164.2677	164.2677	3.1500e- 003	3.0200e- 003	165.2439

6.0 Area Detail

6.1 Mitigation Measures Area

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North Orange Olive Existing Uses - Orange County, Summer

	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/d	day							lb/d	day		
Mitigated	0.8206	1.0000e- 004	0.0108	0.0000		4.0000e- 005	4.0000e- 005	 	4.0000e- 005	4.0000e- 005		0.0229	0.0229	6.0000e- 005		0.0245
Unmitigated	0.8206	1.0000e- 004	0.0108	0.0000		4.0000e- 005	4.0000e- 005		4.0000e- 005	4.0000e- 005		0.0229	0.0229	6.0000e- 005		0.0245

6.2 Area by SubCategory

<u>Unmitigated</u>

	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	0.0951					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
Consumer Products	0.7245					0.0000	0.0000		0.0000	0.0000		,	0.0000	,		0.0000	
Landscaping	1.0200e- 003	1.0000e- 004	0.0108	0.0000		4.0000e- 005	4.0000e- 005	 - 	4.0000e- 005	4.0000e- 005		0.0229	0.0229	6.0000e- 005		0.0245	
Total	0.8206	1.0000e- 004	0.0108	0.0000		4.0000e- 005	4.0000e- 005		4.0000e- 005	4.0000e- 005		0.0229	0.0229	6.0000e- 005		0.0245	

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North Orange Olive Existing Uses - Orange County, Summer

6.2 Area by SubCategory

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	0.0951					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000		
Consumer Products	0.7245					0.0000	0.0000		0.0000	0.0000		;	0.0000			0.0000		
Landscaping	1.0200e- 003	1.0000e- 004	0.0108	0.0000		4.0000e- 005	4.0000e- 005		4.0000e- 005	4.0000e- 005		0.0229	0.0229	6.0000e- 005		0.0245		
Total	0.8206	1.0000e- 004	0.0108	0.0000		4.0000e- 005	4.0000e- 005		4.0000e- 005	4.0000e- 005		0.0229	0.0229	6.0000e- 005		0.0245		

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/Dav	Davs/Year	Horse Power	Load Factor	Fuel Type
Equipment Type	ramboi	riours/Buy	Bays, real	rioise i swei	Load I doloi	1 doi 1ypo

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

North Orange Olive Existing Uses - Orange County, Summer

	Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
--	----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	10.22	1000sqft	0.23	10,220.00	0
Parking Lot	69.43	1000sqft	1.59	69,430.00	0
High Turnover (Sit Down Restaurant)	1.31	1000sqft	0.03	1,315.00	0
Regional Shopping Center	23.82	1000sqft	0.55	23,815.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)30Climate Zone8Operational Year2019

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on Traffic Data and site aerial estimates

Construction Phase - No Construction (Existing Uses)

Vehicle Trips -

Off-road Equipment - No Construction (Existing Uses)

Trips and VMT - No Construction (Existing Uses)

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Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblFleetMix	HHD	0.02	0.01
tblFleetMix	HHD	0.02	0.01
tblFleetMix	HHD	0.02	0.01
tblFleetMix	LDA	0.55	0.64
tblFleetMix	LDA	0.55	0.75
tblFleetMix	LDA	0.55	0.75
tblFleetMix	LDT1	0.04	0.06
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.21	0.13
tblFleetMix	LDT2	0.21	0.06
tblFleetMix	LDT2	0.21	0.06
tblFleetMix	LHD1	0.02	0.05
tblFleetMix	LHD1	0.02	0.04
tblFleetMix	LHD1	0.02	0.04
tblFleetMix	LHD2	5.7970e-003	0.01
tblFleetMix	LHD2	5.7970e-003	0.01
tblFleetMix	LHD2	5.7970e-003	0.01
tblFleetMix	MCY	4.8300e-003	5.1610e-003
tblFleetMix	MCY	4.8300e-003	5.1610e-003
tblFleetMix	MCY	4.8300e-003	5.1610e-003
tblFleetMix	MDV	0.12	0.05
tblFleetMix	MDV	0.12	0.03
tblFleetMix	MDV	0.12	0.03
tblFleetMix	MH	1.0410e-003	1.1120e-003

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tblFleetMix	MH	1.0410e-003	1.1120e-003
tblFleetMix	MH	1.0410e-003	1.1120e-003
tblFleetMix	MHD	0.02	0.01
tblFleetMix	MHD	0.02	0.01
tblFleetMix	MHD	0.02	0.01
tblFleetMix	OBUS	1.6370e-003	0.00
tblFleetMix	OBUS	1.6370e-003	0.01
tblFleetMix	OBUS	1.6370e-003	0.01
tblFleetMix	SBUS	5.8300e-004	0.01
tblFleetMix	SBUS	5.8300e-004	0.01
tblFleetMix	SBUS	5.8300e-004	0.01
tblFleetMix	UBUS	1.6330e-003	0.01
tblFleetMix	UBUS	1.6330e-003	0.01
tblFleetMix	UBUS	1.6330e-003	0.01
tblLandUse	LandUseSquareFeet	1,310.00	1,315.00
tblLandUse	LandUseSquareFeet	23,820.00	23,815.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblVehicleTrips	ST_TR	158.37	140.18
tblVehicleTrips	ST_TR	49.97	44.18
tblVehicleTrips	SU_TR	131.84	116.70
tblVehicleTrips	SU_TR	25.24	22.31
tblVehicleTrips	WD_TR	15.43	5.58
tblVehicleTrips	WD_TR	127.15	112.55
tblVehicleTrips	WD_TR	42.70	37.75

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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
2019	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
Maximum	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

Mitigated Construction

	ROG	NOx	СО	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					ton	s/yr							MT	⁻ /yr		
2019	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
Maximum	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

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	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					ton	s/yr							МТ	Γ/yr		
Area	0.1497	1.0000e- 005	1.3500e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6000e- 003	2.6000e- 003	1.0000e- 005	0.0000	2.7800e- 003
Energy	2.7500e- 003	0.0250	0.0210	1.5000e- 004		1.9000e- 003	1.9000e- 003		1.9000e- 003	1.9000e- 003	0.0000	156.8284	156.8284	5.8700e- 003	1.6100e- 003	157.4538
Mobile	0.2949	1.3946	3.3170	9.5700e- 003	0.8753	0.0120	0.8873	0.2393	0.0113	0.2506	0.0000	898.2617	898.2617	0.0878	0.0000	900.4567
Waste			 			0.0000	0.0000		0.0000	0.0000	10.9392	0.0000	10.9392	0.6465	0.0000	27.1014
Water		i i				0.0000	0.0000		0.0000	0.0000	0.7799	16.8147	17.5947	0.0808	2.0400e- 003	20.2211
Total	0.4474	1.4196	3.3393	9.7200e- 003	0.8753	0.0139	0.8892	0.2393	0.0132	0.2525	11.7191	1,071.907 4	1,083.626 5	0.8210	3.6500e- 003	1,105.235 8

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
Area	0.1497	1.0000e- 005	1.3500e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6000e- 003	2.6000e- 003	1.0000e- 005	0.0000	2.7800e- 003
Energy	2.7500e- 003	0.0250	0.0210	1.5000e- 004		1.9000e- 003	1.9000e- 003		1.9000e- 003	1.9000e- 003	0.0000	156.8284	156.8284	5.8700e- 003	1.6100e- 003	157.4538
Mobile	0.2949	1.3946	3.3170	9.5700e- 003	0.8753	0.0120	0.8873	0.2393	0.0113	0.2506	0.0000	898.2617	898.2617	0.0878	0.0000	900.4567
Waste						0.0000	0.0000		0.0000	0.0000	10.9392	0.0000	10.9392	0.6465	0.0000	27.1014
Water						0.0000	0.0000		0.0000	0.0000	0.7799	16.8147	17.5947	0.0808	2.0400e- 003	20.2211
Total	0.4474	1.4196	3.3393	9.7200e- 003	0.8753	0.0139	0.8892	0.2393	0.0132	0.2525	11.7191	1,071.907 4	1,083.626 5	0.8210	3.6500e- 003	1,105.235 8

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Numbe	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/5/2019	1/4/2019	5	0	

Acres of Grading (Site Preparation Phase): 0

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Acres of Grading (Grading Phase): 0

Acres of Paving: 1.59

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	8.00	97	0.37

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		Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Demolition - 2019
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					ton	s/yr							MT	/yr		
Off-Road	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
Total	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

Unmitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/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	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
Total	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

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3.2 Demolition - 2019

<u>Mitigated Construction On-Site</u>

	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					ton	s/yr							MT	/yr		
	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
Total	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

Mitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/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	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
Total	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

4.0 Operational Detail - Mobile

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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					ton	s/yr							МТ	/yr		
Mitigated	0.2949	1.3946	3.3170	9.5700e- 003	0.8753	0.0120	0.8873	0.2393	0.0113	0.2506	0.0000	898.2617	898.2617	0.0878	0.0000	900.4567
Unmitigated	0.2949	1.3946	3.3170	9.5700e- 003	0.8753	0.0120	0.8873	0.2393	0.0113	0.2506	0.0000	898.2617	898.2617	0.0878	0.0000	900.4567

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	57.03	0.00	0.00	140,385	140,385
High Turnover (Sit Down Restaurant)	147.44	183.64	152.88	209,042	209,042
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	899.21	1,052.37	531.42	1,878,528	1,878,528
Total	1,103.67	1,236.00	684.30	2,227,955	2,227,955

4.3 Trip Type Information

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		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Elementary School	16.60	8.40	6.90	65.00	30.00	5.00	63	25	12
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Elementary School	0.641114	0.064111	0.128223	0.053426	0.053426	0.010685	0.010685	0.010685	0.000000	0.010685	0.005161	0.010685	0.001112
High Turnover (Sit Down Restaurant)	0.747966	0.042741	0.064111	0.032056	0.042741	0.010685	0.010685	0.010685	0.010685	0.010685	0.005161	0.010685	0.001112
Parking Lot	0.552373	0.044229	0.211123	0.119112	0.017503	0.005797	0.024455	0.015685	0.001637	0.001633	0.004830	0.000583	0.001041
Regional Shopping Center	0.747966	0.042741	0.064111	0.032056	0.042741	0.010685	0.010685	0.010685	0.010685	0.010685	0.005161	0.010685	0.001112

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	СО	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													MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	129.6321	129.6321	5.3500e- 003	1.1100e- 003	130.0958
Electricity Unmitigated			, 			0.0000	0.0000	 	0.0000	0.0000	0.0000	129.6321	129.6321	5.3500e- 003	1.1100e- 003	130.0958
NaturalGas Mitigated	2.7500e- 003	0.0250	0.0210	1.5000e- 004		1.9000e- 003	1.9000e- 003		1.9000e- 003	1.9000e- 003	0.0000	27.1964	27.1964	5.2000e- 004	5.0000e- 004	27.3580
NaturalGas Unmitigated	2.7500e- 003	0.0250	0.0210	1.5000e- 004		1.9000e- 003	1.9000e- 003	, 	1.9000e- 003	1.9000e- 003	0.0000	27.1964	27.1964	5.2000e- 004	5.0000e- 004	27.3580

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	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	/уг		
Elementary School	121005	6.5000e- 004	5.9300e- 003	4.9800e- 003	4.0000e- 005		4.5000e- 004	4.5000e- 004		4.5000e- 004	4.5000e- 004	0.0000	6.4573	6.4573	1.2000e- 004	1.2000e- 004	6.4957
High Turnover (Sit Down Restaurant)		1.8400e- 003	0.0167	0.0140	1.0000e- 004		1.2700e- 003	1.2700e- 003	, 	1.2700e- 003	1.2700e- 003	0.0000	18.1974	18.1974	3.5000e- 004	3.3000e- 004	18.3055
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
Regional Shopping Center	47630	2.6000e- 004	2.3300e- 003	1.9600e- 003	1.0000e- 005		1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004	0.0000	2.5417	2.5417	5.0000e- 005	5.0000e- 005	2.5568
Total		2.7500e- 003	0.0250	0.0210	1.5000e- 004		1.9000e- 003	1.9000e- 003		1.9000e- 003	1.9000e- 003	0.0000	27.1964	27.1964	5.2000e- 004	5.0000e- 004	27.3580

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5.2 Energy by Land Use - NaturalGas Mitigated

	NaturalGa s 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		
Elementary School	121005	6.5000e- 004	5.9300e- 003	4.9800e- 003	4.0000e- 005		4.5000e- 004	4.5000e- 004		4.5000e- 004	4.5000e- 004	0.0000	6.4573	6.4573	1.2000e- 004	1.2000e- 004	6.4957
High Turnover (Sit Down Restaurant)		1.8400e- 003	0.0167	0.0140	1.0000e- 004		1.2700e- 003	1.2700e- 003		1.2700e- 003	1.2700e- 003	0.0000	18.1974	18.1974	3.5000e- 004	3.3000e- 004	18.3055
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
Regional Shopping Center	47630	2.6000e- 004	2.3300e- 003	1.9600e- 003	1.0000e- 005		1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004	0.0000	2.5417	2.5417	5.0000e- 005	5.0000e- 005	2.5568
Total		2.7500e- 003	0.0250	0.0210	1.5000e- 004		1.9000e- 003	1.9000e- 003		1.9000e- 003	1.9000e- 003	0.0000	27.1964	27.1964	5.2000e- 004	5.0000e- 004	27.3580

North Orange Olive Existing Uses - Orange County, Annual

5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	-/yr	
Elementary School	62137.6	19.7984	8.2000e- 004	1.7000e- 004	19.8692
High Turnover (Sit Down Restaurant)		15.2847	6.3000e- 004	1.3000e- 004	15.3393
Parking Lot	24300.5	7.7427	3.2000e- 004	7.0000e- 005	7.7704
Regional Shopping Center	272444	86.8064	3.5800e- 003	7.4000e- 004	87.1169
Total		129.6321	5.3500e- 003	1.1100e- 003	130.0958

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5.3 Energy by Land Use - Electricity Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Elementary School	62137.6	19.7984	8.2000e- 004	1.7000e- 004	19.8692
High Turnover (Sit Down Restaurant)		15.2847	6.3000e- 004	1.3000e- 004	15.3393
Parking Lot	24300.5	7.7427	3.2000e- 004	7.0000e- 005	7.7704
Regional Shopping Center	272444	86.8064	3.5800e- 003	7.4000e- 004	87.1169
Total		129.6321	5.3500e- 003	1.1100e- 003	130.0958

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	СО	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					ton	s/yr							MT	-/yr		
Mitigated	0.1497	1.0000e- 005	1.3500e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6000e- 003	2.6000e- 003	1.0000e- 005	0.0000	2.7800e- 003
Unmitigated	0.1497	1.0000e- 005	1.3500e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6000e- 003	2.6000e- 003	1.0000e- 005	0.0000	2.7800e- 003

6.2 Area by SubCategory

<u>Unmitigated</u>

	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											МТ	-/yr			
Architectural Coating	0.0174					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1322					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3000e- 004	1.0000e- 005	1.3500e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6000e- 003	2.6000e- 003	1.0000e- 005	0.0000	2.7800e- 003
Total	0.1497	1.0000e- 005	1.3500e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6000e- 003	2.6000e- 003	1.0000e- 005	0.0000	2.7800e- 003

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6.2 Area by SubCategory 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												МТ	-/yr		
Architectural Coating	0.0174					0.0000	0.0000	i i	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1322					0.0000	0.0000	1 1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3000e- 004	1.0000e- 005	1.3500e- 003	0.0000		0.0000	0.0000	1 1 1 1	0.0000	0.0000	0.0000	2.6000e- 003	2.6000e- 003	1.0000e- 005	0.0000	2.7800e- 003
Total	0.1497	1.0000e- 005	1.3500e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.6000e- 003	2.6000e- 003	1.0000e- 005	0.0000	2.7800e- 003

7.0 Water Detail

7.1 Mitigation Measures Water

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North Orange Olive Existing Uses - Orange County, Annual

	Total CO2	CH4	N2O	CO2e
Category		МТ	√yr	
		0.0808	2.0400e- 003	20.2211
Jgatou	17.5947	0.0808	2.0400e- 003	20.2211

7.2 Water by Land Use Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
	0.296348 / 0.762039	4.0210	9.8200e- 003	2.6000e- 004	4.3444
High Turnover (Sit Down Restaurant)	0.397629 / 0.0253806	1.8657	0.0130	3.2000e- 004	2.2870
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	1.76441 / 1.08141	11.7080	0.0580	1.4500e- 003	13.5897
Total		17.5947	0.0808	2.0300e- 003	20.2211

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7.2 Water by Land Use Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	0.296348 / 0.762039	4.0210	9.8200e- 003	2.6000e- 004	4.3444
High Turnover (Sit Down Restaurant)			0.0130	3.2000e- 004	2.2870
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	1.76441 / 1.08141	11.7080	0.0580	1.4500e- 003	13.5897
Total		17.5947	0.0808	2.0300e- 003	20.2211

8.0 Waste Detail

8.1 Mitigation Measures Waste

North Orange Olive Existing Uses - Orange County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e	
	MT/yr				
gatea	10.9392	0.6465	0.0000	27.1014	
Unmitigated	10.9392	0.6465	0.0000	27.1014	

8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	13.29	2.6978	0.1594	0.0000	6.6836
High Turnover (Sit Down Restaurant)		3.1646	0.1870	0.0000	7.8402
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	25.01	5.0768	0.3000	0.0000	12.5776
Total		10.9392	0.6465	0.0000	27.1014

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e				
Land Use	tons		MT/yr						
Elementary School	13.29	2.6978	0.1594	0.0000	6.6836				
High Turnover (Sit Down Restaurant)		3.1646	0.1870	0.0000	7.8402				
Parking Lot	0	0.0000	0.0000	0.0000	0.0000				
Regional Shopping Center	25.01	5.0768	0.3000	0.0000	12.5776				
Total		10.9392	0.6465	0.0000	27.1014				

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

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Equipment Type	Number
----------------	--------

11.0 Vegetation

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North Orange Olive Road Proposed Project - Orange County, Winter

North Orange Olive Road Proposed Project Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	32.00	Dwelling Unit	2.90	62,864.00	92

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2020
Utility Company	Southern California Ediso	n			
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

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North Orange Olive Road Proposed Project - Orange County, Winter

Project Characteristics -

Land Use - .

Construction Phase - Defaults

Trips and VMT - Default

Demolition - All buildings and asphalt demolition

Vehicle Trips - per Traffic Data

Woodstoves - No Woodstoves per SCAQMD Rule 445

Energy Use - Default

Construction Off-road Equipment Mitigation - .

Energy Mitigation -

North Orange Olive Road Proposed Project - Orange County, Winter

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Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.60	0.00
tblFleetMix	HHD	0.02	0.01
tblFleetMix	LDA	0.56	0.68
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.21	0.10
tblFleetMix	LHD1	0.02	0.05
tblFleetMix	LHD2	5.7950e-003	0.01
tblFleetMix	MCY	4.8670e-003	5.2470e-003
tblFleetMix	MDV	0.12	0.05
tblFleetMix	MH	1.0020e-003	0.00
tblFleetMix	MHD	0.03	0.01
tblFleetMix	OBUS	1.6770e-003	0.00
tblFleetMix	SBUS	5.8600e-004	0.01
tblFleetMix	UBUS	1.5860e-003	0.01
tblLandUse	LandUseSquareFeet	57,600.00	62,864.00
tblLandUse	LotAcreage	10.39	2.90
tblVehicleTrips	ST_TR	9.91	9.82
tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	9.52	9.44
tblWoodstoves	NumberCatalytic	1.60	0.00
tblWoodstoves	NumberNoncatalytic	1.60	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

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North Orange Olive Road Proposed Project - Orange County, Winter

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/d	day							lb/d	lay		
2019	2.6256	27.1733	16.4408	0.0368	6.6641	1.3045	7.7378	3.3971	1.2192	4.3849	0.0000	3,761.209 2	3,761.209 2	0.7698	0.0000	3,779.751 2
2020	39.5865	17.7780	15.3506	0.0270	0.1677	0.9507	1.1040	0.0445	0.9113	0.9524	0.0000	2,492.022 1	2,492.022 1	0.5452	0.0000	2,503.879 1
Maximum	39.5865	27.1733	16.4408	0.0368	6.6641	1.3045	7.7378	3.3971	1.2192	4.3849	0.0000	3,761.209 2	3,761.209 2	0.7698	0.0000	3,779.751 2

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Tota	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day									lb/day						
2019	2.6256	27.1733	16.4408	0.0368	2.6672	1.3045	3.7409	1.3430	1.2192	2.3308	0.0000	3,761.209 2	3,761.209 2	0.7698	0.0000	3,779.751 2
2020	39.5865	17.7780	15.3506	0.0270	0.1677	0.9507	1.1040	0.0445	0.9113	0.9524	0.0000	2,492.022 1	2,492.022 1	0.5452	0.0000	2,503.879 1
Maximum	39.5865	27.1733	16.4408	0.0368	2.6672	1.3045	3.7409	1.3430	1.2192	2.3308	0.0000	3,761.209 2	3,761.209 2	0.7698	0.0000	3,779.751 2
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	58.50	0.00	45.20	59.69	0.00	38.49	0.00	0.00	0.00	0.00	0.00	0.00

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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	1.4859	0.4818	2.8408	3.0200e- 003		0.0510	0.0510		0.0510	0.0510	0.0000	580.7537	580.7537	0.0157	0.0106	584.2924
Energy	0.0244	0.2085	0.0887	1.3300e- 003		0.0169	0.0169		0.0169	0.0169		266.1586	266.1586	5.1000e- 003	4.8800e- 003	267.7403
Mobile	0.5675	2.8028	7.2865	0.0239	2.3511	0.0273	2.3785	0.6407	0.0257	0.6663		2,471.980 0	2,471.980 0	0.2269		2,477.652 0
Total	2.0779	3.4931	10.2160	0.0282	2.3511	0.0952	2.4464	0.6407	0.0936	0.7342	0.0000	3,318.892 2	3,318.892 2	0.2477	0.0154	3,329.684 7

Mitigated Operational

	ROG	NOx	СО	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	1.4859	0.4818	2.8408	3.0200e- 003		0.0510	0.0510		0.0510	0.0510	0.0000	580.7537	580.7537	0.0157	0.0106	584.2924
Energy	0.0244	0.2085	0.0887	1.3300e- 003		0.0169	0.0169		0.0169	0.0169		266.1586	266.1586	5.1000e- 003	4.8800e- 003	267.7403
Mobile	0.5675	2.8028	7.2865	0.0239	2.3511	0.0273	2.3785	0.6407	0.0257	0.6663		2,471.980 0	2,471.980 0	0.2269		2,477.652 0
Total	2.0779	3.4931	10.2160	0.0282	2.3511	0.0952	2.4464	0.6407	0.0936	0.7342	0.0000	3,318.892 2	3,318.892	0.2477	0.0154	3,329.684 7

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2019	3/28/2019	5	20	
2	Site Preparation	Site Preparation	3/29/2019	4/2/2019	5	3	
3	Grading	Grading	4/3/2019	4/10/2019	5	6	
4	Building Construction	Building Construction	4/11/2019	2/12/2020	5	220	
5	Paving	Paving	2/13/2020	2/26/2020	5	10	
6	Architectural Coating	Architectural Coating	2/27/2020	3/11/2020	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0

Residential Indoor: 127,300; Residential Outdoor: 42,433; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating - sqft)

OffRoad Equipment

North Orange Olive Road Proposed Project - Orange County, Winter

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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North Orange Olive Road Proposed Project - Orange County, Winter

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
Demolition	5	13.00	0.00	297.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	12.00	3.00	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	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 **Demolition - 2019**

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/d	day							lb/d	lay		
Fugitive Dust					3.2141	0.0000	3.2141	0.4867	0.0000	0.4867			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241	 	1.2863	1.2863		1.2017	1.2017		2,360.719 8	2,360.719 8	0.6011	 	2,375.747 5
Total	2.2950	22.6751	14.8943	0.0241	3.2141	1.2863	4.5004	0.4867	1.2017	1.6884		2,360.719 8	2,360.719 8	0.6011		2,375.747 5

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North Orange Olive Road Proposed Project - Orange County, Winter

3.2 Demolition - 2019

<u>Unmitigated Construction Off-Site</u>

	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/d	day		
Hauling	0.1267	4.4596	1.1171	0.0114	0.2586	0.0173	0.2759	0.0708	0.0165	0.0873		1,261.938 8	1,261.938 8	0.1372		1,265.367 8
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	0.0604	0.0386	0.4294	1.3900e- 003	0.1453	9.7000e- 004	0.1463	0.0385	8.9000e- 004	0.0394		138.5506	138.5506	3.4100e- 003		138.6359
Total	0.1871	4.4982	1.5465	0.0127	0.4039	0.0183	0.4221	0.1093	0.0174	0.1268		1,400.489 4	1,400.489 4	0.1406		1,404.003 7

Mitigated Construction On-Site

	ROG	NOx	СО	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/d	day							lb/c	lay		
Fugitive Dust					1.2535	0.0000	1.2535	0.1898	0.0000	0.1898			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017	0.0000	2,360.719 7	2,360.719 7	0.6011		2,375.747 5
Total	2.2950	22.6751	14.8943	0.0241	1.2535	1.2863	2.5398	0.1898	1.2017	1.3915	0.0000	2,360.719 7	2,360.719 7	0.6011		2,375.747 5

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North Orange Olive Road Proposed Project - Orange County, Winter

3.2 Demolition - 2019

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	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/d	day							lb/d	day		
Hauling	0.1267	4.4596	1.1171	0.0114	0.2586	0.0173	0.2759	0.0708	0.0165	0.0873		1,261.938 8	1,261.938 8	0.1372		1,265.367 8
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	0.0604	0.0386	0.4294	1.3900e- 003	0.1453	9.7000e- 004	0.1463	0.0385	8.9000e- 004	0.0394		138.5506	138.5506	3.4100e- 003	 	138.6359
Total	0.1871	4.4982	1.5465	0.0127	0.4039	0.0183	0.4221	0.1093	0.0174	0.1268		1,400.489 4	1,400.489 4	0.1406		1,404.003 7

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	СО	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/d	day							lb/c	lay		
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.7557	21.5386	11.9143	0.0245		0.8537	0.8537		0.7854	0.7854		2,426.540 8	2,426.540 8	0.7677		2,445.734 1
Total	1.7557	21.5386	11.9143	0.0245	1.5908	0.8537	2.4445	0.1718	0.7854	0.9572		2,426.540 8	2,426.540 8	0.7677		2,445.734 1

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North Orange Olive Road Proposed Project - Orange County, Winter

3.3 Site Preparation - 2019

<u>Unmitigated Construction Off-Site</u>

	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/d	day							lb/d	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	0.0372	0.0238	0.2642	8.6000e- 004	0.0894	6.0000e- 004	0.0900	0.0237	5.5000e- 004	0.0243		85.2619	85.2619	2.1000e- 003		85.3144
Total	0.0372	0.0238	0.2642	8.6000e- 004	0.0894	6.0000e- 004	0.0900	0.0237	5.5000e- 004	0.0243		85.2619	85.2619	2.1000e- 003		85.3144

Mitigated Construction On-Site

	ROG	NOx	СО	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/d	day							lb/d	lay		
Fugitive Dust					0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000			0.0000
Off-Road	1.7557	21.5386	11.9143	0.0245	 	0.8537	0.8537	 	0.7854	0.7854	0.0000	2,426.540 8	2,426.540 8	0.7677	 	2,445.734 1
Total	1.7557	21.5386	11.9143	0.0245	0.6204	0.8537	1.4741	0.0670	0.7854	0.8524	0.0000	2,426.540 8	2,426.540 8	0.7677		2,445.734 1

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North Orange Olive Road Proposed Project - Orange County, Winter

3.3 Site Preparation - 2019

<u>Mitigated Construction Off-Site</u>

	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/d	day							lb/d	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	0.0372	0.0238	0.2642	8.6000e- 004	0.0894	6.0000e- 004	0.0900	0.0237	5.5000e- 004	0.0243		85.2619	85.2619	2.1000e- 003		85.3144
Total	0.0372	0.0238	0.2642	8.6000e- 004	0.0894	6.0000e- 004	0.0900	0.0237	5.5000e- 004	0.0243		85.2619	85.2619	2.1000e- 003		85.3144

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	СО	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/d	day							lb/c	day		
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.0287	22.7444	10.1518	0.0206	 	1.0730	1.0730		0.9871	0.9871		2,041.253 9	2,041.253 9	0.6458	 	2,057.399 7
Total	2.0287	22.7444	10.1518	0.0206	6.5523	1.0730	7.6253	3.3675	0.9871	4.3546		2,041.253 9	2,041.253 9	0.6458		2,057.399 7

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North Orange Olive Road Proposed Project - Orange County, Winter

3.4 Grading - 2019

<u>Unmitigated Construction Off-Site</u>

	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/d	day							lb/d	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	0.0465	0.0297	0.3303	1.0700e- 003	0.1118	7.5000e- 004	0.1125	0.0296	6.9000e- 004	0.0303		106.5774	106.5774	2.6300e- 003		106.6430
Total	0.0465	0.0297	0.3303	1.0700e- 003	0.1118	7.5000e- 004	0.1125	0.0296	6.9000e- 004	0.0303		106.5774	106.5774	2.6300e- 003		106.6430

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/d	day							lb/c	day		
Fugitive Dust					2.5554	0.0000	2.5554	1.3133	0.0000	1.3133			0.0000			0.0000
Off-Road	2.0287	22.7444	10.1518	0.0206		1.0730	1.0730] 	0.9871	0.9871	0.0000	2,041.253 9	2,041.253 9	0.6458		2,057.399 7
Total	2.0287	22.7444	10.1518	0.0206	2.5554	1.0730	3.6284	1.3133	0.9871	2.3005	0.0000	2,041.253 9	2,041.253 9	0.6458		2,057.399 7

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3.4 Grading - 2019

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/d	day							lb/d	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	0.0465	0.0297	0.3303	1.0700e- 003	0.1118	7.5000e- 004	0.1125	0.0296	6.9000e- 004	0.0303		106.5774	106.5774	2.6300e- 003		106.6430
Total	0.0465	0.0297	0.3303	1.0700e- 003	0.1118	7.5000e- 004	0.1125	0.0296	6.9000e- 004	0.0303		106.5774	106.5774	2.6300e- 003		106.6430

3.5 Building Construction - 2019

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/d	day							lb/c	lay		
Off-Road	2.5581	18.9103	15.2545	0.0250		1.0901	1.0901		1.0449	1.0449		2,312.145 4	2,312.145 4	0.4810		2,324.170 5
Total	2.5581	18.9103	15.2545	0.0250		1.0901	1.0901		1.0449	1.0449		2,312.145 4	2,312.145 4	0.4810		2,324.170 5

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3.5 Building Construction - 2019 <u>Unmitigated Construction Off-Site</u>

	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/d	day							lb/d	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	0.0117	0.3408	0.0988	7.4000e- 004	0.0192	2.3400e- 003	0.0215	5.5200e- 003	2.2400e- 003	7.7600e- 003		79.9065	79.9065	7.2800e- 003	 	80.0885
Worker	0.0558	0.0356	0.3963	1.2800e- 003	0.1341	9.0000e- 004	0.1350	0.0356	8.3000e- 004	0.0364		127.8928	127.8928	3.1500e- 003	 	127.9716
Total	0.0675	0.3764	0.4952	2.0200e- 003	0.1533	3.2400e- 003	0.1565	0.0411	3.0700e- 003	0.0442		207.7994	207.7994	0.0104		208.0601

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/d	day							lb/c	lay		
Off-Road	2.5581	18.9103	15.2545	0.0250		1.0901	1.0901		1.0449	1.0449	0.0000	2,312.145 4	2,312.145 4	0.4810		2,324.170 5
Total	2.5581	18.9103	15.2545	0.0250		1.0901	1.0901		1.0449	1.0449	0.0000	2,312.145 4	2,312.145 4	0.4810		2,324.170 5

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3.5 Building Construction - 2019 Mitigated Construction Off-Site

	ROG	NOx	СО	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/d	day							lb/d	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	0.0117	0.3408	0.0988	7.4000e- 004	0.0192	2.3400e- 003	0.0215	5.5200e- 003	2.2400e- 003	7.7600e- 003		79.9065	79.9065	7.2800e- 003		80.0885
Worker	0.0558	0.0356	0.3963	1.2800e- 003	0.1341	9.0000e- 004	0.1350	0.0356	8.3000e- 004	0.0364		127.8928	127.8928	3.1500e- 003		127.9716
Total	0.0675	0.3764	0.4952	2.0200e- 003	0.1533	3.2400e- 003	0.1565	0.0411	3.0700e- 003	0.0442		207.7994	207.7994	0.0104		208.0601

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	СО	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/d	day							lb/c	lay		
Off-Road	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089		2,288.887 7	2,288.887 7	0.4646		2,300.501 4
Total	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089		2,288.887 7	2,288.887	0.4646		2,300.501 4

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North Orange Olive Road Proposed Project - Orange County, Winter

3.5 Building Construction - 2020 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/d	day							lb/d	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	0.0100	0.3124	0.0904	7.3000e- 004	0.0192	1.6600e- 003	0.0208	5.5200e- 003	1.5900e- 003	7.1000e- 003		79.3398	79.3398	6.9100e- 003		79.5126
Worker	0.0521	0.0319	0.3630	1.2400e- 003	0.1341	8.9000e- 004	0.1350	0.0356	8.2000e- 004	0.0364		123.7945	123.7945	2.8200e- 003		123.8652
Total	0.0621	0.3444	0.4535	1.9700e- 003	0.1533	2.5500e- 003	0.1559	0.0411	2.4100e- 003	0.0435		203.1344	203.1344	9.7300e- 003		203.3777

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/d	day							lb/c	lay		
Off-Road	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089	0.0000	2,288.887 7	2,288.887 7	0.4646		2,300.501 4
Total	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089	0.0000	2,288.887 7	2,288.887 7	0.4646		2,300.501 4

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North Orange Olive Road Proposed Project - Orange County, Winter

3.5 Building Construction - 2020 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/d	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	0.0100	0.3124	0.0904	7.3000e- 004	0.0192	1.6600e- 003	0.0208	5.5200e- 003	1.5900e- 003	7.1000e- 003		79.3398	79.3398	6.9100e- 003		79.5126
Worker	0.0521	0.0319	0.3630	1.2400e- 003	0.1341	8.9000e- 004	0.1350	0.0356	8.2000e- 004	0.0364		123.7945	123.7945	2.8200e- 003		123.8652
Total	0.0621	0.3444	0.4535	1.9700e- 003	0.1533	2.5500e- 003	0.1559	0.0411	2.4100e- 003	0.0435		203.1344	203.1344	9.7300e- 003		203.3777

3.6 Paving - 2020

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/d	day							lb/c	day		
Off-Road	1.1547	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051		1,709.218 0	1,709.218 0	0.5417		1,722.760 5
Paving	0.0000	 	I I		 	0.0000	0.0000		0.0000	0.0000			0.0000		 	0.0000
Total	1.1547	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051		1,709.218 0	1,709.218 0	0.5417		1,722.760 5

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North Orange Olive Road Proposed Project - Orange County, Winter

3.6 Paving - 2020
Unmitigated Construction Off-Site

	ROG	NOx	СО	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/d	day							lb/d	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	0.0651	0.0399	0.4538	1.5500e- 003	0.1677	1.1100e- 003	0.1688	0.0445	1.0200e- 003	0.0455		154.7432	154.7432	3.5300e- 003		154.8314
Total	0.0651	0.0399	0.4538	1.5500e- 003	0.1677	1.1100e- 003	0.1688	0.0445	1.0200e- 003	0.0455		154.7432	154.7432	3.5300e- 003		154.8314

Mitigated Construction On-Site

	ROG	NOx	СО	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/d	day							lb/c	lay		
Off-Road	1.1547	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051	0.0000	1,709.218 0	1,709.218 0	0.5417		1,722.760 5
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1547	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051	0.0000	1,709.218 0	1,709.218 0	0.5417		1,722.760 5

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North Orange Olive Road Proposed Project - Orange County, Winter

3.6 Paving - 2020 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/d	day							lb/d	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	0.0651	0.0399	0.4538	1.5500e- 003	0.1677	1.1100e- 003	0.1688	0.0445	1.0200e- 003	0.0455		154.7432	154.7432	3.5300e- 003		154.8314
Total	0.0651	0.0399	0.4538	1.5500e- 003	0.1677	1.1100e- 003	0.1688	0.0445	1.0200e- 003	0.0455		154.7432	154.7432	3.5300e- 003		154.8314

3.7 Architectural Coating - 2020

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/d	day							lb/c	lay		
Archit. Coating	39.3356					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	39.5778	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

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3.7 Architectural Coating - 2020 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/d	day							lb/c	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	8.6900e- 003	5.3200e- 003	0.0605	2.1000e- 004	0.0224	1.5000e- 004	0.0225	5.9300e- 003	1.4000e- 004	6.0600e- 003		20.6324	20.6324	4.7000e- 004		20.6442
Total	8.6900e- 003	5.3200e- 003	0.0605	2.1000e- 004	0.0224	1.5000e- 004	0.0225	5.9300e- 003	1.4000e- 004	6.0600e- 003		20.6324	20.6324	4.7000e- 004		20.6442

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/d	day							lb/d	day		
Archit. Coating	39.3356					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.2422	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	39.5778	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

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North Orange Olive Road Proposed Project - Orange County, Winter

3.7 Architectural Coating - 2020 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/d	day							lb/d	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	8.6900e- 003	5.3200e- 003	0.0605	2.1000e- 004	0.0224	1.5000e- 004	0.0225	5.9300e- 003	1.4000e- 004	6.0600e- 003		20.6324	20.6324	4.7000e- 004		20.6442
Total	8.6900e- 003	5.3200e- 003	0.0605	2.1000e- 004	0.0224	1.5000e- 004	0.0225	5.9300e- 003	1.4000e- 004	6.0600e- 003		20.6324	20.6324	4.7000e- 004		20.6442

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

North Orange Olive Road Proposed Project - Orange County, Winter

	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/d	day							lb/c	lay		
Mitigated	0.5675	2.8028	7.2865	0.0239	2.3511	0.0273	2.3785	0.6407	0.0257	0.6663		2,471.980 0	2,471.980 0	0.2269		2,477.652 0
Unmitigated	0.5675	2.8028	7.2865	0.0239	2.3511	0.0273	2.3785	0.6407	0.0257	0.6663		2,471.980 0	2,471.980 0	0.2269		2,477.652 0

4.2 Trip Summary Information

	Avei	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	302.08	314.24	273.60	1,024,286	1,024,286
Total	302.08	314.24	273.60	1,024,286	1,024,286

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	se %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Single Family Housing	0.682057	0.050367	0.104932	0.052466	0.052466	0.010493	0.010493	0.010493	0.000000	0.010493	0.005247	0.010493	0.000000

5.0 Energy Detail

Historical Energy Use: N

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North Orange Olive Road Proposed Project - Orange County, Winter

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/d	day							lb/c	lay		
NaturalGas Mitigated	0.0244	0.2085	0.0887	1.3300e- 003		0.0169	0.0169		0.0169	0.0169		266.1586	266.1586	5.1000e- 003	4.8800e- 003	267.7403
NaturalGas Unmitigated	0.0244	0.2085	0.0887	1.3300e- 003		0.0169	0.0169		0.0169	0.0169		266.1586	266.1586	5.1000e- 003	4.8800e- 003	267.7403

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s 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/d	day							lb/c	day		
Single Family Housing	2262.35	0.0244	0.2085	0.0887	1.3300e- 003		0.0169	0.0169		0.0169	0.0169		266.1586	266.1586	5.1000e- 003	4.8800e- 003	267.7403
Total		0.0244	0.2085	0.0887	1.3300e- 003		0.0169	0.0169		0.0169	0.0169		266.1586	266.1586	5.1000e- 003	4.8800e- 003	267.7403

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North Orange Olive Road Proposed Project - Orange County, Winter

5.2 Energy by Land Use - NaturalGas Mitigated

	NaturalGa s 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/d	day							lb/c	lay		
Single Family Housing	2.26235	0.0244	0.2085	0.0887	1.3300e- 003		0.0169	0.0169		0.0169	0.0169		266.1586	266.1586	5.1000e- 003	4.8800e- 003	267.7403
Total		0.0244	0.2085	0.0887	1.3300e- 003	·	0.0169	0.0169		0.0169	0.0169		266.1586	266.1586	5.1000e- 003	4.8800e- 003	267.7403

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/d	day							lb/d	day		
Mitigated	1.4859	0.4818	2.8408	3.0200e- 003		0.0510	0.0510		0.0510	0.0510	0.0000	580.7537	580.7537	0.0157	0.0106	584.2924
Unmitigated	1.4859	0.4818	2.8408	3.0200e- 003		0.0510	0.0510		0.0510	0.0510	0.0000	580.7537	580.7537	0.0157	0.0106	584.2924

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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/d	day							lb/d	day		
Architectural Coating	0.1078			 		0.0000	0.0000	 	0.0000	0.0000			0.0000	! !		0.0000
Consumer Products	1.2447			 		0.0000	0.0000	 	0.0000	0.0000			0.0000			0.0000
Hearth	0.0528	0.4512	0.1920	2.8800e- 003		0.0365	0.0365	 	0.0365	0.0365	0.0000	576.0000	576.0000	0.0110	0.0106	579.4229
Landscaping	0.0807	0.0306	2.6488	1.4000e- 004		0.0146	0.0146	 	0.0146	0.0146		4.7537	4.7537	4.6400e- 003		4.8696
Total	1.4859	0.4818	2.8408	3.0200e- 003		0.0510	0.0510		0.0510	0.0510	0.0000	580.7537	580.7537	0.0157	0.0106	584.2924

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6.2 Area by SubCategory

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/e	day							lb/d	day		
Architectural Coating	0.1078					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2447		1 			0.0000	0.0000	1 1 1 1	0.0000	0.0000		;	0.0000			0.0000
Hearth	0.0528	0.4512	0.1920	2.8800e- 003		0.0365	0.0365	i i	0.0365	0.0365	0.0000	576.0000	576.0000	0.0110	0.0106	579.4229
Landscaping	0.0807	0.0306	2.6488	1.4000e- 004		0.0146	0.0146	1 1 1	0.0146	0.0146		4.7537	4.7537	4.6400e- 003		4.8696
Total	1.4859	0.4818	2.8408	3.0200e- 003		0.0510	0.0510		0.0510	0.0510	0.0000	580.7537	580.7537	0.0157	0.0106	584.2924

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

10.0 Stationary Equipment

North Orange Olive Road Proposed Project - Orange County, Winter

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
		4	4	4		4

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

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North Orange Olive Road Proposed Project - Orange County, Summer

North Orange Olive Road Proposed Project Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	32.00	Dwelling Unit	2.90	62,864.00	92

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2020
Utility Company	Southern California Edisc	on			
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

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North Orange Olive Road Proposed Project - Orange County, Summer

Project Characteristics -

Land Use - .

Construction Phase - Defaults

Trips and VMT - Default

Demolition - All buildings and asphalt demolition

Vehicle Trips - per Traffic Data

Woodstoves - No Woodstoves per SCAQMD Rule 445

Energy Use - Default

Construction Off-road Equipment Mitigation - .

Energy Mitigation -

North Orange Olive Road Proposed Project - Orange County, Summer

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Table Name	Column Name	Default Value	New Value			
tblFireplaces	FireplaceWoodMass	1,019.20	0.00			
tblFireplaces	NumberWood	1.60	0.00			
tblFleetMix	HHD	0.02	0.01			
tblFleetMix	LDA	0.56	0.68			
tblFleetMix	LDT1	0.04	0.05			
tblFleetMix	LDT2	0.21	0.10			
tblFleetMix	LHD1	0.02	0.05			
tblFleetMix	LHD2	5.7950e-003	0.01			
tblFleetMix	MCY	4.8670e-003	5.2470e-003			
tblFleetMix	MDV	0.12	0.05			
tblFleetMix	MH	1.0020e-003	0.00			
tblFleetMix	MHD	0.03	0.01			
tblFleetMix	OBUS	1.6770e-003	0.00			
tblFleetMix	SBUS	5.8600e-004	0.01			
tblFleetMix	UBUS	1.5860e-003	0.01			
tblLandUse	LandUseSquareFeet	57,600.00	62,864.00			
tblLandUse	LotAcreage	10.39	2.90			
tblVehicleTrips	ST_TR	9.91	9.82			
tblVehicleTrips	SU_TR	8.62	8.55			
tblVehicleTrips	WD_TR	9.52	9.44			
tblWoodstoves	NumberCatalytic	1.60	0.00			
tblWoodstoves	NumberNoncatalytic	1.60	0.00			
tblWoodstoves	WoodstoveDayYear	25.00	0.00			
tblWoodstoves	WoodstoveWoodMass	999.60	0.00			

2.0 Emissions Summary

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North Orange Olive Road Proposed Project - Orange County, Summer

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/d	day							lb/d	lay		
2019	2.6188	27.1120	16.4134	0.0371	6.6641	1.3042	7.7378	3.3971	1.2188	4.3849	0.0000	3,788.038 3	3,788.038 3	0.7699	0.0000	3,806.499 0
2020	39.5855	17.7752	15.3725	0.0271	0.1677	0.9507	1.1040	0.0445	0.9113	0.9524	0.0000	2,501.031 6	2,501.031 6	0.5454	0.0000	2,512.884 3
Maximum	39.5855	27.1120	16.4134	0.0371	6.6641	1.3042	7.7378	3.3971	1.2188	4.3849	0.0000	3,788.038 3	3,788.038 3	0.7699	0.0000	3,806.499 0

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Tota	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Year	lb/day									lb/day							
2019	2.6188	27.1120	16.4134	0.0371	2.6672	1.3042	3.7409	1.3430	1.2188	2.3308	0.0000	3,788.038 3	3,788.038 3	0.7699	0.0000	3,806.499 0	
2020	39.5855	17.7752	15.3725	0.0271	0.1677	0.9507	1.1040	0.0445	0.9113	0.9524	0.0000	2,501.031 6	2,501.031 6	0.5454	0.0000	2,512.884 3	
Maximum	39.5855	27.1120	16.4134	0.0371	2.6672	1.3042	3.7409	1.3430	1.2188	2.3308	0.0000	3,788.038 3	3,788.038 3	0.7699	0.0000	3,806.499 0	
	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	N20	CO2e	
Percent Reduction	0.00	0.00	0.00	0.00	58.50	0.00	45.20	59.69	0.00	38.49	0.00	0.00	0.00	0.00	0.00	0.00	

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North Orange Olive Road Proposed Project - Orange County, Summer

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	СО	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	1.4859	0.4818	2.8408	3.0200e- 003		0.0510	0.0510		0.0510	0.0510	0.0000	580.7537	580.7537	0.0157	0.0106	584.2924
Energy	0.0244	0.2085	0.0887	1.3300e- 003		0.0169	0.0169		0.0169	0.0169		266.1586	266.1586	5.1000e- 003	4.8800e- 003	267.7403
Mobile	0.5729	2.7100	7.5624	0.0249	2.3511	0.0272	2.3784	0.6407	0.0256	0.6662		2,577.873 2	2,577.873 2	0.2278		2,583.567 0
Total	2.0832	3.4003	10.4920	0.0293	2.3511	0.0951	2.4463	0.6407	0.0935	0.7341	0.0000	3,424.785 5	3,424.785 5	0.2485	0.0154	3,435.599 7

Mitigated Operational

	ROG	NOx	СО	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	1.4859	0.4818	2.8408	3.0200e- 003		0.0510	0.0510		0.0510	0.0510	0.0000	580.7537	580.7537	0.0157	0.0106	584.2924
Energy	0.0244	0.2085	0.0887	1.3300e- 003		0.0169	0.0169		0.0169	0.0169		266.1586	266.1586	5.1000e- 003	4.8800e- 003	267.7403
Mobile	0.5729	2.7100	7.5624	0.0249	2.3511	0.0272	2.3784	0.6407	0.0256	0.6662		2,577.873 2	2,577.873 2	0.2278	1	2,583.567 0
Total	2.0832	3.4003	10.4920	0.0293	2.3511	0.0951	2.4463	0.6407	0.0935	0.7341	0.0000	3,424.785 5	3,424.785 5	0.2485	0.0154	3,435.599 7

North Orange Olive Road Proposed Project - Orange County, Summer

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2019	3/28/2019	5	20	
2	Site Preparation	Site Preparation	3/29/2019	4/2/2019	5	3	
3	Grading	Grading	4/3/2019	4/10/2019	5	6	
4	Building Construction	Building Construction	4/11/2019	2/12/2020	5	220	
5	Paving	Paving	2/13/2020	2/26/2020	5	10	
6	Architectural Coating	Architectural Coating	2/27/2020	3/11/2020	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0

Residential Indoor: 127,300; Residential Outdoor: 42,433; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

North Orange Olive Road Proposed Project - Orange County, Summer

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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North Orange Olive Road Proposed Project - Orange County, Summer

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
Demolition	5	13.00	0.00	297.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	12.00	3.00	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	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 **Demolition - 2019**

	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/d	day							lb/d	lay		
Fugitive Dust					3.2141	0.0000	3.2141	0.4867	0.0000	0.4867			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241	 	1.2863	1.2863		1.2017	1.2017		2,360.719 8	2,360.719 8	0.6011	 	2,375.747 5
Total	2.2950	22.6751	14.8943	0.0241	3.2141	1.2863	4.5004	0.4867	1.2017	1.6884		2,360.719 8	2,360.719 8	0.6011		2,375.747 5

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North Orange Olive Road Proposed Project - Orange County, Summer

3.2 Demolition - 2019

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	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/d	day							lb/d	day		
Hauling	0.1234	4.4018	1.0553	0.0115	0.2586	0.0169	0.2755	0.0708	0.0162	0.0870		1,280.920 4	1,280.920 4	0.1337		1,284.263 3
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	0.0536	0.0351	0.4638	1.4700e- 003	0.1453	9.7000e- 004	0.1463	0.0385	8.9000e- 004	0.0394		146.3982	146.3982	3.6000e- 003	 	146.4882
Total	0.1770	4.4369	1.5190	0.0130	0.4039	0.0179	0.4218	0.1093	0.0171	0.1264		1,427.318 6	1,427.318 6	0.1373		1,430.751 6

	ROG	NOx	СО	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/d	day							lb/d	lay		
Fugitive Dust					1.2535	0.0000	1.2535	0.1898	0.0000	0.1898			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017	0.0000	2,360.719 7	2,360.719 7	0.6011	 	2,375.747 5
Total	2.2950	22.6751	14.8943	0.0241	1.2535	1.2863	2.5398	0.1898	1.2017	1.3915	0.0000	2,360.719 7	2,360.719 7	0.6011		2,375.747 5

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North Orange Olive Road Proposed Project - Orange County, Summer

3.2 Demolition - 2019

<u>Mitigated Construction Off-Site</u>

	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/d	day							lb/d	day		
Hauling	0.1234	4.4018	1.0553	0.0115	0.2586	0.0169	0.2755	0.0708	0.0162	0.0870		1,280.920 4	1,280.920 4	0.1337		1,284.263 3
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	0.0536	0.0351	0.4638	1.4700e- 003	0.1453	9.7000e- 004	0.1463	0.0385	8.9000e- 004	0.0394		146.3982	146.3982	3.6000e- 003	 	146.4882
Total	0.1770	4.4369	1.5190	0.0130	0.4039	0.0179	0.4218	0.1093	0.0171	0.1264		1,427.318 6	1,427.318 6	0.1373		1,430.751 6

3.3 Site Preparation - 2019

	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/d	day							lb/c	lay		
Fugitive Dust	 				1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.7557	21.5386	11.9143	0.0245		0.8537	0.8537		0.7854	0.7854		2,426.540 8	2,426.540 8	0.7677		2,445.734 1
Total	1.7557	21.5386	11.9143	0.0245	1.5908	0.8537	2.4445	0.1718	0.7854	0.9572		2,426.540 8	2,426.540 8	0.7677		2,445.734 1

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North Orange Olive Road Proposed Project - Orange County, Summer

3.3 Site Preparation - 2019

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	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/d	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	0.0330	0.0216	0.2854	9.0000e- 004	0.0894	6.0000e- 004	0.0900	0.0237	5.5000e- 004	0.0243		90.0912	90.0912	2.2100e- 003		90.1466
Total	0.0330	0.0216	0.2854	9.0000e- 004	0.0894	6.0000e- 004	0.0900	0.0237	5.5000e- 004	0.0243		90.0912	90.0912	2.2100e- 003		90.1466

	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/d	day							lb/c	lay		
Fugitive Dust	 	i i i			0.6204	0.0000	0.6204	0.0670	0.0000	0.0670			0.0000			0.0000
Off-Road	1.7557	21.5386	11.9143	0.0245		0.8537	0.8537	 	0.7854	0.7854	0.0000	2,426.540 8	2,426.540 8	0.7677		2,445.734 1
Total	1.7557	21.5386	11.9143	0.0245	0.6204	0.8537	1.4741	0.0670	0.7854	0.8524	0.0000	2,426.540 8	2,426.540 8	0.7677		2,445.734 1

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North Orange Olive Road Proposed Project - Orange County, Summer

3.3 Site Preparation - 2019

<u>Mitigated Construction Off-Site</u>

	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/d	day							lb/d	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	0.0330	0.0216	0.2854	9.0000e- 004	0.0894	6.0000e- 004	0.0900	0.0237	5.5000e- 004	0.0243		90.0912	90.0912	2.2100e- 003		90.1466
Total	0.0330	0.0216	0.2854	9.0000e- 004	0.0894	6.0000e- 004	0.0900	0.0237	5.5000e- 004	0.0243		90.0912	90.0912	2.2100e- 003		90.1466

3.4 Grading - 2019

	ROG	NOx	СО	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/d	day							lb/c	lay		
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.0287	22.7444	10.1518	0.0206		1.0730	1.0730		0.9871	0.9871		2,041.253 9	2,041.253 9	0.6458		2,057.399 7
Total	2.0287	22.7444	10.1518	0.0206	6.5523	1.0730	7.6253	3.3675	0.9871	4.3546		2,041.253 9	2,041.253 9	0.6458		2,057.399 7

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North Orange Olive Road Proposed Project - Orange County, Summer

3.4 Grading - 2019
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/d	day							lb/d	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	0.0412	0.0270	0.3567	1.1300e- 003	0.1118	7.5000e- 004	0.1125	0.0296	6.9000e- 004	0.0303		112.6140	112.6140	2.7700e- 003		112.6833
Total	0.0412	0.0270	0.3567	1.1300e- 003	0.1118	7.5000e- 004	0.1125	0.0296	6.9000e- 004	0.0303		112.6140	112.6140	2.7700e- 003		112.6833

	ROG	NOx	СО	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/d	day							lb/c	lay		
Fugitive Dust					2.5554	0.0000	2.5554	1.3133	0.0000	1.3133			0.0000			0.0000
Off-Road	2.0287	22.7444	10.1518	0.0206		1.0730	1.0730		0.9871	0.9871	0.0000	2,041.253 9	2,041.253 9	0.6458		2,057.399 7
Total	2.0287	22.7444	10.1518	0.0206	2.5554	1.0730	3.6284	1.3133	0.9871	2.3005	0.0000	2,041.253 9	2,041.253 9	0.6458		2,057.399 7

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North Orange Olive Road Proposed Project - Orange County, Summer

3.4 Grading - 2019

<u>Mitigated Construction Off-Site</u>

	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/d	day							lb/d	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	0.0412	0.0270	0.3567	1.1300e- 003	0.1118	7.5000e- 004	0.1125	0.0296	6.9000e- 004	0.0303		112.6140	112.6140	2.7700e- 003		112.6833
Total	0.0412	0.0270	0.3567	1.1300e- 003	0.1118	7.5000e- 004	0.1125	0.0296	6.9000e- 004	0.0303		112.6140	112.6140	2.7700e- 003		112.6833

3.5 Building Construction - 2019

	ROG	NOx	СО	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/d	day							lb/c	lay		
Off-Road	2.5581	18.9103	15.2545	0.0250		1.0901	1.0901		1.0449	1.0449		2,312.145 4	2,312.145 4	0.4810		2,324.170 5
Total	2.5581	18.9103	15.2545	0.0250		1.0901	1.0901		1.0449	1.0449		2,312.145 4	2,312.145 4	0.4810		2,324.170 5

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North Orange Olive Road Proposed Project - Orange County, Summer

3.5 Building Construction - 2019 <u>Unmitigated Construction Off-Site</u>

	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/d	day							lb/d	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	0.0113	0.3404	0.0900	7.5000e- 004	0.0192	2.3000e- 003	0.0215	5.5200e- 003	2.2000e- 003	7.7200e- 003		81.8907	81.8907	6.9100e- 003		82.0635
Worker	0.0495	0.0324	0.4281	1.3600e- 003	0.1341	9.0000e- 004	0.1350	0.0356	8.3000e- 004	0.0364		135.1368	135.1368	3.3200e- 003		135.2199
Total	0.0607	0.3729	0.5181	2.1100e- 003	0.1533	3.2000e- 003	0.1565	0.0411	3.0300e- 003	0.0441		217.0275	217.0275	0.0102		217.2834

	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/d	day							lb/c	lay		
Off-Road	2.5581	18.9103	15.2545	0.0250		1.0901	1.0901		1.0449	1.0449	0.0000	2,312.145 4	2,312.145 4	0.4810		2,324.170 5
Total	2.5581	18.9103	15.2545	0.0250		1.0901	1.0901		1.0449	1.0449	0.0000	2,312.145 4	2,312.145 4	0.4810		2,324.170 5

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North Orange Olive Road Proposed Project - Orange County, Summer

3.5 Building Construction - 2019 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/d	day							lb/d	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	0.0113	0.3404	0.0900	7.5000e- 004	0.0192	2.3000e- 003	0.0215	5.5200e- 003	2.2000e- 003	7.7200e- 003		81.8907	81.8907	6.9100e- 003		82.0635
Worker	0.0495	0.0324	0.4281	1.3600e- 003	0.1341	9.0000e- 004	0.1350	0.0356	8.3000e- 004	0.0364		135.1368	135.1368	3.3200e- 003		135.2199
Total	0.0607	0.3729	0.5181	2.1100e- 003	0.1533	3.2000e- 003	0.1565	0.0411	3.0300e- 003	0.0441		217.0275	217.0275	0.0102		217.2834

3.5 Building Construction - 2020

	ROG	NOx	СО	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/d	day							lb/c	lay		
Off-Road	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089		2,288.887 7	2,288.887 7	0.4646		2,300.501 4
Total	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089		2,288.887 7	2,288.887 7	0.4646		2,300.501 4

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North Orange Olive Road Proposed Project - Orange County, Summer

3.5 Building Construction - 2020 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/d	day							lb/d	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	9.5800e- 003	0.3125	0.0825	7.5000e- 004	0.0192	1.6300e- 003	0.0208	5.5200e- 003	1.5600e- 003	7.0800e- 003		81.3387	81.3387	6.5800e- 003		81.5031
Worker	0.0461	0.0291	0.3928	1.3100e- 003	0.1341	8.9000e- 004	0.1350	0.0356	8.2000e- 004	0.0364		130.8052	130.8052	2.9800e- 003		130.8798
Total	0.0557	0.3416	0.4753	2.0600e- 003	0.1533	2.5200e- 003	0.1558	0.0411	2.3800e- 003	0.0435		212.1439	212.1439	9.5600e- 003		212.3829

	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/d	day							lb/c	lay		
Off-Road	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089	0.0000	2,288.887 7	2,288.887 7	0.4646		2,300.501 4
Total	2.2879	17.4336	14.8972	0.0250		0.9482	0.9482		0.9089	0.9089	0.0000	2,288.887 7	2,288.887 7	0.4646		2,300.501 4

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North Orange Olive Road Proposed Project - Orange County, Summer

3.5 Building Construction - 2020 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/d	day							lb/d	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
Vollage	9.5800e- 003	0.3125	0.0825	7.5000e- 004	0.0192	1.6300e- 003	0.0208	5.5200e- 003	1.5600e- 003	7.0800e- 003		81.3387	81.3387	6.5800e- 003		81.5031
Worker	0.0461	0.0291	0.3928	1.3100e- 003	0.1341	8.9000e- 004	0.1350	0.0356	8.2000e- 004	0.0364		130.8052	130.8052	2.9800e- 003		130.8798
Total	0.0557	0.3416	0.4753	2.0600e- 003	0.1533	2.5200e- 003	0.1558	0.0411	2.3800e- 003	0.0435		212.1439	212.1439	9.5600e- 003		212.3829

3.6 Paving - 2020

	ROG	NOx	СО	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/d	day							lb/d	day		
Off-Road	1.1547	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051		1,709.218 0	1,709.218 0	0.5417		1,722.760 5
Paving	0.0000	 			 	0.0000	0.0000		0.0000	0.0000		 	0.0000		i i i	0.0000
Total	1.1547	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051		1,709.218 0	1,709.218 0	0.5417		1,722.760 5

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North Orange Olive Road Proposed Project - Orange County, Summer

3.6 Paving - 2020
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/d	day							lb/d	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	0.0576	0.0363	0.4910	1.6400e- 003	0.1677	1.1100e- 003	0.1688	0.0445	1.0200e- 003	0.0455		163.5065	163.5065	3.7300e- 003	 	163.5997
Total	0.0576	0.0363	0.4910	1.6400e- 003	0.1677	1.1100e- 003	0.1688	0.0445	1.0200e- 003	0.0455		163.5065	163.5065	3.7300e- 003		163.5997

	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/c	lay		
Off-Road	1.1547	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051	0.0000	1,709.218 0	1,709.218 0	0.5417		1,722.760 5
Paving	0.0000	 			 	0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1547	11.5873	11.8076	0.0178		0.6565	0.6565		0.6051	0.6051	0.0000	1,709.218 0	1,709.218 0	0.5417		1,722.760 5

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North Orange Olive Road Proposed Project - Orange County, Summer

3.6 Paving - 2020

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/d	day							lb/d	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	0.0576	0.0363	0.4910	1.6400e- 003	0.1677	1.1100e- 003	0.1688	0.0445	1.0200e- 003	0.0455		163.5065	163.5065	3.7300e- 003		163.5997
Total	0.0576	0.0363	0.4910	1.6400e- 003	0.1677	1.1100e- 003	0.1688	0.0445	1.0200e- 003	0.0455		163.5065	163.5065	3.7300e- 003		163.5997

3.7 Architectural Coating - 2020

	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/d	day							lb/c	day		
Archit. Coating	39.3356					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e- 003		0.1109	0.1109	1 1 1 1	0.1109	0.1109		281.4481	281.4481	0.0218	 	281.9928
Total	39.5778	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

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3.7 Architectural Coating - 2020 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/d	day							lb/d	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	7.6900e- 003	4.8400e- 003	0.0655	2.2000e- 004	0.0224	1.5000e- 004	0.0225	5.9300e- 003	1.4000e- 004	6.0600e- 003		21.8009	21.8009	5.0000e- 004		21.8133
Total	7.6900e- 003	4.8400e- 003	0.0655	2.2000e- 004	0.0224	1.5000e- 004	0.0225	5.9300e- 003	1.4000e- 004	6.0600e- 003		21.8009	21.8009	5.0000e- 004	_	21.8133

	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/d	day							lb/d	lay		
Archit. Coating	39.3356					0.0000	0.0000	i i	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	39.5778	1.6838	1.8314	2.9700e- 003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

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North Orange Olive Road Proposed Project - Orange County, Summer

3.7 Architectural Coating - 2020 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/d	day							lb/d	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	7.6900e- 003	4.8400e- 003	0.0655	2.2000e- 004	0.0224	1.5000e- 004	0.0225	5.9300e- 003	1.4000e- 004	6.0600e- 003		21.8009	21.8009	5.0000e- 004	;	21.8133
Total	7.6900e- 003	4.8400e- 003	0.0655	2.2000e- 004	0.0224	1.5000e- 004	0.0225	5.9300e- 003	1.4000e- 004	6.0600e- 003		21.8009	21.8009	5.0000e- 004		21.8133

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

North Orange Olive Road Proposed Project - Orange County, Summer

	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/d	day							lb/c	lay		
Mitigated	0.5729	2.7100	7.5624	0.0249	2.3511	0.0272	2.3784	0.6407	0.0256	0.6662		2,577.873 2	2,577.873 2	0.2278		2,583.567 0
Unmitigated	0.5729	2.7100	7.5624	0.0249	2.3511	0.0272	2.3784	0.6407	0.0256	0.6662		2,577.873 2	2,577.873 2	0.2278		2,583.567 0

4.2 Trip Summary Information

	Avei	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	302.08	314.24	273.60	1,024,286	1,024,286
Total	302.08	314.24	273.60	1,024,286	1,024,286

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.682057	0.050367	0.104932	0.052466	0.052466	0.010493	0.010493	0.010493	0.000000	0.010493	0.005247	0.010493	0.000000

5.0 Energy Detail

Historical Energy Use: N

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North Orange Olive Road Proposed Project - Orange County, Summer

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/d	day							lb/c	lay		
NaturalGas Mitigated	0.0244	0.2085	0.0887	1.3300e- 003		0.0169	0.0169		0.0169	0.0169		266.1586	266.1586	5.1000e- 003	4.8800e- 003	267.7403
NaturalGas Unmitigated	0.0244	0.2085	0.0887	1.3300e- 003		0.0169	0.0169		0.0169	0.0169		266.1586	266.1586	5.1000e- 003	4.8800e- 003	267.7403

5.2 Energy by Land Use - NaturalGas Unmitigated

	NaturalGa s Use	ROG	NOx	СО	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/d	day							lb/c	day		
Single Family Housing	2262.35	0.0244	0.2085	0.0887	1.3300e- 003		0.0169	0.0169		0.0169	0.0169		266.1586	266.1586	5.1000e- 003	4.8800e- 003	267.7403
Total		0.0244	0.2085	0.0887	1.3300e- 003		0.0169	0.0169		0.0169	0.0169		266.1586	266.1586	5.1000e- 003	4.8800e- 003	267.7403

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5.2 Energy by Land Use - NaturalGas Mitigated

	NaturalGa s 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/d	day							lb/c	day		
Single Family Housing	2.26235	0.0244	0.2085	0.0887	1.3300e- 003		0.0169	0.0169		0.0169	0.0169		266.1586	266.1586	5.1000e- 003	4.8800e- 003	267.7403
Total		0.0244	0.2085	0.0887	1.3300e- 003	·	0.0169	0.0169		0.0169	0.0169		266.1586	266.1586	5.1000e- 003	4.8800e- 003	267.7403

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	СО	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/d	day							lb/d	day		
Mitigated	1.4859	0.4818	2.8408	3.0200e- 003		0.0510	0.0510		0.0510	0.0510	0.0000	580.7537	580.7537	0.0157	0.0106	584.2924
Unmitigated	1.4859	0.4818	2.8408	3.0200e- 003		0.0510	0.0510		0.0510	0.0510	0.0000	580.7537	580.7537	0.0157	0.0106	584.2924

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6.2 Area by SubCategory Unmitigated

	ROG	NOx	СО	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/d	day							lb/d	day		
Architectural Coating	0.1078					0.0000	0.0000	 	0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2447		 			0.0000	0.0000	 	0.0000	0.0000			0.0000			0.0000
Hearth	0.0528	0.4512	0.1920	2.8800e- 003		0.0365	0.0365	 	0.0365	0.0365	0.0000	576.0000	576.0000	0.0110	0.0106	579.4229
Landscaping	0.0807	0.0306	2.6488	1.4000e- 004		0.0146	0.0146		0.0146	0.0146		4.7537	4.7537	4.6400e- 003		4.8696
Total	1.4859	0.4818	2.8408	3.0200e- 003		0.0510	0.0510		0.0510	0.0510	0.0000	580.7537	580.7537	0.0157	0.0106	584.2924

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6.2 Area by SubCategory

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/d	day							lb/d	day		
	0.1078					0.0000	0.0000	i i i	0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2447					0.0000	0.0000	 	0.0000	0.0000			0.0000			0.0000
Hearth	0.0528	0.4512	0.1920	2.8800e- 003		0.0365	0.0365	 	0.0365	0.0365	0.0000	576.0000	576.0000	0.0110	0.0106	579.4229
Landscaping	0.0807	0.0306	2.6488	1.4000e- 004		0.0146	0.0146	 	0.0146	0.0146		4.7537	4.7537	4.6400e- 003		4.8696
Total	1.4859	0.4818	2.8408	3.0200e- 003		0.0510	0.0510		0.0510	0.0510	0.0000	580.7537	580.7537	0.0157	0.0106	584.2924

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

10.0 Stationary Equipment

North Orange Olive Road Proposed Project - Orange County, Summer

Fire Pumps and Emergency Generators

|--|

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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North Orange Olive Road Proposed Project Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	32.00	Dwelling Unit	2.90	62,864.00	92

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2020
Utility Company	Southern California Ediso	n			
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics -

Land Use - .

Construction Phase - Defaults

Trips and VMT - Default

Demolition - All buildings and asphalt demolition

Vehicle Trips - per Traffic Data

Woodstoves - No Woodstoves per SCAQMD Rule 445

Energy Use - Default

Construction Off-road Equipment Mitigation - .

Energy Mitigation -

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Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.60	0.00
tblFleetMix	HHD	0.02	0.01
tblFleetMix	LDA	0.56	0.68
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.21	0.10
tblFleetMix	LHD1	0.02	0.05
tblFleetMix	LHD2	5.7950e-003	0.01
tblFleetMix	MCY	4.8670e-003	5.2470e-003
tblFleetMix	MDV	0.12	0.05
tblFleetMix	MH	1.0020e-003	0.00
tblFleetMix	MHD	0.03	0.01
tblFleetMix	OBUS	1.6770e-003	0.00
tblFleetMix	SBUS	5.8600e-004	0.01
tblFleetMix	UBUS	1.5860e-003	0.01
tblLandUse	LandUseSquareFeet	57,600.00	62,864.00
tblLandUse	LotAcreage	10.39	2.90
tblVehicleTrips	ST_TR	9.91	9.82
tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	9.52	9.44
tblWoodstoves	NumberCatalytic	1.60	0.00
tblWoodstoves	NumberNoncatalytic	1.60	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

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2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
2019	0.2812	2.1966	1.7028	3.0300e- 003	0.0729	0.1209	0.1937	0.0203	0.1154	0.1356	0.0000	259.8082	259.8082	0.0516	0.0000	261.0992
2020	0.2403	0.3423	0.3088	5.3000e- 004	3.2700e- 003	0.0186	0.0219	8.7000e- 004	0.0177	0.0186	0.0000	44.9213	44.9213	9.2400e- 003	0.0000	45.1523
Maximum	0.2812	2.1966	1.7028	3.0300e- 003	0.0729	0.1209	0.1937	0.0203	0.1154	0.1356	0.0000	259.8082	259.8082	0.0516	0.0000	261.0992

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Tota	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					tor	ns/yr							М	T/yr		
2019	0.2812	2.1966	1.7028	3.0300e- 003	0.0398	0.1209	0.1607	0.0110	0.1154	0.1263	0.0000	259.8079	259.8079	0.0516	0.0000	261.0989
2020	0.2403	0.3423	0.3088	5.3000e- 004	3.2700e- 003	0.0186	0.0219	8.7000e- 004	0.0177	0.0186	0.0000	44.9212	44.9212	9.2400e- 003	0.0000	45.1522
Maximum	0.2812	2.1966	1.7028	3.0300e- 003	0.0398	0.1209	0.1607	0.0110	0.1154	0.1263	0.0000	259.8079	259.8079	0.0516	0.0000	261.0989
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	43.42	0.00	15.33	43.99	0.00	6.02	0.00	0.00	0.00	0.00	0.00	0.00

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2019	5-31-2019	0.8082	0.8082
2	6-1-2019	8-31-2019	0.7196	0.7196
3	9-1-2019	11-30-2019	0.7120	0.7120
4	12-1-2019	2-29-2020	0.6602	0.6602
5	3-1-2020	5-31-2020	0.1622	0.1622
		Highest	0.8082	0.8082

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	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					ton	s/yr							МТ	-/yr		
Area	0.2576	9.4700e- 003	0.3335	5.0000e- 005		2.2800e- 003	2.2800e- 003		2.2800e- 003	2.2800e- 003	0.0000	7.0708	7.0708	6.5000e- 004	1.2000e- 004	7.1227
Energy	4.4500e- 003	0.0381	0.0162	2.4000e- 004		3.0800e- 003	3.0800e- 003	 	3.0800e- 003	3.0800e- 003	0.0000	125.8217	125.8217	4.2200e- 003	1.5100e- 003	126.3760
Mobile	0.0959	0.4949	1.2799	4.1900e- 003	0.4012	4.7300e- 003	0.4059	0.1095	4.4400e- 003	0.1140	0.0000	393.6079	393.6079	0.0357	0.0000	394.5005
Waste						0.0000	0.0000	 	0.0000	0.0000	7.6568	0.0000	7.6568	0.4525	0.0000	18.9695
Water	F; 61 61 61	1 1				0.0000	0.0000	1 	0.0000	0.0000	0.6615	13.3028	13.9642	0.0685	1.7200e- 003	16.1883
Total	0.3579	0.5425	1.6296	4.4800e- 003	0.4012	0.0101	0.4113	0.1095	9.8000e- 003	0.1193	8.3183	539.8031	548.1214	0.5616	3.3500e- 003	563.1570

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	СО	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					ton	s/yr							МТ	√yr		
Area	0.2576	9.4700e- 003	0.3335	5.0000e- 005		2.2800e- 003	2.2800e- 003		2.2800e- 003	2.2800e- 003	0.0000	7.0708	7.0708	6.5000e- 004	1.2000e- 004	7.1227
Energy	4.4500e- 003	0.0381	0.0162	2.4000e- 004		3.0800e- 003	3.0800e- 003		3.0800e- 003	3.0800e- 003	0.0000	125.8217	125.8217	4.2200e- 003	1.5100e- 003	126.3760
Mobile	0.0959	0.4949	1.2799	4.1900e- 003	0.4012	4.7300e- 003	0.4059	0.1095	4.4400e- 003	0.1140	0.0000	393.6079	393.6079	0.0357	0.0000	394.5005
Waste	6; 6; 6; 6; 6;	 				0.0000	0.0000		0.0000	0.0000	7.6568	0.0000	7.6568	0.4525	0.0000	18.9695
Water	6; 6; 6; 6; 6;					0.0000	0.0000		0.0000	0.0000	0.6615	13.3028	13.9642	0.0685	1.7200e- 003	16.1883
Total	0.3579	0.5425	1.6296	4.4800e- 003	0.4012	0.0101	0.4113	0.1095	9.8000e- 003	0.1193	8.3183	539.8031	548.1214	0.5616	3.3500e- 003	563.1570

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2019	3/28/2019	5	20	
2	Site Preparation	Site Preparation	3/29/2019	4/2/2019	5	3	
3	Grading	Grading	4/3/2019	4/10/2019	5	6	
4	Building Construction	Building Construction	4/11/2019	2/12/2020	5	220	
5	Paving	Paving	2/13/2020	2/26/2020	5	10	
6	Architectural Coating	Architectural Coating	2/27/2020	3/11/2020	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0

Residential Indoor: 127,300; Residential Outdoor: 42,433; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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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
Demolition	5	13.00	0.00	297.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	12.00	3.00	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	2.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2019

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Fugitive Dust			 		0.0321	0.0000	0.0321	4.8700e- 003	0.0000	4.8700e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0230	0.2268	0.1489	2.4000e- 004		0.0129	0.0129	1	0.0120	0.0120	0.0000	21.4161	21.4161	5.4500e- 003	0.0000	21.5524
Total	0.0230	0.2268	0.1489	2.4000e- 004	0.0321	0.0129	0.0450	4.8700e- 003	0.0120	0.0169	0.0000	21.4161	21.4161	5.4500e- 003	0.0000	21.5524

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3.2 Demolition - 2019

<u>Unmitigated Construction Off-Site</u>

	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					ton	s/yr							MT	/yr		
Hauling	1.2500e- 003	0.0455	0.0108	1.1000e- 004	2.5500e- 003	1.7000e- 004	2.7200e- 003	7.0000e- 004	1.6000e- 004	8.6000e- 004	0.0000	11.5480	11.5480	1.2300e- 003	0.0000	11.5787
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	4.0000e- 004	4.4000e- 003	1.0000e- 005	1.4300e- 003	1.0000e- 005	1.4400e- 003	3.8000e- 004	1.0000e- 005	3.9000e- 004	0.0000	1.2761	1.2761	3.0000e- 005	0.0000	1.2769
Total	1.7900e- 003	0.0459	0.0152	1.2000e- 004	3.9800e- 003	1.8000e- 004	4.1600e- 003	1.0800e- 003	1.7000e- 004	1.2500e- 003	0.0000	12.8241	12.8241	1.2600e- 003	0.0000	12.8556

	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					ton	s/yr							MT	/yr		
Fugitive Dust					0.0125	0.0000	0.0125	1.9000e- 003	0.0000	1.9000e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0230	0.2268	0.1489	2.4000e- 004		0.0129	0.0129	1 1 1	0.0120	0.0120	0.0000	21.4161	21.4161	5.4500e- 003	0.0000	21.5524
Total	0.0230	0.2268	0.1489	2.4000e- 004	0.0125	0.0129	0.0254	1.9000e- 003	0.0120	0.0139	0.0000	21.4161	21.4161	5.4500e- 003	0.0000	21.5524

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3.2 Demolition - 2019

<u>Mitigated Construction Off-Site</u>

	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					ton	s/yr							MT	/yr		
Hauling	1.2500e- 003	0.0455	0.0108	1.1000e- 004	2.5500e- 003	1.7000e- 004	2.7200e- 003	7.0000e- 004	1.6000e- 004	8.6000e- 004	0.0000	11.5480	11.5480	1.2300e- 003	0.0000	11.5787
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	4.0000e- 004	4.4000e- 003	1.0000e- 005	1.4300e- 003	1.0000e- 005	1.4400e- 003	3.8000e- 004	1.0000e- 005	3.9000e- 004	0.0000	1.2761	1.2761	3.0000e- 005	0.0000	1.2769
Total	1.7900e- 003	0.0459	0.0152	1.2000e- 004	3.9800e- 003	1.8000e- 004	4.1600e- 003	1.0800e- 003	1.7000e- 004	1.2500e- 003	0.0000	12.8241	12.8241	1.2600e- 003	0.0000	12.8556

3.3 Site Preparation - 2019

	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	11 11 11				2.3900e- 003	0.0000	2.3900e- 003	2.6000e- 004	0.0000	2.6000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Off-Road	2.6300e- 003	0.0323	0.0179	4.0000e- 005	 	1.2800e- 003	1.2800e- 003		1.1800e- 003	1.1800e- 003	0.0000	3.3020	3.3020	1.0400e- 003	0.0000	3.3281			
Total	2.6300e- 003	0.0323	0.0179	4.0000e- 005	2.3900e- 003	1.2800e- 003	3.6700e- 003	2.6000e- 004	1.1800e- 003	1.4400e- 003	0.0000	3.3020	3.3020	1.0400e- 003	0.0000	3.3281			

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3.3 Site Preparation - 2019

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	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			
	5.0000e- 005	4.0000e- 005	4.1000e- 004	0.0000	1.3000e- 004	0.0000	1.3000e- 004	3.0000e- 005	0.0000	4.0000e- 005	0.0000	0.1178	0.1178	0.0000	0.0000	0.1179			
Total	5.0000e- 005	4.0000e- 005	4.1000e- 004	0.0000	1.3000e- 004	0.0000	1.3000e- 004	3.0000e- 005	0.0000	4.0000e- 005	0.0000	0.1178	0.1178	0.0000	0.0000	0.1179			

	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					9.3000e- 004	0.0000	9.3000e- 004	1.0000e- 004	0.0000	1.0000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Off-Road	2.6300e- 003	0.0323	0.0179	4.0000e- 005		1.2800e- 003	1.2800e- 003		1.1800e- 003	1.1800e- 003	0.0000	3.3020	3.3020	1.0400e- 003	0.0000	3.3281			
Total	2.6300e- 003	0.0323	0.0179	4.0000e- 005	9.3000e- 004	1.2800e- 003	2.2100e- 003	1.0000e- 004	1.1800e- 003	1.2800e- 003	0.0000	3.3020	3.3020	1.0400e- 003	0.0000	3.3281			

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3.3 Site Preparation - 2019

<u>Mitigated Construction Off-Site</u>

	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					ton	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	5.0000e- 005	4.0000e- 005	4.1000e- 004	0.0000	1.3000e- 004	0.0000	1.3000e- 004	3.0000e- 005	0.0000	4.0000e- 005	0.0000	0.1178	0.1178	0.0000	0.0000	0.1179
Total	5.0000e- 005	4.0000e- 005	4.1000e- 004	0.0000	1.3000e- 004	0.0000	1.3000e- 004	3.0000e- 005	0.0000	4.0000e- 005	0.0000	0.1178	0.1178	0.0000	0.0000	0.1179

3.4 Grading - 2019

	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					0.0197	0.0000	0.0197	0.0101	0.0000	0.0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
1	6.0900e- 003	0.0682	0.0305	6.0000e- 005		3.2200e- 003	3.2200e- 003		2.9600e- 003	2.9600e- 003	0.0000	5.5554	5.5554	1.7600e- 003	0.0000	5.5993			
Total	6.0900e- 003	0.0682	0.0305	6.0000e- 005	0.0197	3.2200e- 003	0.0229	0.0101	2.9600e- 003	0.0131	0.0000	5.5554	5.5554	1.7600e- 003	0.0000	5.5993			

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3.4 Grading - 2019
Unmitigated Construction Off-Site

	ROG	NOx	СО	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			
· · · · · · · ·	1.3000e- 004	9.0000e- 005	1.0100e- 003	0.0000	3.3000e- 004	0.0000	3.3000e- 004	9.0000e- 005	0.0000	9.0000e- 005	0.0000	0.2945	0.2945	1.0000e- 005	0.0000	0.2947			
Total	1.3000e- 004	9.0000e- 005	1.0100e- 003	0.0000	3.3000e- 004	0.0000	3.3000e- 004	9.0000e- 005	0.0000	9.0000e- 005	0.0000	0.2945	0.2945	1.0000e- 005	0.0000	0.2947			

	ROG	NOx	СО	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					7.6700e- 003	0.0000	7.6700e- 003	3.9400e- 003	0.0000	3.9400e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Off-Road	6.0900e- 003	0.0682	0.0305	6.0000e- 005		3.2200e- 003	3.2200e- 003	 	2.9600e- 003	2.9600e- 003	0.0000	5.5554	5.5554	1.7600e- 003	0.0000	5.5993			
Total	6.0900e- 003	0.0682	0.0305	6.0000e- 005	7.6700e- 003	3.2200e- 003	0.0109	3.9400e- 003	2.9600e- 003	6.9000e- 003	0.0000	5.5554	5.5554	1.7600e- 003	0.0000	5.5993			

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3.4 Grading - 2019

<u>Mitigated Construction Off-Site</u>

	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					ton	s/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
· · · · · · ·	1.3000e- 004	9.0000e- 005	1.0100e- 003	0.0000	3.3000e- 004	0.0000	3.3000e- 004	9.0000e- 005	0.0000	9.0000e- 005	0.0000	0.2945	0.2945	1.0000e- 005	0.0000	0.2947
Total	1.3000e- 004	9.0000e- 005	1.0100e- 003	0.0000	3.3000e- 004	0.0000	3.3000e- 004	9.0000e- 005	0.0000	9.0000e- 005	0.0000	0.2945	0.2945	1.0000e- 005	0.0000	0.2947

3.5 Building Construction - 2019

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					ton	s/yr							MT	/yr		
Off-Road	0.2417	1.7870	1.4416	2.3600e- 003		0.1030	0.1030		0.0988	0.0988	0.0000	198.2178	198.2178	0.0412	0.0000	199.2487
Total	0.2417	1.7870	1.4416	2.3600e- 003		0.1030	0.1030		0.0988	0.0988	0.0000	198.2178	198.2178	0.0412	0.0000	199.2487

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3.5 Building Construction - 2019 Unmitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/yr							МТ	/уг		
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
1	1.0800e- 003	0.0328	8.9300e- 003	7.0000e- 005	1.7800e- 003	2.2000e- 004	2.0000e- 003	5.1000e- 004	2.1000e- 004	7.2000e- 004	0.0000	6.9490	6.9490	6.1000e- 004	0.0000	6.9641
	4.7400e- 003	3.4600e- 003	0.0384	1.2000e- 004	0.0125	8.0000e- 005	0.0125	3.3100e- 003	8.0000e- 005	3.3800e- 003	0.0000	11.1316	11.1316	2.7000e- 004	0.0000	11.1384
Total	5.8200e- 003	0.0363	0.0473	1.9000e- 004	0.0142	3.0000e- 004	0.0145	3.8200e- 003	2.9000e- 004	4.1000e- 003	0.0000	18.0805	18.0805	8.8000e- 004	0.0000	18.1025

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					ton	s/yr							MT	/yr		
Off-Road	0.2417	1.7870	1.4416	2.3600e- 003		0.1030	0.1030		0.0987	0.0987	0.0000	198.2176	198.2176	0.0412	0.0000	199.2485
Total	0.2417	1.7870	1.4416	2.3600e- 003		0.1030	0.1030		0.0987	0.0987	0.0000	198.2176	198.2176	0.0412	0.0000	199.2485

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3.5 Building Construction - 2019 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					ton	s/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	1.0800e- 003	0.0328	8.9300e- 003	7.0000e- 005	1.7800e- 003	2.2000e- 004	2.0000e- 003	5.1000e- 004	2.1000e- 004	7.2000e- 004	0.0000	6.9490	6.9490	6.1000e- 004	0.0000	6.9641
Worker	4.7400e- 003	3.4600e- 003	0.0384	1.2000e- 004	0.0125	8.0000e- 005	0.0125	3.3100e- 003	8.0000e- 005	3.3800e- 003	0.0000	11.1316	11.1316	2.7000e- 004	0.0000	11.1384
Total	5.8200e- 003	0.0363	0.0473	1.9000e- 004	0.0142	3.0000e- 004	0.0145	3.8200e- 003	2.9000e- 004	4.1000e- 003	0.0000	18.0805	18.0805	8.8000e- 004	0.0000	18.1025

3.5 Building Construction - 2020

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					ton	s/yr							MT	/yr		
	0.0355	0.2702	0.2309	3.9000e- 004		0.0147	0.0147		0.0141	0.0141	0.0000	32.1849	32.1849	6.5300e- 003	0.0000	32.3482
Total	0.0355	0.2702	0.2309	3.9000e- 004		0.0147	0.0147		0.0141	0.0141	0.0000	32.1849	32.1849	6.5300e- 003	0.0000	32.3482

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3.5 Building Construction - 2020 Unmitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/yr							МТ	/уг		
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	1.5000e- 004	4.9300e- 003	1.3400e- 003	1.0000e- 005	2.9000e- 004	3.0000e- 005	3.2000e- 004	8.0000e- 005	2.0000e- 005	1.1000e- 004	0.0000	1.1319	1.1319	9.0000e- 005	0.0000	1.1343
1	7.3000e- 004	5.1000e- 004	5.7700e- 003	2.0000e- 005	2.0400e- 003	1.0000e- 005	2.0600e- 003	5.4000e- 004	1.0000e- 005	5.5000e- 004	0.0000	1.7673	1.7673	4.0000e- 005	0.0000	1.7683
Total	8.8000e- 004	5.4400e- 003	7.1100e- 003	3.0000e- 005	2.3300e- 003	4.0000e- 005	2.3800e- 003	6.2000e- 004	3.0000e- 005	6.6000e- 004	0.0000	2.8992	2.8992	1.3000e- 004	0.0000	2.9026

Mitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
	0.0355	0.2702	0.2309	3.9000e- 004		0.0147	0.0147		0.0141	0.0141	0.0000	32.1848	32.1848	6.5300e- 003	0.0000	32.3482
Total	0.0355	0.2702	0.2309	3.9000e- 004		0.0147	0.0147		0.0141	0.0141	0.0000	32.1848	32.1848	6.5300e- 003	0.0000	32.3482

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3.5 Building Construction - 2020 Mitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/yr							МТ	/уг		
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	1.5000e- 004	4.9300e- 003	1.3400e- 003	1.0000e- 005	2.9000e- 004	3.0000e- 005	3.2000e- 004	8.0000e- 005	2.0000e- 005	1.1000e- 004	0.0000	1.1319	1.1319	9.0000e- 005	0.0000	1.1343
1	7.3000e- 004	5.1000e- 004	5.7700e- 003	2.0000e- 005	2.0400e- 003	1.0000e- 005	2.0600e- 003	5.4000e- 004	1.0000e- 005	5.5000e- 004	0.0000	1.7673	1.7673	4.0000e- 005	0.0000	1.7683
Total	8.8000e- 004	5.4400e- 003	7.1100e- 003	3.0000e- 005	2.3300e- 003	4.0000e- 005	2.3800e- 003	6.2000e- 004	3.0000e- 005	6.6000e- 004	0.0000	2.8992	2.8992	1.3000e- 004	0.0000	2.9026

3.6 Paving - 2020

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					ton	s/yr							MT	⁻ /yr		
	5.7700e- 003	0.0579	0.0590	9.0000e- 005		3.2800e- 003	3.2800e- 003		3.0300e- 003	3.0300e- 003	0.0000	7.7529	7.7529	2.4600e- 003	0.0000	7.8143
	0.0000		1			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.7700e- 003	0.0579	0.0590	9.0000e- 005		3.2800e- 003	3.2800e- 003		3.0300e- 003	3.0300e- 003	0.0000	7.7529	7.7529	2.4600e- 003	0.0000	7.8143

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3.6 Paving - 2020
Unmitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/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	2.9000e- 004	2.0000e- 004	2.3200e- 003	1.0000e- 005	8.2000e- 004	1.0000e- 005	8.3000e- 004	2.2000e- 004	1.0000e- 005	2.2000e- 004	0.0000	0.7126	0.7126	2.0000e- 005	0.0000	0.7130
Total	2.9000e- 004	2.0000e- 004	2.3200e- 003	1.0000e- 005	8.2000e- 004	1.0000e- 005	8.3000e- 004	2.2000e- 004	1.0000e- 005	2.2000e- 004	0.0000	0.7126	0.7126	2.0000e- 005	0.0000	0.7130

Mitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Off-Road	5.7700e- 003	0.0579	0.0590	9.0000e- 005		3.2800e- 003	3.2800e- 003		3.0300e- 003	3.0300e- 003	0.0000	7.7529	7.7529	2.4600e- 003	0.0000	7.8143
Paving	0.0000					0.0000	0.0000	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	5.7700e- 003	0.0579	0.0590	9.0000e- 005		3.2800e- 003	3.2800e- 003		3.0300e- 003	3.0300e- 003	0.0000	7.7529	7.7529	2.4600e- 003	0.0000	7.8143

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3.6 Paving - 2020 Mitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/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	2.9000e- 004	2.0000e- 004	2.3200e- 003	1.0000e- 005	8.2000e- 004	1.0000e- 005	8.3000e- 004	2.2000e- 004	1.0000e- 005	2.2000e- 004	0.0000	0.7126	0.7126	2.0000e- 005	0.0000	0.7130
Total	2.9000e- 004	2.0000e- 004	2.3200e- 003	1.0000e- 005	8.2000e- 004	1.0000e- 005	8.3000e- 004	2.2000e- 004	1.0000e- 005	2.2000e- 004	0.0000	0.7126	0.7126	2.0000e- 005	0.0000	0.7130

3.7 Architectural Coating - 2020

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					ton	s/yr							MT	/yr		
Archit. Coating	0.1967				! !	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2100e- 003	8.4200e- 003	9.1600e- 003	1.0000e- 005		5.5000e- 004	5.5000e- 004		5.5000e- 004	5.5000e- 004	0.0000	1.2766	1.2766	1.0000e- 004	0.0000	1.2791
Total	0.1979	8.4200e- 003	9.1600e- 003	1.0000e- 005		5.5000e- 004	5.5000e- 004		5.5000e- 004	5.5000e- 004	0.0000	1.2766	1.2766	1.0000e- 004	0.0000	1.2791

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3.7 Architectural Coating - 2020 Unmitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/yr							МТ	/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
1	4.0000e- 005	3.0000e- 005	3.1000e- 004	0.0000	1.1000e- 004	0.0000	1.1000e- 004	3.0000e- 005	0.0000	3.0000e- 005	0.0000	0.0950	0.0950	0.0000	0.0000	0.0951
Total	4.0000e- 005	3.0000e- 005	3.1000e- 004	0.0000	1.1000e- 004	0.0000	1.1000e- 004	3.0000e- 005	0.0000	3.0000e- 005	0.0000	0.0950	0.0950	0.0000	0.0000	0.0951

Mitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Archit. Coating	0.1967					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2100e- 003	8.4200e- 003	9.1600e- 003	1.0000e- 005		5.5000e- 004	5.5000e- 004		5.5000e- 004	5.5000e- 004	0.0000	1.2766	1.2766	1.0000e- 004	0.0000	1.2791
Total	0.1979	8.4200e- 003	9.1600e- 003	1.0000e- 005		5.5000e- 004	5.5000e- 004		5.5000e- 004	5.5000e- 004	0.0000	1.2766	1.2766	1.0000e- 004	0.0000	1.2791

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3.7 Architectural Coating - 2020 Mitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/yr							МТ	/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	4.0000e- 005	3.0000e- 005	3.1000e- 004	0.0000	1.1000e- 004	0.0000	1.1000e- 004	3.0000e- 005	0.0000	3.0000e- 005	0.0000	0.0950	0.0950	0.0000	0.0000	0.0951
Total	4.0000e- 005	3.0000e- 005	3.1000e- 004	0.0000	1.1000e- 004	0.0000	1.1000e- 004	3.0000e- 005	0.0000	3.0000e- 005	0.0000	0.0950	0.0950	0.0000	0.0000	0.0951

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	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					ton	s/yr							MT	/yr		
Mitigated	0.0959	0.4949	1.2799	4.1900e- 003	0.4012	4.7300e- 003	0.4059	0.1095	4.4400e- 003	0.1140	0.0000	393.6079	393.6079	0.0357	0.0000	394.5005
Unmitigated	0.0959	0.4949	1.2799	4.1900e- 003	0.4012	4.7300e- 003	0.4059	0.1095	4.4400e- 003	0.1140	0.0000	393.6079	393.6079	0.0357	0.0000	394.5005

4.2 Trip Summary Information

	Avei	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	302.08	314.24	273.60	1,024,286	1,024,286
Total	302.08	314.24	273.60	1,024,286	1,024,286

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	se %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Single Family Housing	0.682057	0.050367	0.104932	0.052466	0.052466	0.010493	0.010493	0.010493	0.000000	0.010493	0.005247	0.010493	0.000000

5.0 Energy Detail

Historical Energy Use: N

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5.1 Mitigation Measures Energy

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	81.7561	81.7561	3.3800e- 003	7.0000e- 004	82.0486
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	81.7561	81.7561	3.3800e- 003	7.0000e- 004	82.0486
Mistro-4- d	4.4500e- 003	0.0381	0.0162	2.4000e- 004		3.0800e- 003	3.0800e- 003		3.0800e- 003	3.0800e- 003	0.0000	44.0655	44.0655	8.4000e- 004	8.1000e- 004	44.3274
	4.4500e- 003	0.0381	0.0162	2.4000e- 004		3.0800e- 003	3.0800e- 003		3.0800e- 003	3.0800e- 003	0.0000	44.0655	44.0655	8.4000e- 004	8.1000e- 004	44.3274

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s 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					ton	s/yr							MT	/yr		
Single Family Housing	825757	4.4500e- 003	0.0381	0.0162	2.4000e- 004		3.0800e- 003	3.0800e- 003		3.0800e- 003	3.0800e- 003	0.0000	44.0655	44.0655	8.4000e- 004	8.1000e- 004	44.3274
Total		4.4500e- 003	0.0381	0.0162	2.4000e- 004		3.0800e- 003	3.0800e- 003		3.0800e- 003	3.0800e- 003	0.0000	44.0655	44.0655	8.4000e- 004	8.1000e- 004	44.3274

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5.2 Energy by Land Use - NaturalGas Mitigated

	NaturalGa s 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					ton	s/yr							MT	/yr		
Single Family Housing	825757	4.4500e- 003	0.0381	0.0162	2.4000e- 004		3.0800e- 003	3.0800e- 003		3.0800e- 003	3.0800e- 003	0.0000	44.0655	44.0655	8.4000e- 004	8.1000e- 004	44.3274
Total		4.4500e- 003	0.0381	0.0162	2.4000e- 004		3.0800e- 003	3.0800e- 003		3.0800e- 003	3.0800e- 003	0.0000	44.0655	44.0655	8.4000e- 004	8.1000e- 004	44.3274

5.3 Energy by Land Use - Electricity <u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
Single Family Housing	256593	81.7561	3.3800e- 003	7.0000e- 004	82.0486
Total		81.7561	3.3800e- 003	7.0000e- 004	82.0486

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5.3 Energy by Land Use - Electricity Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Single Family Housing		81.7561	3.3800e- 003	7.0000e- 004	82.0486
Total		81.7561	3.3800e- 003	7.0000e- 004	82.0486

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	СО	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	0.2576	9.4700e- 003	0.3335	5.0000e- 005		2.2800e- 003	2.2800e- 003		2.2800e- 003	2.2800e- 003	0.0000	7.0708	7.0708	6.5000e- 004	1.2000e- 004	7.1227
Unmitigated	0.2576	9.4700e- 003	0.3335	5.0000e- 005		2.2800e- 003	2.2800e- 003		2.2800e- 003	2.2800e- 003	0.0000	7.0708	7.0708	6.5000e- 004	1.2000e- 004	7.1227

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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	0.0197					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2272		 			0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.6000e- 004	5.6400e- 003	2.4000e- 003	4.0000e- 005		4.6000e- 004	4.6000e- 004	 	4.6000e- 004	4.6000e- 004	0.0000	6.5317	6.5317	1.3000e- 004	1.2000e- 004	6.5705
Landscaping	0.0101	3.8300e- 003	0.3311	2.0000e- 005		1.8200e- 003	1.8200e- 003		1.8200e- 003	1.8200e- 003	0.0000	0.5391	0.5391	5.3000e- 004	0.0000	0.5522
Total	0.2576	9.4700e- 003	0.3335	6.0000e- 005		2.2800e- 003	2.2800e- 003		2.2800e- 003	2.2800e- 003	0.0000	7.0708	7.0708	6.6000e- 004	1.2000e- 004	7.1227

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6.2 Area by SubCategory 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	0.0197					0.0000	0.0000	i i i	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2272					0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.6000e- 004	5.6400e- 003	2.4000e- 003	4.0000e- 005		4.6000e- 004	4.6000e- 004	 	4.6000e- 004	4.6000e- 004	0.0000	6.5317	6.5317	1.3000e- 004	1.2000e- 004	6.5705
Landscaping	0.0101	3.8300e- 003	0.3311	2.0000e- 005		1.8200e- 003	1.8200e- 003	 	1.8200e- 003	1.8200e- 003	0.0000	0.5391	0.5391	5.3000e- 004	0.0000	0.5522
Total	0.2576	9.4700e- 003	0.3335	6.0000e- 005		2.2800e- 003	2.2800e- 003		2.2800e- 003	2.2800e- 003	0.0000	7.0708	7.0708	6.6000e- 004	1.2000e- 004	7.1227

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category		МТ	√yr	
Mitigated	10.0012	0.0685	1.7200e- 003	16.1883
Unmitigated		0.0685	1.7200e- 003	16.1883

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e			
Land Use	Mgal	MT/yr						
Single Family Housing	2.08493 / 1.31441	13.9642	0.0685	1.7200e- 003	16.1883			
Total		13.9642	0.0685	1.7200e- 003	16.1883			

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7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	-/yr	
Single Family Housing	2.08493 / 1.31441	13.9642	0.0685	1.7200e- 003	16.1883
Total		13.9642	0.0685	1.7200e- 003	16.1883

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
		МТ	√yr	
willigated	7.6568	0.4525	0.0000	18.9695
Jgatea		0.4525	0.0000	18.9695

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8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	-/yr	
Single Family Housing	37.72	7.6568	0.4525	0.0000	18.9695
Total		7.6568	0.4525	0.0000	18.9695

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	-/yr	
Single Family Housing	37.72	7.6568	0.4525	0.0000	18.9695
Total		7.6568	0.4525	0.0000	18.9695

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

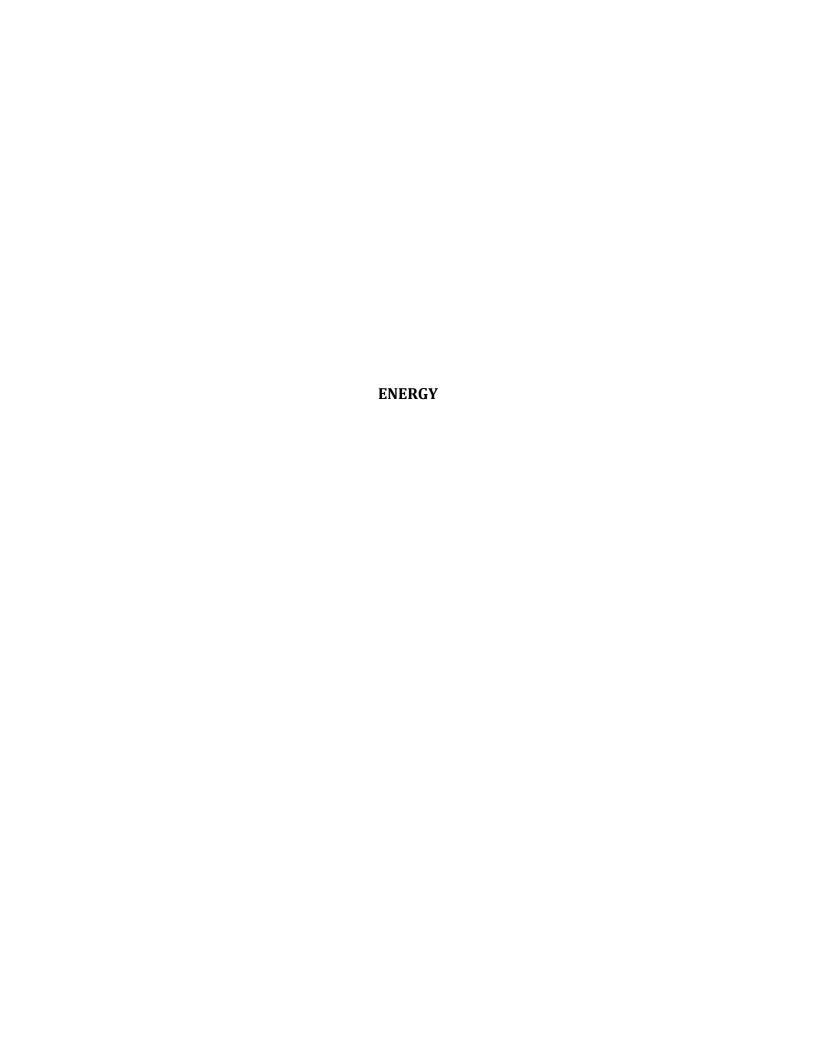
Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number
• • • • • • • • • • • • • • • • • • • •	

11.0 Vegetation



Energy Summary

Vehicle	Fuels
---------	-------

Construction Phase (gallons/construction period	Gasoline	Diesel
Construction Vehicles		17,957
Worker Trips	43	0
Vendor Trips	1	0
Haul Trucks	11	1,018
Total	55	18,975

Project Operations Phase Single Family Housing	Gasoline (gallons/year) 40,507	Diesel (gallons/year) 3,049	Natural Gas (kBTU/yr) 825,757	Electricity (kWh/yr) 256,593
All Land Uses	40,507	3,049	825,757	256,593

Existing Uses				
Operations Phase (gallons/year)	Gasoline (gallons/year)	Diesel (gallons/year)	Natural Gas (kBTU/yr)	Electricity (kWh/yr)
Elementary School	4,013	715	121,005	62,138
High Turnover (Sit Down Restaurant)	8,116	1,564	341,006	47,971
Parking Lot	0	0	0	24,301
Regional Shopping Center	72,931	14,059	47,630	272,444
	0			
	0			
	0			
All Land Uses	85,060	16,339	509,641	406,853

Gasoline (gallons/year) Diesel (gallons/year) Natural Gas (kBTU/yr) Electricity (kWh/yr) |
Project Net Difference -44,553 -13,290 316,116 -150,260

Fuel	Use
------	-----

Fuel Use	Office of Facilities at Toron			B	Hamana Catanana		N B	V	Fuel Consumption Rate (gal/hour)	Total Fuel Consumption (gal/construction period)
Phase Name	Offroad Equipment Type	Amount	-		Horsepower Category	Load Factor	Num Days	Year	.= .	. ,
Demolition	Concrete/Industrial Saws	1	8.00	81	100	0.73	20	2019	4.7	551
Demolition	Rubber Tired Dozers	1	8.00	247	300	0.40	20	2019	4.5	285
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	100	0.37	20	2019	1.6	282
Site Preparation	Graders	1	8.00	187	175	0.41	3	2019	3.1	31
Site Preparation	Scrapers	1	8.00	367	300	0.48	3	2019	5.6	64
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	100	0.37	3	2019	1.6	12
Grading	Graders	1	8.00	187	175	0.41	6	2019	3.1	62
Grading	Rubber Tired Dozers	1	8.00	247	300	0.40	6	2019	4.5	86
Grading	Tractors/Loaders/Backhoes	2	7.00	97	100	0.37	6	2019	1.6	49
Building Construction	Cranes	1	8.00	231	300	0.29	220	2019	3.3	1,685
Building Construction	Forklifts	2	7.00	89	100	0.20	220	2019	2.0	1,232
Building Construction	Generator Sets	1	8.00	84	100	0.74	220	2019	5.2	6,797
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	100	0.37	220	2019	1.6	776
Building Construction	Welders	3	8.00	46	50	0.45	220	2019	2.4	5,733
Paving	Cement and Mortar Mixers	1	8.00	9	25	0.56	10	2020	0.4	17
Paving	Pavers	1	8.00	130	100	0.42	10	2020	1.7	58
Paving	Paving Equipment	1	8.00	132	100	0.36	10	2020	1.6	47
Paving	Rollers	2	8.00	80	100	0.38	10	2020	1.7	103
Paving	Tractors/Loaders/Backhoes	1	8.00	97	100	0.37	10	2020	1.6	47
Architectural Coating	Air Compressors	1	6.00	78	100	0.48	10	2020	1.3	38

17,957

Onroad Fuel Use

Immediate Improvements						
Phase Name	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length
Demolition	13	0	297	15	7	20
Site Preparation	8	0	0	15	7	20
Grading	10	0	0	15	7	20
Building Construction	12	3	0	15	7	20
Paving	15	0	0	15	7	20
Architectural Coating	2	0	0	15	7	20

Total Trips and VMT						
Phase Name	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length
All Trips	60	3	297	15	7	20

Fuel Consumption (Gasoline)					Fuel Consumption		
Phase Name	٧	Norker Trips	Vendor Trips	Hauling Trips	Worker Trips	Vendor Trips	Hauling Trips
All Trips		43	1	11	0	0	1,018
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
	0	0	0	0	0	0	0
Total		43	1	11	. 0	0	1.018

Total 55 1,018

Gallons of Gasoline and Diesel

Year	2020								
Vehicle Types	MPG by Fuel Typ	e		Population by Fuel Type					
	GAS	DSL	ELEC	GAS	DSL	ELEC	Total		
LDA	27.7	37.1		6,057,424	56,830	135,127	6,114,253		
LDT1	23.2	26.5		513,376	635	391	514,011		
LDT2	20.7	28.2		2,127,118	3,604		2,130,723		
LHDT1	10.9	20.4		119,024	90,013		209,037		
LHDT2	10.2	18.7		24,274	37,748		62,022		
MCY	35.2			281,781			281,781		
MDV	15.3	21.8		1,429,909	21,913		1,451,822		
MH	7.4	10.2		36,719	9,447		46,167		
MHDT	7.0	8.7		19,066	130,263		149,329		
HHDT	4.7	5.8		775	85,233		86,008		
OBUS	7.2	7.3		8,230	5,193	1	13,424		
SBUS	11.3	7.2		2,199	5,153	1	7,352		
UBUS	5.0	4.8		2,260	4,492		6,752		

Trips/Day Land Use Single Family Housing	Trips/day Weekday 302.	Trips/day Saturday 08 314.24	Trips/day Sunday 273.6													
Total	302	314	274													
Fleet Mix Land Use Single Family Housing	LDA 0.7470405 0 0	LDT1 7 0.050832088	LDT2 0.114929318	MDV 0.057464659	LHD1 0	LHD2 0	MHD 0	HHD 0	OBUS 0	UBUS 0.011492932	MCY 0.005551086	SBUS 0.011492932	MH 0.001196414	Total 100.0% 0.0% 0.0% 0.0% 0.0%		
Vehicle Trips Weekday Trips Single Family Housing	LDA 226 0 0 0 0	LDT1 15 0 0	LDT2 35 0 0	MDV 17 0 0	LHDT1 0 0 0 0	LHDT2 0 0 0	MHDT 0 0 0	HHDT 0 0 0	Obus 0 0 0	Ubus 3 0 0	MCY 2 0 0	Sbus 3 0 0	MH 0 0 0	Total 302 0 0	Daily VMT 2,813.97 - -	Weekday Annual VMT 731,633 0 0
Total	0 0 226	0 15	0 35	0 17	0	0	0	0	0 0	0 3	0 2	0 3	0	0 302	-	731,633
Saturday Trips Single Family Housing Total	LDA 235 0 0 0 0 0 0 0 0 235	LDT1 16 0 0 0 0	LDT2 36 0 0 0 0	MDV 18 0 0 0 0	LHDT1 0 0 0 0 0	LHDT2 0 0 0 0 0	MHDT 0 0 0 0 0	HHDT 0 0 0 0 0	Obus 0 0 0 0 0	Ubus 4 0 0 0 0	MCY 2 0 0 0 0	Sbus 4 0 0 0 0	MH 0 0 0 0	Total 314 0 0 0 0 0	Daily VMT 2,814 - - - -	Saturday Annual VMT 146,327 0 0 0 0 146,327
												_				Sunday
Sunday Trips Single Family Housing	0 0 0 0 0 0 0 0	14 0 0 0	31 0 0 0	MDV 16 0 0	LHDT1 0 0 0 0 0	0 0 0 0 0	MHDT 0 0 0 0	0 0 0 0 0	Obus 0 0 0 0	Ubus 3 0 0 0	MCY 2 0 0 0	3 0 0 0	MH 0 0 0 0	Total 274 0 0 0 0	Daily VMT 2,814 - - -	Annual VMT 146,327 0 0 0
Total	204	14	31	16	0	0	0	0	0	3	2	3	0	274	-	146,327
Gallons of Fuel																
Gasoline Single Family Housing	LDA 27,416 0 0 0 0 0 0 0 0 0 27,416	2,239 0 0 0 0 2,239	5,677 0 0 0 0 5,677	MDV 3,782 0 0 0 0 3,782	LHDT1 0 0 0 0 0 0	0 0 0 0 0 0 0	MHDT 0 0 0 0 0 0	HHD 0 0 0 0 0 0	Obus 0 0 0 0 0 0 0	788 0 0 0 0 788	MCY 161 0 0 0 0 161	310 0 0 0 0 0 0 310	MH 132 0 0 0 0 132	Total 40,507 0 0 0 0 40,507	Total Gallons	Gasoline
Diesel Single Family Housing	LDA 192 0 0 0 0 0 0 0 0 192	LDT1 2 0 0 0 0 2	LDT2 7 0 0 0 0 7	MDV 41 0 0 0 0 41	OBUS 0 0 0 0 0	LHDT2 0 0 0 0 0 0	MHDT 0 0 0 0 0	HHD 0 0 0 0 0	Obus 0 0 0 0 0 0	Ubus 1,639 0 0 0 0 1,639	MCY 0 0 0 0 0	Sbus 1,143 0 0 0 0 0 1,143	MH 25 0 0 0 0 25	Total 3,049 0 0 0 0 0 3,049	Total Gallons	Diesel

43,556 Total Gallons of Diesel and

24 Average MPG

APPENDIX C GEOTECHNICAL EVALUATION



Geotechnical Engineering Evaluation Report

Proposed North Orange Olive Development

Northeast Corner of N. Orange Olive Road & E.Grove Avenue Orange, California

Prepared for:

Mr. David Cohen Cohen living Trust 4922 E. Somerton Avenue Orange, CA 92867

January 7, 2019 Project No.: 181055.1



January 7, 2019 Project No. 181055.1

Mr. David Cohen Cohen living Trust 4922 E. Somerton Avenue Orange, CA 92867

Subject: Preliminary Geotechnical Engineering Evaluation Report

Proposed North Orange Olive Development

Northeast Corner of N. Orange Olive Road & E. Grove Avenue

Orange, California

Dear Mr. David Cohen:

In accordance with your request and authorization, Twining Consulting, Inc. is pleased to present the results of our preliminary geotechnical engineering evaluation for the proposed North Orange Olive Development located at Northeast Corner of North Orange Olive Road and East Grove Ave, Orange, CA. The project includes construction of a new 32- unit apartment complex on an approximately 2.9-acre lot. We anticipate that the apartment buildings will be 2-stories tall, wood-framed and likely supported on relatively shallow foundations. The complex includes asphalt-paved driveways and likely concrete pavements for entrances and includes an above-grade garage parking structure. Appurtenant improvements such as concrete flatwork and possibly bioswales (or other means of storm water infiltration) will be incorporated into the project. The purpose of this investigation has been to evaluate the potential geologic hazards and subsurface conditions at the site and to provide preliminary recommendations for the proposed development. Our geotechnical evaluation was performed in conformance with Chapter 18A of Title 24, Part 2, Volume 2 of the 2016 California Building Code.

We appreciate the opportunity to be of service on this project. Should you have any questions regarding this report or if we can be of further service, please do not hesitate to contact the undersigned.

Respectfully submitted,
TWINING CONSULTING, INC.



CONSULTING

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Irvine CA 92614



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Figure 3 – Regional Geologic Map

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Figure 5 – Earthquake Fault Zones and Seismic Hazards Zones Map Figure 6 – FEMA FIRM Map

Appendices

Appendix A – Geotechnical Field Exploration Appendix B – Laboratory Testing

Appendix C - Percolation Test



1. INTRODUCTION

This report presents the results of the preliminary geotechnical evaluation performed by Twining Consulting, Inc. ("Twining") for the proposed North Orange Olive development to be built at Northeast corner of North Orange Olive road and East Grove avenue, Orange, California. The objectives of this study were to evaluate the subsurface conditions of the site and to provide design recommendations for the proposed development.

Our geotechnical evaluation was performed in conformance with Chapter 18 of Title 24, Part 2, Volume 2 of the 2016 California Building Code (CBC).

2. SITE AND PROJECT DESCRIPTION

2.1. Site Location and Existing Conditions

The proposed North Orange Olive Development located at Northeast corner of North Orange Olive road and East Grove avenue, Orange, CA, as shown on Figure 1, Site Location Map. The site currently is occupied by a retail development that will demolished as part of this proposed project. The site has an existing building on the northern approximately one-half of the site, a small building at the southwest corner of the site, and asphalt- and concrete-paved surrounding the existing structures as shown on Figure 2, Site Plan.

The approximate site coordinates are latitude 33.8211 °N and longitude 117.8504 °W. The site is located on the Orange, California 7½-Minute Quadrangle (United States Geological Survey, 1997).

2.2. Proposed Project

We estimated the maximum axial load on the columns to be approximately 100 kips (dead + live loads) and the wall loading to be approximately 12 kips per foot. Should the design loads vary significantly from these values, this office should be contacted to provide revised recommendations.

3. SCOPE OF WORK

To prepare this report, we have performed the following tasks:

3.1. Literature Review

We reviewed readily available background data including previous geotechnical investigation reports, in-house geophysical data, geologic maps, and topographic maps relevant to the subject site in preparation of this report. A partial list of literature reviewed is presented in the "Selected References" section of this report.

3.2. Field Exploration

Field exploration consisting of the drilling of six 8-inch-diameter exploratory borings was conducted at the site on November 26 and December 3, 2018. The borings were advanced to the depth approximately 51½ and 26½ feet. Three additional borings



were advanced to depth of between 5 feet and 25 feet and prepared for percolation test in accordance with the county of orange guideline. The drilling operation was performed using a truck-mounted, hollow-stem auger drill rig. The approximate locations of the borings are shown on Figure 2, Site Plan. Detailed exploration information regarding the borings is presented in Appendix A.

3.3. Geotechnical Laboratory Testing

Laboratory tests were performed on selected samples obtained from the borings in order to aid in the soil classification and to evaluate the engineering properties of the foundation soils. The following tests were performed in general accordance with ASTM standards:

- In-situ moisture and density;
- Maximum dry density-optimum moisture content;
- Corrosivity;
- R-value;
- Expansion Index;
- Soil classification testing including #200 wash sieve and Atterberg limits;
- · Consolidation; and,
- Direct Shear.

The detailed laboratory test results are presented in Appendix B.

3.4. Engineering Analyses and Report Preparation

We compiled and analyzed the data collected from our site reconnaissance, subsurface evaluation, and laboratory testing, and prepared this report to present our conclusions and recommendations. The analyses included:

- Evaluation of general subsurface conditions and description of types, distribution, and engineering characteristics of subsurface materials;
- Evaluation of site geology and geologic hazards, including site seismicity, liquefaction and seismic settlement potential
- Evaluation of site-specific seismic design parameters in accordance with provisions of the 2016 California Building Code;
- Evaluation of current and historical groundwater conditions at the site and potential impact on the existing structures;
- Evaluation of project feasibility and suitability of on-site soils for foundation support;
- Evaluation of expansion potential;
- Development of general recommendation for earthwork, including site preparation and excavation;
- Recommendation for suitable building foundation system, and provision of allowable bearing capacities, associate settlement estimate and lateral pressures and resistance;



- Recommendation for slab-on-grade floors including modulus of subgrade reaction;
- Recommendation for subgrade preparation for floor slab and slab-on-grade support;
- Recommendation for pavement design; and,
- Evaluation of the corrosion potential of the on-site earth materials including soil ferrous corrosivity and concrete attack potential
- Recommendation for design infiltration rates of the site soil in accordance with the orange county requirements.

4. SITE GEOLOGY AND SUBSURFACE CONDITIONS

4.1. Subsurface Earth Materials

Earth materials encountered during our subsurface investigation consist of an underlain by old alluvial fan deposits (geologic map symbol Qof) extending to the total depth of exploration. The alluvial deposits comprise predominantly Sandy lean Clay Silty Sand and Poorly- Graded Sand with Silt. Detailed information regarding the exploratory excavations is presented in Appendix A, Field Exploration.

4.2. Groundwater

Groundwater was not encountered in the exploratory borings placed on the site during the geotechnical investigation. The historical high depth to groundwater is reportedly at approximately 50 feet at the project site (California Department of Conservation, Division of Mines and Geology, 1997). Groundwater conditions may vary across the site due to stratigraphic and hydrologic conditions, and may change over time as a consequence of seasonal and meteorological fluctuations, or of activities by humans at this and nearby sites.

5. GEOLOGIC HAZARDS AND SEISMIC DESIGN CONSIDERATIONS

The site is located in a seismically active area, as is the majority of southern California, and the potential for strong ground motion in the project area is considered high during the design life of the proposed improvements. The hazards associated with seismic activity in the vicinity of the site are discussed in the following sections.

5.1. Liquefaction and Seismic Settlement Potential

Liquefaction occurs when the pore pressures generated within a soil mass approach the effective overburden pressure. Liquefaction of soils may be caused by cyclic loading such as that imposed by ground shaking during earthquakes. The increase in pore pressure results in a loss of strength, and the soil then can undergo both horizontal and vertical movements, depending on the site conditions. Other phenomena associated with soil liquefaction include sand boils, ground oscillation, and loss of foundation bearing capacity. Liquefaction is generally known to occur in loose, saturated, relatively clean, fine-grained cohesionless soils at depths shallower than approximately 50 feet. Factors to consider in the evaluation of soil liquefaction



potential include groundwater conditions, soil type, grain size distribution, relative density, degree of saturation, and both the intensity and duration of ground motion.

Based on our review of the State of California Official Map of Earthquake Zones of Required Investigation for the Orange Quadrangle (California Geological Survey, 1997), the site is not located within a Zone of Required Investigation for Liquefaction.

5.2. Landslides

Based on our review of the referenced geologic maps, literature, and topographic maps, as well as our site investigation, no landslides or related features underlie or are adjacent to the subject site. Due to the relatively level nature of the site and surrounding areas, the potential for landslides at the project site is considered negligible.

5.3. Flooding

The Federal Emergency Management Agency (FEMA) has prepared flood insurance rate maps (FIRMs) for use in administering the National Flood Insurance Program. Based on our review of online FEMA flood mapping, the site is located within Zone X, which is described as "Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood." No additional flooding hazards (e.g. dam inundation hazard) are identified in the City of Anaheim General Plan Safety Element.

5.4. Tsunamis and Seiches

Tsunamis are waves generated by massive landslides near or under sea water. The site is not located on any State of California – County of Orange Tsunami Inundation Map for Emergency Planning. The potential for the site to be adversely impacted by earthquake-induced tsunamis is considered to be negligible because the site is located miles inland from the Pacific Ocean coast, at an elevation exceeding the maximum height of potential tsunami inundation (California Emergency Management Agency and others, 2009).

Seiches are standing wave oscillations of an enclosed water body after the original driving force has dissipated. The potential for the site to be adversely impacted by earthquake-induced seiches is considered to be negligible due to the lack of any significant enclosed bodies of water located in the vicinity of the site.

5.5. CBC Seismic Design Parameters

Our recommendations for seismic design parameters have been developed in accordance with 2016 CBC and ASCE 7-10 (ASCE, 2010) standards. The applicable site class is E based on the results of our field investigation. Table 3 presents the seismic design parameters for the site in accordance with 2016 CBC.



Table 1 - 2016 California Building Code Design Parameters

rable 1 – 2010 California Bulluting Code Design 1 arameters					
Design Parameters	Value				
Site Class	D				
Mapped Spectral Acceleration Parameter at Period of 0.2-Second, S _s	1.5g				
Mapped Spectral Acceleration Parameter at at Period 1-Second, S ₁	0.572g				
Site Coefficient, Fa	1.0				
Site Coefficient, F_{v}	1.5				
Adjusted MCE $_{\rm R}^1$ Spectral Response Acceleration Parameter at Short Period, S_{MS}	1.5 g				
1-Second Period Adjusted MCE_R^1 Spectral Response Acceleration Parameter, S_{M1}	0.859g				
Short Period Design Spectral Response Acceleration Parameter, SDS	1g				
1-Second Period Design Spectral Response Acceleration Parameter, S_{D1}	0.572g				
Peak Ground Acceleration, PGA _M ²	0.503g				
Seismic Design Category ³	D				
Notes: 1 Risk-targeted maximum considered earthquake 2 Peak ground acceleration adjusted for site effects					

6. GEOTECHNICAL ENGINEERING RECOMMENDATIONS

General Considerations 6.1.

Based on the results of our field exploration and engineering analyses, it is our opinion that the proposed development is feasible from a geotechnical standpoint provided that the recommendations in this report are incorporated into the design plans and are implemented during construction.

The following is a list of geotechnical considerations for this project:

Hydro-collapsible soils are observed between 0 to 5 feet and at 15 feet below the ground surface

Our geotechnical engineering analyses performed for this report were based on the earth materials encountered during the subsurface exploration for the site. If the design substantially changes, then our geotechnical engineering recommendations would be subject to revision based on our evaluation of the changes. The following sections present our conclusions and recommendations pertaining to the engineering design for this project.

6.2. **Expansive and Collapsible Soils**

Expansive soils are characterized by their ability to undergo significant volume changes (shrink or swell) due to variations in moisture content. Changes in soil moisture content can result from rainfall, landscape irrigation, utility leakage, roof drainage, perched groundwater, drought, or other factors, and may cause

³ For S₁ greater than or equal to 0.75g, the seismic design category is E



unacceptable settlement or heave of structures, concrete slabs supported on-grade, or pavements supported over these materials. Depending on the extent and location below finished subgrade, these soils could have a detrimental effect on the proposed construction.

Based on our field soil classification, the expansion index classified as "very low" expansion potential. However, our consolidations test results show existing collapsible soil at various depths. Mitigation measurement for collapsible soil is provided in earthwork and site preparation section of this report.

6.3. Corrosive Soils

The potential for the near-surface on-site materials to corrode buried steel and concrete improvements was evaluated. Laboratory testing was performed on one representative sample of on-site soils to evaluate pH and electrical resistivity, as well as chloride and sulfate contents. The pH and electrical resistivity tests were performed in accordance with California Tests 643, and the sulfate and chloride tests were performed in accordance with California Tests 417 and 422, respectively. These laboratory test results are presented in Appendix B.

In accordance with the Caltrans (2014) criteria, corrosive soil is defined as the soil has minimum resistivity less than 1,000 ohm-centimeters, or chloride concentration greater than 500 ppm, or sulfate concentration in soils greater than 2,000 ppm, or a pH less than 5.5. Based on the results of resistivity testing we would rate the soil onsite as mildly corrosive.

6.3.1.Reinforced Concrete

Laboratory tests indicate that the potential for sulfate attack on concrete in contact with the on-site soils is negligible in accordance with ACI 318, Table 4.3.1. As a minimum, we recommend that Type I or II cement and a water-cement ratio of no greater than 0.5 be used on the project.

Test results also indicate that the potential for chloride attack of reinforcing steel in concrete structures and pipes in contact with soil is negligible.

6.3.2.Metallic

Laboratory resistivity testing indicates that the on-site near-surface soils are considerred to be not corrosive to buried ferrous metals.

6.4. Earthwork and Site Preparation

Site preparation should begin with the removal of utility lines, asphalt, concrete, vegetation, and other deleterious debris from areas to be graded. Tree stumps and roots should be removed to such a depth that organic material is generally not present. Clearing and grubbing should extend to the outside edges of the proposed excavation and fill areas. We recommend that unsuitable materials such as organic matter or oversized material be selectively removed and disposed offsite. The debris and unsuitable material generated during clearing and grubbing should be removed from areas to be graded and disposed at a legal dump site away from the project area.



6.4.1. Building Pad and Foundations

In order to control the settlement for hydro-collapsible soils, we recommend an overexcavation and recompaction of the building pad area to a depth of 6 feet below the adjacent grade or 4 feet below the bottom of foundation, whichever is deeper. The exposed bottom should be scarified to a depth of 12 inches and saturated 20 percent over optimum moisture content and compacted to 95 percent relative compaction in accordance with the latest version of ASTM Test Method D1557.

In order to further control the settlement, a layer geogrid material (Tensar Triax TX-7 or equivalent) over the compacted bottom. The lateral extent of the overexcavation and geogrid should be at least 5 feet beyond the edge of the future footings. Deeper removals may be required in areas where soft, saturated, or organic materials are encountered, for example, tree root balls or similar.

Exterior Flatwork/Sidewalks: Exterior flatwork and sidewalks subgrade that are not subject to vehicle traffic, and that are outside the limits of grading for the building pad area may be excavated to a depth of 2 feet below the adjacent grade or 1 feet on relatively undisturbed and competent native soils. Any undocumented fills encountered during site grading should be completely removed or properly compacted to at least 95 percent of the maximum dry density as determined by ASTM D 1557.

<u>Pavements:</u> Pavements subgrade that are subject to vehicle traffic and that are outside the limits of grading for the building pad area should be excavated to a depth of at least 3 feet below the adjacent grade or 2 feet below the bottom of pavement section and properly compacted to at least 95 percent of the maximum dry density as determined by ASTM D 1557.

A representative of Twining should observe the bottoms of the excavations prior to placement of any geogrid or aggregate base materials and be present during the placement and compaction of aggregate base materials.

6.4.2.Compacted Fill

Fill materials should be moisture conditioned to approximately 2% above optimum moisture content prior to placement. The optimum moisture content will vary with material type and other factors. Moisture conditioning of fill soils should be generally consistent within the soil mass. Continue to place the compacted fill in horizontal lifts of approximately 6 to 8 inches in loose thickness. Prior to compaction, each lift should be watered or dried as needed, mixed, and then compacted by mechanical methods, using multiple wheel pneumatic tired rollers, sheepsfoot rollers, or other appropriate compacting rollers, to a relative compaction as evaluated by the latest version of ASTM D1557. Successive lifts should be treated in a like manner until the desired finish grades are achieved.

The evaluation of compaction by Twining should not be considered to preclude any requirements for observation or approval by governing agencies. It is the contractor's responsibility to notify Twining and the appropriate governing agency when project areas are ready for observation, and to provide reasonable time for that review.



6.4.3. Temporary Excavations

Temporary excavations for the demolishing, earthwork, footing and utility trench are expected. We anticipate that unsurcharged excavations with vertical side slopes less than 5 feet high will generally be stable; however, some sloughing of cohesionless sandy materials encountered at the site should be expected.

Where the space is available, temporary, unsurcharged excavation sides over 5 feet in height should be sloped no steeper than an inclination of 1.5H:1V (horizontal:vertical). Where sloped excavations are created, the tops of the slopes should be barricaded so that vehicles and storage loads do not encroach within 10 feet of the top of the excavated slopes. A greater setback may be necessary when considering heavy vehicles, such as concrete trucks and cranes. Twining should be advised of such heavy vehicle loadings so that specific setback requirements can be established. If the temporary construction slopes are to be maintained during the rainy season, berms are recommended to be graded along the tops of the slopes in order to prevent runoff water from entering the excavation and eroding the slope faces.

Excavations shall not undermine the existing adjacent building footings. Where space for sloped excavations is not available, slot-cut or temporary shoring (trench box) may be utilized. For temporary excavations that are less than 6 feet in height adjacent to existing buildings where the excavation extends deeper than the bottom of the existing footing, slot cuts may be utilized. The slots should be no wider than 8 feet and should be excavated in an A-B-C sequence so that there are at least 16 feet spacing between any two excavated slots. The excavated slots should not be left open overnight and should be backfilled on the same day it was excavated before the next set of slots are excavated.

Personnel from Twining should observe the excavations so that any necessary modifications based on variations in the encountered soil conditions can be made. All applicable safety requirements and regulations, including CalOSHA requirements, should be met.

6.4.4. Utility Trench Backfill

Trench excavations to receive backfill shall be free of trash, debris or other unsatisfactory materials at the time of backfill placement. The utility should be bedded with clean sand to at least one foot over the crown. The bedding sand should have a sand equivalent (SE) of 30 or greater. The remainder of trench backfill may be onsite soils compacted to 90 percent of the laboratory maximum dry density as per ASTM Standard D1557.

6.4.5. Rippability

The earth materials underlying the site should be generally excavatable with heavy-duty earthwork equipment in good working condition. Some gravels, cobbles and man-made debris should be anticipated within the fill soils.



6.4.6. Shrinkage/Bulking Due to Compaction

Based on our review of the in-situ soil density data, preliminary volumetric expansion on the order of 10 percent as a result of compaction of on-site soil may be assumed.

6.4.7. Excavation Bottom Stability

In general, we anticipate that excavation bottoms of the excavations will be stable and should provide suitable support for the proposed improvements. Unstable bottom conditions may be mitigated by overexcavation of the bottom to suitable depths, and/or replacement with a minimum 6- to 12-inch-thick aggregate base based on the field evaluation. Recommendations for stabilizing excavation bottoms should be based on evaluation in the field by the geotechnical consultant at the time of construction.

6.4.8. Construction Dewatering

Due to the absence of shallow groundwater, dewatering measures are not anticipated to be necessary during excavation operations. If needed, considerations for construction dewatering should include anticipated drawdown, volume of pumping, potential for settlement of nearby structures, and groundwater discharge. Disposal of groundwater should be performed in accordance with guidelines of the Regional Water Quality Control Board.

6.5. Foundation Recommendations

A post-tension concrete slab with thickened edges may be used for support of the proposed building, provided that all the footings are placed on subgrade prepared as described in the "Earthwork and Site Preparation" section of this report. The recommended geotechnical foundation design parameters are presented in Table 2 below.



Table 2 – Geotechnical Foundation Design Parameters

Minimum Footing Dimensions	A minimum embedment depth of 24 inches and width of 12 inches for perimeter footings should be utilized.	
Allowable Bearing Pressure	 Footing should be supported on compacted fill. An allowable vertical bearing pressure of 2500 pounds per square foot may be assumed for the post-tension slab. 	
	The allowable bearing values may be increased by one-third for transient live loads from wind or earthquake.	
Estimated Static Settlement	Less than 1.0 inches total settlement with differential settlement estimated to be less than 0.5 inch over 40 feet.	
	The static settlement of the foundation system is expected to occur on initial application of loading.	
Allowable Coefficient of Friction Below Footings	0.25 (against sandy soil)	
Unfactored Lateral Passive Resistance	300 pcf (equivalent fluid pressure)	

The passive resistance values may be increased by one-third when considering wind or seismic loading.

6.6. Concrete Slabs-on-Grade

For design of concrete floor slabs supported on engineered fill, a modulus of subgrade reaction (k) of 150 pounds per cubic inch (pci) may be used on compacted, engineered fill.

Floor slabs should be designed and reinforced in accordance with the structural engineer's recommendations. However, for slabs not supporting heavy loads, we recommend that the concrete should have a thickness of at least 4 inches, a 28-day compressive strength of at least 3,000 pounds per square inch (psi), a water-cement ratio of 0.50 or less, and a slump of 4 inches or less. Slabs should be reinforced with at least No. 3 reinforcing bars placed longitudinally at 18 inches on center. The reinforcement should be extended through the control joints to reduce the potential for differential movement. Control joints should be constructed in accordance with recommendations from the structural engineer or architect. For slabs supporting equipment, a minimum thickness of 5 inches is recommended. Additional thickness and reinforcement recommendations may be provided by the structural engineer.

All underslab materials should be adequately compacted prior to the placement of concrete. Care should be taken during placement of the concrete to prevent displacement of the underslab materials. The granular material should be dry to moist, and should not be wetted or saturated prior to the placement of concrete. The concrete slab should be allowed to cure properly prior to placing vinyl or other moisture-sensitive floor covering.

Table 3 provides recommendations for various levels of protection against vapor transmission through concrete floor slabs placed over a properly prepared subgrade.



Table 3 - Options for Subgrade Preparation Below Concrete Floor Slabs

Primary Objective	Recommendation		
	 Concrete floor slab-on-grade may be placed directly on a 15-mil thick moisture vapor retarder that meets the requirements of ASTM E 1745 Class C (Stego Wrap or similar). 		
Enhanced protection against vapor transmission (For Hotel Building)	 The moisture vapor retarder membrane may be placed directly on the subgrade (ACI302.1R-67); if required for either leveling of the subgrade or for protection of the membrane from protruding gravel, then place about 2 inches of silty sand¹ under the membrane. 		
	 Special consideration for curing the concrete, such as wet curing, should be made if concrete is placed directly on the impermeable vapor retarder. 		
Above-standard protection against vapor transmission	This option is available if the slab perimeter is bordered by continuous footings at least 24 inches deep, OR if the area adjacent and extending at least 10 feet from the slab is covered by hardscape without planters: • 2 inches of dry silty sand¹; over • Waterproofing plastic membrane 10-mil thick; over • At least 4 inches of ¾-inch crushed rock² or clean gravel³ to act as a capillary break		
Standard protection against vapor transmission	 2 inches of dry silty sand¹; over Waterproofing plastic membrane 10-mil thick. If required for either leveling of the subgrade or for protection of the membrane from protruding gravel, place at least 2 inches of silty sand¹ under the membrane. 		

Notes:

- ¹ The silty sand should have a gradation between approximately 15 and 40 percent passing the No. 200 sieve and a plasticity index (PI) of less than 4.
- ² The ³/₄-inch crushed rock should conform to Section 200-1.2 of the latest edition of the "Greenbook" Standard Specifications for Public Works Construction (BNI Publications, Inc., 2012).
- ³ The gravel should contain less than 10 percent of material passing the No. 4 sieve and less than 3 percent passing the No. 200 sieve.

The recommendations presented above are intended to reduce the potential for cracking of slabs; however, even with the incorporation of the recommendations



presented herein, slabs may still exhibit some cracking. The occurrence of concrete shrinkage cracks is independent of the supporting soil characteristics.

6.7. Drainage Control

The control of surface water is essential to the satisfactory performance of the building and site improvements. Surface water should be controlled so that conditions of uniform moisture are maintained beneath the improvements, even during periods of heavy rainfall. The following recommendations are considered minimal:

- Ponding and areas of low flow gradients should be avoided.
- If bare soil within 5 feet of the structure is not avoidable, then a gradient of 5
 percent or more should be provided sloping away from the improvement.
 Corresponding paved surfaces should be provided with a gradient of at least
 1 percent.
- The remainder of the unpaved areas should be provided with a drainage gradient of at least 2 percent.
- Positive drainage devices, such as graded swales, paved ditches, and/or catch basins should be employed to accumulate and to convey water to appropriate discharge points.
- Concrete walks and flatwork should not obstruct the free flow of surface water.
- Brick flatwork should be sealed by mortar or be placed over an impermeable membrane.
- Area drains should be recessed below grade to allow free flow of water into the basin.
- Enclosed raised planters should be sealed at the bottom and provided with an ample flow gradient to a drainage device. Recessed planters and landscaped areas should be provided with area inlet and subsurface drain pipes.
- Planters should not be located adjacent to the structures wherever possible.
 If planters are to be located adjacent to the structures, the planters should be positively sealed, should incorporate a subdrain, and should be provided with free discharge capacity to a drainage device.
- Planting areas at grade should be provided with positive drainage. Wherever
 possible, the grade of exposed soil areas should be established above
 adjacent paved grades. Drainage devices and curbing should be provided to
 prevent runoff from adjacent pavement or walks into planted areas.
- Gutter and downspout systems should be provided to capture discharge from roof areas. The accumulated roof water should be conveyed to off-site disposal areas by a pipe or concrete swale system.
- Landscape watering should be performed judiciously to preclude either soaking or desiccation of soils. The watering should be such that it just sustains plant growth without excessive watering. Sprinkler systems should



be checked periodically to detect leakage and they should be turned off during the rainy season.

6.8. Preliminary Flexible Pavement Design

Our pavement structural design is in accordance with Chapter 600 of the Caltrans Highway Design Manual, which is based on a relationship between the gravel equivalent (GE) of the pavement structural materials, the traffic index (TI), and the R-value of the underlying subgrade soil.

For the conventional pavement section recommendations to be valid, the recommendations for subgrade preparation presented in section 6.4 must be followed. Based on our observations made during drilling, there is a high likelihood to encounter moist to wet, soft subgrade soils in subgrade preparation. Soft subgrade conditions can be identified by surface yielding under rubber-tired equipment loading and the inability to achieve proper compaction. The intent of recommended pavement subgrade preparation is to achieve a non-yielding subgrade when subjected to relatively heavy, rubber-tired construction equipment loading such as a loaded water truck or loader with full bucket. The remediated areas should be proof-rolled with this type of equipment after remediation to confirm that the subgrade is unyielding.

Table 9 provides minimum thicknesses for HMA and aggregate base sections constructed on top of a properly prepared stabilized subgrade and Table 10 provides minimum thicknesses for HMA and cement-treated sections constructed on top of subgrade.

We have provided recommendations for HMA section using an R-value of 18 and TI's ranging from 5.0 to 7.0 in our analyses.

Table 4
Recommended Minimum HMA and Base Section Thicknesses

	Traffic Index	5.0	6.0	7.0
1	HMA Thickness (in)	4.0	5.0	6.0
	Aggregate Base Thickness (in)	6.0	8.0	10.0

6.9. Rigid Pavement Design

Table 5 provides minimum thicknesses for Portland Cement Concrete (PCC) pavement sections constructed on non-expansive engineered fill and underlain by at least 4 inches of Class 2 aggregate base compacted to at least 95 percent of the maximum dry density (ASTM D 1557).



Table 5 - Recommended Minimum PCC Section Thicknesses

Location	Light Vehicle Parking	Firelane / Truck Drive Way
Traffic Index	5.0	7.0
PCC Thickness (in)	5.5	6.0
Aggregate Base Thickness (in.)	6.0	6.0

The above pavement section is based on a minimum 28-day Modulus of Rupture (M-R) of 550 psi and a compressive strength of 3,000 psi. Transverse contraction joints should not be spaced more than 15 feet and should be cut to a depth of ¼ the thickness of the slab. Longitudinal joints should not be spaced more than 15 feet apart, however, are not necessary in the pavement adjacent to the curb and gutter section. Positive drainage should be provided away from all pavement areas to prevent seepage of surface and/or subsurface water into the pavement base and/or subgrade.

6.10. Stormwater Quality Control Measures Recommendations

Based on the percolation results presented in Appendix C, the on-site infiltration system is not considered feasible because the infiltration rate is less than the minimum required 0.3 inch/hour in accordance with the County of Orange guidelines. The test details are provided in appendix C of this report.

7. DESIGN REVIEW AND CONSTRUCTION MONITORING

Geotechnical review of plans and specifications is of paramount importance in engineering practice. The poor performance of many structures has been attributed to inadequate geotechnical review of construction documents. Additionally, observation of excavations will be important to the performance of the proposed development. The following sections present our recommendations relative to the review of construction documents and the monitoring of construction activities.

7.1. Plans and Specifications

The design plans and specifications should be reviewed by Twining prior to bidding and construction, as the geotechnical recommendations may need to be reevaluated in the light of the actual design configuration and loads. This review is necessary to evaluate whether the recommendations contained in this report and future reports have been properly incorporated into the project plans and specifications. Based on the work already performed, this office is best qualified to provide such review.

7.2. Construction Monitoring

Site preparation, removal of unsuitable soils, assessment of imported fill materials, fill placement, foundation installation, and other site grading operations should be observed and tested. The substrata exposed during the construction may differ from that encountered in the test excavations. Continuous observation by a representative of Twining during construction allows for evaluation of the soil conditions as they are



encountered, and allows the opportunity to recommend appropriate revisions where necessary.

The project engineer should be notified prior to exposure of subgrades. It is critically important that the engineer be provided with an opportunity to observe all exposed subgrades prior to burial or covering.

8. LIMITATIONS

The recommendations and opinions expressed in this report are based on Twining, Inc.'s review of available background documents, on information obtained from field explorations, and on laboratory testing. It should be noted that this study did not evaluate the possible presence of hazardous materials on any portion of the site. In the event that any of our recommendations conflict with recommendations provided by other design professionals, we should be contacted to aid in resolving the discrepancy.

Due to the limited nature of our field explorations, conditions not observed and described in this report may be present on the site. Uncertainties relative to subsurface conditions can be reduced through additional subsurface exploration. Additional subsurface evaluation and laboratory testing can be performed upon request. It should be understood that conditions different from those anticipated in this report may be encountered during grading operations, for example, the extent of removal of unsuitable soil, and that additional effort may be required to mitigate them.

Site conditions, including groundwater elevation, can change with time as a result of natural processes or the activities of man at the subject site or at nearby sites. Changes to the applicable laws, regulations, codes, and standards of practice may occur as a result of government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Twining, Inc. has no control.

Twining's recommendations for this site are, to a high degree, dependent upon appropriate quality control of subgrade preparation, fill placement, and foundation construction. Accordingly, the recommendations are made contingent upon the opportunity for Twining to observe grading operations and foundation excavations for the proposed construction. If parties other than Twining are engaged to provide such services, such parties must be notified that they will be required to assume complete responsibility as the geotechnical engineer of record for the geotechnical phase of the project by concurring with the recommendations in this report and/or by providing alternative recommendations.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Twining should be contacted if the reader requires additional information or has questions regarding the content, interpretations presented, or completeness of this document.

This report has been prepared for the exclusive use by the client and its agents for specific application to the proposed project. Land use, site conditions, or other factors may change over time, and additional work may be required with the passage of time. Based on the intended use of this report and the nature of the new project, Twining may require that additional work be performed and that an updated report be issued. Non-compliance

with any of these requirements by the Client or anyone else will release Twining from any liability resulting from the use of this report by any unauthorized party.



Twining performed its evaluation using the degree of care and skill ordinarily exercised under similar circumstances by reputable geotechnical professionals with experience in this area in similar soil conditions. No other warranty, either express or implied, is made as to the conclusions and recommendations contained in this report.

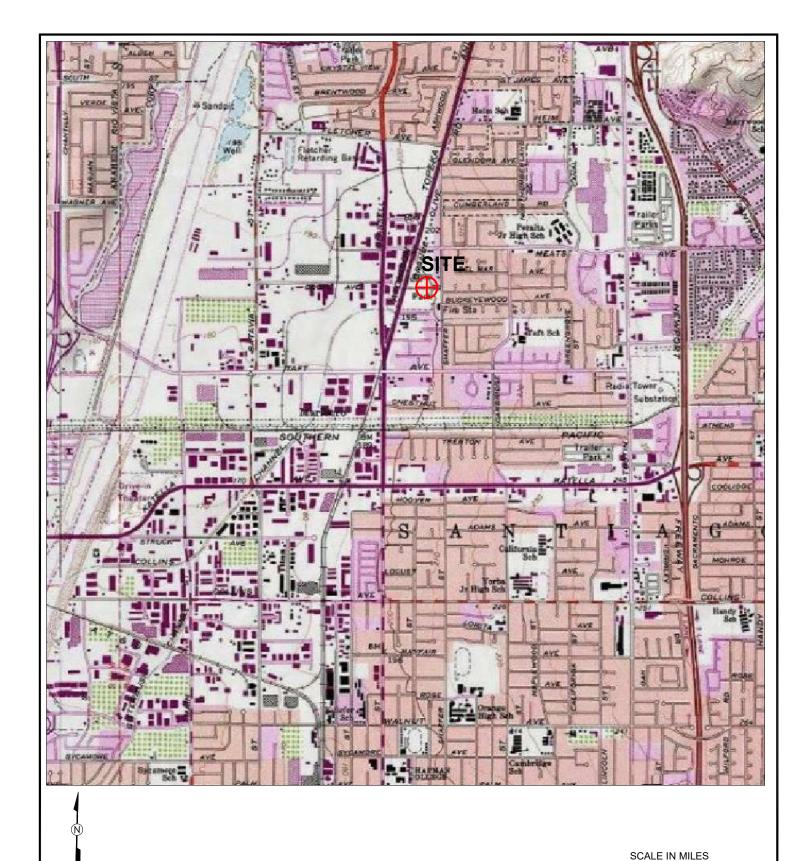


9. SELECTED REFERENCES



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- United States Geological Survey, 1981, Orange, Calif. Quadrangle: 7.5 Minute Series (Topographic), Photorevised from 1965 base, scale 1:24,000.





REFERENCE: USGS (2018)



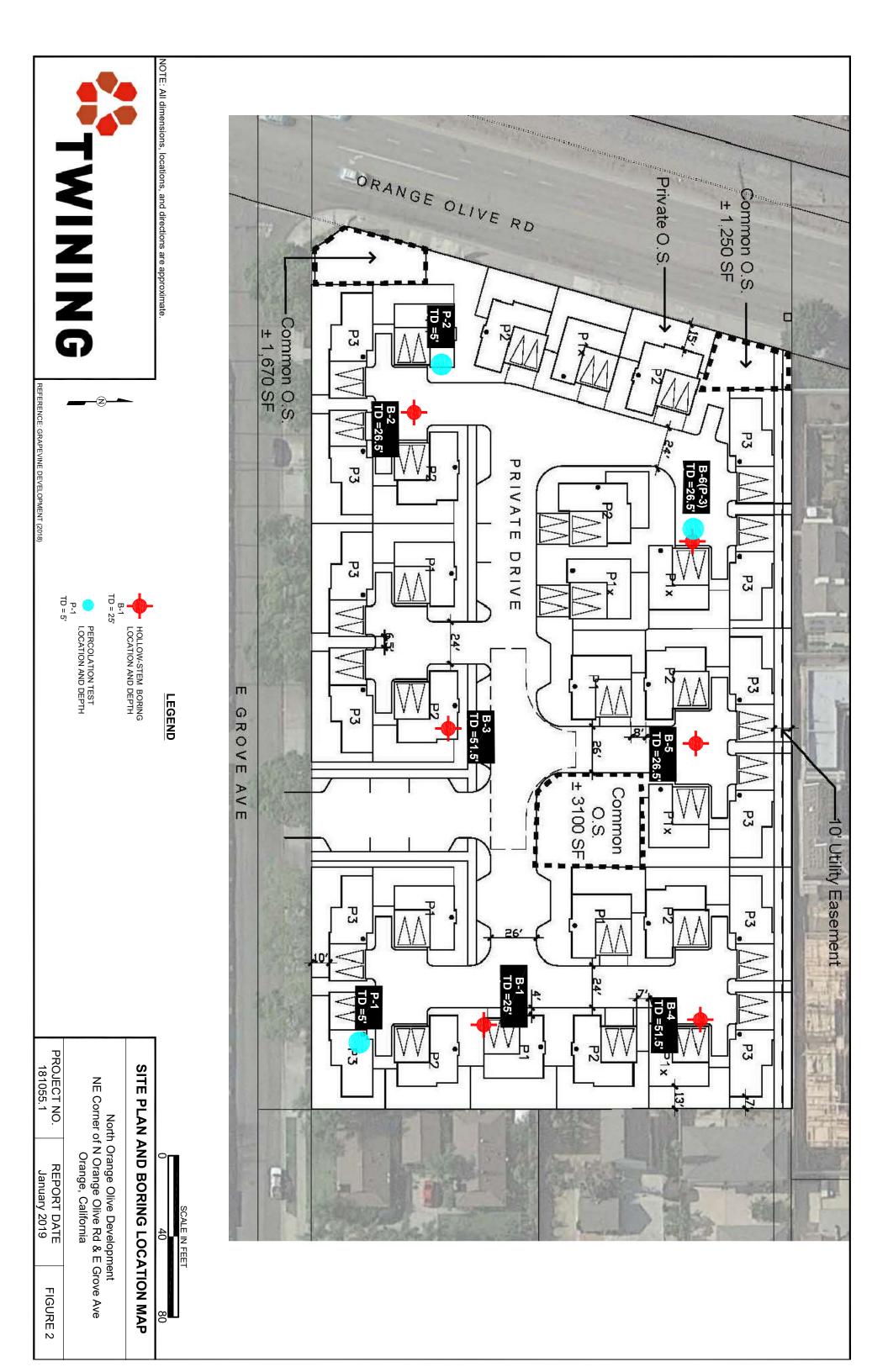
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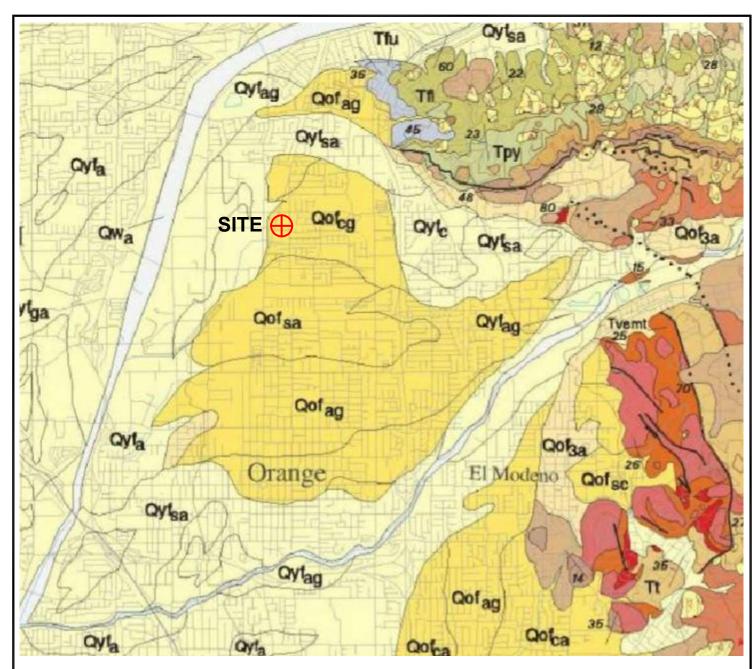
SITE LOCATION MAP

North Orange Olive Development NE Corner of N Orange Olive Rd & E Grove Ave Orange, California

PROJECT NO.
181055.1

REPORT DATE January 2019





LEGEND

Qof

OLD Alluvial Fan Deposit

slightly to moderately consolidated, moderately dissected boulder, cobble, gravel , sand and silt deposits issued from a confined valley or canyon.



Young Alluvial Fan Deposit

Unconsolidated to slightly consolidated, undissected to slightly dissected boulder, cobble, gravel, sand, and silt deposits issued from confined valley or canyon

REFERENCE: DIBBLEE AND EHRENSPECK (1999)



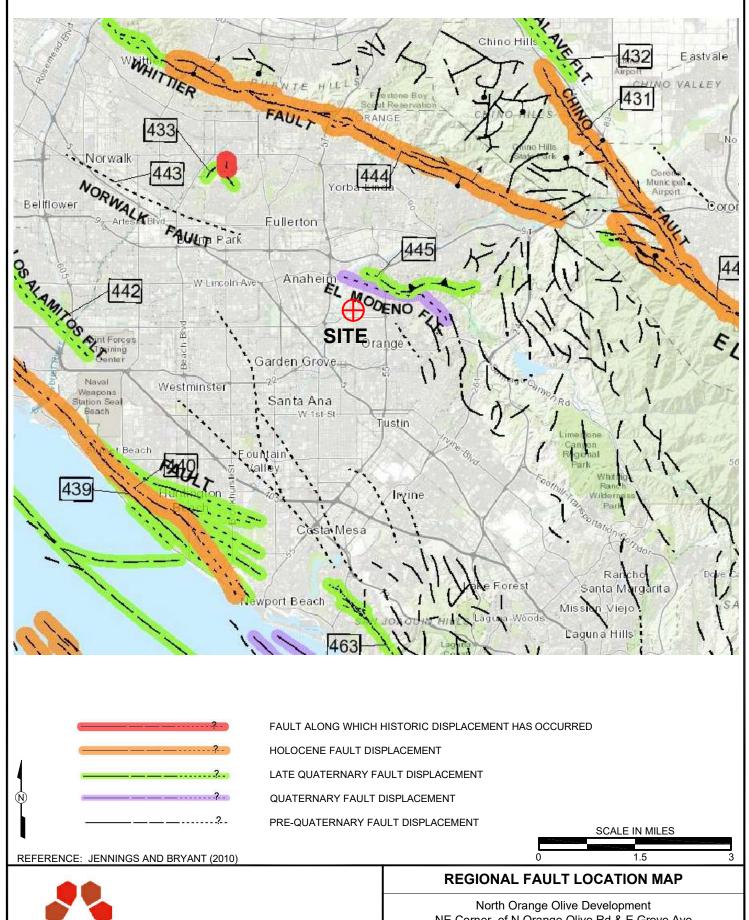


REGIONAL GEOLOGIC MAP

North Orange Olive Development NE Corner of N Orange Olive Rd & E Grove Ave Orange, California

PROJECT NO.
181055.1

REPORT DATE January 2019

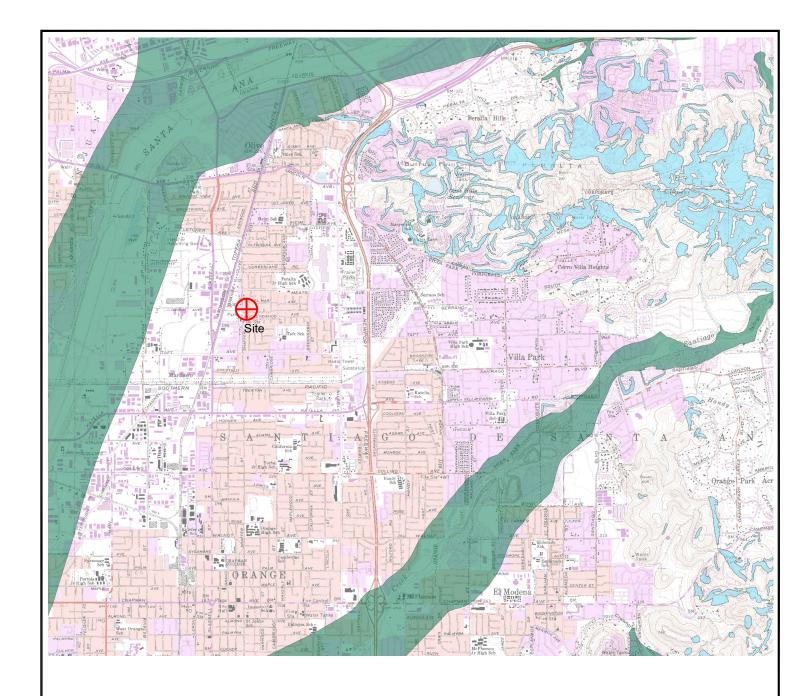




North Orange Olive Development
NE Corner of N Orange Olive Rd & E Grove Ave
Orange, California

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REPORT DATE January 2019



SEISMIC HAZARD ZONES



Liquefaction ZonesAreas where historical occurrence of liquefaction, or local geological, geotechnical and ground water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.



REFERENCE: CALIFORNIA GEOLOGICAL SURVEY (1999)



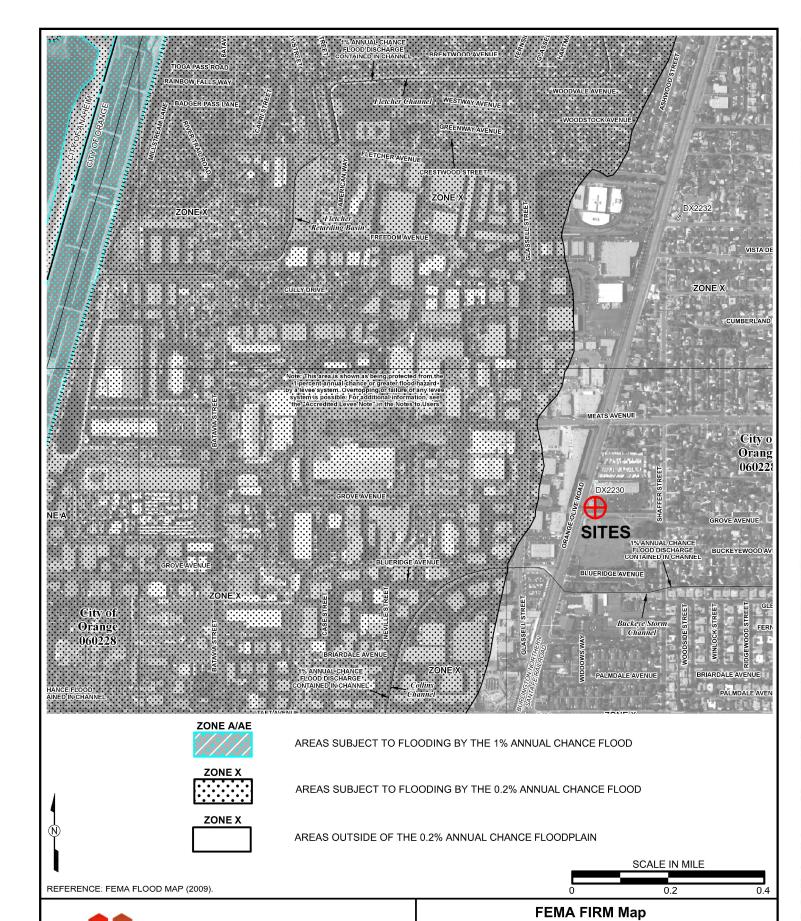


EARTHQUAKE FAULT ZONES AND SEISMIC HAZARD ZONES MAP

North Orange Olive Development NE Corner of N Orange Olive Rd & E Grove Ave Orange, California

PROJECT NO. 181055.1

REPORT DATE January 2019



North Orange Olive Development NE Corner of N Orange Olive Rd & E Grove Ave

Orange, CA

REPORT DATE

January 2019

FIGURE 6

PROJECT NO.

181055.1



Appendix A Field Exploration

Appendix A Field Exploration



General

Field exploration consisting of the drilling of five 8-inch-diameter exploratory borings was conducted at the site on November 26 and December 3, 2018. The borings were advanced to the depth approximately 51½ feet and 26½ feet. Three additional borings were advanced to depth of 5 and 25 feet and prepared in accordance with the county of orange guideline for percolation testing. The drilling operation was performed using a truck-mounted, hollow-stem auger drill rig. Drilling was performed by Baja Drilling.

Drilling and Sampling

The Logs of Borings are presented as Figures A-2 through A-9. An explanation of these logs is presented as Figure A-1. The Logs of Borings describe the earth materials encountered, samples obtained, and show the field and laboratory tests performed. The logs also show the boring number, drilling date, and the name of the logger and drilling subcontractor. The borings were logged by a Twining engineer/geologist using the Unified Soil Classification System. The boundaries between soil types shown on the logs are approximate because the transition between different soil layers may be gradual. Drive and bulk samples of representative earth materials were obtained from the borings.

A California modified sampler was used to obtain drive samples of the soil encountered. This sampler consists of an approximately 3-inch outside diameter (O.D.), 2.4-inch inside diameter (I.D.) split barrel shaft that is driven a total of 18-inches into the soil at the bottom of the boring. The soil was retained in brass rings for laboratory testing. Additional soil from each drive remaining in the cutting shoe was usually discarded after visually classifying the soil. The number of blows required to drive the sampler the final 12 inches is presented on the boring logs.

Disturbed samples were obtained using a Standard Penetration Sampler (SPT). This sampler consists of a 2-inch O.D., 1.4-inch I.D. split barrel shaft that is advanced into the soil at the bottom of the drilled hole a total of 18 inches. The number of blows required to drive the sampler the final 12 inches is presented on the boring logs. Soil samples obtained by the SPT were retained in air-tight plastic bags.

Both the California modified and the SPT sampler were driven by an automatic-trip hammer weighing 140 pounds at a drop height of approximately 30 inches.

Upon completion of drilling, the borings were backfilled by the drilling subcontractor using soil derived from the cuttings. The surfaces were patched using native soil.

UNIFIED SOIL CLASSIFICATION CHART					
MAJOR DIVISIONS		SYMBOLS		TYPICAL	
MIAON DIVIDIONO		GRAPH	LETTER	DESCRIPTIONS	
GRAVEL AND GRAVELLY		CLEAN GRAVELS		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
COARSE	SOILS	(LITTLE OR NO FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
GRAINED SOILS	MORE THAN 50% OF COARSE FRACTION	GRAVELS WITH FINES		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
	RETAINED ON NO. 4 SIEVE	(APPRECIABLE AMOUNT OF FINES)		GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
MORE THAN 50% OF	SAND AND SANDY	CLEAN SANDS		sw	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	SOILS	(LITTLE OR NO FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	SANDS WITH FINES		SM	SILTY SANDS, SAND - SILT MIXTURES
		(APPRECIABLE AMOUNT OF FINES)		sc	CLAYEY SANDS, SAND - CLAY MIXTURES
		LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
FINE GRAINED SOILS MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS			CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
		LIQUID LIMIT GREATER THAN 50		МН	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
	SILTS AND CLAYS			СН	INORGANIC CLAYS OF HIGH PLASTICITY
				ОН	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS			7 77 77 77 77 77 77 77	PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

COARSE-GRAINED SOILS FINE-GRAINED SOILS

Relative Density	SPT (blows/ft)	Relative Density (%)	Consistency	SPT (blows/ft)
Very Loose	<4	0 - 15	Very Soft	<2
Loose	4 - 10	15 - 35	Soft	2 - 4
Medium Dense	10 - 30	35 - 65	Medium Stiff	4 - 8
Dense	30 - 50	65 - 85	Stiff	8 - 15
Very Dense	>50	85 - 100	Very Stiff	15 - 30
			Hard	>30

NOTE: SPT blow counts based on 140 lb. hammer falling 30 inches

Sample Symbol	Sample Type	Description	
	SPT	1.4 in I.D., 2.0 in. O.D. driven sampler	
	California Modified	2.4 in. I.D., 3.0 in. O.D. driven sampler	
	Bulk	Retrieved from soil cuttings	
	Thin-Walled Tube	Pitcher or Shelby Tube	

LABORATORY TESTING ABBREVIATIONS

ATT

С	Consolidation
CORR	Corrosivity Series
DS	Direct Shear
EI	Expansion Index
GS	Grain Size Distribution
K	Permeability
MAX	Moisture/Density
	(Modified Proctor)
0	Organic Content
RV	Resistance Value
SE	Sand Equivalent
SG	Specific Gravity
TX	Triaxial Compression
UC	Unconfined Compression

Atterberg Limits



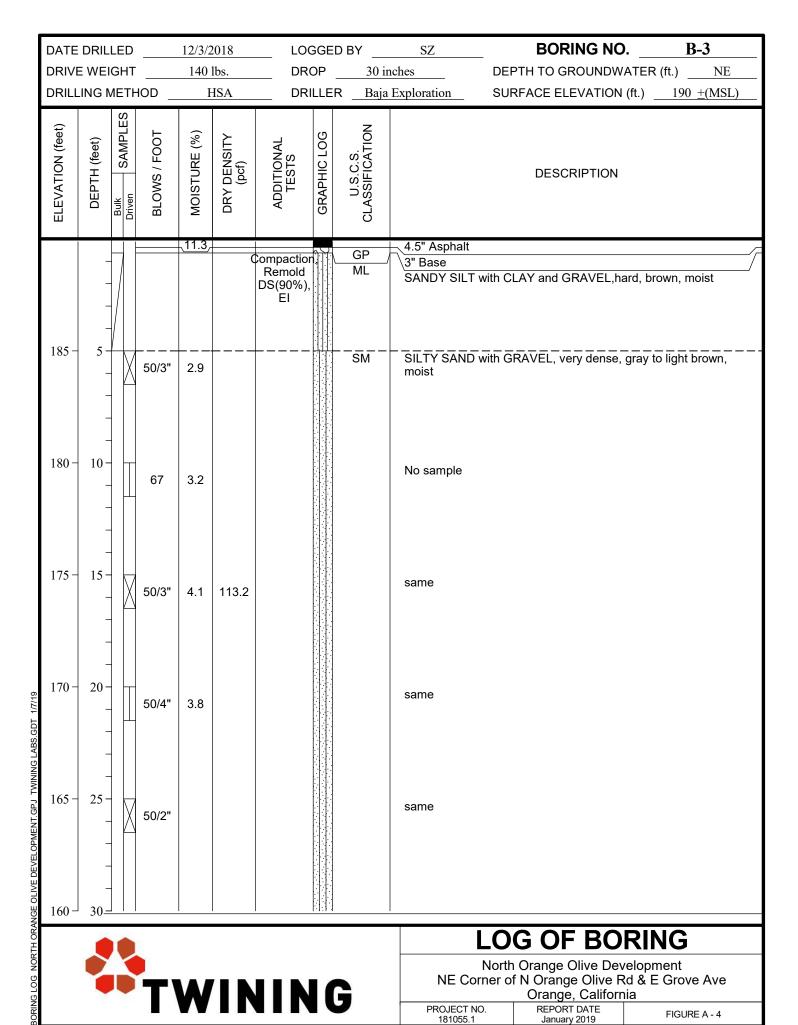
EXPLANATION FOR LOG OF BORINGS

North Orange Olive Development NE Corner of N Orange Olive Rd & E Grove Ave Orange, California

	Orange, California	
PROJECT NO. 181055.1	REPORT DATE January 2018	FIGURE A-1

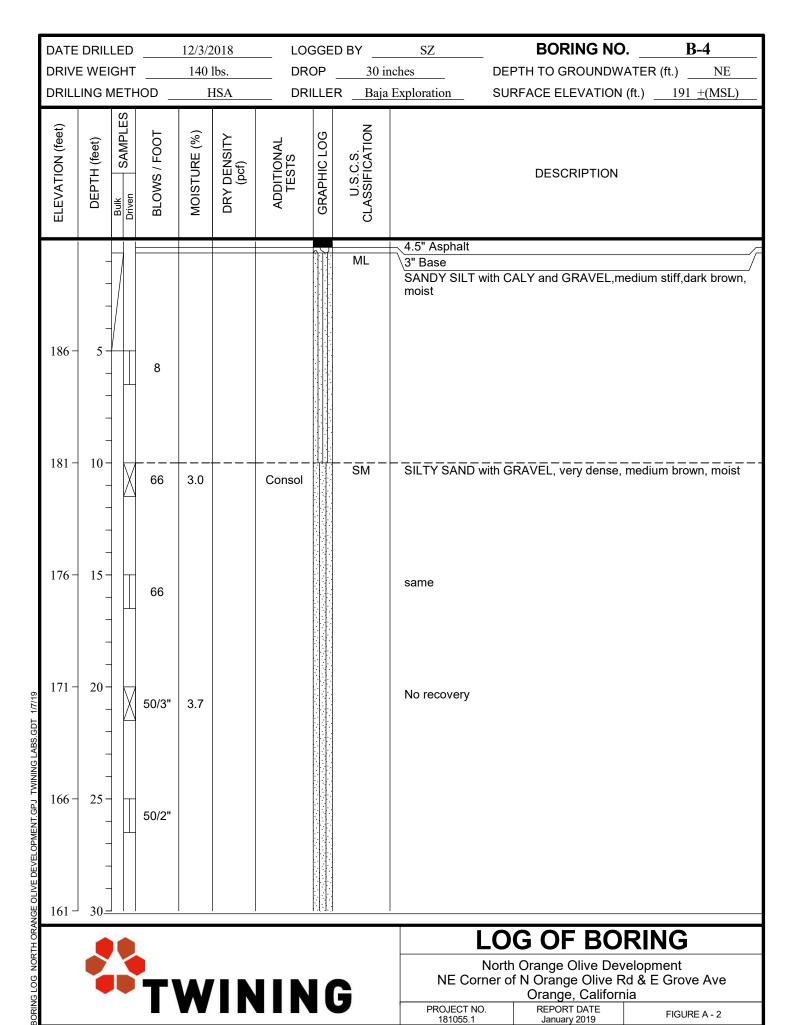
DATE	DRIL	LED		11/26/	2018	LO	GGE	D BY	SZ	BORING NO	O. <u>B-1</u>
									Exploration	DEPTH TO GROUNDY	` '
DRIL	LING	_	HOD _	<u> </u>	HSA	DR	ILLE	R <u>Baja</u>	Exploration	SURFACE ELEVATION	N (ft.) <u>191 ±(MSL)</u>
ELEVATION (feet)	DEPTH (feet)	Bulk SAMPLES	BLOWS / FOOT	MOISTURE (%)	DRY DENSITY (pcf)	ADDITIONAL TESTS	GRAPHIC LOG	U.S.C.S. CLASSIFICATION		DESCRIPTION	
	_							GP	4.5" Asphalt		
186 -	- - - 5- -		18	9.6	117.2	Consol		SM		with GRAVEL, medium de	nse, dark brown, moist
181 -	- 10 -		50/2"						very dense		
176 -	- 15 -		50/4"	3.7					same		
171 -	-		50/3"						same		
166 -	25 -						-1.1		Borehole bac	= 25.0 feet	testing with cuttings.
			r							LOG OF BO	RING
		K	T	W		IIN	I 1	2		North Orange Olive De orner of N Orange Olive I Orange, Califor	velopment Rd & E Grove Ave
				VV			1	J	PROJECT N 181055.1	NO. REPORT DATE	FIGURE A - 5

	DATE	DRIL	LED		11/26/	2018	LO	GGE	D BY	SZ	BORING NO.	B-2
							DR			Explanation	DEPTH TO GROUNDWA	• • —
	DRILL	ING N		10D _	1	ISA	DRI	LLE	R <u>Ваја</u>	Exploration	SURFACE ELEVATION (π.) <u>190 ±(MSL)</u>
	ELEVATION (feet)	DEPTH (feet)	Bulk SAMPLES	BLOWS / FOOT	MOISTURE (%)	DRY DENSITY (pcf)	ADDITIONAL TESTS	GRAPHIC LOG	U.S.C.S. CLASSIFICATION		DESCRIPTION	
		_							ML	4.5" Asphalt		
	185 –	- - - 5 -		29	13.0	126.5	DS		IVIL		with CLAY,stiff, reddish brow	vn, moist
	180 –	10-		37					SM	SILTY SAND moist) with some gravel, dense, da	rk brown to gray,
	175 –	- 15		50/3"	6.8	111.4	Consol			very dense		
TWINING LABS.GDT 1/7/19	170 -	20 -		45					SP-SM	Poorly grade to dark gray,	d SAND with SILT and GRAV moist	EL, very dense,brown
NT.GPJ	165 -	25 -		50/5"	3.0					No recover		
BORING LOG NORTH ORANGE OLIVE DEVELOPMENT.GPJ TWINING LABS.GDT	160 –	30=						<u>, 11-11</u>		Borehole bad	11/26/2018 was not encountered ckfilled at the completion of te hed with cold patch asphalt	
TH OR				ı,							LOG OF BOP	RING
G LOG NOF				T	W	'I N	IIN		3	NE Co	North Orange Olive Deve orner of N Orange Olive Ro Orange, Californi	d & E Grove Ave
30RIN					VV					PROJECT 181055.	NO. REPORT DATE January 2019	FIGURE A - 3



	DATE	DRIL	LED		12/3/2	2018	LOC	GED	BY	SZ	BORIN	IG NO	B-3
	DRIVE	E WEI	GHT	-	140	lbs.	DRO	OP _	30 ir	ches	DEPTH TO GRO	DUNDWATER	(ft.) <u>NE</u>
	DRILL	ING N	ИΕΤΙ	HOD _	ŀ	ISA	DRI	LLER	Baja	Exploration	SURFACE ELEV	/ATION (ft.)	190 <u>+</u> (MSL)
	ELEVATION (feet)	DEPTH (feet)	Bulk SAMPLES	BLOWS / FOOT	MOISTURE (%)	DRY DENSITY (pcf)	ADDITIONAL TESTS	GRAPHIC LOG	U.S.C.S. CLASSIFICATION		DESCRI	PTION	
		- - -		50/2"					SM	SILTY SAND moist (contin same) with GRAVEL, very ued)	dense, gray t	o light brown,
	155 –	35		50/4"						same			
	150 -	40 -		50/2"						same			
	145 -	45 - - - -		50/3"						same			
NING LABS.GDT 1/7/19	140 -	50 -		50/5"						Borehole bac	= 51.5 feet 12/3/2018 was not encountereckfilled at the completed with cold patch at the completed with cold patch at the cold patch at th	tion of testing	with cuttings.
BORING LOG NORTH ORANGE OLIVE DEVELOPMENT.GPJ TWINING LABS.GDT 1/7/19	135 –	55 - - - -								зинас е расс	neu wiiri colu paich :	аэрпан	
Œ OLI	130	60 <i>=</i>											
ORANG	130	- UU-										PODI	VC
ORTH (LOG OF		
IG LOG N				T	W		IIN			NE Co	North Orange Ol orner of N Orange Orange,	California	Grove Ave
SORIN				a 	VV					PROJECT N 181055.1			FIGURE A - 4





DATE	DRIL	LED		12/3/2	2018	LO	GGE	D BY	SZ	BORING NO.	B-4	
DRIV	E WEI	GHT	<u> </u>	140	lbs.	DR	OP	30 ir	nches	DEPTH TO GROUNDWATER (ft.) NE		
DRILI	LING N	ИΕΤΙ	HOD _	I	HSA	DR	ILLE	R <u>Baj</u> a	Exploration	SURFACE ELEVATION (ft.)	191 <u>+</u> (MSL)	
ELEVATION (feet)	DEPTH (feet)	Bulk SAMPLES	BLOWS / FOOT	MOISTURE (%)	DRY DENSITY (pcf)	ADDITIONAL TESTS	GRAPHIC LOG	U.S.C.S. CLASSIFICATION		DESCRIPTION		
	-		50/3"	3.5				SM	SILTY SAND (continued) dark brown	with GRAVEL, very dense, med	dium brown, moist	
156 -	35 -		50/4"						light brown to	gray		
151 -	- 40 - - - -		50/3"						No recovery			
146 -	- 45 - - - -		50/2"						No recovery			
NG LABS.GDT 1/7/19	50 -		50/4"						Borehole back	12/3/2018 was not encountered kfilled at the completion of testir		
BORING LOG NORTH ORANGE OLIVE DEVELOPMENT.GPJ TWINING LABS.GDT 1/7/19	- 55 - 	-							Surface patch	ed with cold patch asphalt	· · · · · ·	
≥ 0 121												
31 - 131 -	60=			1			, 1		·	100 05 505	INIO	
RTH C										LOG OF BOR		
3 LOG NC			T	W		IIN	1	2	NE Co	North Orange Olive Develo rner of N Orange Olive Rd & Orange, California	pment E Grove Ave	
BORIN				VV			1		PROJECT No. 181055.1		FIGURE A - 2	

)					D BY		BORING NO.	
				T HOD		lbs. HSA			30 ir R Baja	Exploration	DEPTH TO GROUNDWAT SURFACE ELEVATION (ft	
	ELEVATION (feet)	DEPTH (feet)	Bulk SAMPLES	NS N	MOISTURE (%)	DRY DENSITY (pcf)	ADDITIONAL TESTS	GRAPHIC LOG	U.S.C.S. CLASSIFICATION		DESCRIPTION	
ı		_							GP ,	4.5" Asphalt 3" Base		
	185 –	- - - 5 - - -		15	12.7	121.2	DS		ML	\	with CLAY, stiff, reddish brow	n, moist
	180 -	- 10 - - - -		15	14.4	111.8				same		
	175 –	15 - - - -		50/3"	2.7				SM	SILTY SAND	with GRAVEL, very dense, da	rk gray, moist
VINING LABS.GDT 1/7/19	170 -	20 -		50/5"								
NT.GPJ T	165 -	25 -		50/3"								
BORING LOG NORTH ORANGE OLIVE DEVELOPMENT.GPJ TWINING LABS.GDT 1/7/19	160 –	30=	<u>/</u> -					HIGH.		Borehole bacl	26.5 feet 11/26/2018 was not encountered kfilled at the completion of test ned with cold patch asphalt	ting with cuttings.
TH ORA											LOG OF BOR	RING
GLOG NOR				T	W		IIN	1	2	NE Co	North Orange Olive Develorner of N Orange Olive Rd Orange, California	opment & E Grove Ave
BORIN					VV			1		PROJECT N 181055.1	O. REPORT DATE January 2019	FIGURE A - 6

) BY					B-6 (P-3)
			 HOD		lbs. HSA		OP ₋		Exploration		TH TO GROUNI RFACE ELEVATI		• •
DRILL	ING I		 	1	ISA	DINI		X <u>Daja</u>	Exploration	301	AFACE ELEVATI	ON (IL.)	190 <u>-</u> (MSL)
ELEVATION (feet)	DEPTH (feet)	Bulk SAMPLES	BLOWS / FOOT	MOISTURE (%)	DRY DENSITY (pcf)	ADDITIONAL TESTS	GRAPHIC LOG	U.S.C.S. CLASSIFICATION			DESCRIPTIC	DΝ	
	_	\mathbb{H}				Corrosivity		GP ,	4.5" Asphalt 3" Base				/
185 -	5 -		13	13.3	119.9	RV		ML	\	Γ with CL	.AY , hard, reddis	sh brown	moist
180 -	10 -		7	13.3		— — — — Wash #200, ATT		CL	SANDY lean	CLAY, r	medium stiff, redo	dishbrow	n, moist
175 -	15 -		50/2"	2.3				SM	SILTY SANE	O with GF	RAVEL, very den	se, redis	n brown, moist
170 -	20		86					SP-SM	Poorly-grade	ed SAND	with SILT and G	RAVEL,	dark gray, moist
160 -	30=						F-14H		Borehole ba	n 11/26/2 r was not ckfilled a	eet 2018 t encountered It the completion cold patch asph		with cuttings.
			r!							LO	G OF B	ORI	NG
	P	K	T	W		UN		`	NE C	North	Orange Olive I N Orange Oliv Orange, Calif	Develop e Rd & I	ment
į				VV					PROJECT 181055.		REPORT DATE January 2019		FIGURE A - 7

ı	DATE	DRIL	LED		11/26/	2018		LOGGE	D BY	SZ	BORING NO.	P-1
	DRIVE	E WEI	GHT		140	lbs.		DROP	30 inc	hes	DEPTH TO GROUNDWA	ΓER (ft.) <u>NE</u>
	DRILL	ING N	ЛΕΤΗ	HOD _	ŀ	ISA		DRILLE	R <u>Baja</u> E	Exploration	SURFACE ELEVATION (f	t.) <u>190 ±(MSL)</u>
	ELEVATION (feet)	DEPTH (feet)	Bulk SAMPLES	BLOWS / FOOT	MOISTURE (%)	DRY DENSITY (pcf)	GRAPHIC LOG	U.S.C.S. CLASSIFICATION			DESCRIPTION	
		- - -						ML	4.5" Asph 3" Base SANDY S		and GRAVEL,medium stiff,d	ark brown, moist
	185 –	5							Backfilled Groundwa Borehole	oth = 5.0 feet l on 11/26/2018 ater was not end backfilled at the atched with cold		uttings.
	180 -	10-										
	175 -	15 -										
ING LABS.GDT 1/7/19	170 -	20 -										
BORING LOG NORTH ORANGE OLIVE DEVELOPMENT.GPJ TWINING LABS.GDT 1/7/19	165 -	25 -										
E OLIV	160	20										
RANG	160	30=		•		•	. 1					
JRTH C			0								LOG OF BOF	
3 LOG NO				T	W			N	2	NE Cor	North Orange Olive Deve ner of N Orange Olive Rd Orange, California	& E Grove Ave
30RIN					VV					PROJECT NO 181055.1		FIGURE A - 8

	DATE	DRIL	LED		11/26/	2018		LOGGE	D BY	SZ	BORING NO.	P-2
	DRIVE	E WEI	GHT		140	lbs.		DROP	30 inc	ehes	DEPTH TO GROUNDWA	ΓER (ft.) <u>NE</u>
	DRILL	ING N	ИΕΤΗ	HOD _	H	ISA		DRILLE	R <u>Baja I</u>	Exploration	SURFACE ELEVATION (f	t.) <u>190 ±(MSL)</u>
	ELEVATION (feet)	DEPTH (feet)	Bulk SAMPLES	BLOWS / FOOT	MOISTURE (%)	DRY DENSITY (pdf)	GRAPHIC LOG	U.S.C.S. CLASSIFICATION			DESCRIPTION	
		- - -	-					ML	4.5" Asph 3" Base SANDY S		and GRAVEL,medium stiff,da	ark brown, moist
	185 –	5	-				1.1.1.1		Backfilled Groundw Borehole	oth = 5.0 feet I on 11/26/2018 ater was not end backfilled at the batched with cold	countered e completion of testing with co	uttings.
	180 -	10 -										
	175 -	15 -	-									
IING LABS.GDT 1/7/19	170 -	20 -	-									
BORING LOG NORTH ORANGE OLIVE DEVELOPMENT.GPJ TWINING LABS.GDT 1/7/19	165 -	25 -										
E OLI	160	30=										
RANG	100	30=				-	. '	'				NNC
JRTH C			1								LOG OF BOF	
FOG NC				-				N	2	NE Cor	North Orange Olive Deve ner of N Orange Olive Rd Orange, California	& E Grove Ave
30RINC					VV				9	PROJECT NO 181055.1		FIGURE A - 9



Appendix B Laboratory Testing



Appendix B Laboratory Testing

Laboratory Moisture Content and Density Tests

The moisture content and dry densities of selected driven samples obtained from the exploratory borings were evaluated in general accordance with the latest version of ASTM D 2937. The test results are presented on the logs of the exploratory borings in Appendix A.

Wash Sieve

The amount of fines passing the No. 200 sieve was evaluated by the wash sieve. The test procedure was in general accordance with ASTM D 1140. The results are presented in Table B-2.

Atterberg Limits

Liquid limit, plastic limit and plasticity index of the soil are evaluated. The test procedure was in general accordance with ASTM D 4318. The results are presented in Figures B-1 and Table B-3.

Maximum Dry Density-Optimum Moisture Content

A Modified Proctor test was performed on near-surface soils to evaluate the maximum dry density and optimum water content for compaction. The test was performed in accordance with ASTM D 1557 Method A. The result is summarized below in Table B-1 and a copy of the curve is presented as Figure B-2.

Expansion Index Test

The expansion index was evaluated in general accordance with ASTM D 4829. The specimen was molded under a specified compactive energy at approximately 50 percent saturation. The prepared 1-inch thick by 4-inch diameter specimen was loaded with a surcharge of 144 pounds per square foot and was inundated with tap water. Readings of volumetric swell were made for a period of 24 hours. The result of the Expansion Index test is presented on Table B-4.

Consolidation Test

Consolidation tests were performed on a selected driven soil sample by in general accordance with the latest version of ASTM D2435. The sample was inundated during testing to represent adverse field conditions. The percent consolidation for each load cycle was recorded as a ratio of the amount of vertical compression to the original height of the sample. The results of the test are presented in Figures B-3 through B-5.



Direct Shear Tests

Direct shear tests were performed on selected remolded and relatively undisturbed soil samples in general accordance with ASTM D 3080 to evaluate the shear strength characteristics of the materials. The samples were inundated during shearing to represent adverse field conditions. The results are summarized in Table B-5 and are illustrated graphically in Figures B-6 and B-8.

Corrosivity

Soil pH and resistivity tests were performed by Anaheim Test Lab on a representative soil sample in general accordance with the latest version of California Test Method 643. The chloride content of the selected sample was evaluated in general accordance with the latest version of California Test Method 422. The sulfate content of the selected samples was evaluated in general accordance with the latest version of California Test Method 417. The test results are presented on Table B-6.

Resistance Value (R-Value)

R-value testing was performed on a select bulk sample of the near-surface soils encountered at the site. The test was performed in general accordance with ASTM D 2844. The results are summarized in Table B-7.

Table B-1
Moisture-Density Relationship Testing
ASTM D 1557 Method A

Boring No.	Depth (feet)	Maximum Dry Density (pcf)	Optimum Water Content (%)
B-3	1 – 5	130.0	8.4

Table B-2 No. 200 Wash Sieve Results

Boring No.	Depth (feet)	Percent Passing #200
B-6	10	61.5



Table B-3 Atterberg Limits Results

Boring	Depth	Liquid	Plastic	Plastic	U.S.C.S. Classification
No.	(feet)	Limit	Limit	Index	
B-6	10	25	16	10	SANDY lean CLAY

Table B-4
Expansion Index Test Result

Boring No.	Depth (feet)	Expansion Index		
B-3	1 – 5	7		

Table B-5 Direct Shear Tests

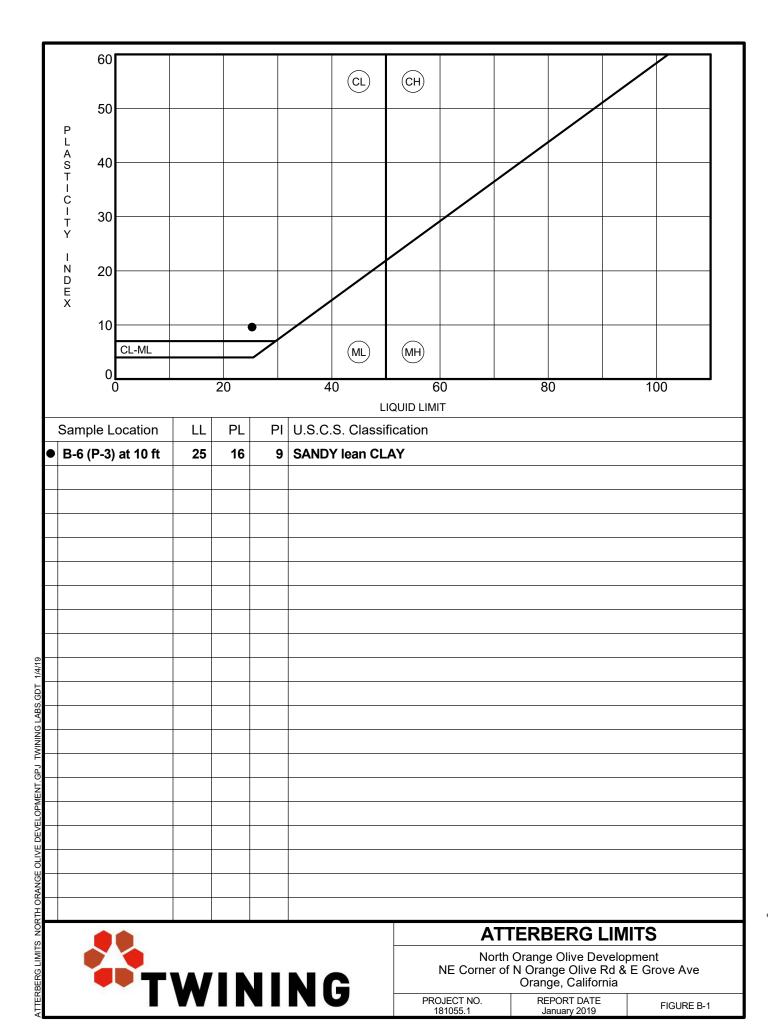
Boring Depth Remolded		Remolded	Peak		Ultimate	
No.	(feet)		C (psf)	φ (deg)	C (psf)	φ (deg)
B-2	5	No	576	29	456	29
B-3	0-5	Yes	252	28	84	30
B-5	5	No	444	31	60	32

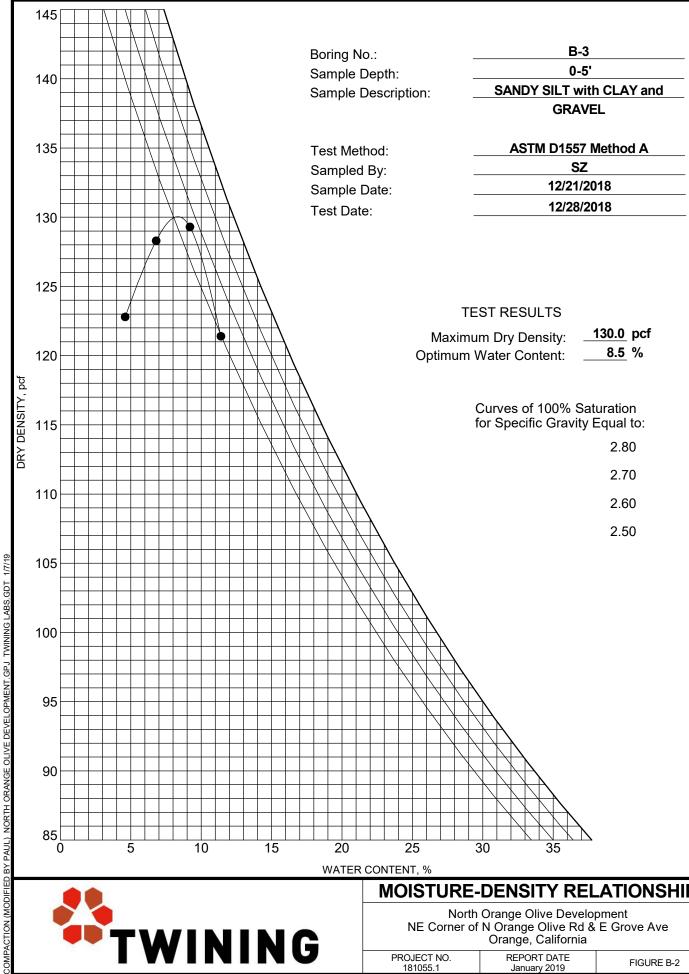
Table B-6 Soil Corrosivity Test Results

Boring No.	Depth (feet)	рН	Water Soluble Sulfate (ppm)	Water Soluble Chloride (ppm)	Minimum Resistivity (ohm-cm)
B-6	1-5	7.0	181	61	3,000

Table B-7 Resistance Value (R-Value)

Boring No.	Depth (feet)	R-Value	
B-6	1–5	18	







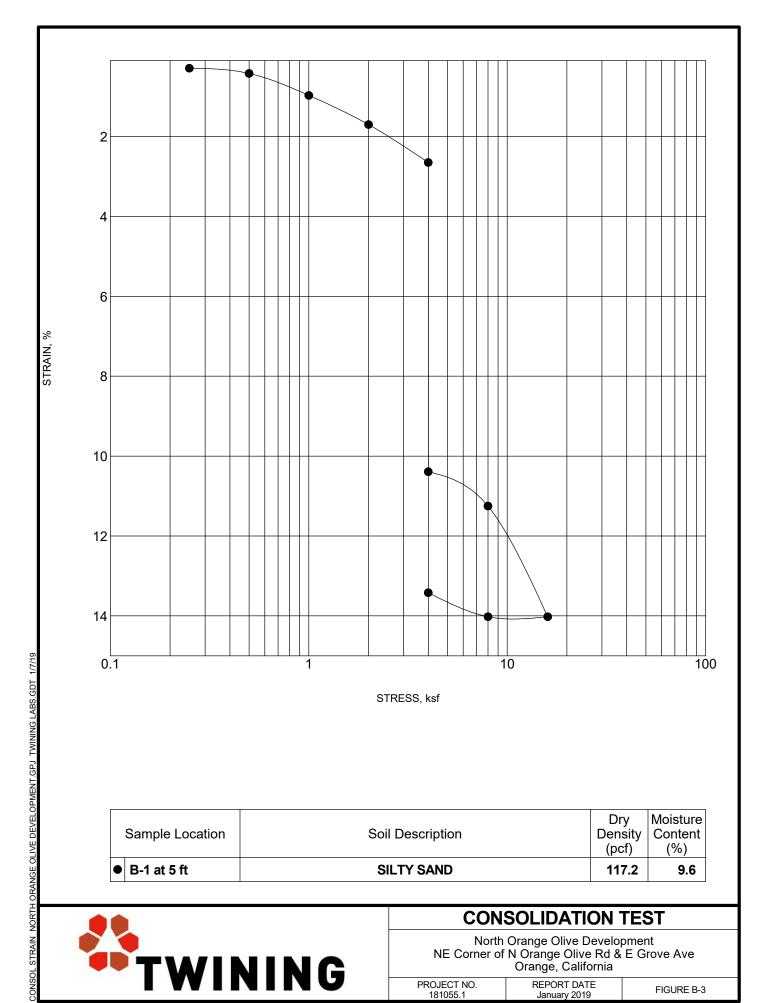
MOISTURE-DENSITY RELATIONSHIP

North Orange Olive Development NE Corner of N Orange Olive Rd & E Grove Ave Orange, California

PROJECT NO.

REPORT DATE January 2019

FIGURE B-2

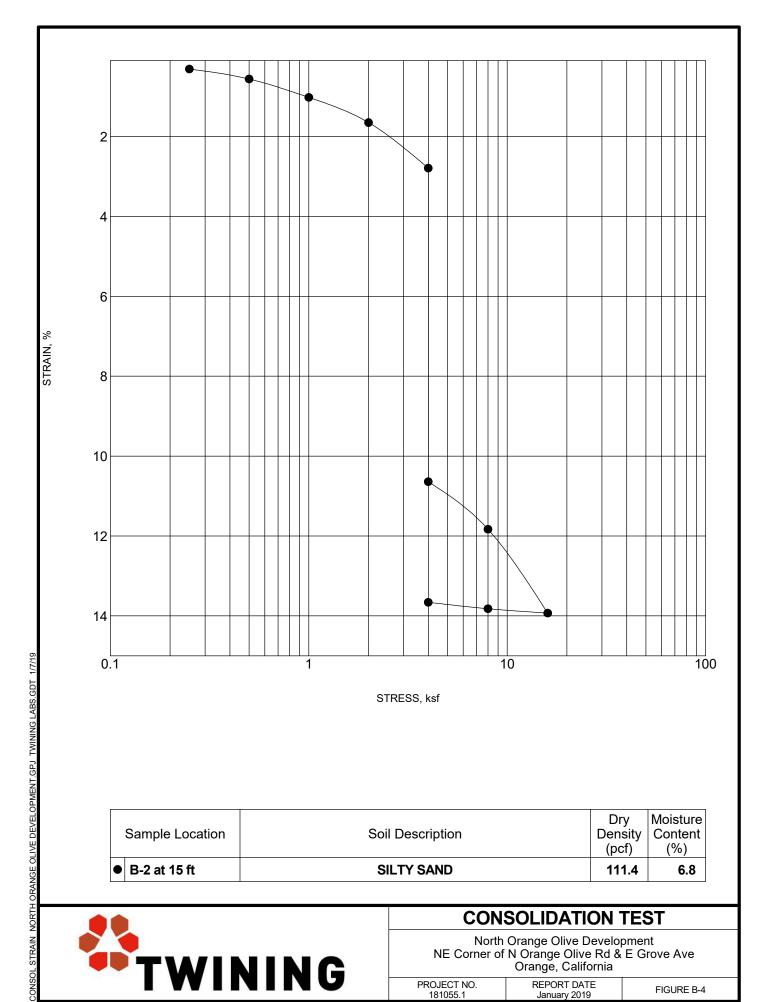


	Sample Location	Soil Description		Moisture Content (%)
•	B-1 at 5 ft	SILTY SAND	117.2	9.6



CONSOLIDATION TEST

PROJECT NO. 181055.1	REPORT DATE January 2019	FIGURE B-3

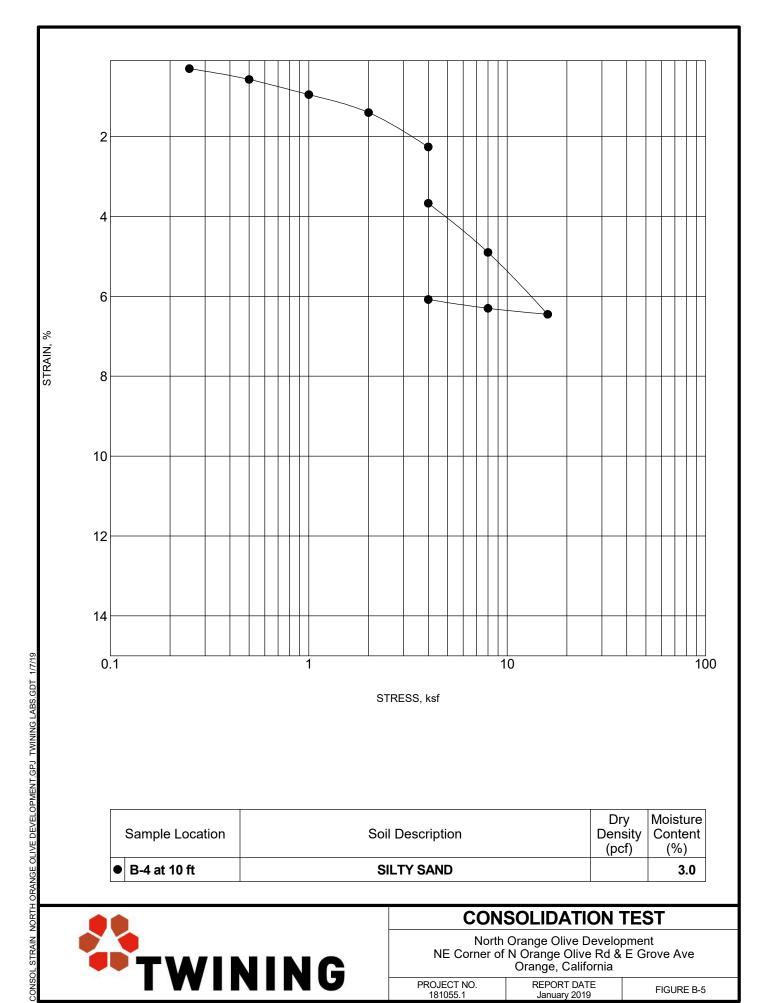


	Sample Location	Soil Description	,	Moisture Content (%)
•	B-2 at 15 ft	SILTY SAND	111.4	6.8



CONSOLIDATION TEST

PROJECT NO. 181055.1	REPORT DATE January 2019	FIGURE B-4

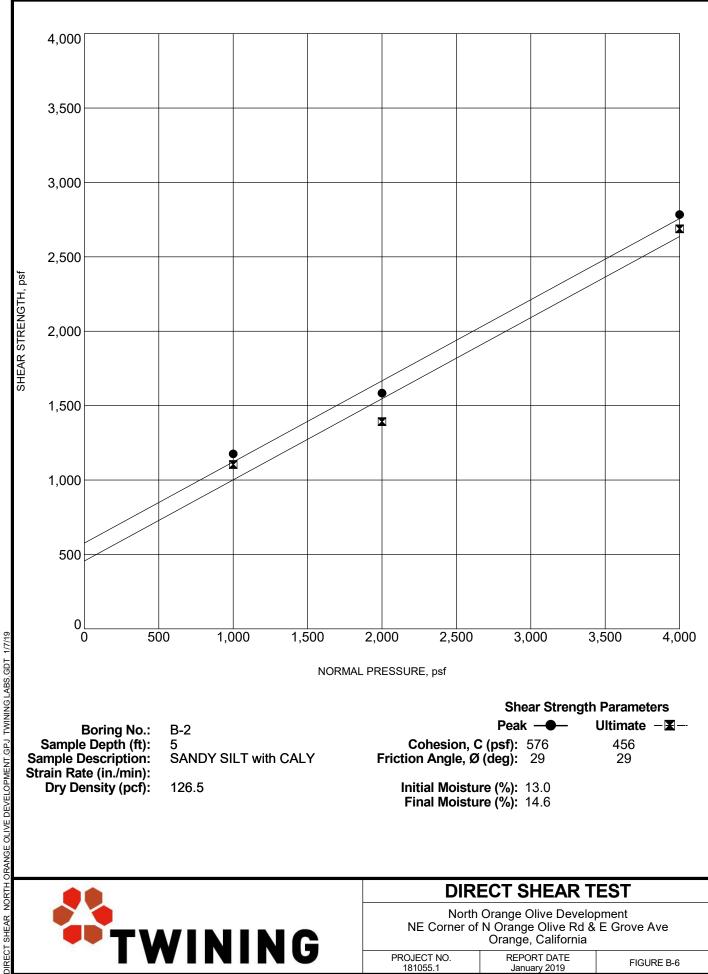


		(POI)	1 (/0)
Sample Location	Soil Description	Density (pcf)	1
Sample Location	Soil Description	Dry Density	Moi



CONSOLIDATION TEST

PROJECT NO. 181055.1	REPORT DATE January 2019	FIGURE B-5



NORMAL PRESSURE, psf

Shear Strength Parameters

Peak — Ultimate -**X**-

Boring No.: Sample Depth (ft): Cohesion, C (psf): 576 Friction Angle, Ø (deg): 29 456 Sample Description: SANDY SILT with CALY 29

Strain Rate (in./min):

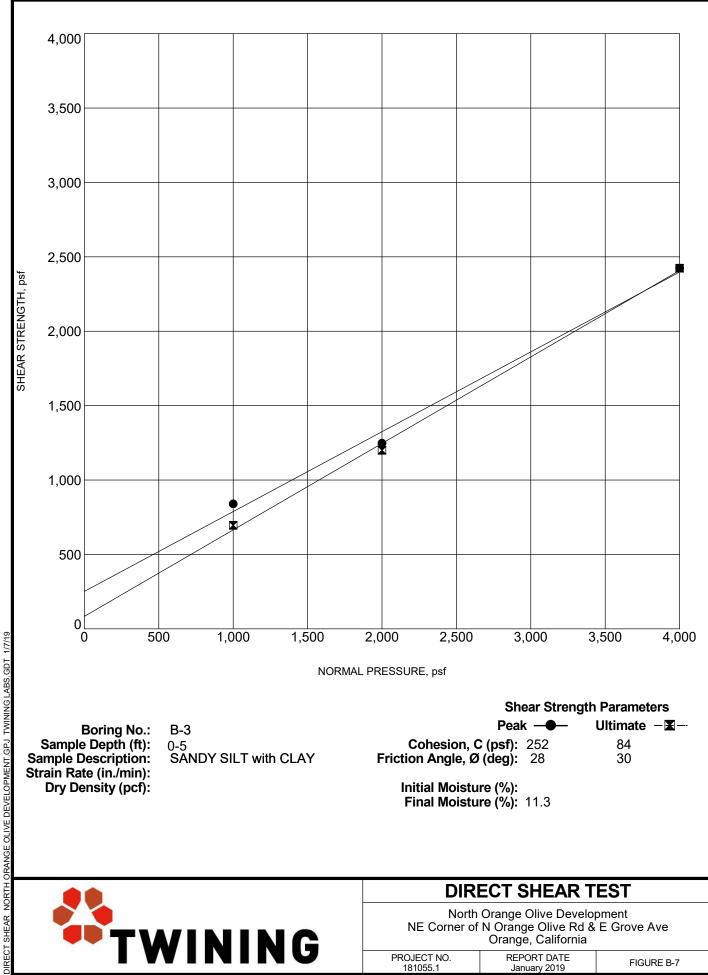
Initial Moisture (%): 13.0 Dry Density (pcf): 126.5 Final Moisture (%): 14.6



B-2

DIRECT SHEAR TEST

	Orange, Camorna	
PROJECT NO. 181055 1	REPORT DATE	FIGURE B-6



NORMAL PRESSURE, psf

Shear Strength Parameters

Peak — Ultimate -**X**-B-3 **Boring No.:**

Sample Depth (ft): Cohesion, C (psf): 252 84 0-5 Sample Description: SANDY SILT with CLAY Friction Angle, Ø (deg): 28 30 Strain Rate (in./min):

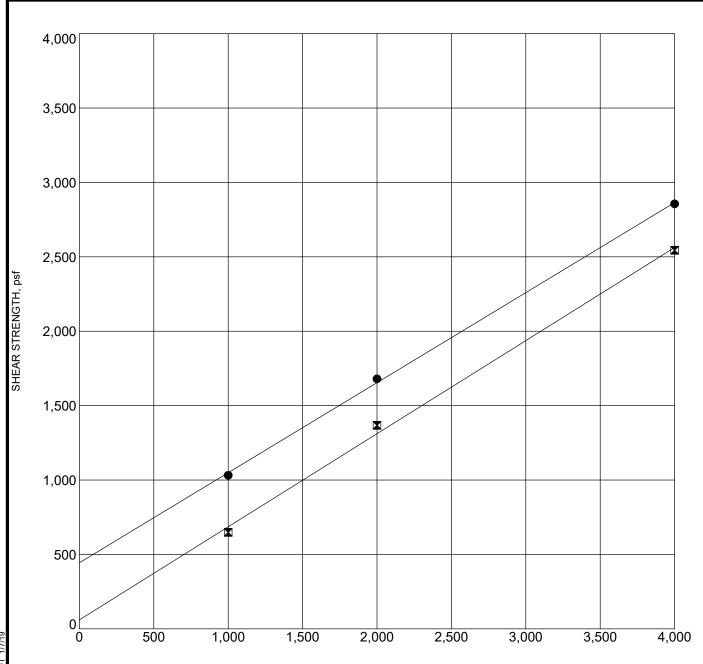
Dry Density (pcf): Initial Moisture (%): Final Moisture (%): 11.3



DIRECT SHEAR TEST

North Orange Olive Development NE Corner of N Orange Olive Rd & E Grove Ave Orange, California

PROJECT NO. REPORT DATE FIGURE B-7 January 2019



NORMAL PRESSURE, psf

Shear Strength Parameters

Peak —● Ultimate – ¥

Cohesion, C (psf): 444 60 Friction Angle, Ø (deg): 31 32

> Initial Moisture (%): 12.7 Final Moisture (%): 12.3

Boring No.: B-5 **Sample Depth (ft):** 5

Sample Description: SANDY SILT

Strain Rate (in./min):

Dry Density (pcf): 121.2



DIRECT SHEAR TEST

North Orange Olive Development NE Corner of N Orange Olive Rd & E Grove Ave Orange, California

PROJECT NO. REP

REPORT DATE January 2019

FIGURE B-8

DIRECT SHEAR NORTH ORANGE OLIVE DEVELOPMENT.GPJ TWINING LABS.GDT 1/7/19



Appendix C Percolation Testing



Percolation Testing

Percolation testing was performed in the soil borings on November 27, 2018 in conformance with the County of Orange TGD (County of Orange, 2013). The purpose of the tests was to evaluate the percolation rates of the subgrade soils in order to determine the infiltration rates at the proposed infiltration locations.

The clayey and silty- soil criteria were implemented to determine if 6 inches of water wouldn't seep away in less than 25 minutes over two consecutive measurements. Therefore, soils need to be pre-soak (fill) overnight, and obtain at least twelve measurements per hole over at least six hours with precision of at least 0.25 inch. Three of the borings met the clayey soils criteria; therefore, the test was performed next day after 24 hours pre-soak. The infiltration rate was calculated using the Porchet Method as described in County of Orange TGD (County of Orange, 2013). A factor of safety of 2.0 was applied to the final readings from each percolation test. The following Table 1 summarizes the design infiltration rate for each boring.

Results of the percolation testing are provided here in Table 1.

Table 1: Calculated Infiltration Rates

Boring Location	Calculated Infiltration Rate* (inch/hour)
P-1	0
P-2	0.07
P-3	0.05

*Based on a Factor of Safety of 2

PERCOLATION TEST DATA

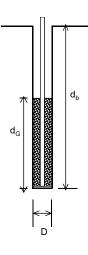
Project No.: 181055.1

Project Name: N. Orange Olive Development
Test Date: November 27, 2018

Test Boring No.: Diameter of Boring (D): 0.67 feet Depth of Boring (d_b): 5.0 feet Test Performer: SZ

Sandy Soil Criteria Test

Sandy Soil Criteria Test									
Time of	Testing (November 26	Water	Level Measure	ments					
Start Time	Start Time Stop Time		Initial depth to water	Final depth to water	Initial depth to water	Greater than or Equal to 6"?			
T _i	T_f	ΔΤ	d_1	d_2	d ₁	(Yes/No)			
		(min)	(feet)	(feet)	(inch)				
9:00:00 AM	9:25:00 AM	25.00	0.29	0.38	1.00	No			
9:35:00 AM	10:00:00 AM	25.00	0.25	0.33	1.00	No			



Time of Testing			Water Level Measurements		Water Level Calculations			Infiltration Rate Calculations	
Start Time	Stop Time	Time Interval	Initial depth to water	Final depth to water	Initial height of water column	Final height of water column	Drop of water column	Tested Infiltration Rate	Infiltration Rate w/ Factor of Safety of 2
T _i	T _f	ΔΤ	d ₁	d_2	d_{i}	d _f	$\Delta d = d_i - d_f$	l t	It/2
		(min)	(feet)	(feet)	(feet)	(feet)	(inch)	(inch/hr)	(inch/hr)
Percolation Te	st								
9:12:00 AM	9:42:00 AM	30.00	2.00	2.00	3.00	3.00	0.00	0.00	0.00
9:45:00 AM	10:15:00 AM	30.00	2.10	2.10	2.90	2.90	0.00	0.00	0.00
10:25:00 AM	10:55:00 AM	30.00	2.10	2.10	2.90	2.90	0.00	0.00	0.00
11:00:00 AM	11:30:00 AM	30.00	2.10	2.10	2.90	2.90	0.00	0.00	0.00
11:45:00 AM	12:15:00 PM	30.00	2.10	2.10	2.90	2.90	0.00	0.00	0.00
12:20:00 PM	12:50:00 PM	30.00	2.10	2.10	2.90	2.90	0.00	0.00	0.00
1:00:00 PM	1:30:00 PM	30.00	2.10	2.10	2.90	2.90	0.00	0.00	0.00
1:30:00 PM	2:00:00 PM	30.00	2.10	2.10	2.90	2.90	0.00	0.00	0.00

*Infiltration Rate: 0.00 (inch/hr)

Reference: County of Orange Technical Guidance Document, dated December 20, 2013

^{*}Based on the last dropped obtained in the final 30 minutes

PERCOLATION TEST DATA

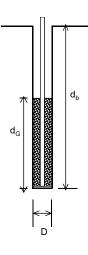
Project No.: 181055.1

Project Name: N. Orange Olive Development
Test Date: November 27, 2018

Test Boring No.: Diameter of Boring (D): 0.67 feet Depth of Boring (d_b): 5.0 feet Test Performer: SZ

Sandy Soil Criteria Test

Sandy Soil Criteria Test									
Time of	Testing (November 26	Water	r Level Measure	ments					
Start Time	Start Time Stop Time		t Time Stop Time Time Interval		Initial depth to water Final depth to		Initial depth to water	Greater than or Equal to 6"?	
T _i	T_f	ΔΤ	d_1	d_2	d ₁	(Yes/No)			
		(min)	(feet)	(feet)	(inch)				
9:53:00 AM	10:18:00 AM	25.00	1.70	2.00	3.60	No			
10:20:00 AM	10:45:00 AM	25.00	1.60	1.90	3.60	No			



Time of Testing			Water Level Measurements		Water Level Calculations			Infiltration Rate Calculations	
Start Time	Stop Time	Time Interval	Initial depth to water	Final depth to water	Initial height of water column	Final height of water column	Drop of water column	Tested Infiltration Rate	Infiltration Rate w/ Factor of Safety of 2
T _i	T _f	ΔΤ	d ₁	d_2	d_{i}	d _f	$\Delta d = d_i - d_f$	l t	It/2
		(min)	(feet)	(feet)	(feet)	(feet)	(inch)	(inch/hr)	(inch/hr)
Percolation Te	st								
9:15:00 AM	9:45:00 AM	30.00	3.10	3.20	1.90	1.80	1.20	0.20	0.10
9:50:00 AM	10:20:00 AM	30.00	3.00	3.10	2.00	1.90	1.20	0.19	0.09
10:25:00 AM	10:55:00 AM	30.00	2.90	3.00	2.10	2.00	1.20	0.18	0.09
11:00:00 AM	11:30:00 AM	30.00	2.70	2.80	2.30	2.20	1.20	0.17	0.08
11:35:00 AM	12:05:00 PM	30.00	2.50	2.60	2.50	2.40	1.20	0.15	0.08
12:10:00 PM	12:40:00 PM	30.00	2.20	2.30	2.80	2.70	1.20	0.14	0.07
12:50:00 PM	1:20:00 PM	30.00	2.20	2.30	2.80	2.70	1.20	0.14	0.07
1:25:00 PM	1:55:00 PM	30.00	2.20	2.30	2.80	2.70	1.20	0.14	0.07

*Infiltration Rate: 0.07 (inch/hr)

Reference: County of Orange Technical Guidance Document, dated December 20, 2013

*Based on the last dropped obtained in the final 30 minutes

PERCOLATION TEST DATA

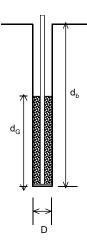
Project No.: 181055.1

Project Name: N. Orange Olive Development
Test Date: November 27, 2018

Test Boring No.: Diameter of Boring (D): 0.67 feet Depth of Boring (d_b) : 25.0 feet Test Performer: SZ

Sandy Soil Criteria Test

Sandy Son Chiena Test						
Time of Testing (November 26, 2018)			Water Level Measurements			
Start Time	Stop Time	Time Interval	Initial depth to water	Final depth to water	Initial depth to water	Greater than or Equal to 6"?
T _i	T_f	ΔΤ	d_1	d_2	d_1	(Yes/No)
		(min)	(feet)	(feet)	(inch)	
2:12:00 PM	2:37:00 PM	25.00	14.75	15.02	3.24	No
2:45:00 PM	3:10:00 PM	25.00	14.00	14.27	3.24	No



Time of Testing			Water Level N	/leasurements	Water Level Calculations Infiltration Rate Ca		ate Calculations		
Start Time	Stop Time	Time Interval	Initial depth to water	Final depth to water	Initial height of water column	Final height of water column	Drop of water column	Tested Infiltration Rate	Infiltration Rate w/ Factor of Safety of 2
T _i	T _f	ΔΤ	d ₁	d_2	d_{i}	d _f	$\Delta d = d_i - d_f$	l t	It/2
		(min)	(feet)	(feet)	(feet)	(feet)	(inch)	(inch/hr)	(inch/hr)
Percolation Te	Percolation Test								
9:15:00 AM	9:45:00 AM	30.00	13.90	14.40	11.10	10.60	6.00	0.18	0.09
10:00:00 AM	10:30:00 AM	30.00	6.40	6.90	18.60	18.10	6.00	0.11	0.05
10:35:00 AM	11:05:00 AM	30.00	5.50	6.00	19.50	19.00	6.00	0.10	0.05
11:10:00 AM	11:40:00 AM	30.00	4.90	5.40	20.10	19.60	6.00	0.10	0.05
11:45:00 AM	12:15:00 PM	30.00	4.30	4.80	20.70	20.20	6.00	0.10	0.05
12:25:00 PM	12:55:00 PM	30.00	3.60	4.10	21.40	20.90	6.00	0.09	0.05
1:00:00 PM	1:30:00 PM	30.00	3.60	4.10	21.40	20.90	6.00	0.09	0.05
1:35:00 PM	2:05:00 PM	30.00	3.50	4.00	21.50	21.00	6.00	0.09	0.05

*Infiltration Rate: 0.05 (inch/hr)

Reference: County of Orange Technical Guidance Document, dated December 20, 2013

*Based on the last dropped obtained in the final 30 minutes

APPENDIX D HAZARDS AND HAZARDOUS MATERIALS

D1 PHASE I ENVIRONMENTAL SITE ASSESSMENT

San Diego County Credit Union

PHASE I ENVIRONMENTAL SITE ASSESSMENT *

Commercial Property
301 through 349 East Grove Avenue
and 1997 North Orange Olive Road
Orange, California



CERES, Corp.

4617 CALAVO DRIVE LA MESA, CALIFORNIA 91941 Phone (800) 258-1490

* Based on guidelines designated in ASTM E 1527-13 for the Phase I Environmental Site Assessment Process

To the user:

This Phase I Environmental Site Assessment (ESA) report is designed by CERES and is based on the Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process developed by the American Society for Testing and Materials (ASTM) Committee E-50 on Environmental Assessment, designated E 1527-13. The purpose of E 1527-13 is to define good commercial and customary practice in the United States of America for conducting an ESA of a parcel of commercial real estate with respect to the range of contaminants within the scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and petroleum products. As such, this practice is intended to permit a 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, the practices that constitute "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined in 42 USC Section 9601(35)(B). An evaluation of business environmental risk associated with a parcel of commercial real estate may necessitate investigation beyond that identified in this practice (ASTM E 1527-13, Section 1.1).

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. Unless otherwise indicated herein, we have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312 (ASTM E 1527-13, Sections 12.13.1 and 12.13.2). Qualifications of the individuals who prepared this report are included in Appendix A - Professional Qualifications (ASTM E 1527-13, Section 12.14).

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COVER: View of the Property looking northeastward from across East Grove Avenue

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Prepared for:

San Diego County Credit Union 6545 Sequence Drive San Diego, California 92121

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Commercial Property 301 through 349 East Grove Avenue and 1997 North Orange Olive Road Orange, California

Project C322-01

Prepared by:

Karen L. Reynoso

Senior Environmental Specialist

Reviewed by:

Jeffrey B. Fleming, REPA #994321

President

(E 1527-13, Section 12.12)

CERES, Corp.

4617 Calavo Drive La Mesa, California 91941 (800) 258-1490 / Fax (208) 765-1745

August 20, 2015

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1.0 SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

At the request of San Diego County Credit Union, CERES, Corp. (CERES) completed a Phase I Environmental Site Assessment (ESA) of a commercial property located at 301 through 349 East Grove Avenue and 1997 North Orange Olive Road, within the city limits of Orange, Orange County, California (Property) (refer to Figure 1- Property Location Maps). The Phase I ESA included: a Property and adjoining sites reconnaissance; interviews with informed persons; a search of city directories; and reviews of public records, historical topographic maps, aerial photographs, and an environmental database report.

The 2.78-acre Property is located at the northeastern corner of the East Grove Avenue and North Orange Olive Road intersection and has been assigned Assessor's Parcel Number 374-431-17-00. It is reportedly owned by Chester L. Shaffer, Jr., (First American Company, 2015, FastWeb Property Profile). The Property is developed with two single-story, multi-tenant retail buildings and is locally known as Shaffer Park Center. The buildings have a reported total floor area of 37,350 square feet (sf).

The multi-tenant retail building addressed 301 through 349 East Grove Avenue has a reported total floor area of 34,720 sf. It is currently divided into six tenant spaces, and is constructed of wood-framing and stucco and is set on a concrete, slab-on-grade foundation. It was occupied by four thrift stores and offices of the Orange Unified School District at the time of the Property reconnaissance. It was reportedly constructed in 1964.

The multi-tenant retail building addressed 1997 North Orange Olive Road has a reported total floor area of 2,630 sf, is currently divided into two tenant spaces, and is constructed of wood-framing and stucco. It is set on a concrete, slab-on-grade foundation. It was occupied by Rooftops Church and Taqueria restaurant at the time of the Property reconnaissance. It was reportedly constructed sometime between 1980 and 1986.

CERES has performed a Phase I ESA in conformance with the scope and limitations of ASTM E 1527-13 of the Property and to the limitations provided in Section 6.0 of this report. Any exceptions to, or deletions from, this practice, if any, are described herein. This assessment has revealed no evidence of RECs (including historical and controlled) in connection with the Property (E 1527-13, Section 12.8.1) Based on the findings of this assessment, CERES does not recommend additional assessment at this time (E 1527-13, Sections 12.5. and 12.6).

2.0 PHYSICAL SETTING

2.1 UNITED STATES GEOLOGICAL SURVEY (USGS) MAP REVIEW (E 1527-13, Section 8.2.4)

The elevation of the Property is approximately 200 feet above mean sea level (amsl). The immediate surrounding area of the Property generally slopes westward at a gradient of 1.3 x 10⁻² feet per foot. The nearest surface water is the Santa Ana River located approximately one mile west of the Property (United States Geological Survey [USGS], 1964, *Orange Quadrangle, California-Orange County, 7.5 Minute Series (Topographic)*; photorevised 1981, scale 1:24,000).

2.2 PROPERTY ENVIRONMENTAL CONDITIONS (E 1527-13, Section 9.4.1.6)

The Property is underlain by Recent-age alluvium (Qal) (California Division of Mines and Geology, 1986, *Geologic Map of California*, *Santa Ana Sheet*). Soil underlying the Property is described as Myford sandy loam, 0 to 2 percent slopes (172). This nearly level soil generally occurs on broad terraces. If the soil is bare, runoff is slow and the erosion hazard is moderate. The Myford series consists of moderately well drained soils on marine terraces that formed in sandy sediments and have very slow permeability (United States Department of Agriculture, Soil Conservation Service and Forest Service, 1978, *Soil Survey of Orange County and Western Part of Riverside County, California*).

Depth to groundwater beneath the Property was not found. Groundwater depth was estimated to be approximately 130 feet below ground surface at a site located about 1,500 feet northwest of the Property. Groundwater flow direction at this site was estimated to be southwestward (Orange County Health Care Agency, December 11, 2002, Case Closure Summary, Hamilton Materials, 345 Meats Avenue, Orange, CA). Based on an interpretation of elevation contours, groundwater flow beneath the Property is expected to be approximately westward.

The Property is located above aquifers that are or may be used as drinking water resources. The Property is located in the East Coastal Plain Hydrologic Subarea of the Lower Santa Ana River Hydrologic Subunit of the Santa Ana River Hydrologic Unit of the Santa Ana Drainage Province (Y-01.A1) (State of California, Department of Water Resources, 1975, *Areal Designations of Hydrologic Units, Subunits, and Subareas*).

3.0 PROPERTY RECONNAISSANCE

3.1 PROPERTY AND ADJOINING SITES DESCRIPTION

A walking reconnaissance of the Property was made on August 13, 2015, by Ms. Karen Reynoso with the assistance of Mr. Jim Liberio, a Property owner and manager. Environmental irregularities, problems, and concerns, if noted, were marked on a map drawn by CERES in the field (Figure 2). The Property was observed for evidence of hazardous substances that may affect the environmental quality of the Property. CERES observed the Property for evidence of aboveground and underground storage tanks (ASTs and USTs), surface staining, hazardous materials, suspected polychlorinated biphenyls (PCBs)-containing devices, asbestos-containing building materials (ACBMs), and other indications of environmental concern.

The 2.78-acre Property is developed with two single-story, multi-tenant retail buildings with a reported total floor area of 37,350 sf. The Property is locally known as Shaffer Park Center. The building addressed 301 through 349 East Grove Avenue is currently divided into six tenant spaces and has a reported total floor area of 34,720 sf. It is constructed of wood-framing and stucco and is set on a concrete, slab-on-grade foundation. Its flat roof is likely composed of asphalt-impregnated sheets with HVAC units over tenant spaces. The following table lists the building tenancy observed during the Property reconnaissance:

Unit	Estimated Floor Area (sf)	Tenant
301	1,650	Rooftops Church Thrift Store
303	10,000	Thrift Shoppe
305	5,650	Thriftology
321	1,200	Orange Unified School District
325-335	6,000	The Sheepfold Thrift Store
337-349	10,220	Orange Unified School District

The Property building addressed 1997 North Orange Olive Road is divided into two tenants spaces and has a reported total floor area of 2,630 sf. It is constructed of wood-framing and stucco and is set on a concrete, slab-on-grade foundation. Its flat roof is likely composed of asphalt-impregnated sheets with HVAC units over each tenant space. Unit A (1,315 sf) was occupied by Rooftop Church and Unit B (1,315 sf) was occupied by Taqueria restaurant at the time of the Property reconnaissance.

Except for some professionally-maintained landscaping (mostly along the southern Property border), the exterior of the Property is mostly paved in asphalt for customer parking. Concrete-paved walkways are present along some perimeter areas of the Property buildings. Municipal dumpsters were observed along the northern Property border. The thrift stores use exterior areas of the Property

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north and east of the larger retail building to store donated items (refer to Figure 2 and Photographs 1 through 10 in Section 7.0 - Property Photographs) (E 1527-13, Section 9).

POTABLE WATER (E 1527-13, Section 9.4.1.9)

Potable water is provided to the Property by the City of Orange Public Works Water Division.

HEATING AND COOLING (E 1527-13, Section 9.4.3.1)

The source of heating, ventilation and air conditioning energy is Southern California Edison and Southern California Gas.

SEWAGE DISPOSAL SYSTEM (E 1527-13, Sections 9.4.1.10 and 9.4.4.7)

Sewage disposal for the Property is provided by the City of Orange Public Works Department's municipal sewer system. Evidence of septic systems and cesspools was not found.

INTERIOR--STAINS, CORROSION, DRAINS, AND SUMPS (E 1527-13, Sections 9.4.3.2 and 9.4.3.3)

Significant staining and corrosion inside accessible areas of the Property buildings were not observed. With the exception of a couple of floor sinks inside the Taqueria restaurant, evidence of drains, sumps, or clarifiers was not found at the Property.

EXTERIOR-PITS, PONDS, LAGOONS, SURFACE STAINING, STRESSED VEGETATION, AND WELLS (E 1527-13, Sections 9.4.4.1, 9.4.4.2, 9.4.4.3, and 9.4.4.6)

Pits, ponds, lagoons, significant surface staining, stressed vegetation, and wells were not observed on the Property.

SOLID WASTE AND WASTE WATER (E 1527-13, Sections 9.4.4.4 and 9.4.4.5).

Other than small quantities of discarded trash, solid waste and waste water were not observed on the Property.

CURRENT AND PAST USES OF ADJOINING SITES AND SURROUNDING AREA (E 1527-13, Sections 9.4.1.3, 9.4.1.4, and 9.4.1.5)

Shannon's Storage adjoins the northern Property border. Shaffer Park adjoins the Property to the south, across East Grove Avenue. Single-family residences adjoin the eastern Property border. Warehouses and light industrial buildings adjoin the Property to the west, across North Orange Olive Road and the railroad tracks and associated easement of Metrolink. The use of the surrounding area of the Property is a mix of commercial and light industrial (mostly west and north of the Property) and residential (mostly east of the Property).

3.2 HAZARDOUS MATERIALS

HAZARDOUS MATERIALS (E 1527-13, Sections 9.4.2.3, 9.4.2.8 and 9.4.2.9)

Evidence of hazardous materials/wastes was not observed during the Property reconnaissance.

STORAGE TANKS (E 1527-13, Section 9.4.2.4)

Evidence of USTs, ASTs, clarifiers, and other hazardous materials storage tanks was not observed during the Property reconnaissance.

ODORS, POOLS OF LIQUID, DRUMS (E 1527-13, Sections 9.4.2.5, 9.4.2.6 and 9.4.2.7)

Evidence of unusual odors, pools of liquid, or drums was not observed during the Property reconnaissance.

POLYCHLORINATED BIPHENYLS (PCBs) (E 1527-13, Section 9.4.2.10)

A few pole-mounted electrical transformers are located along the northern Property border. The transformers appeared to be in good condition and evidence of leaks was not observed.

ASBESTOS (E 1527-13, Section 13.1.5.1)

Although ACBMs are not within the scope of E 1527-13, a visual evaluation of building materials was conducted during the Property reconnaissance to assess for the potential presence of ACBMs. Bulk sampling of potential ACBMs, which is necessary to confirm the presence or absence of asbestos in many materials, was not conducted during this Phase I ESA. Bulk sampling, if requested, can be provided as part of an asbestos survey. Since the larger Property building was reportedly completed in 1964, it is possible that ACBMs were used in its construction. Observed building materials appeared to be in good condition.

4.0 INTERVIEWS AND DATABASE REVIEW

4.1 INTERVIEWS

- CERES interviewed Mr. Jim Liberio, a Property owner/manager, for information regarding past uses of the Property and the use, storage, or disposal of hazardous materials on the Property. Mr. Liberio indicated they have owned the Property for approximately fourteen years and it has been used for retail and office use since that time. Former tenants have included a grocery store, a liquor store, a dance studio, and a flooring company. Mr. Liberio was not aware of any spills or releases of hazardous materials at the Property, the presence of former or existing USTs at the Property, nor of other environmental issues associated with the Property history (E 1527-13, Section 10).
- Mr. Liberio completed a *User Questionnaire* (UQ) provided by CERES. Mr. Liberio did not indicate environmental issues regarding the Property on the UQ. Refer to Appendix B Additional Records for a copy of the completed UQ (E 1527-13, Section 10).
- CERES contacted the Orange County Health Care Agency (OCHCA) with a request to research environmentally-related records for the Property addresses. A response was not received from the OCHCA at the time this report was submitted. A response is not expected to be forthcoming in the time frame given for this Phase I ESA. If a file is found by the OCHCA, CERES will review and summarize in an addendum letter to San Diego County Credit Union if information gleaned is pertinent to this Phase I ESA (E 1527-13, Section 11).

All pertinent records may not have been available for this review. If a site is currently under litigation, the file information will not be made available. In addition, some public records may be filed by information that was not given to CERES, i.e. incident date, and thus may not have been accessed.

4.2 ENVIRONMENTAL DATABASE REVIEW

CERES subcontracted the services of an environmental database search firm to provide a list of sites within designated distances of the Property that are listed by regulatory agencies as having potential environmental concern (refer to Appendix C - Environmental Database Report). This is done to assess the potential for offsite contamination which may adversely affect the environmental quality of the Property. A table is provided in Appendix C indicating referenced agency lists and the distances from the Property for which searches are conducted (E 1527-13, Section 8.2.1.1).

The environmental database report was generated on August 4, 2015. Selected sites found on referenced agency lists within the designated distances of the Property are discussed below. Sites which are listed as not requiring further action (NFA) or were deemed by CERES to be too distant to represent an environmental concern, are excluded from the discussion. Acronyms placed in bold letters refer to database lists and the bold number is the map identification number. The Property and its adjoining sites were not found on referenced agency lists.

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The nearest Leaking UST site to the Property is as follows:

Orange Olive Auto Care, 2101 North Orange Olive Road, is reportedly located 0.124 miles north of the Property. This site reportedly impacted the soil with gasoline. The release was discovered on April 9, 1987, and a case was subsequently opened by the Regional Water Quality Control Board. The case was closed by this agency on April 7, 1988.

Other than the aforementioned, there are numerous sites listed on various agency lists within one-half mile of the Property. This is indicative of the commercial nature of the surrounding area. Based on distance and/or case status, the sites listed in the database report are not considered by CERES to represent a significant environmental concern to the Property.

Munger Map Book, California-Alaska Oil and Gas Fields, 1994, is a compilation of maps produced by the State of California Department of Natural Resources - Division of Oil and Gas, Oil Operators, Munger Oilogram, and other journals of present or past drilling locations for oil and gas exploration. CERES reviewed the map book to assess if oil wells were located on the Property. Wells were not depicted on the Property or on its adjoining sites.

5.0 HISTORICAL REVIEW

5.1 HISTORICAL AERIAL PHOTOGRAPHS AND TOPOGRAPHIC MAP

Historical aerial photographs were reviewed by CERES using an Abrams Instrument Corporation stereoscope, model CB-1, with a built-in 2-power magnifier, and 4-power binoculars. During review, CERES looked for evidence of hazardous materials and features that might affect the environmental quality of the Property, such as sumps, pits, ponds, lagoons, ASTs, landfills, outside storage of hazardous materials, and general land use (E 1527-13, Section 8.3.4.1).

This review has been supplemented by geographic place names and other data obtained in other assessment activities of this ESA. Ten single aerial photographs, one stereoscopic pair of photographs, and one topographic map were reviewed as follows.

SOURCE	YEAR/DAT E	PRINTED SCALE	MEDIUM
historicaerials.com	1946	not printed	Single Aerial Photograph
historicaerials.com	1952	not printed	Single Aerial Photograph
historicaerials.com	1963	not printed	Single Aerial Photograph
historicaerials.com	1966	not printed	Single Aerial Photograph
historicaerials.com	1972	not printed	Single Aerial Photograph
historicaerials.com	1980	not printed	Single Aerial Photograph
CERES Archives (WAC-85CA 18-18/19)	April 18, 1986	one inch equals 2,640 feet	Stereoscopic Aerial Photographs
historicaerials.com	1995	not printed	Single Aerial Photograph
historicaerials.com	2002	not printed	Single Aerial Photograph
historicaerials.com	2005	not printed	Single Aerial Photograph
historicaerials.com	2012	not printed	Single Aerial Photograph
United States Geological Survey 1964, Photorevised 1981		1 inch equals 2,000 feet Orange Quadrangle Topographic Map	

Aerial Photographs

1946 - The Property and its adjoining sites to the north, south, and east were part of a large orchard. Farmhouse structures were also noted on an adjoining site to the east; and the southern Property border was demarcated by a windbreak of trees and an unpaved road (in the position

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- of East Grove Avenue). Orchards adjoined the Property to the west, across North Orange Olive Road, railroad tracks, and a windbreak of trees.
- **1952 -** Significant discernible changes to the Property and its adjoining sites were not observed from what was noted in the 1946 photograph.
- 1963 The Property was undeveloped land. Orchards adjoined the northern Property border and to the west, across North Orange Olive Road, railroad tracks, and a windbreak of trees. Farmhouse structures were noted on an adjoining site to the east (but without surrounding orchard trees as in previous photographs). Undeveloped land which may have been in the process of becoming a park adjoined the Property to the south, across a narrow unpaved road (in the position of East Grove Avenue).
- 1966 The Property was developed with the larger existing multi-tenant retail building. Undeveloped land adjoined the Property to the north and Shaffer Park adjoined the Property to the south (across East Grove Avenue). An orchard adjoined the Property to the west, across North Orange Olive Road, railroad tracks, and a windbreak of trees. Single-family residences adjoined the eastern Property border.
- 1972 The site adjoining the northern Property border was a large storage yard for vehicles. The orchard noted to the west of the Property in previous photographs had been removed. This area appeared to be fallow agricultural land. Significant discernible changes to the Property and its adjoining sites to the south and east were not observed from what was noted in the 1966 photograph.
- 1980 Existing commercial buildings adjoined the Property to the west, across North Orange Olive Road and railroad tracks. Significant discernible changes to the Property and its other adjoining sites were not observed from what was noted in the 1972 photograph.
- **1986 -** Significant discernible changes to the Property and its adjoining sites were not observed from what was noted in the 1980 photograph.
- 1995 Except that the smaller Property multi-tenant retail building was present, significant discernible changes to the Property and its adjoining sites were not observed from what was noted in the 1980 photograph.
- **2002** Significant discernible changes to the Property and its adjoining sites were not observed from what was noted in the 1995 photograph.
- **2005** Significant discernible changes to the Property and its adjoining sites were not observed from what was noted in the 2002 photograph.
- **2012 -** Significant discernible changes to the Property and its adjoining sites were not observed from what was noted in the 2005 photograph.

Topographic Map (E 1527-13, Section 8.3.4.5)

CERES reviewed *Orange Quadrangle, California - Orange County, 7.5 Minute Series (Topographic)* map printed at a scale of one inch equals 2,000 feet (USGS, 1964, photorevised 1981). This map depicts features from 1964 and 1981 as photorevisions, as follows:

- 1964 The Property was depicted with the larger multi-tenant retail building. Structures were not depicted on the adjoining site to the north and houses were depicted on the adjoining site to the east. The word "Park" was denoted on the adjoining site to the south, across East Grove Avenue. Structures of this edition were not depicted on the adjoining site to the west, across North Orange Olive Road and the railroad tracks.
- 1975 "House omission tint" as a photorevision overlaid the houses adjoining the eastern Property border. Existing commercial buildings west of the Property, across North Orange Olive Road and the railroad tracks, were depicted as photorevised features. Photorevised features were not depicted on the Property or on its other adjoining sites.

5.2 BUILDING DEPARTMENT RECORDS

CERES visited the City of Orange Building Department to obtain building department records for the Property addresses. The following records were found for the Property:

YEAR	ADDRESS	DOCUMENT
1962, revised 1963	301-349	A drawing for the larger Property building depicted various tenant spaces and proposed occupants, including a market, a liquor store, laundry, a pharmacy, a hardware store, a beauty shop, a hobby shop, a coffee shop, a billiard hall, and a cleaners. The cleaners was depicted for Unit 325
1963-1968	301-349	Additional drawings depicted similar tenant uses as the original drawing; however, the unit previously depicted to be a cleaners (Unit 325) was depicted as a dress shop
1963	301-349	Building permit application (BPA) to construct a new building for a market and stores
1964-2001	301-349	Numerous sign permit applications (SPA) and BPAs for tenant improvement for various tenants, including a beauty shop, Michael's Market, Adam's Drug Store, Larry's Liquor, Stone TV, Ronn's Liquor, Family Thrift, Value Thrift, Thrift Shoppe, Enterprise Rent-A-Car, Gymnastics, a dance studio, and Orange Unified School District.
1992	1997B	BPA to conduct tenant improvement for Taqueria El Chavo
1995	1997A	BPA to conduct tenant improvement for Enterprise Rent-A-Car
1997	1997	SPA for Enterprise Rent-A-Car. A drawing indicated that they occupied both units

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The original construction permit for the building addressed 1997 North Orange Olive Road was not found. Information regarding uses of the Property prior to 1962, was not found at the City of Orange Building Department (E 1527-13, Section 8.3.4.7).

5.3 ADDITIONAL HISTORICAL SOURCES

Sanborn Fire Insurance Company maps

CERES retained a third-party source (EDR) to search historical Sanborn Fire Insurance Company maps for the Property. EDR responded stating that the complete holdings of the Sanborn Library collection have been searched and that fire insurance maps covering the Property were not found.

Street Directories

CERES retained a third-party source (EDR) to sample historical city directories dated from 1920 to 2013. City directories dated from 1920 to 1971, did not reveal occupancy information at the Property addresses. Occupancy at the Property addresses from as early as 1975, was assessed as follows (E 1527-13, Section 8.3.4.6):

UNIT	SOURCE	YEAR	OCCUPANCY	
301	Cole Information Services	2003	Eli Home, Inc./Eli Home Rack	
303	Cole Information Services	2003	Family Thrift	
303	Cole Information Services	2008	American Family Services/United Family/United Family Associates Foundation	
303	Cole Information Services	2013	Family Thrift/United Family Associates	
305	Cole Information Services	2008	Dollar Mart	
305	Cole Information Services	2013	Second Hand Thrift Store	
321	Luskey Brothers & Co., Inc.	1975	Salon of Beauty	
321	Pacific Telephone	1980	Tre Semme Salon of Beauty	
321	Pacific Bell	1991	My Silk Garden	
325	Luskey Brothers & Co., Inc.	1975	Peddlepower Cyclery bicycles	
325	Pacific Bell	1995	Mostly Ninety-Eight Cents	
331	Luskey Brothers & Co., Inc.	1975	Custom Golf House	
331	Pacific Telephone	1980	Custom Golf House	
331	Pacific Bell	1986	Custom Golf House	
331	Pacific Bell	1991	Custom Golf House	
331	Pacific Bell	1995	G T Golf Company	
335	Cole Information Services	2003	Sheepfold Thrift Store Orange	

UNIT	SOURCE	YEAR	OCCUPANCY	
335	Cole Information Services	2008	Sheepfold Thrift Store	
335	Cole Information Services	2013	The Sheepfold Thrift Store	
339	Pacific Telephone	1980	Victory Christian Center	
339	Pacific Bell	1991	Weber's Bread Bakery Thrift Store	
339	Pacific Bell	1995	Weber's Bread Bakery Thrift Store	
339	Cole Information Services	2008	Interstate Brands West Corporation	
341	Pacific Telephone	1980	Frank's Barber Shop	
341	Pacific Bell	1986	Frank's Barber Shop	
341	Pacific Bell	1991	Frank's Barber Shop	
341	Pacific Bell	1995	Frank's Barber Shop	
347	Cole Information Services	2003	Dance Partner	
347	Cole Information Services	2008	Dance Partner/Gemini Gymnastics	
1997	Cole Information Services	2003	Advantage Rent a Car/Taqueria Guadulupana	
1997	Cole Information Services	2008	Impresa Development Corporation/Southwest Tex Leasing Co., Inc.	
1997	Cole Information Services	2013	Floors Now/Taqueria Guadulupana/Thriftology	

The aforementioned sources of historical information in this ESA provided historical information of the Property use pursuant to Section 8.3 of E 1527-13; thus, additional information and reports were not reviewed for this ESA.

5.4 SUMMARY OF HISTORICAL USE

Based on reviews of available historical records, the Property was in agricultural use from as early as 1946 (i.e., part of a large orchard), but by 1963 the orchard trees had been removed from the Property. The Property was reportedly developed with the existing multi-tenant retail building addressed 301 through 349 East Grove Avenue in 1964. The building addressed 1997 North Orange Olive Road was completed sometime between 1980 and 1986. The Property has been occupied by retail stores, services, and small restaurants since completion of the structures. Reasonably ascertainable historical information dated prior to 1946, was not found during the assessment activities of this Phase I ESA. Although Property history was not assessed to pre-use, it is CERES' opinion that based on historical use of the surrounding area of the Property, an orchard was the likely the first use of the Property (E 1527-13, Section 8.3.2).

6.0 LIMITATIONS

The scope of work described herein is designed to meet the minimum requirements of ASTM document E 1527-13. However, it is not intended to be all inclusive, identify all potential concerns, or eliminate the possibility of the Property having some degree of environmental problems. It is possible that variations in soil or groundwater conditions or unpermitted, undocumented, or concealed improvements or alterations to the Property could exist beyond what was found during this ESA. Changes in observed conditions could also occur in the future due to variations in environmental and physical conditions.

Any geologic and hydrogeologic data are gathered for drawing conclusions, by CERES, within the context and timing of this report only.

No ESA can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. Performance of Practice E 1527-13 is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions in connection with a property, and this practice recognizes reasonable limits of time and cost (E 1527-13, Section 4.5.1).

All appropriate inquiry does not mean an exhaustive assessment of a clean property. There is a point at which the cost of information obtained or the time required to gather it outweighs the usefulness of the information and, in fact, may be a material detriment to the orderly completion of transactions. One of the purposes of E 1527-13 is to identify a balance between the competing goals of limiting the costs and time demands inherent in performing an ESA and the reduction of uncertainty about unknown conditions resulting from additional information (E 1527-13, Section 4.5.2). Not every property will warrant the same level of assessment (E 1527-13, Section 4.5.3).

Much of the information on which the conclusions and recommendations of this ESA are based comes from data provided by others. CERES is not responsible for the accuracy or completeness of this information. CERES is not required to verify independently the information provided [from others] but may rely on information provided (E 1527-13, Section 7.5.2.1). Inaccurate data or information that was not found or made available to CERES may result in a modification of the presented conclusions and recommendations.

REPORT USE

This report was prepared for the sole use and benefit of San Diego County Credit Union. This report is not a legal opinion and does not offer warranties or guarantees.

CERES would like to thank San Diego County Credit Union, for the opportunity to work on this project. We look forward to working together on future projects.

7.0 PROPERTY PHOTOGRAPHS



Photograph 1: View of the smaller two-unit Property building (1997) looking southward from near the southwestern corner of the larger Property building



Photograph 2: View inside Taqueria (Unit 1997B).



Photograph 3: View of the larger six-unit Property building (301 through 349) looking eastward from near the western Property border



Photograph 4: View of the Property parking area looking westward from near the eastern Property border



Photograph 5: View of the larger six-unit Property building (301 through 349) looking west-northwestward from near the eastern Property border



Photograph 6: View of the driveway and storage area east of the larger Property building looking southward from near the northeasternmost Property corner



Photograph 7: View of the driveway and storage area north of the larger Property building looking westward from near the northeastern Property corner



Photograph 8: View of the driveway and storage area north of the larger Property building looking eastward from near the northwestern Property corner

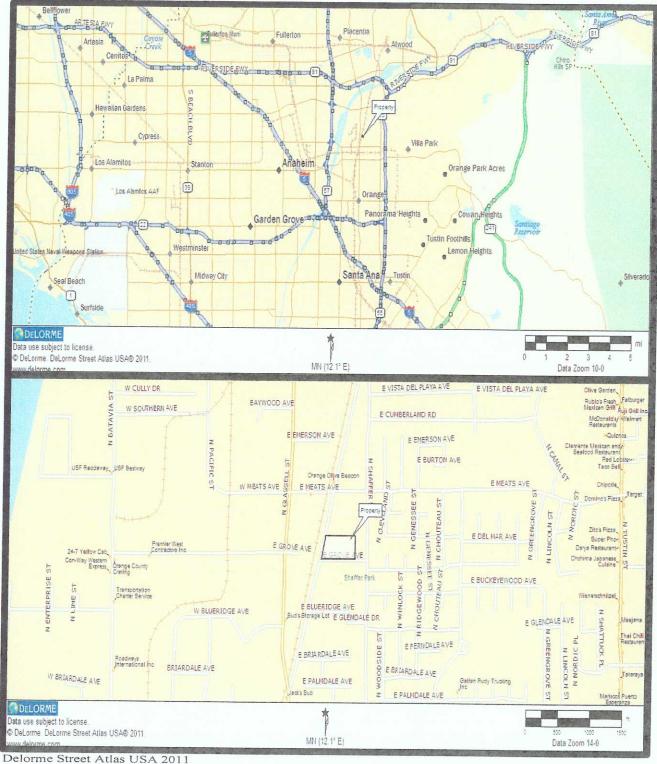


Photograph 9: View of the western Property border looking southward from near the northwestern Property corner



Photograph 10: View inside Thriftology (Unit 305)

FIGURES



Commercial Property 301 through 349 East Grove Avenue and 1997 North Orange Olive Road Orange, California

Property Location Maps **FIGURE**

driveway 337-349 East Grove Avenue 325-335 321 305 North Orange Olive Road Metrolink railroad tracks and easement Approximate scale: 1 inch = 70 feet

underlying image courtesy of Google Earth collection date: March 24, 2015

FIGURE

Property Map

approximate Property border

301 through 349 East Grove Avenue

Commercial Property

and 1997 North Orange Olive Road

California

Orange, (

Adjoining sites in italics

municipal dumpster

Project C322-01 August 2015

APPENDIX A PROFESSIONAL QUALIFICATIONS

KAREN L. REYNOSO

SENIOR ENVIRONMENTAL SPECIALIST

Education

Degree

Associate of Arts, Concentration in Hazardous Materials Management; Fullerton College, Fullerton

Certificate Programs

Environmental Hazardous Materials Technician, Fullerton College, Fullerton

Radon Measurement Operator; Western Regional Radon Training Center, Colorado

Summary of Experience

Ms. Reynoso has twenty-three years experience performing Phase I Environmental Site Assessments (ESAs) in the states of California, Nevada, Texas, Colorado, and North Carolina. She has conducted services at a large variety of sites, including unimproved land, residential properties, office buildings, commercial and retail businesses, and industrial facilities. Ms. Reynoso is an Asbestos Hazard Emergency Response Act (AHERA)-Accredited Building Inspector.

Ms. Reynoso has also gained experience in Phase II Contamination Assessment, including subsurface and near surface soil sampling, subsurface soil vapor sampling, and geophysical surveys. Ms. Reynoso has conducted groundwater sampling from monitoring wells on a quarterly basis for a Class III household waste disposal facility. She has also directed field activities during the installation of monitoring wells, dedicated pumps, and lysimeters at the facility.

Ms. Reynoso has interacted with a number of federal, state, and local environmental agencies during collection of data for environmental assessments and is well versed in methods of data collection from public and private sources.

Ms. Reynoso has substantial experience in the review of aerial photography and was in charge of aerial photography procurement for CERES' corporate office photo library for four years.

JEFFREY B. FLEMING PRESIDENT/ENVIRONMENTAL SPECIALIST

Education

Degrees

Bachelor of Science, Physics/Scientific and Technical Communication, University of Washington, Seattle, Washington

Master of Arts, Physical Geography, San Diego State University, San Diego, California

Registrations

National Registry of Environmental Professions, Registered Environmental Property Assessor (REPA) #994321

Mr. Fleming was a State of California Registered Environmental Assessor (#7055) from 1997 through 2012. The State of California discontinued this program in 2012.

Summary of Experience

Mr. Fleming has twenty-five years experience conducting and managing environmental investigations, teaching environmental science, and managing environmental risk. His environmental work experience includes private consulting, County government, banking, and college-level instruction. He has conducted or managed Phase I, II, and III Environmental Site Assessments (ESAs), Transaction Screens, Second Level Reviews, asbestos surveys, and lead-in-paint sampling. He has conducted these assessments and surveys at a large variety of sites, including commercial, residential, agricultural, and undeveloped properties. His fieldwork experience includes borehole drilling; underground storage tank removal; groundwater, surface water, soil, and soil vapor sampling; and geophysical surveys.

As an Environmental Resources Specialist III with the Orange County Environmental Management Agency, California, Mr. Fleming was tasked with the management of Phase I ESAs, conducted storm water sampling and gauging, and assisted in the development of Best Management Practices in the control of storm water runoff quality. As an Environmental Analyst with a major bank in the State of California, Mr. Fleming assessed and managed environmental risk associated with collateralized loans and foreclosures. He was active in the supervision of Phase II assessments and Phase III characterization activities. His teaching experience at San Diego State University and the University of Wisconsin - Madison included undergraduate instruction in physiography, hydrology, and climatology.

APPENDIX B ADDITIONAL RECORDS

CERES, Corp., is conducting a Phase I Environmental Site Assessment of:

Commercial Property, 301 - 349 E. Grove Avenue and 1997 N. Orange Olive Road, Orange, California (Property)

Property Name and Address

Please complete this User Questionnaire in order to qualify for one of the Landowner Liability Protections offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete (E 1527-13, Appendix X3). After completion, please fax back to 208.765.1745, email to infilie the appropriate inquiry or call 800.258.1490 for mailing instructions.

1)	Are you awar tribal, state or	e of any environmental cleanup liens against the Property that are filed or recorded under federal r local law?
	YES 🗆	NO Comments:
2)	institutional c tribal, state or	
	YES 🗆	NO 🗹 Comments:
3)	are you invol- property so the business?	any specialized knowledge or experience related to the Property or nearby properties? For example ved in the same line of business as the current or former occupants of the Property or an adjoining nat you would have specialized knowledge of the chemicals and processes used by this type of
	YES □	NO S Comments:
4)	conclude that	hase price being paid for this Property reasonably reflect the fair market value of the Property? If you there is a difference, have you considered whether the lower purchase price is because contamination elieved to be present at the Property?
	YES 🗆	NO & Comments: Ref;
5)	environmenta	e of commonly known or reasonably ascertainable information about the Property that would help the professional to identify conditions indicative of releases or threatened releases? [For example: past ical use, spills/releases, environmental cleanups].
	YES 🗆	NOTO Comments:
6)	Based on your presence or lil	knowledge and experience related to the Property, are there any obvious indicators that point to the kely presence of contamination at the Property?
	YES 🗆	NO Comments:
7)		any other knowledge or experience with the Property that may be pertinent to the environmental [For example: copies of prior environmental site assessment reports, correspondence, etc.].
	YES 🗆	NO A Comments:
/		
		22 8/13/15
Compli	eled By (Signati	ire) Date
	James C	-iberso ourey/Manager
Printed	Name	Tido

APPENDIX C ENVIRONMENTAL DATABASE REPORT

Commercial Property

301-349 E Grove Avenue and 1997 N Orange Olive Rd Orange, CA 92865

Inquiry Number: 4373361.2s

August 04, 2015

FirstSearch Report



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800 352,0050 www.edmet.com

Search Summary Report

TARGET SITE 301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RD ORANGE, CA 92865

Category	Sel	Site	1/8	1/4	1/2	> 1/2	ZIP	TOTALS
NPL	Y	0	0	0	0	0	0	0
NPL Delisted	Y	0	0	0	0	0	0	0
CERCLIS	Y	0	0	0	0	2	0	0
NFRAP	Y	0	0	0	0	(2)	0	0
RCRA COR ACT	Y	0	0	0	0	1	0	1
RCRA TSD	Y	0	0	0	0	_	0	0
RCRA GEN	Υ	0	0	9		_	0	9
Federal IC / EC	Υ	0	0	0	0	-	0	0
ERNS	Υ	0	¥:	_	-	-	0	0
State/Tribal NPL	Υ	0	0	0	0	1	0	1
State/Tribal CERCLIS	Υ	0	0	1	1	8	0	10
State/Tribal SWL	Υ	0	0	1	0	-	0	1
State/Tribal LTANKS	Υ	0	1	3	6	-	0	10
State/Tribal Tanks	Υ	0	1	3	-	-	0	4
State/Tribal VCP	Υ	0	0	0	0	-	0	0
US Brownfields	Υ	0	0	0	0	 //	0	0
Other SWF	Υ	0	0	0	0	-	0	0
Other Haz Sites	Υ	0	20	=	-		0	0
Other Tanks	Υ	0	1	5	-	1.7	0	6
Local Land Records	Υ	0	0	0	0	-	0	0
Spills	Υ	0	-	-	-	-	0	0
Other	Υ	0	2	32	-	7	0	34
	- Totals	0	5	54	7	10	0	76

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Search Summary Report

TARGET SITE:

301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RD ORANGE, CA 92865

Category	Database	Update	Radius	Site	1/8	1/4	1/2	> 1/2	ZIP	TOTAL

NPL	NPL	03/26/2015	1.000	0	0	0	0	0	0	0
	Proposed NPL	03/26/2015	1.000	0	0	0	0	0	0	0
NPL Delisted	Delisted NPL	03/26/2015	1.000	0	0	0	0	0	0	0
CERCLIS	CERCLIS	10/25/2013	0.500	0	0	0	0	-	0	0
NFRAP	CERC-NFRAP	10/25/2013	0.500	0	0	0	0	25	0	0
RCRA COR ACT	CORRACTS	03/10/2015	1.000	0	0	0	0	1	0	1
RCRA TSD	RCRA-TSDF	03/10/2015	0.500	0	0	0	0	-	0	0
RCRA GEN	RCRA-LQG	03/10/2015	0.250	0	0	3	_	_	0	3
	RCRA-SQG	03/10/2015	0.250	0	0	6		-	0	6
	RCRA-CESQG	03/10/2015	0.250	0	0	0	-	-	0	0
Federal IC / EC	US ENG CONTROLS	03/16/2015	0.500	0	0	0	0	-	0	0
	US INST CONTROL	03/16/2015	0.500	0	0	0	0	-	0	0
ERNS	ERNS	03/30/2015	TP	0	.=:	-	÷-	-	0	0
State/Tribal NPL	RESPONSE	05/04/2015	1.000	0	0	0	0	1	0	1
State/Tribal CERCLIS	ENVIROSTOR	05/04/2015	1.000	0	0	1	1	8	0	10
State/Tribal SWL	SWF/LF	05/18/2015	0.500	0	0	1	0	-	0	1
state/Tribal LTANKS	LUST	06/15/2015	0.500	0	1	3	6	2	0	10
	SLIC	06/15/2015	0.500	0	0	0	0		0	0
	INDIAN LUST	02/03/2015	0.500	0	0	0	0	-	0	0
tate/Tribal Tanks	UST	06/15/2015	0.250	0	1	1	2		0	2
	AST	08/01/2009	0.250	0	0	2	T L	_	0	2
	INDIAN UST	02/03/2015	0.250		0	0	+ ,		0	0
tate/Tribal VCP	VCP	05/04/2015	0.500	0	0	0	0	-	0	0
S Brownfields	US BROWNFIELDS	03/23/2015	0.500	0	0	0	0	-	0	0

Search Summary Report

TARGET SITE:

301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RD ORANGE, CA 92865

Category	Database	Update	Radius	Site	1/8	1/4	1/2	> 1/2	ZIP	TOTA
Other SWF	WMUDS/SWAT	04/01/2000	0.500	0	0	0	0	-	0	0
Other Haz Sites	US CDL	02/25/2015	TP	0	-		-	_	0	0
	SCH	05/04/2015	0.250	0	0	0	-	-	0	0
Other Tanks	CA FID UST	10/31/1994	0.250	0	0	3	-	_	0	3
	SWEEPS UST	06/01/1994	0.250	0	1	2	-	-	0	3
Local Land Records	DEED	06/08/2015	0.500	0	0	0	0	-	0	0
Spills	HMIRS	03/30/2015	TP	0	_	32			0	0
	CHMIRS	06/15/2015	TP	0			=	=	0	0
	Orange Co. Industrial S		TP	0	_	_		-	0	
	SPILLS 90	06/06/2012	TP	0	-	-		-	0	0
Other	RCRA NonGen / NLR	03/10/2015	0.250	0	0	1		_	0	
	TRIS	12/31/2013	TP	0	-	113	(10)	_	0	1
	TSCA	12/31/2012	TP	0		_	-	_	0	0
	FTTS	04/09/2009	TP	0				-	0	0
	SSTS	12/31/2009	TP	0	_	_	_	-	0	0
	ICIS	01/23/2015	TP	0	_	_	_	_	0	0
	PADS	07/01/2014	TP	0	_	_	_	_	0	0
	MLTS	03/31/2015	TP	0	-	-	-	_	0	0
	RADINFO	04/07/2015	TP	0	_	-	_	_	0	0
	FINDS	01/18/2015	TP	0		_	_	41	0	0
	RAATS	04/17/1995	TP	0	-	-	-		0	0
	Cortese	06/24/2015	0.500	0	0	0	0	-	0	0
	CUPA Listings		0.250	0	0	0	-	-	0	0
	HAZNET	12/31/2013	0.250	0	2	31	_	-	0	33
	INDIAN RESERV	12/31/2005	1.000	0	0	0	0	0	0	0
	PRP	10/25/2013	TP	0	-	-	-	_	0	0
	US AIRS	10/16/2014	TP	0	-	-	_	-	0	0
	WDS	06/19/2007	TP	0	-	-1	-	-	0	0
	- Totals			0	5	54	7	10	0	76

Site Information Report

Request Date:

AUGUST 4, 2015

Request Name:

JEFF FLEMING

Search Type:

COORD

Job Number:

NA

Target Site:

301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RD

ORANGE, CA 92865

Site Location

Degrees (Decimal)

Degrees (Min/Sec)

UTMs

Longitude:

117.850800

117.8508000 - 117° 51' 2.88"

Easting: 421263.3

Latitude:

33.821200

33.8212000 - 33° 49' 16.32"

Northing: 3742462.8

Elevation:

201 ft. above sea level

Zone: Zone 11

Demographics

Sites:

77

Non-Geocoded: 0

Population: N/A

RADON

Federal EPA Radon Zone for ORANGE County: 3

Note: Zone 1 indoor average level > 4 pCi/L.

: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.

: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for ORANGE COUNTY, CA

Number of sites tested: 30

Area

Average Activity

% <4 pCi/L

% 4-20 pCi/L

% >20 pCi/L

Living Area - 1st Floor

0.763 pCi/L

0%

0%

100%

Not Reported

Not Reported

Living Area - 2nd Floor Basement

Not Reported

Not Reported

Not Reported Not Reported

Not Reported

Not Reported

Site Information Report

RADON

State Database: CA Radon

Radon Test Results

 Zipcode
 Num Tests
 > 4 pCi/L

 —
 —
 —

 92865
 146
 4

Target Site Summary Report

Target Property:

301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RDOB: ORANGE, CA 92865

NA

TOTAL:

77

GEOCODED: 77

NON GEOCODED: 0

DB Type

--ID/Status

Site Name

Address

Dist/Dir

ElevDiff

Page No.

No sites found for target address

Target Property:

301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RDOB: ORANGE, CA 92865

NA

TOTAL:

77

GEOCODED: 77

NON GEOCODED:

DB Type Map ID --ID/Status Site Name Address Dist/Dir **ElevDiff** Page No. HAZNET A1 POLLARD SWAIN INC 218 EAST MEATS 0.11 North + 2 1 --CAL000115786 ORANGE, CA 92665 B2 **HAZNET** IEB CORP DBA ORANGE OLIVE GASO 2101 N ORANGE OLIVE RD 0.12 North + 2 3 -- CAL000351167 ORANGE, CA 92865 **B**3 SWEEPS UST ORANGE OLIVE AUTO CARE 2101 N ORANGE OLIVE RD 0.12 North + 2 4 ORANGE, CA 92665 --A --800067 **B3** LUST ORANGE OLIVE AUTO CARE 2101 N ORANGE OLIVE RD 0.12 North + 2 6 -- Completed - Case Closed ORANGE, CA 92665 --T0605900239 **B4** UST ORANGE OLIVE ARCO 2101 ORANGE OLIVE ROAD 0.12 North +2 8 --30-030-800067 ORANGE, CA 92865 **B**5 CA FID UST ORANGE OLIVE AUTO CARE 2101 ORANGE OLIVE R ORANG 0.13 North +2 9 ORANGE, CA 92665 --30017909 **B6** HAZNET ANASTASIA GORA 338 E MEATS AVE APT A 0.13 NNE + 3 10 --CAC002727645 ORANGE, CA 92865 **B7** LUST ORANGE OLIVE AUTO CARE 2101 ORANGE OLIVE 0.13 North +2 11 -- Case Closed ORANGE, CA 92665 --T0605900239 C8 **HAZNET** POLLARD SWAIN 218 E MEATS AVE 0.13 NNW +1 13 -- CAL000372901 ORANGE, CA 92865 C9 AST 218 E MEATS AVE 0.13 NNW + 1 15 ORANGE, CA 92865 A10 RCRA-SQG FINE FINISH SASH AND DOOR INC 227 E MEATS AVE 0.13 NNW + 1 16 --CAD981387921 ORANGE, CA 92865 C11 HAZNET BASF CORPORATION 210 E MEATS AVE 0.13 NNW 18 + 1 --CAD131842445 ORANGE, CA 92865

Target Property:

301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RDOB: ORANGE, CA 92865

NA

TOTAL:

GEOCODED: 77

NON GEOCODED: 0

Map ID	DB Type ID/Status	Site Name	Address	Dist/Dir	ElevDiff	Page No.
C12	RCRA-SQG CAD131842445	BASF CORP	210 E MEATS AVE ORANGE, CA 92865	0.13 NNW	+ 1	20
D13	HAZNET CAC002679920	BOYD BUSINESS CENTER OF ORANGE	2043 N GLASSELL ST ORANGE, CA 92865	0.14 WNW	-7	23
E14	SWEEPS UST A A 2624	CITY OF ORANGE FIRE STATION #3	1910 N SHAFFER ORANGE, CA 92665	0.14 SE	+ 3	25
E14	CA FID UST A 30017897	CITY OF ORANGE FIRE STATION #3	1910 N SHAFFER ORANGE, CA 92665	0.14 SE	+ 3	26
E15	HAZNET CAC001494344	CITY OF ORANGE FIRE DEPT	1910 N. SHAFFER ORANGE, CA 92865	0.14 SE	+ 3	27
16	HAZNET CAX000081133	MERCO MANUFACTURING	1927 N. GLASSELL ORANGE, CA 92665	0.14 SW	- 8	28
E17	AST		1910 SHAFFER ST ORANGE, CA 92869	0.14 SE	+ 3	29
18	HAZNET CAC002589034	PGM METAL FINISHING CORP	409 E BLUERIDGE AVE ORANGE, CA 92865	0.14 South	- 2	30
D19	SWF/LF Active Active 30-AB-0363 2325 Permitted	WASTE MANAGEMENT OF ORANGE TRA	2050 NORTH GLASSELL AVENU ORANGE, CA 92865	0.14 WNW	-7	32
D20	SWEEPS UST A A 800070	ORANGE RESOURCE RECYCLING	2050 N GLASSELL ORANGE, CA 92665	0.14 WNW	- 7	34
D21	UST 30-030-800070	ORANGE RESOURCE RECOVERY SYSTE	2050 N. GLASSELL ORANGE, CA 92865	0.14 WNW	- 7	35

Target Property:

301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RDOB: ORANGE, CA 92865

TOTAL: 77

GEOCODED: 77

NON GEOCODED: 0

NA

Map ID	DB Type ID/Status	Site Name	Address	Dist/Dir	ElevDiff	Page No.
D22	HAZNET CAL000083312	WASTE MANAGEMENT OF ORANGE	2050 N GLASSELL ST ORANGE, CA 92865	0.14 WNW	-7	36
F23	HAZNET CAL000357732	M&R ENGINEERING COMPANY	227 MEATS AVE ORANGE, CA 92865	0.16 NNW	+ 2	38
F24	HAZNET CAD981387921	FINE FINISH SASH & DOOR INC	227 E MEATS ORANGE, CA 92665	0.16 NNW	+ 2	40
G25	RCRA-SQG CAD983601147	MERCO MFG CO	1927 GLASSEL ORANGE, CA 92865	0.17 SW	- 9	42
H26	LUST Completed - Case T0605901485	HIGHTOWER PLATING & MANUFACTUR e Closed	2090 N GLASSELL ST ORANGE, CA 92865	0.17 NW	- 5	44
H27	RCRA-LQG CAD009521089	HIGHTOWER PLATING AND MANUFACT	2090 N GLASSELL ST ORANGE, CA 92865	0.17 NW	- 5	46
H28	LUST Case Closed T0605901485	ANILLO COMPANY	2090 GLASSELL ORANGE, CA 92668	0.17 NW	- 5	67
29	HAZNET CAL000077130	CAMELOT FURNITURE CORP	1960 N GLASSELL ORANGE, CA 92865	0.18 WSW	- 10	69
G30	HAZNET CAR000017210	RICKS TRUCKWORKS	1962 N GLASSELL ST ORANGE, CA 92865	0.18 SW	- 9	71
G30	RCRA-SQG CAR000017210	RICKS TRUCKWORKS	1962 N GLASSELL ST ORANGE, CA 92865	0.18 SW	- 9	72
131	RCRA-LQG CAR000049858	BURLINGTON ENGINEERING, INC.	220 WEST GROVE AVENUE ORANGE, CA 92865	0.20 West	- 10	74
132	HAZNET CAR000049858	BURLINGTON ENGINEERING INC	220 W GROVE ST ORANGE, CA 92865	0.20 West	- 10	80

Target Property:

301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RDOB: ORANGE, CA 92865

TOTAL:

77

GEOCODED: 77

NON GEOCODED: 0

NA

Map ID	DB Type ID/Status	Site Name	Address	Dist/Dir	ElevDiff	Page No
33	HAZNET CAC000938312	ORANGE CO SCAFFORD	2163 N GLASSELL AVE ORANGE, CA 92665	0.20 NNW	-1	82
134	HAZNET CAC002590168	CASE AUTOMATION CORP	240 W GROVE AVE ORANGE, CA 92865	0.21 West	- 10	83
135	HAZNET CAD981972144	ACR MECHANICAL CORP	240 W GROVE AVE ORANGE, CA 92665	0.21 West	- 10	84
J36	HAZNET CAC000973288	VERNA LAWSON	1859 N GLASSELL ST ORANGE, CA 92665	0.21 SW	- 8	86
37	CA FID UST A 30004551	LIQUINOX COMPANY	221 W MEATS AVE ORANGE, CA 92665	0.22 WNW	- 7	87
K38	HAZNET CAC002565775 CAL000388357	TIMBER CREST FURNITURE	200 W GROVE ORANGE, CA 92665	0.22 West	- 11	88
K39	HAZNET CAL000352656	STS GRAPHICS INC	200 W GROVE AVE ORANGE, CA 92865	0.22 West	- 11	90
K40	HAZNET CAC002687027	WANDA BOSE	200 W GROVE AVE ORANGE, CA 92865	0.22 West	- 11	91
K41	HAZNET CAL921843259	FURNITURE TRADITIONS CORP	200 WEST GROVE ORANGE, CA 92665	0.22 West	- 11	92
L42	HAZNET CA0000371278	HONEYCUTT TEAR OFF	2163 N GLASSELL ST ORANGE, CA 92865	0.23 NNW	- 3	93
L42	RCRA-SQG CA0000371278	HONEYCUTT TEAR OFF	2163 N GLASSELL ST ORANGE, CA 92865	0.23 NNW	- 3	94
M43	HAZNET CAL000070224	CENTURY INDEX CORPORATION	1870 N GLASSELL ST ORANGE, CA 92665	0.23 SW	- 9	96

Target Property:

301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RDOB:

ORANGE, CA 92865

TOTAL: 7

77

GEOCODED: 77

NON GEOCODED:

NA

DB Type --ID/Status Map ID Site Name Address Dist/Dir **ElevDiff** Page No. M44 CENTURY INDEX CORP HAZNET 1870 N GLASSELL 0.23 SW -9 97 --CAD983661166 ORANGE, CA 92665 M45 RCRA-SQG CENTURY INDEX CORP 1870 N GLASSELL ST 0.23 SW - 9 99 --CAD983661166 ORANGE, CA 92865 L46 HAZNET DELTECH ENGINEERING INC (FOWLE 2164 N GLASSELL ST 0.23 NNW - 3 101 --CAC002563743 ORANGE, CA 92865 NOELLE CORPORATE COMMUNICATION J47 HAZNET 205 W BLUERIDGE AVE 0.23 SW - 8 102 --CAD981432131 ORANGE, CA 92665 N48 HAZNET R & C MOLD CO 2143 N GLASSELL 0.23 NNW 103 --CAL000284206 ORANGE, CA 92665 N49 **HAZNET** R & C MOLD CO. INC. 2143 N GLASSELL 0.23 NNW - 1 104 --CAL000036976 ORANGE, CA 92665 050 **HAZNET** CIRTECH INC 250 E EMERSON AVE 0.24 North + 1 106 --CAD981388655 ORANGE, CA 92665 O51 CIRTECH INC **ENVIROSTOR** 250 E EMERSON 0.24 North 108 --Inactive - Needs Evaluation ORANGE, CA 92865 --71002789 051 MANIFEST CIRTECH INC 250 E EMERSON 0.24 North +1 110 --CAD981388655 ORANGE, CA 92865 --RIH0018379 051 RCRA-LQG CIRTECH INC 250 E EMERSON 0.24 North + 1 111 --CAD981388655 ORANGE, CA 92865 O52 RCRA NonGen / NLR APPLIED FRICTION TECHNIQUES IN 230 E EMERSON AVE STE B 0.24 North + 0 123 --CAD982442592 ORANGE, CA 92865 053 HAZNET PROPECH MOLD 210 E EMERSON AVE 0.24 NNW + 0 125 --CAC002604589 ORANGE, CA 92865

Target Property:

301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RDOB:

ORANGE, CA 92865

TOTAL:

77

GEOCODED: 77

NON GEOCODED:

NA

DB Type Map ID --ID/Status Site Name Address Dist/Dir **ElevDiff** Page No. M54 HAZNET CATALINA PRECISION ENGINEERING 223 W BLUERIDGE AVENUE 0.25 SW - 9 126 -- CAL000218656 ORANGE, CA 92865 55 LUST FEDEX FREIGHT INC ONG 310 W GROVE 0.25 West - 10 127 -- Case Closed ORANGE, CA 92865 --Completed - Case Closed --T0605901123 --T0605901123 56 LUST WESTPAC MATERIALS 345 W MEATS AVE 0.27 WNW - 8 131 -- Case Closed ORANGE, CA 92865 --02UT016 -Completed - Case Closed --T0605900139 --9 --T0605900139 *Additional key fields are available in the Map Findings section 57 **ENVIROSTOR** MARCEL ELECTRONICS INT'L 230 BRISTOL LANE 0.28 North + 0 134 -- Inactive - Needs Evaluation ORANGE, CA 92665 --71002927 58 LUST FORMER SANTIAGO HEATING & AIR 231 BLUERIDGE 0.32 SW - 16 136 -- Case Closed ORANGE, CA 92867 --97UT044 -- Completed - Case Closed --T0605902100 --T0605902100 *Additional key fields are available in the Map Findings section 59 LUST STRAUB DISTRIBUTING CO 410 GROVE 0.33 West - 11 139 --97UT046 ORANGE, CA 92865 --Completed - Case Closed --T0605902068 --9 P60 LUST THOMPSON BUILDING MATERIALS 141 W TAFT AVE 0.41 SSW - 8 141 -- Completed - Case Closed ORANGE, CA 92867 -T0605902324 P61 LUST THOMPSON BUILDING MATERIALS 141 TAFT AVE 0.41 SSW - 8 143 -- Case Closed ORANGE, CA 92867 --T0605902324

Target Property:

 $301\mbox{-}349$ E GROVE AVENUE AND 1997 N ORANGE OLIVE RDOB: ORANGE, CA 92865

NA

TOTAL: 77

GEOCODED: 77

NON GEOCODED: 0

Map ID	DB TypeID/Status	Site Name	Address	Dist/Dir	ElevDiff	Page No.
Q62	ENVIROSTORInactive - Needs71002846	ULTRA-PURE METAL FINISHING INC Evaluation	1764 N. CASE ST ORANGE, CA 92865	0.56 SW	- 17	145
Q63	ENVIROSTOR Inactive - Needs 71002406	MCCURDY CIRCUITS INC. Evaluation	1739 N CASE ST ORANGE, CA 92865	0.57 SW	- 18	147
R64	ENVIROSTOR Certified O&M - 30280027	FXI, INC. Land Use Restrictions Only	2060 NORTH BATAVIA ORANGE, CA 92665	0.65 West	- 12	149
R65	ENVIROSTOR* Inactive80001567	FXI INC	2060 N BATAVIA ST ORANGE, CA 92865	0.65 West	- 12	154
66	ENVIROSTORNo Further ActionRefer: RCRA8000173230360250	ORANGE PRECISION CIRCUITS	812 SOUTHERN AVE ORANGE, CA 92865	0.65 WNW	- 8	156
66	CORRACTS CAD097577035	ORANGE PRECISION CIRCUITS	812 SOUTHERN AVE ORANGE, CA 92865	0.65 WNW	- 8	160
67	ENVIROSTOR Refer: Other Ager 30340167	VAN DOREN RUBBER CO, INC.	2095 NORTH BATAVIA ORANGE, CA 92667	0.66 West	- 10	161
68	ENVIROSTOR Certified 30240011	CONTINENTAL MOLDING	1841 N. BATAVIA STREET ORANGE, CA 92666	0.68 WSW	- 16	163
68	RESPONSECertified30240011	CONTINENTAL MOLDING	1841 N. BATAVIA STREET ORANGE, CA 92666	0.68 WSW	- 16	165
69	ENVIROSTORInactive - Withdray30000046	THERMCO SYSTEMS CORP	1465 N BATAVIA ST ORANGE, CA 92867	0.98 SW	- 30	167

Target Property: 301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RD JOB: NA ORANGE, CA 92865

HAZNET

EDR ID: S113066036

DIST/DIR:

0.114 North

ELEVATION: 203

MAP ID: A1

NAME:

POLLARD SWAIN INC

ADDRESS: 218 EAST MEATS

ORANGE, CA 92665

Rev:

12/31/2013

ID/Status: CAL000115786

SOURCE: CA California Environmental Protection Agency

HAZNET:

envid: S113066036

Year: 2011

GEPAID: CAL000115786 Contact: DALE SWAIN PRES. Telephone: 7146371531 Mailing Name: Not reported Mailing Address: PO BOX 3846

Mailing City, St, Zip: ORANGE, CA 928570846

Gen County: Not reported TSD EPA ID: CAD981696420 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: 0.25

Facility County: Orange

envid: S113066036

Year: 2009

GEPAID: CAL000115786 Contact: DALE SWAIN PRES. Telephone: 7146371531 Mailing Name: Not reported Mailing Address: PO BOX 3846

Mailing City, St, Zip: ORANGE, CA 928570846

Gen County: Not reported TSD EPA ID: CAD981696420 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: 0.105

Facility County: Orange

envid: S113066036

Year: 1998

GEPAID: CAL000115786 Contact: DONNA SWAIN Telephone: 0000000000 Mailing Name: Not reported Mailing Address: PO BOX 3846

Mailing City, St, Zip: ORANGE, CA 928570846

Gen County: Not reported

- Continued on next page -

Target Property: 301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RD JOB: NA

ORANGE, CA 92865

HAZNET

EDR ID: S113066036

DIST/DIR: 0.114 North

ELEVATION: 203 MAP ID: A1

NAME:

POLLARD SWAIN INC ADDRESS: 218 EAST MEATS

ORANGE, CA 92665

Rev:

12/31/2013

ID/Status: CAL000115786

SOURCE: CA California Environmental Protection Agency

TSD EPA ID: CAD008302903 TSD County: Not reported

Waste Category: Unspecified solvent mixture

Disposal Method: Recycler

Tons: .2293

Facility County: Orange

envid: S113066036

Year: 1997

GEPAID: CAL000115786 Contact: DONNA SWAIN Telephone: 0000000000 Mailing Name: Not reported Mailing Address: PO BOX 3846

Mailing City, St, Zip: ORANGE, CA 928570846

Gen County: Not reported TSD EPA ID: CAD044429835 TSD County: Not reported

Waste Category: Waste oil and mixed oil

Disposal Method: Recycler

Tons: .4170

Facility County: Orange

envid: S113066036

Year: 1996

GEPAID: CAL000115786 Contact: DONNA SWAIN Telephone: 0000000000 Mailing Name: Not reported Mailing Address: PO BOX 3846

Mailing City, St, Zip: ORANGE, CA 928570846

Gen County: Not reported TSD EPA ID: CAD981696420 TSD County: Not reported

Waste Category: Aqueous solution with total organic residues less than 10 percent

Disposal Method: Transfer Station

Tons: .1668

Facility County: Orange

Click this hyperlink while viewing on your computer to access 1 additional CA_HAZNET: record(s) in the EDR Site Report.

Target Property:

301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RD JOB:

ORANGE, CA 92865

HAZNET

EDR ID:

S113158303

DIST/DIR:

0.124 North

ELEVATION:

203

MAP ID: B2

NAME:

IEB CORP DBA ORANGE OLIVE GASOLINE

Rev: ID/Status: CAL000351167

12/31/2013

NA

ADDRESS: 2101 N ORANGE OLIVE RD

ORANGE, CA 92865

ORANGE

SOURCE: CA California Environmental Protection Agency

HAZNET:

envid: S113158303

Year: 2012

GEPAID: CAL000351167 Contact: IRAJ MIRHASHEMI Telephone: 7142833750 Mailing Name: Not reported

Mailing Address: 2101 N ORANGE OLIVE RD Mailing City, St, Zip: ORANGE, CA 928653327

Gen County: Orange

TSD EPA ID: CAD981696420 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: 0.1

Facility County: Orange

envid: S113158303

Year: 2011

GEPAID: CAL000351167 Contact: IRAJ MIRHASHEMI Telephone: 7142833750 Mailing Name: Not reported

Mailing Address: 2101 N ORANGE OLIVE RD Mailing City, St, Zip: ORANGE, CA 928653327

Gen County: Not reported TSD EPA ID: CAD981696420 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: 0.25

Facility County: Orange

Target Property: 301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RD JOB: NA ORANGE, CA 92865

SWEEPS UST

EDR ID:

S106930171

DIST/DIR:

0.124 North

ELEVATION:

203

06/01/1994

MAP ID: B3

NAME:

ORANGE OLIVE AUTO CARE

ADDRESS: 2101 N ORANGE OLIVE RD

ORANGE, CA 92665

ORANGE

ID/Status: A

Rev:

ID/Status: A ID/Status: 800067

SOURCE: CA State Water Resources Control Board

SWEEPS UST: Status: Active

Comp Number: 800067

Number: 2

Board Of Equalization: Not reported

Referral Date: 06-22-93 Action Date: 01-19-94 Created Date: 06-22-93 Owner Tank Id: 800067

SWRCB Tank ld: 30-030-800067-000001

Tank Status: A Capacity: 5000 Active Date: 06-22-93 Tank Use: M.V. FUEL

STG: P

Content: LEADED Number Of Tanks: 4

Status: Active

Comp Number: 800067

Number: 2

Board Of Equalization: Not reported

Referral Date: 06-22-93 Action Date: 01-19-94 Created Date: 06-22-93 Owner Tank Id: 800067

SWRCB Tank Id: 30-030-800067-000002

Tank Status: A Capacity: 5000 Active Date: 06-22-93 Tank Use: M.V. FUEL

STG: P

Content: PRM UNLEADED Number Of Tanks: Not reported

Status: Active

Comp Number: 800067

Number: 2

Board Of Equalization: Not reported

Referral Date: 06-22-93 Action Date: 01-19-94 Created Date: 06-22-93 Owner Tank ld: 800067

SWRCB Tank Id: 30-030-800067-000003

- Continued on next page -

Target Property:

301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RD ORANGE, CA 92865

JOB:

NA

SWEEPS UST

EDR ID:

S106930171

DIST/DIR:

0.124 North

ELEVATION:

203

06/01/1994

MAP ID: B3

NAME:

ORANGE OLIVE AUTO CARE ADDRESS: 2101 N ORANGE OLIVE RD

ORANGE, CA 92665

ORANGE

Rev: ID/Status: A

ID/Status: A ID/Status: 800067

SOURCE: CA State Water Resources Control Board

Tank Status: A Capacity: 5000 Active Date: 06-22-93 Tank Use: M.V. FUEL

STG: P

Content: REG UNLEADED Number Of Tanks: Not reported

Status: Active

Comp Number: 800067

Number: 2

Board Of Equalization: Not reported

Referral Date: 06-22-93 Action Date: 01-19-94 Created Date: 06-22-93 Owner Tank Id: 800067

SWRCB Tank Id: 30-030-800067-000004

Tank Status: A Capacity: 500

Active Date: 06-22-93

Tank Use: OIL

STG: W

Content: WASTE OIL

Number Of Tanks: Not reported

Target Property:

301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RD JOB: NA ORANGE, CA 92865

LUST

EDR ID:

S106930171

DIST/DIR:

0.124 North

ELEVATION:

Rev:

203

ID/Status: T0605900239

06/15/2015 ID/Status: Completed - Case Closed

MAP ID: B3

NAME:

ORANGE OLIVE AUTO CARE

ADDRESS: 2101 N ORANGE OLIVE RD

ORANGE, CA 92665

ORANGE

SOURCE: CA State Water Resources Control Board

LUST:

Region: STATE

Global Id: T0605900239 Latitude: 33.823298 Longitude: -117.850246 Case Type: Not reported

Status: Completed - Case Closed

Status Date: 04/07/1988 Lead Agency: Not reported Case Worker: UNK

Local Agency: Not reported RB Case Number: 083000304T LOC Case Number: Not reported File Location: Not reported Potential Media Affect: Soil

Potential Contaminants of Concern: Gasoline

Site History: Not reported

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

Contact:

Global Id: T0605900239

Contact Type: Local Agency Caseworker

Contact Name: UNK

Organization Name: ORANGE, CITY OF

Address: Not reported City: r8 UNKNOWN Email: Not reported

Phone Number: Not reported

Global Id: T0605900239

Contact Type: Regional Board Caseworker

Contact Name: PATRICIA HANNON

Organization Name: SANTA ANA RWQCB (REGION 8)

Address: 3737 MAIN STREET, SUITE 500

City: RIVERSIDE

Email: phannon@waterboards.ca.gov

Phone Number: Not reported

Status History:

Global Id: T0605900239

Status: Completed - Case Closed

Status Date: 04/07/1988

- Continued on next page -

Target Property:

301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RD JOB: NA

ORANGE, CA 92865

LUST

EDR ID:

S106930171

DIST/DIR:

0.124 North

ELEVATION:

MAP ID: B3

NAME:

ORANGE OLIVE AUTO CARE

ADDRESS: 2101 N ORANGE OLIVE RD

ORANGE, CA 92665

ORANGE

SOURCE: CA State Water Resources Control Board

Rev: 06/15/2015 ID/Status: Completed - Case Closed

ID/Status: T0605900239

Global Id: T0605900239

Status: Open - Case Begin Date

Status Date: 03/27/1987

Global Id: T0605900239

Status: Open - Site Assessment Status Date: 08/25/1987

Regulatory Activities: Global Id: T0605900239 Action Type: Other Date: 04/09/1987 Action: Leak Reported

Global Id: T0605900239 Action Type: ENFORCEMENT

Date: 04/07/1988

Action: Closure/No Further Action Letter

Global Id: T0605900239 Action Type: Other Date: 03/27/1987 Action: Leak Discovery

Global Id: T0605900239 Action Type: Other Date: 03/28/1987 Action: Leak Stopped

Target Property:

301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RD JOB:

ORANGE, CA 92865

UST

EDR ID:

U004061490

DIST/DIR:

0.124 North

MAP ID: B4

NAME:

ORANGE OLIVE ARCO

ADDRESS: 2101 ORANGE OLIVE ROAD

ORANGE, CA 92865

ORANGE

SOURCE: CA SWRCB

UST:

Facility ID: 30-030-800067

Permitting Agency: ORANGE, CITY OF

Latitude: 33.824654 Longitude: -117.848912

4373361.2s Site Details Page - 8

ELEVATION:

203

Rev:

06/15/2015

NA

ID/Status: 30-030-800067

Target Property:

301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RD

ORANGE, CA 92865

NA

CA FID UST

EDR ID:

S101619674

DIST/DIR:

0.126 North

ELEVATION:

203

JOB:

MAP ID: B5

NAME:

ORANGE OLIVE AUTO CARE

ADDRESS: 2101 ORANGE OLIVE R ORANG ORANGE, CA 92665

ORANGE

SOURCE: CA California Environmental Protection Agency

Rev: ID/Status: A 10/31/1994

ID/Status: 30017909

CA FID UST:

Facility ID: 30017909 Regulated By: UTNKA Regulated ID: 00057689 Cortese Code: Not reported SIC Code: Not reported Facility Phone: 7149747313 Mail To: Not reported

Mailing Address: 2101 ORANGE OLIVE R ORANG

Mailing Address 2: Not reported Mailing City, St, Zip: ORANGE 92665

Contact: Not reported Contact Phone: Not reported DUNs Number: Not reported NPDES Number: Not reported

EPA ID: Not reported Comments: Not reported

Status: Active

NPL: NPL 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. NPL - National Priority List Proposed NPL - Proposed National Priority List Sites.

NPL Delisted: Delisted NPL 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. Delisted NPL - National Priority List Deletions

CERCLIS: CERCLIS 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. CERCLIS - Comprehensive Environmental Response, Compensation, and Liability Information System

NFRAP: CERCLIS-NFRAP 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. CERCLIS-NFRAP - CERCLIS No Further Remedial Action Planned

RCRA COR ACT: CORRACTS CORRACTS identifies hazardous waste handlers with RCRA corrective action activity. CORRACTS - Corrective Action Report

RCRA TSD: RCRA-TSDF 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. RCRA-TSDF - RCRA - Treatment, Storage and Disposal

RCRA GEN: RCRA-LQG 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. RCRA-LQG - RCRA - Large Quantity Generators RCRA-SQG - RCRA - Small Quantity Generators. RCRA-CESQG - RCRA - Conditionally Exempt Small Quantity Generators.

Federal IC / EC: US ENG CONTROLS 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. US ENG CONTROLS - Engineering Controls Sites List US INST CONTROL - Sites with Institutional Controls.

ERNS: ERNS Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances. ERNS - Emergency Response Notification System

State/Tribal NPL: RESPONSE 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. RESPONSE - State Response Sites

State/Tribal CERCLIS: 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. ENVIROSTOR - EnviroStor Database

State/Tribal SWL: SWF/LF (SWIS) 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. SWF/LF (SWIS) - Solid Waste Information System

State/Tribal LTANKS: LUST REG 6L LUST REG 5 - Leaking Underground Storage Tank Database. LUST REG 8 - Leaking Underground Storage Tanks. LUST REG 7 - Leaking Underground Storage Tank Case Listing. SAN MATEO CO. LUST - Fuel Leak List. SONOMA CO. LUST - Leaking Underground Storage Tank Sites. ORANGE CO. LUST - List of Underground Storage Tank Cleanups. LUST REG 3 - Leaking Underground Storage Tank Database. SAN FRANCISCO CO. LUST - Local Oversite Facilities. RIVERSIDE CO. LUST - Listing of Underground Tank Cleanup Sites. LUST REG 6V - Leaking Underground Storage Tank Case Listing. LUST REG 1 - Active Toxic Site Investigation. LUST REG 2 - Fuel Leak List. LUST - Geotracker's Leaking Underground Fuel Tank Report. VENTURA CO. LUST - Listing of Underground Tank Cleanup Sites. SOLANO CO. LUST - Leaking Underground Storage Tanks. LUST REG 4 - Underground Storage Tank Leak List. LUST REG 9 - Leaking Underground Storage Tank Report. LUST SANTA CLARA - LOP Listing. NAPA CO. LUST - Sites With Reported Contamination. A listing of leaking underground storage tank sites located in Napa county. NAPA CO. LUST - Sites With Reported Contamination SLIC - Statewide SLIC Cases. SLIC REG 1 - Active Toxic Site Investigations. SLIC REG 2 - Spills, Leaks, Investigation & Cleanup Cost Recovery Listing. SLIC REG 3 - Spills, Leaks, Investigation & Cleanup Cost Recovery Listing. SLIC REG 4 - Spills, Leaks, Investigation & Cleanup Cost Recovery Listing. SLIC REG 5 - Spills, Leaks, Investigation & Cleanup Cost Recovery Listing. SLIC REG 6V - Spills, Leaks, Investigation & Cleanup Cost Recovery Listing. SLIC REG 6L - SLIC Sites. SLIC REG 7 - SLIC List. SLIC REG 8 - Spills, Leaks, Investigation & Cleanup Cost Recovery Listing. Sacramento Co. CS - Toxic Site Clean-Up List. SLIC REG 9 - Spills, Leaks, Investigation & Cleanup Cost Recovery Listing. SAN DIEGO CO. SAM - Environmental Case Listing. INDIAN LUST R6 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R4 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R9 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R1 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R10 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R5 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R8 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R7 - Leaking Underground Storage Tanks on Indian Land.

State/Tribal Tanks: UST Active UST facilities gathered from the local regulatory agencies UST - Active UST Facilities AST - Aboveground Petroleum Storage Tank Facilities. INDIAN UST R1 - Underground Storage Tanks on Indian Land. INDIAN UST R8 - Underground Storage Tanks on Indian Land. INDIAN UST R6 - Underground Storage Tanks on Indian Land. INDIAN UST R5 - Underground Storage Tanks on Indian Land. INDIAN UST R9 - Underground Storage Tanks on Indian Land. INDIAN UST R9 - Underground Storage Tanks on Indian Land. INDIAN UST R7 - Underground Storage Tanks on Indian Land. INDIAN UST R10 - Underground Storage Tanks on Indian Land.

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

US Brownfields: US BROWNFIELDS 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. US BROWNFIELDS - A Listing of Brownfields Sites

Other SWF: SAN DIEGO CO. LF VENTURA CO. LF - Inventory of Illegal Abandoned and Inactive Sites. LOS ANGELES CO. LF - List of Solid Waste Facilities. CA LA LF - City of Los Angeles Landfills. Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites. CA LA LF - Inventory of Illegal Abandoned and Inactive Sites WMUDS/SWAT - Waste Management Unit Database.

Other Haz Sites: US CDL 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. US CDL - Clandestine Drug Labs SCH - School Property Evaluation Program. SAN DIEGO CO. HMMD - Hazardous Materials Management Division Database.

Other Tanks: CA FID UST 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. CA FID UST - Facility Inventory Database ALAMEDA CO. UST - Underground Tanks. KERN CO. UST - Underground Storage Tank Sites & Tank Listing. MARIN CO. UST - Underground Storage Tank Sites. NAPA CO. UST - Closed and Operating Underground Storage Tank Sites. ORANGE CO. UST - List of Underground Storage Tank Facilities. RIVERSIDE CO. UST - Underground Storage Tank Information. SOLANO CO. UST - Underground Storage Tank Information. SOLANO CO. UST - Underground Storage Tanks. SUTTER CO. UST - Underground Storage Tanks. VENTURA CO. UST - Underground Tank Closed Sites List. YOLO CO. UST - Underground Storage Tank Comprehensive Facility Report. EL SEGUNDO UST - City of El Segundo Underground Storage Tank. LONG BEACH UST - City of Long Beach Underground Storage Tank. TORRANCE UST - City of Torrance Underground Storage Tank. UST SAN JOAQUIN - San Joaquin Co. UST. UST MENDOCINO - Mendocino County UST Database. SWEEPS UST - SWEEPS UST Listing.

Local Land Records: DEED 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. DEED - Deed Restriction Listing

Spills: HMIRS Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT. HMIRS - Hazardous Materials Information Reporting System CHMIRS - California Hazardous Material Incident Report System. Orange Co. Industrial Site - List of Industrial Site Cleanups. SPILLS 90 - SPILLS 90 data from FirstSearch.

Other: 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. RCRA NonGen / NLR - RCRA - Non Generators / No Longer Regulated 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). FTTS INSP - FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act). SSTS - Section 7 Tracking Systems. ICIS - Integrated Compliance Information System. PADS - PCB Activity Database System. MLTS - Material Licensing Tracking System. RADINFO - Radiation Information Database. FINDS - Facility Index System/Facility Registry System. RAATS - RCRA Administrative Action Tracking System. BRS - Biennial Reporting System. CORTESE - "Cortese" Hazardous Waste & Substances Sites List. CUPA IMPERIAL - CUPA Facility List. CUPA EL DORADO - CUPA Facility List. CUPA - CUPA Resources List. CUPA FRESNO - CUPA Resources List. CUPA SANTA CLARA - Cupa Facility List. CUPA CALVERAS - CUPA Facility Listing. CUPA AMADOR - CUPA Facility List. CUPA MONO - CUPA Facility List. CUPA DEL NORTE - CUPA Facility List. CUPA SONOMA - Cupa Facility List. CUPA TUOLUMNE - CUPA Facility List. CUPA LAKE - CUPA Facility List. CUPA SANTA BARBARA - CUPA Facility Listing. CUPA MONTEREY - CUPA Facility Listing. CUPA SANTA CRUZ - CUPA Facility List. CUPA MERCED - CUPA Facility List. CUPA SAN LUIS OBISPO - CUPA Facility List. CUPA SHASTA - CUPA Facility List. CUPA HUMBOLDT - CUPA Facility List. CUPA INYO - CUPA Facility List. CUPA KINGS - CUPA Facility List. CUPA MADERA - CUPA Facility List. CUPA NEVADA - CUPA Facility List. CUPA BUTTE - CUPA Facility Listing. CUPA COLUSA - CUPA Facility List. CUPA YUBA - CUPA Facility List. LA Co. Site Mitigation - Site Mitigation List. San Bern. Co. Permit - Hazardous Material Permits. Sacramento Co. ML - Master Hazardous Materials Facility List. HAZNET - Facility and Manifest Data. INDIAN RESERV - Indian Reservations. US AIRS (AFS) - Aerometric Information Retrieval System Facility Subsystem (AFS). US AIRS MINOR - Air Facility System Data. WDS - Waste Discharge System. FEDLAND - Federal and Indian Lands. PRP - Potentially Responsible Parties.

Database Sources

NPL: EPA

Updated Quarterly

NPL Delisted: EPA

Updated Quarterly

CERCLIS: EPA

Updated Quarterly

NFRAP: EPA

Updated Quarterly

RCRA COR ACT: EPA

Updated Quarterly

RCRA TSD: Environmental Protection Agency

Updated Quarterly

RCRA GEN: Environmental Protection Agency

Updated Quarterly

Federal IC / EC: Environmental Protection Agency

Varies

ERNS: National Response Center, United States Coast Guard

Updated Annually

State/Tribal NPL: Department of Toxic Substances Control

Updated Quarterly

State/Tribal CERCLIS: Department of Toxic Substances Control

Updated Quarterly

State/Tribal SWL: Department of Resources Recycling and Recovery

Updated Quarterly

State/Tribal LTANKS: San Mateo County Environmental Health Services Division

Updated Semi-Annually

Database Sources

State/Tribal Tanks: SWRCB

Updated Semi-Annually

State/Tribal VCP: Department of Toxic Substances Control

Updated Quarterly

US Brownfields: Environmental Protection Agency

Updated Semi-Annually

Other SWF: La County Department of Public Works

Varies

Other Haz Sites: Drug Enforcement Administration

Updated Quarterly

Other Tanks: California Environmental Protection Agency

No Update Planned

Local Land Records: DTSC and SWRCB

Updated Semi-Annually

Spills: U.S. Department of Transportation

Updated Annually

Other: Environmental Protection Agency

Varies

Street Name Report for Streets near the Target Property

Target Property:

301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RDOB: ORANGE, CA 92865

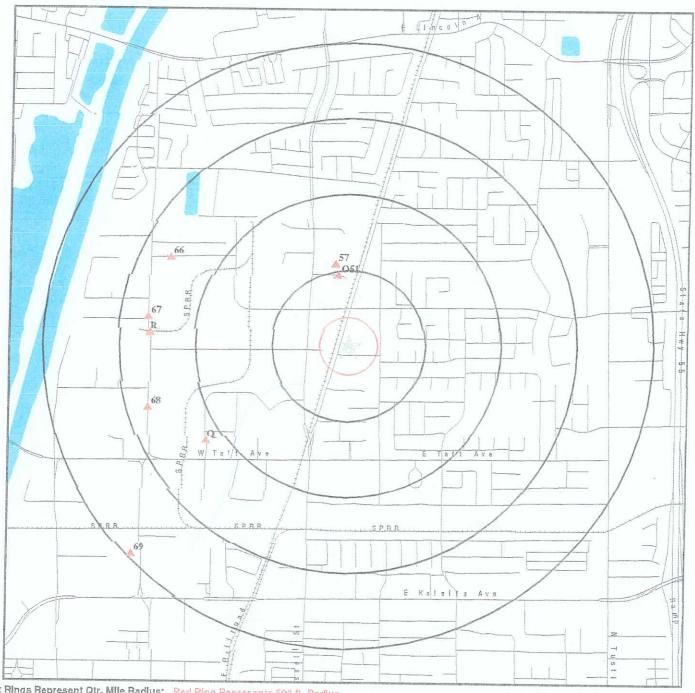
Street Name	Dist/Dir	Street Name	Dist/Dir
E Blueridge Ave	0.14 South		
E Buckeyewood Ave	0.15 SE		
E Del Mar Ave	0.16 East		
E Emerson Ave	0.22 North		
E Gates Ave	0.18 ENE		
E Glendale Ave	0.21 SSE		
E Glendale Dr	0.20 South		
E Grove Ave	0.03 South		
E Meats Ave	0.12 North		
N Cleveland St	0.16 ENE		
N Glassell St	0.13 West		
N Harwood St	0.24 ENE		
N Keokuk St	0.16 East		
N Namuria St	0.22 East		
N Orange Olive Rd	0.03 WNW		
N Shaffer St	0.10 East		
Winlock St	0.24 ESE		
Woodside St	0.19 ESE		
V Blueridge Ave	0.23 SW		
V Grove Ave	0.14 West		
V Meats Ave	0.18 NW		

Environmental FirstSearch 1,000 Mile Radius

ASTM MAP: NPL, RCRACOR, STATES Sites



301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RD ORANGE, CA 92865



Black Rings Represent Qtr. Mile Radius; Red Ring Represents 500 ft. Radius

Target Property (Latitude: 33.8212 Longitude: 117.8508)

Identified Sites

Indian Reservations BIA

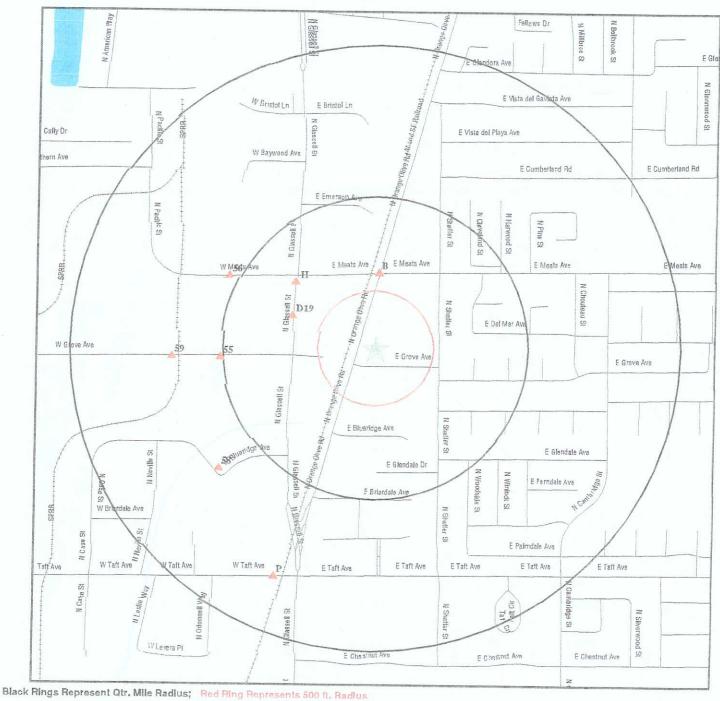
National Priority List Sites

Environmental FirstSearch 0.500 Mile Radius

ASTM MAP: CERCLIS, RCRATSD, LUST, SWL



301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RD ORANGE, CA 92865



Target Property (Latitude: 33.8212 Longitude: 117.8508)

Identified Sites

Indian Reservations BIA

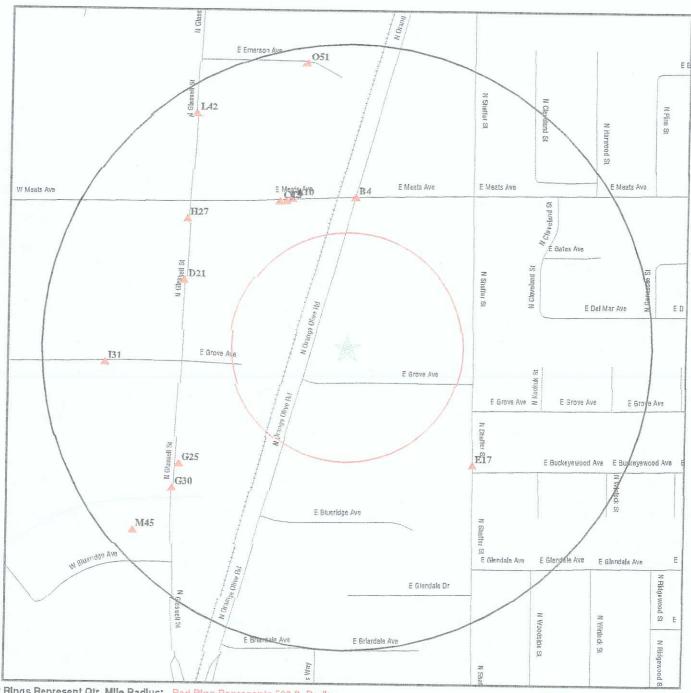
National Priority List Sites

Environmental FirstSearch 0.25 Mile Radius

ASTM MAP: RCRAGEN, ERNS, UST, FED IC/EC, METH LABS



301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RD ORANGE, CA 92865



Black Rings Represent Qtr. Mile Radius; Red Ring Represents 500 ft. Radius

Target Property (Latitude: 33.8212 Longitude: 117.8508) Identified Sites

National Priority List Sites

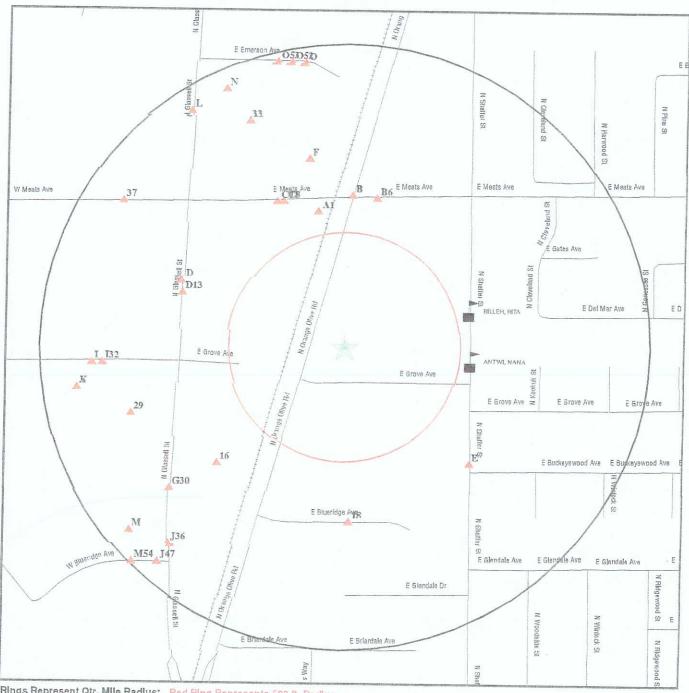
Indian Reservations BIA

Environmental FirstSearch 0.25 Mile Radius

Non ASTM Map, Spills, FINDS



301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RD ORANGE, CA 92865



Black Rings Represent Qtr. Mile Radius; Red Ring Represents 500 ft. Radius

Target Property (Latitude: 33.8212 Longitude: 117.8508)

Identified Sites

Indian Reservations BIA

Sensitive Receptors

National Priority List Sites

Site location Map

Topo: 0.75 Mile Radius



301-349 E GROVE AVENUE AND 1997 N ORANGE OLIVE RD ORANGE, CA 92865



Map Image Position: TP Map Reference Code & Name: 5641308 Orange Map State(s): CA Version Date: 2012



North Orange Olive Road Residential 1997 North Orange Olive Road Orange, CA 92865

Inquiry Number: 5509310.2s

December 11, 2018

The EDR Radius Map™ Report



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

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GEOCHECK ADDENDUM	

GeoCheck - Not Requested

Thank you for your business.
Please contact EDR at 1-800-352-0050

with any questions or comments.

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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), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1997 NORTH ORANGE OLIVE ROAD ORANGE, CA 92865

COORDINATES

Latitude (North): 33.8212000 - 33° 49' 16.32" Longitude (West): 117.8504140 - 117° 51' 1.49"

Universal Tranverse Mercator: Zone 11 UTM X (Meters): 421299.1 UTM Y (Meters): 3742462.5

Elevation: 202 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5641308 ORANGE, CA

Version Date: 2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140513, 20140514

Source: USDA

MAPPED SITES SUMMARY

Target Property Address: 1997 NORTH ORANGE OLIVE ROAD ORANGE, CA 92865

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS		ELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	BASF CORP	210 E MEATS AVE	RCRA-SQG, TRIS	Lower	247, 0.047, WNW
A2		218 E MEATS AVE	CA AST	Lower	353, 0.067, NW
B3	CITY OF ORANGE FIRE	1910 N SHAFFER	CA SWEEPS UST, CA FID UST	Higher	459, 0.087, SE
B4	ORANGE FIRE STATION	1910 N SHAFFER ST	CA AST	Higher	459, 0.087, SE
B5		1910 SHAFFER ST	CA AST	Higher	459, 0.087, SE
B6	FIRE STATION 3	1910 N SHAFFER ST	CA HIST UST	Higher	459, 0.087, SE
C7	NATES ARCO AUTOCARE	2101 ORANGE-OLIVE RD	EDR Hist Auto	Higher	503, 0.095, North
C8	ORANGE OLIVE AUTO CA	2101 ORANGE OLIVE R	CA FID UST	Higher	503, 0.095, North
C9	ORANGE OLIVE AUTO CA	2101 ORANGE OLIVE R	CA HIST UST	Higher	503, 0.095, North
C10	ORANGE OLIVE AUTO CA	2101 ORANGE OLIVE RD	CA LUST, CA HIST CORTESE	Higher	503, 0.095, North
C11	ORANGE OLIVE ARCO	2101 ORANGE OLIVE RO	CAUST	Higher	503, 0.095, North
C12	ORANGE OLIVE AUTO CA	2101 N ORANGE OLIVE	CA LUST, CA SWEEPS UST	Higher	619, 0.117, North
C13	ORANGE OLIVE AUTO CA	2101 N ORANGE OLIVE	EDR Hist Auto	Higher	619, 0.117, North
C14	ORANGE OLIVE GASOLIN	2101 N ORANGE OLIVE	CAUST	Higher	619, 0.117, North
D15	MERCO MFG CO	1927 GLASSEL ST	RCRA-SQG, FINDS, ECHO	Lower	641, 0.121, WSW
C16	FINE FINISH SASH AND	227 E MEATS AVE	RCRA-SQG, FINDS, ECHO	Higher	676, 0.128, NNW
D17	RICKS TRUCKWORKS	1962 N GLASSELL ST	RCRA-SQG, FINDS, ECHO, CA HAZNET	Lower	742, 0.141, WSW
E18	ANILLO INDUSTRIES, I	2090 N GLASSELL ST	CA HIST UST	Lower	743, 0.141, WNW
E19	HIGHTOWER METAL PROD	2090 N GLASSELL ST	CA HIST UST, CA WDS	Lower	743, 0.141, WNW
E20	ANILLO COMPANY	2090 GLASSELL ST	CA LUST, CA HIST CORTESE	Lower	743, 0.141, WNW
E21	HIGHTOWER PLATING &	2090 N GLASSELL BLVD	CA LUST, CA HIST UST, CA EMI, CA HAZNET, CA NPDES	, Lower	743, 0.141, WNW
E22	HIGHTOWER PLATING AN	2090 NORTH GLASSELL	RCRA-LQG	Lower	743, 0.141, WNW
F23	WASTE MANAGEMENT OF	2050 NORTH GLASSELL	CA SWF/LF	Lower	832, 0.158, West
F24	ORANGE RESOURCE RECO	2050 N. GLASSELL	CAUST	Lower	832, 0.158, West
F25	ORANGE RESOURCE RECY	2050 N GLASSELL	CA SWEEPS UST, CA PROC	Lower	832, 0.158, West
F26	WASTE MANAGEMENT OF	2050 N GLASSELL ST	CAUST	Lower	832, 0.158, West
27	HONEYCUTT TEAR OFF	2163 N GLASSELL ST	RCRA-SQG, FINDS, ECHO, CA HAZNET	Lower	899, 0.170, NNW
G28	CIRTECH INC	250 EAST EMERSON AVE	RCRA-LQG, CA ENVIROSTOR, TRIS, RAATS, RI MANIFES	ST,Higher	922, 0.175, North
29	CENTURY INDEX CORP	1870 N GLASSELL ST	RCRA-SQG, FINDS, ECHO	Lower	943, 0.179, SW
30	BURLINGTON ENGINEERI	220 WEST GROVE AVENU	RCRA-LQG, CA EMI, CA NPDES, CA WDS, CA CIWQS	Lower	983, 0.186, WSW
G31	APPLIED FRICTION TEC	230 E EMERSON AVE ST	RCRA NonGen / NLR, FINDS, ECHO	Higher	1023, 0.194, NNW
H32	C S MATTRESS	1821 N GLASSELL	CA HIST UST	Lower	1178, 0.223, SSW
H33	PREFERRED AUTO BODY	1821 N GLASSELL	CA FID UST, CA EMI	Lower	1178, 0.223, SSW
34	LIQUINOX COMPANY	221 W MEATS AVENUE	CA HIST UST, CA FID UST	Lower	1189, 0.225, WNW
135	CABLESCAN INC	145 E EMERSON	RCRA-SQG, FINDS, ECHO	Lower	1198, 0.227, NNW
J36	ANR FRIEGHT TERMINAL	310 WEST GROVE	CA HIST UST, CA NPDES, CA CIWQS	Lower	1207, 0.229, West
J37	RYDER/PIE NATIONWIDE	310 W GROVE AVE	CA HIST UST	Lower	1207, 0.229, West
J38	FEDEX FREIGHT ONG	310 W GROVE	RCRA-SQG, CA LUST, FINDS, ECHO, CA HIST CORTESE	, Lower	1207, 0.229, West
J39	RYDER PIG	310 W GROVE	CA HIST UST	Lower	1207, 0.229, West

MAPPED SITES SUMMARY

<u>Target Property Address:</u>
1997 NORTH ORANGE OLIVE ROAD
ORANGE, CA 92865

Click on Map ID to see full detail.

MAP) EI ATI\/E	DIST (ft. & mi.)
ID IVIAP	SITE NAME	ADDRESS		ELATIVE LEVATION	DIRECTION
140	MARBIL INDUSTRIES IN	2201 N GLASSELL ST	RCRA-SQG, CA HAZNET	Lower	1267, 0.240, NNW
I41	RONEL ENTERPRISES	2207 N GLASSELL ST	RCRA-SQG, FINDS, ECHO	Lower	1270, 0.241, NNW
142	SUMMIT INTERCONNECT	230 BRISTOL LN	CA ENVIROSTOR, CA HAZNET	Lower	1299, 0.246, NNW
K43	HAMILTON MATERIALS I	345 W MEATS AV	CA LUST, CA HIST UST, CA EMI	Lower	1462, 0.277, WNW
K44	WESTPAC MATERIALS	345 W MEATS AVE	CA LUST, CA SWEEPS UST, CA FID UST, TRIS, CA HIST.	Lower	1462, 0.277, WNW
L45	AIR CABIN ENGINEERIN	231 W BLUERIDGE AVE	CA LUST, CA HAZNET	Lower	1477, 0.280, SW
L46	FORMER SANTIAGO HEAT	231 BLUERIDGE	CA LUST	Lower	1498, 0.284, SW
M47	STRAUB DISTRIBUTION	410	CA HIST CORTESE	Lower	1604, 0.304, West
M48	STRAUB DISTRIBUTING	410 GROVE	CA LUST	Lower	1604, 0.304, West
M49	STRAUB FAMILY TRUST	410 W GROVE AV	CA LUST, CA HIST UST, CA EMI	Lower	1684, 0.319, West
50	THOMPSON BUILDING MA	141 W TAFT AVE	CA LUST, CA SWEEPS UST, CA FID UST	Lower	1847, 0.350, SW
51	THOMPSON BUILDING MA	141 TAFT AVE	CA LUST	Lower	1954, 0.370, SSW
52	CONTINUOUS COATING C	520 W. GROVE	CA ENVIROSTOR	Lower	2023, 0.383, West
N53	COCA COLA BOTTLING C	700 W GROVE	CA LUST, CA SWEEPS UST, CA FID UST, CA NPDES, CA	Lower	2435, 0.461, West
O54	SA RECYCLING	2411 N GLASSEL ST	CA PROC	Lower	2508, 0.475, NNW
N55	COCA-COLA ENTERPRISE	700 GROVE AVE	CA LUST, CA HIST CORTESE	Lower	2532, 0.480, West
O56	DESERT PETROLEUM SS	2440 N GLASSELL ST	CA LUST	Lower	2605, 0.493, NNW
O57	DESERT PETROLEUM SS	2440 GLASSELL ST	CA LUST, CA HIST CORTESE	Lower	2605, 0.493, NNW
N58	RSA SOIL PRODUCTS, I	701 W GROVE	CA LUST, CA SWEEPS UST, CA FID UST	Lower	2607, 0.494, West
P59	RICK HAMM CONSTRUCTI	2314 PACIFIC ST	CA LUST	Lower	2614, 0.495, NW
P60	RICK HAMM CONSTRUCTI	2314 N PACIFIC	CA LUST, CA SWEEPS UST, CA FID UST	Lower	2614, 0.495, NW
61	ORANGE POST OFFICE	1075 N TAFT	CA LUST	Higher	2620, 0.496, SE
Q62	CIRCUIT CONNECTION I	1739 N. CASE ST	RCRA-SQG, CA ENVIROSTOR, CA LUST, FINDS, ECHO, C	CALower	2731, 0.517, SW
Q63	ULTRA-PURE METAL FIN	1764 CASE ST	RCRA-LQG, CA ENVIROSTOR, CA NPDES, CA WDS, CA	. Lower	2747, 0.520, WSW
64	VAN DOREN RUBBER CO,	2095 NORTH BATAVIA	CA ENVIROSTOR, CA EMI	Lower	3285, 0.622, West
65	ORANGE PRECISION CIR	812 SOUTHERN AVE	SEMS-ARCHIVE, CORRACTS, RCRA-TSDF, RCRA-SQG,	CALower	3324, 0.630, WNW
66	CONTINENTAL MOLDING	1841 N. BATAVIA STRE	CA RESPONSE, CA ENVIROSTOR, CA HIST Cal-Sites	Lower	3337, 0.632, WSW
R67	FXI, INC.	2060 NORTH BATAVIA	CA ENVIROSTOR, CA VCP, CA DEED, CA HAZNET	Lower	3941, 0.746, West
R68	FXI INC	2060 N BATAVIA ST	SEMS-ARCHIVE, RCRA-TSDF, RCRA-LQG, CA ENVIROS	OR,Lower	3941, 0.746, West
69	COMMUNITY COLLEGE	1465 N. BATAVIA STRE	CA ENVIROSTOR, CA SCH, CA Orange Co. Industrial	Lower	4687, 0.888, SW

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

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	Proposed National Priority List Sites
Federal Delisted NPL site lis	st
Delisted NPL	National Priority List Deletions
	Federal Facility Site Information listing Superfund Enterprise Management System
Federal RCRA generators li	st
RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generator
LUCISUS ENG CONTROLS	Is / engineering controls registries Land Use Control Information System Engineering Controls Sites List Sites with Institutional Controls
Federal ERNS list	
ERNS	Emergency Response Notification System
State and tribal leaking stor INDIAN LUSTCA CPS-SLIC	Leaking Underground Storage Tanks on Indian Land
State and tribal registered s	torage tank lists

FEMA UST..... Underground Storage Tank Listing

INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

CA BROWNFIELDS..... Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

CA WMUDS/SWAT..... Waste Management Unit Database

CA SWRCY..... Recycler Database

CA HAULERS..... Registered Waste Tire Haulers Listing

INDIAN ODI...... Report on the Status of Open Dumps on Indian Lands

ODI..... Open Dump Inventory

DEBRIS REGION 9...... Torres Martinez Reservation Illegal Dump Site Locations

IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register

CA CDL..... Clandestine Drug Labs CA Toxic Pits..... Toxic Pits Cleanup Act Sites

CA CERS HAZ WASTE..... CERS HAZ WASTE

US CDL...... National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

CA CERS TANKS...... California Environmental Reporting System (CERS) Tanks

Local Land Records

CA LIENS Environmental Liens Listing LIENS 2..... CERCLA Lien Information

Records of Emergency Release Reports

..... Hazardous Materials Information Reporting System

CA CHMIRS...... California Hazardous Material Incident Report System

CA LDS..... Land Disposal Sites Listing CA MCS..... Military Cleanup Sites Listing CA SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS..... Formerly Used Defense Sites

_____ Department of Defense Sites

SCRD DRYCLEANERS...... State Coalition for Remediation of Drycleaners Listing

US FIN ASSUR..... Financial Assurance Information

EPA WATCH LIST..... EPA WATCH LIST

2020 COR ACTION........... 2020 Corrective Action Program List TSCA..... Toxic Substances Control Act SSTS..... Section 7 Tracking Systems ROD..... Records Of Decision

RMP..... Risk Management Plans PRP.....Potentially Responsible Parties PADS...... PCB Activity Database System

ICIS...... Integrated Compliance Information System

Act)/TSCA (Toxic Substances Control Act)

COAL ASH DOE..... Steam-Electric Plant Operation Data

COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List

PCB TRANSFORMER...... PCB Transformer Registration Database

RADINFO...... Radiation Information Database HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing

DOT OPS..... Incident and Accident Data

CONSENT..... Superfund (CERCLA) Consent Decrees

INDIAN RESERV......Indian Reservations

FUSRAP..... Formerly Utilized Sites Remedial Action Program

UMTRA..... Uranium Mill Tailings Sites

LEAD SMELTERS..... Lead Smelter Sites

US AIRS...... Aerometric Information Retrieval System Facility Subsystem

US MINES..... Mines Master Index File ABANDONED MINES..... Abandoned Mines

UXO...... Unexploded Ordnance Sites

DOCKET HWC..... Hazardous Waste Compliance Docket Listing

FUELS PROGRAM..... EPA Fuels Program Registered Listing

CA BOND EXP. PLAN...... Bond Expenditure Plan

CA CUPA Listings..... CUPA Resources List CA DRYCLEANERS...... Cleaner Facilities

CA ENF..... Enforcement Action Listing

CA Financial Assurance Financial Assurance Information Listing

CA ICE.....ICE

CA HWT....... Registered Hazardous Waste Transporter Database

CA MINES..... Mines Site Location Listing

CA MWMP..... Medical Waste Management Program Listing

CA PEST LIC..... Pesticide Regulation Licenses Listing

CA Notify 65..... Proposition 65 Records

CA UIC_____UIC Listing
CA WASTEWATER PITS____ Oil Wastewater Pits Listing

CA CERS..... CERS

CA WIP..... Well Investigation Program Case List CA SAMPLING POINT...... SAMPLING POINT (GEOTRACKER) CA OTHER OIL GAS..... OTHER OIL & GAS (GEOTRACKER) CA WELL STIM PROJ...... Well Stimulation Project (GEOTRACKER) CA MILITARY PRIV SITES ... MILITARY PRIV SITES (GEOTRACKER)

CA PROJECT..... PROJECT (GEOTRACKER)

CA UIC GEO...... UIC GEO (GEOTRACKER)
CA PROD WATER PONDS... PROD WATER PONDS (GEOTRACKER)

CA NON-CASE INFO....... NON-CASE INFO (GEOTRACKER)
CA WDR....... Waste Discharge Requirements Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants EDR Hist Cleaner.... EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

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 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 03/01/2018 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ORANGE PRECISION CIR	812 SOUTHERN AVE	WNW 1/2 - 1 (0.630 mi.)	65	217
EPA ID:: CAD097577035				

Federal RCRA generators list

RCRA-LQG: 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.

A review of the RCRA-LQG list, as provided by EDR, and dated 03/01/2018 has revealed that there are 3 RCRA-LQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CIRTECH INC EPA ID:: CAD981388655	250 EAST EMERSON AVE	N 1/8 - 1/4 (0.175 mi.)	G28	67
Lower Elevation	Address	Direction / Distance	Map ID	Page
HIGHTOWER PLATING AN EPA ID:: CAD009521089	2090 NORTH GLASSELL	WNW 1/8 - 1/4 (0.141 mi.)	E22	43
BURLINGTON ENGINEERI EPA ID:: CAR000049858	220 WEST GROVE AVENU	WSW 1/8 - 1/4 (0.186 mi.)	30	92

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 03/01/2018 has revealed that there are 10 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FINE FINISH SASH AND EPA ID:: CAD981387921	227 E MEATS AVE	NNW 1/8 - 1/4 (0.128 mi.)	C16	22
Lower Elevation	Address	Direction / Distance	Map ID	Page
BASF CORP EPA ID:: CAD131842445	210 E MEATS AVE	WNW 0 - 1/8 (0.047 mi.)	A1	8
MERCO MFG CO EPA ID:: CAD983601147	1927 GLASSEL ST	WSW 0 - 1/8 (0.121 mi.)	D15	21
RICKS TRUCKWORKS EPA ID:: CAR000017210	1962 N GLASSELL ST	WSW 1/8 - 1/4 (0.141 mi.)	D17	24
HONEYCUTT TEAR OFF EPA ID:: CA0000371278	2163 N GLASSELL ST	NNW 1/8 - 1/4 (0.170 mi.)	27	65
CENTURY INDEX CORP EPA ID:: CAD983661166	1870 N GLASSELL ST	SW 1/8 - 1/4 (0.179 mi.)	29	90
CABLESCAN INC EPA ID:: CAD051977098	145 E EMERSON	NNW 1/8 - 1/4 (0.227 mi.)	<i>1</i> 35	109
FEDEX FREIGHT ONG	310 W GROVE	W 1/8 - 1/4 (0.229 mi.)	J38	114

EPA ID:: CAD983650680

 MARBIL INDUSTRIES IN
 2201 N GLASSELL ST
 NNW 1/8 - 1/4 (0.240 mi.)
 I40
 132

 EPA ID:: CAR000197079
 RONEL ENTERPRISES
 2207 N GLASSELL ST
 NNW 1/8 - 1/4 (0.241 mi.)
 I41
 136

EPA ID:: CAD981391246

State- and tribal - equivalent NPL

CA RESPONSE: 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.

A review of the CA RESPONSE list, as provided by EDR, has revealed that there is 1 CA RESPONSE site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CONTINENTAL MOLDING	1841 N. BATAVIA STRE	WSW 1/2 - 1 (0.632 mi.)	66	232

Database: RESPONSE, Date of Government Version: 07/30/2018

Status: Certified Facility Id: 30240011

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

A review of the CA ENVIROSTOR list, as provided by EDR, and dated 07/30/2018 has revealed that there are 11 CA ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CIRTECH INC Facility Id: 71002789 Status: Inactive - Needs Evaluation	250 EAST EMERSON AVE	N 1/8 - 1/4 (0.175 mi.)	G28	67
Lower Elevation	Address	Direction / Distance	Map ID	Page
SUMMIT INTERCONNECT Facility Id: 71002927 Status: Refer: Local Agency	230 BRISTOL LN	NNW 1/8 - 1/4 (0.246 mi.)	I42	138
CONTINUOUS COATING C Facility Id: 71002438	520 W. GROVE	W 1/4 - 1/2 (0.383 mi.)	52	168

Status: No Action Required				
CIRCUIT CONNECTION I Facility Id: 71002406 Status: Inactive - Needs Evaluation	1739 N. CASE ST	SW 1/2 - 1 (0.517 mi.)	Q62	194
ULTRA-PURE METAL FIN Facility Id: 71002846 Status: Inactive - Needs Evaluation	1764 CASE ST	WSW 1/2 - 1 (0.520 mi.)	Q63	200
VAN DOREN RUBBER CO, Facility Id: 30340167 Status: Refer: Other Agency	2095 NORTH BATAVIA	W 1/2 - 1 (0.622 mi.)	64	215
ORANGE PRECISION CIR Facility Id: 30360250 Facility Id: 80001732 Status: Refer: RCRA Status: No Further Action	812 SOUTHERN AVE	WNW 1/2 - 1 (0.630 mi.)	65	217
CONTINENTAL MOLDING Facility Id: 30240011 Status: Certified	1841 N. BATAVIA STRE	WSW 1/2 - 1 (0.632 mi.)	66	232
FXI, INC. Facility Id: 30280027 Status: Certified O&M - Land Use Restri	2060 NORTH BATAVIA	W 1/2 - 1 (0.746 mi.)	R67	235
FXI INC Facility Id: 80001567 Status: * Inactive	2060 N BATAVIA ST	W 1/2 - 1 (0.746 mi.)	R68	244
COMMUNITY COLLEGE Facility Id: 30000046 Status: Inactive - Withdrawn	1465 N. BATAVIA STRE	SW 1/2 - 1 (0.888 mi.)	69	280

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, has revealed that there is 1 CA SWF/LF site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WASTE MANAGEMENT OF	2050 NORTH GLASSELL	W 1/8 - 1/4 (0.158 mi.)	F23	62
Database: SWF/LF (SWIS), Date	of Government Version: 08/08/2018			

Database: SWF/LF (SWIS), Date of Government Version: 08/08/2018

Database: LOS ANGELES CO. LF, Date of Government Version: 10/15/2018

Facility ID: 30-AB-0363

Site ID: 2325 Status: Active

Operational Status: Active Regulation Status: Permitted

State and tribal leaking storage tank lists

CA LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the CA LUST list, as provided by EDR, has revealed that there are 21 CA LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ORANGE OLIVE AUTO CA Database: LUST REG 8, Date of Governing Facility Status: Case Closed Global ID: T0605900239	2101 ORANGE OLIVE RD ment Version: 02/14/2005	N 0 - 1/8 (0.095 mi.)	C10	15
ORANGE OLIVE AUTO CA Database: LUST, Date of Government Verstatus: Completed - Case Closed Global Id: T0605900239	2101 N ORANGE OLIVE ersion: 09/10/2018	N 0 - 1/8 (0.117 mi.)	C12	17
ORANGE POST OFFICE Database: LUST, Date of Government Ve Status: Completed - Case Closed Global Id: T0605999124	1075 N TAFT ersion: 09/10/2018	SE 1/4 - 1/2 (0.496 mi.)	61	193
Lower Elevation	Address	Direction / Distance	Map ID	Page
ANILLO COMPANY Database: LUST REG 8, Date of Governing Facility Status: Case Closed Global ID: T0605901485	2090 GLASSELL ST ment Version: 02/14/2005	WNW 1/8 - 1/4 (0.141 mi.)	E20	28
HIGHTOWER PLATING & Database: LUST, Date of Government Ve Status: Completed - Case Closed Global Id: T0605901485	2090 N GLASSELL BLVD ersion: 09/10/2018	WNW 1/8 - 1/4 (0.141 mi.)	E21	29
FEDEX FREIGHT ONG Database: LUST, Date of Government Vernorman Database: LUST REG 8, Date of Government Status: Completed - Case Closed Facility Status: Case Closed Global Id: T0605901123 Global ID: T0605901123		W 1/8 - 1/4 (0.229 mi.)	J38	114
HAMILTON MATERIALS I Database: ORANGE CO. LUST, Date of Facility Id: 02UT016	345 W MEATS AV Government Version: 07/13/2018	WNW 1/4 - 1/2 (0.277 mi.)	K43	141
WESTPAC MATERIALS Database: LUST, Date of Government Verbatabase: LUST REG 8, Date of Government Status: Completed - Case Closed Facility Status: Case Closed Global Id: T0605900139 Global ID: T0605900139		WNW 1/4 - 1/2 (0.277 mi.)	K44	145
AIR CABIN ENGINEERIN Database: ORANGE CO. LUST, Date of	231 W BLUERIDGE AVE Government Version: 07/13/2018	SW 1/4 - 1/2 (0.280 mi.)	L45	156

Facility Id: 97UT044				
FORMER SANTIAGO HEAT Database: LUST, Date of Government Vers Database: LUST REG 8, Date of Government Status: Completed - Case Closed Facility Status: Case Closed Global Id: T0605902100 Global ID: T0605902100		SW 1/4 - 1/2 (0.284 mi.)	L46	158
STRAUB DISTRIBUTING Database: LUST, Date of Government Vers Status: Completed - Case Closed Global Id: T0605902068	410 GROVE sion: 09/10/2018	W 1/4 - 1/2 (0.304 mi.)	M48	160
STRAUB FAMILY TRUST Database: ORANGE CO. LUST, Date of Go Facility Id: 97UT046	410 W GROVE AV overnment Version: 07/13/2018	W 1/4 - 1/2 (0.319 mi.)	M49	161
THOMPSON BUILDING MA Database: LUST, Date of Government Vers Status: Completed - Case Closed Global Id: T0605902324	141 W TAFT AVE sion: 09/10/2018	SW 1/4 - 1/2 (0.350 mi.)	50	165
THOMPSON BUILDING MA Database: LUST REG 8, Date of Government Facility Status: Case Closed Global ID: T0605902324	141 TAFT AVE ent Version: 02/14/2005	SSW 1/4 - 1/2 (0.370 mi.)	51	167
COCA COLA BOTTLING C Database: LUST, Date of Government Vers Status: Completed - Case Closed Global Id: T0605901952	700 W GROVE sion: 09/10/2018	W 1/4 - 1/2 (0.461 mi.)	N53	169
COCA-COLA ENTERPRISE Database: LUST REG 8, Date of Government Facility Status: Case Closed Global ID: T0605901952	700 GROVE AVE ent Version: 02/14/2005	W 1/4 - 1/2 (0.480 mi.)	N55	183
DESERT PETROLEUM SS Database: LUST, Date of Government Vers Status: Completed - Case Closed Global Id: T0605901372	2440 N GLASSELL ST sion: 09/10/2018	NNW 1/4 - 1/2 (0.493 mi.)	O56	184
DESERT PETROLEUM SS Database: LUST REG 8, Date of Government Facility Status: Case Closed Global ID: T0605901372	2440 GLASSELL ST ent Version: 02/14/2005	NNW 1/4 - 1/2 (0.493 mi.)	O57	186
RSA SOIL PRODUCTS, I Database: LUST, Date of Government Vers Status: Completed - Case Closed Global Id: T0605901916	701 W GROVE sion: 09/10/2018	W 1/4 - 1/2 (0.494 mi.)	N58	187
RICK HAMM CONSTRUCTI Database: LUST REG 8, Date of Government Facility Status: Case Closed Global ID: T0605999277	2314 PACIFIC ST ent Version: 02/14/2005	NW 1/4 - 1/2 (0.495 mi.)	P59	190
RICK HAMM CONSTRUCTI Database: LUST, Date of Government Vers Status: Completed - Case Closed Global Id: T0605999277	2314 N PACIFIC sion: 09/10/2018	NW 1/4 - 1/2 (0.495 mi.)	P60	191

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, has revealed that there are 4 CA UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ORANGE OLIVE ARCO Database: UST, Date of Government Facility Id: 30-030-800067	2101 ORANGE OLIVE RO nt Version: 09/10/2018	N 0 - 1/8 (0.095 mi.)	C11	16
ORANGE OLIVE GASOLIN Database: UST, Date of Governme Facility Id: FA0036493	2101 N ORANGE OLIVE nt Version: 09/10/2018	N 0 - 1/8 (0.117 mi.)	C14	20
Lower Elevation	Address	Direction / Distance	Map ID	Page
ORANGE RESOURCE RECO Database: UST, Date of Government Facility Id: 30-030-800070	2050 N. GLASSELL nt Version: 09/10/2018	W 1/8 - 1/4 (0.158 mi.)	F24	64
WASTE MANAGEMENT OF Database: UST, Date of Government Facility Id: FA0026139	2050 N GLASSELL ST nt Version: 09/10/2018	W 1/8 - 1/4 (0.158 mi.)	F26	65

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

A review of the CA AST list, as provided by EDR, has revealed that there are 3 CA AST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ORANGE FIRE STATION Database: AST, Date of Governmen	1910 N SHAFFER ST it Version: 07/06/2016	SE 0 - 1/8 (0.087 mi.)	B4	11
Not reported Database: AST, Date of Governmen	1910 SHAFFER ST It Version: 07/06/2016	SE 0 - 1/8 (0.087 mi.)	B5	12
Lower Elevation	Address	Direction / Distance	Map ID	Page
Not reported Database: AST, Date of Governmen	218 E MEATS AVE t Version: 07/06/2016	NW 0 - 1/8 (0.067 mi.)	A2	10

ADDITIONAL ENVIRONMENTAL RECORDS

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 is 1 CA HIST Cal-Sites site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CONTINENTAL MOLDING	1841 N. BATAVIA STRE	WSW 1/2 - 1 (0.632 mi.)	66	232

Local Lists of Registered Storage Tanks

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 3 CA SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CITY OF ORANGE FIRE Status: A Tank Status: A Comp Number: 2624	1910 N SHAFFER	SE 0 - 1/8 (0.087 mi.)	В3	11
ORANGE OLIVE AUTO CA Status: A Tank Status: A Comp Number: 800067	2101 N ORANGE OLIVE	N 0 - 1/8 (0.117 mi.)	C12	17
Lower Elevation	Address	Direction / Distance	Map ID	Page
ORANGE RESOURCE RECY Status: A Tank Status: A Comp Number: 800070	2050 N GLASSELL	W 1/8 - 1/4 (0.158 mi.)	F25	64

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 10 CA HIST UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FIRE STATION 3 Facility Id: 00000002624	1910 N SHAFFER ST	SE 0 - 1/8 (0.087 mi.)	B6	13
ORANGE OLIVE AUTO CA Facility Id: 00000057689	2101 ORANGE OLIVE R	N 0 - 1/8 (0.095 mi.)	C9	14
Lower Elevation	Address	Direction / Distance	Map ID	Page
ANILLO INDUSTRIES, I	2090 N GLASSELL ST	WNW 1/8 - 1/4 (0.141 mi.)	E18	26

Facility Id: 00000056592				
HIGHTOWER METAL PROD Facility Id: 00000021280	2090 N GLASSELL ST	WNW 1/8 - 1/4 (0.141 mi.)	E19	26
HIGHTOWER PLATING & C S MATTRESS Facility Id: 00000048457	2090 N GLASSELL BLVD 1821 N GLASSELL	WNW 1/8 - 1/4 (0.141 mi.) SSW 1/8 - 1/4 (0.223 mi.)	E21 H32	29 106
LIQUINOX COMPANY Facility Id: 00000028616	221 W MEATS AVENUE	WNW 1/8 - 1/4 (0.225 mi.)	34	108
ANR FRIEGHT TERMINAL RYDER/PIE NATIONWIDE Facility Id: 00000035997	310 WEST GROVE 310 W GROVE AVE	W 1/8 - 1/4 (0.229 mi.) W 1/8 - 1/4 (0.229 mi.)	J36 J37	111 114
RYDER PIG Facility Id: 00000047931	310 W GROVE	W 1/8 - 1/4 (0.229 mi.)	J39	131

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 4 CA FID UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CITY OF ORANGE FIRE Facility Id: 30017897 Status: A	1910 N SHAFFER	SE 0 - 1/8 (0.087 mi.)	В3	11
ORANGE OLIVE AUTO CA Facility Id: 30017909 Status: A	2101 ORANGE OLIVE R	N 0 - 1/8 (0.095 mi.)	C8	14
Lower Elevation	Address	Direction / Distance	Map ID	Page
PREFERRED AUTO BODY Facility Id: 30002652 Status: A	1821 N GLASSELL	SSW 1/8 - 1/4 (0.223 mi.)	Н33	107
LIQUINOX COMPANY Facility Id: 30004551 Status: A	221 W MEATS AVENUE	WNW 1/8 - 1/4 (0.225 mi.)	34	108

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 03/01/2018 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
APPLIED FRICTION TEC	230 E EMERSON AVE ST	NNW 1/8 - 1/4 (0.194 mi.)	G31	105
FPA ID:: CAD982442592				

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 [CALSITES]. 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 7 CA HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ORANGE OLIVE AUTO CA Reg ld: 083000304T	2101 ORANGE OLIVE RD	N 0 - 1/8 (0.095 mi.)	C10	15
Lower Elevation	Address	Direction / Distance	Map ID	Page
ANILLO COMPANY Reg ld: 083001985T	2090 GLASSELL ST	WNW 1/8 - 1/4 (0.141 mi.)	E20	28
FEDEX FREIGHT ONG Reg Id: 083001477T	310 W GROVE	W 1/8 - 1/4 (0.229 mi.)	J38	114
WESTPAC MATERIALS Reg Id: 083000183T	345 W MEATS AVE	WNW 1/4 - 1/2 (0.277 mi.)	K44	145
STRAUB DISTRIBUTION Reg Id: 083003033T	410	W 1/4 - 1/2 (0.304 mi.)	M47	160
COCA-COLA ENTERPRISE Reg Id: 083002846T	700 GROVE AVE	W 1/4 - 1/2 (0.480 mi.)	N55	183
DESERT PETROLEUM SS Reg Id: 083001834T	2440 GLASSELL ST	NNW 1/4 - 1/2 (0.493 mi.)	O57	186

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 08/20/2018 has revealed that there are 2 CA HWP sites within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ORANGE PRECISION CIR EPA Id: CAD097577035 Cleanup Status: CLOSED	812 SOUTHERN AVE	WNW 1/2 - 1 (0.630 mi.)	65	217
FXI INC EPA Id: CAD008352361 Cleanup Status: PROTECTIVE FILER	2060 N BATAVIA ST	W 1/2 - 1 (0.746 mi.)	R68	244

RI MANIFEST: Hazardous waste manifest information

A review of the RI MANIFEST list, as provided by EDR, and dated 12/31/2017 has revealed that there is 1 RI MANIFEST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CIRTECH INC	250 EAST EMERSON AVE	N 1/8 - 1/4 (0.175 mi.)	G28	67
EPΔ Id: CΔD981388655				

Manifest Document Number: RIH0018379

CA PROC: A listing of certified processors.

A review of the CA PROC list, as provided by EDR, and dated 09/10/2018 has revealed that there are 2 CA PROC sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	tion / Distance Map ID		
ORANGE RESOURCE RECY Cert Id: PR18883.001 Reg Id: 18883	2050 N GLASSELL	W 1/8 - 1/4 (0.158 mi.)	F25	64	
SA RECYCLING Cert Id: PR153938.001 Reg Id: 153938	2411 N GLASSEL ST	NNW 1/4 - 1/2 (0.475 mi.)	O54	183	

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

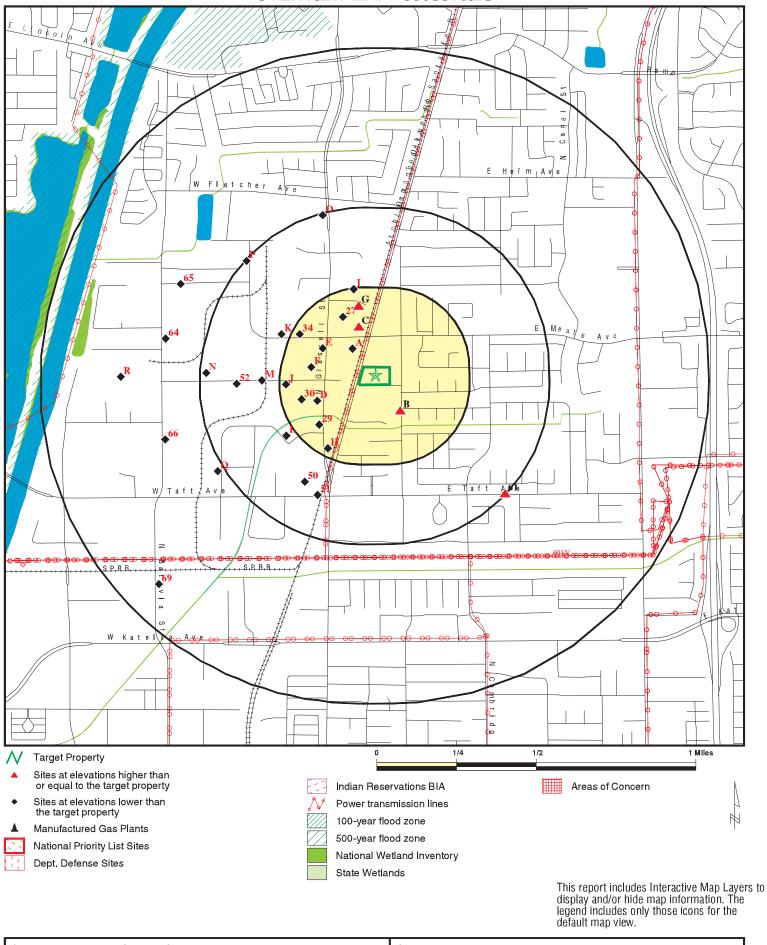
EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion,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

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

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NATES ARCO AUTOCARE	2101 ORANGE-OLIVE RD	N 0 - 1/8 (0.095 mi.)	C7	13
ORANGE OLIVE AUTO CA	2101 N ORANGE OLIVE	N 0 - 1/8 (0.117 mi.)	C13	19

Due to poor or inacequate address information, the following sites were not mapped. Count. Trecords.							
Site Name	Database(s)						
	CA CDL						

OVERVIEW MAP - 5509310.2S



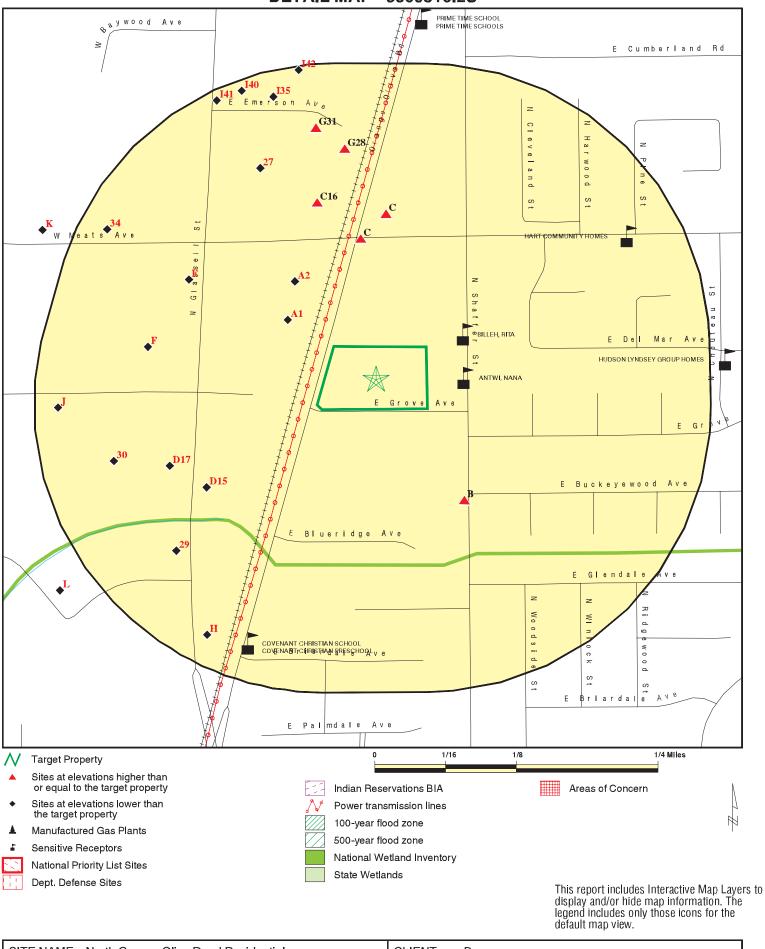
SITE NAME: North Orange Olive Road Residential 1997 North Orange Olive Road Orange CA 92865 ADDRESS:

LAT/LONG: 33.8212 / 117.850414 CLIENT: CONTACT: **Psomas** Josephine Alido

INQUIRY#: 5509310.2s DATE: December 11, 2018 5:48 pm

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DETAIL MAP - 5509310.2S



SITE NAME: North Orange Olive Road Residential ADDRESS: 1997 North Orange Olive Road

Orange CA 92865 LAT/LONG: 33.8212 / 117.850414 CLIENT: Psomas

CONTACT: Josephine Alido INQUIRY #: 5509310.2s

DATE: December 11, 2018 5:54 pm

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMEN	TAL RECORDS							
Federal NPL site list								
NPL Proposed NPL NPL LIENS	1.000 1.000 0.001		0 0 0	0 0 NR	0 0 NR	0 0 NR	NR NR NR	0 0 0
Federal Delisted NPL sit	e list							
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY SEMS	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
Federal CERCLIS NFRA	P site list							
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRAC	TS facilities li	st						
CORRACTS	1.000		0	0	0	1	NR	1
Federal RCRA non-COR	RACTS TSD f	acilities list						
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generator	rs list							
RCRA-LQG RCRA-SQG RCRA-CESQG	0.250 0.250 0.250		0 2 0	3 8 0	NR NR NR	NR NR NR	NR NR NR	3 10 0
Federal institutional con engineering controls reg								
LUCIS US ENG CONTROLS US INST CONTROL	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equiva	alent NPL							
CA RESPONSE	1.000		0	0	0	1	NR	1
State- and tribal - equiva	alent CERCLIS	8						
CA ENVIROSTOR	1.000		0	2	1	8	NR	11
State and tribal landfill a solid waste disposal site								
CA SWF/LF	0.500		0	1	0	NR	NR	1
State and tribal leaking	storage tank l	ists						
CA LUST	0.500		2	3	16	NR	NR	21

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST CA CPS-SLIC	0.500 0.500		0	0 0	0 0	NR NR	NR NR	0 0
State and tribal registere	d storage tar	ık lists						
FEMA UST CA UST CA AST INDIAN UST	0.250 0.250 0.250 0.250		0 2 3 0	0 2 0 0	NR NR NR NR	NR NR NR NR	NR NR NR NR	0 4 3 0
State and tribal voluntary	cleanup site	es						
CA VCP INDIAN VCP	0.500 0.500		0	0 0	0 0	NR NR	NR NR	0 0
State and tribal Brownfie	lds sites							
CA BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMEN	TAL RECORDS	<u>3</u>						
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / S Waste Disposal Sites	olid							
CA WMUDS/SWAT CA SWRCY CA HAULERS INDIAN ODI ODI DEBRIS REGION 9 IHS OPEN DUMPS	0.500 0.500 0.001 0.500 0.500 0.500 0.500		0 0 0 0 0 0	0 0 NR 0 0 0	0 0 NR 0 0 0	NR NR NR NR NR NR	NR NR NR NR NR NR	0 0 0 0 0 0
Local Lists of Hazardous Contaminated Sites	waste/							
US HIST CDL CA HIST Cal-Sites CA SCH CA CDL CA Toxic Pits CA CERS HAZ WASTE US CDL	0.001 1.000 0.250 0.001 1.000 0.250 0.001		0 0 0 0 0 0	NR 0 0 NR 0 0 NR	NR 0 NR NR 0 NR	NR 1 NR NR 0 NR NR	NR NR NR NR NR NR	0 1 0 0 0 0
Local Lists of Registered	Storage Tan	ıks						
CA SWEEPS UST CA HIST UST CA CERS TANKS CA FID UST	0.250 0.250 0.250 0.250		2 2 0 2	1 8 0 2	NR NR NR NR	NR NR NR NR	NR NR NR NR	3 10 0 4
Local Land Records								
CA LIENS LIENS 2	0.001 0.001		0 0	NR NR	NR NR	NR NR	NR NR	0 0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	<u>1/2 - 1</u>	<u>> 1</u>	Total Plotted
CA DEED	0.500		0	0	0	NR	NR	0
Records of Emergency F	Release Repo	rts						
HMIRS CA CHMIRS CA LDS CA MCS CA Orange Co. Industrial CA SPILLS 90	0.001 0.001 0.001 0.001 Site0.001 0.001		0 0 0 0 0	NR NR NR NR NR NR	NR NR NR NR NR	NR NR NR NR NR	NR NR NR NR NR	0 0 0 0 0
Other Ascertainable Rec	ords							
RCRA NonGen / NLR FUDS DOD SCRD DRYCLEANERS US FIN ASSUR EPA WATCH LIST 2020 COR ACTION TSCA TRIS SSTS ROD RMP RAATS PRP PADS ICIS FTTS MLTS COAL ASH DOE COAL ASH DOE COAL ASH EPA PCB TRANSFORMER RADINFO HIST FTTS DOT OPS CONSENT INDIAN RESERV FUSRAP UMTRA LEAD SMELTERS US MINES ABANDONED MINES	0.250 1.000 1.000 0.500 0.001			1 0 0 0 RR O RR O R RR RR RR RR O RR O R	N O O O RR R R O R R R R R R R R R O R O	N O O O R R R R R O R R R R R R R R R R	N	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FINDS UXO DOCKET HWC ECHO FUELS PROGRAM CA BOND EXP. PLAN CA Cortese CA CUPA Listings	0.001 1.000 0.001 0.001 0.250 1.000 0.500 0.250		0 0 0 0 0 0	NR 0 NR NR 0 0	NR 0 NR NR NR 0 0	NR 0 NR NR NR 0 NR	NR NR NR NR NR NR NR	0 0 0 0 0 0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CA DRYCLEANERS CA EMI CA ENF CA Financial Assurance CA HAZNET CA ICE CA HIST CORTESE CA HWP CA HWT RI MANIFEST CA MINES CA MWMP CA NPDES CA PEST LIC CA PROC CA Notify 65 CA UIC CA WASTEWATER PITS CA WDS CA CERS CA WIP CA CIWQS CA SAMPLING POINT CA OTHER OIL GAS CA WELL STIM PROJ CA MILITARY PRIV SITES CA PROJECT	0.250 0.001 0.001 0.001 0.001 0.001 0.500 1.000 0.250 0.001 0.500 1.000 0.001 0.500 1.000 0.001 0.500 1.000 0.001 0.500 1.000 1.	Property	000000000000000000000000000000000000000	0 NR NR NR 2 0 0 1 NR 0 NR NR NR 1 0 NR	NR N	NR N		0 0 0 0 0 0 0 7 2 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
CA UIC GEO CA PROD WATER PONDS CA NON-CASE INFO	0.001		0 0 0	NR NR NR	NR NR NR	NR NR NR	NR NR NR	0 0 0
CA WDR	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL	RECORDS							
EDR Exclusive Records								
EDR MGP EDR Hist Auto EDR Hist Cleaner	1.000 0.125 0.125		0 2 0	0 NR NR	0 NR NR	0 NR NR	NR NR NR	0 2 0
EDR RECOVERED GOVERNM	IENT ARCHIVE	<u>s</u>						
Exclusive Recovered Gov	t. Archives							
CA RGA LF CA RGA LUST	0.001 0.001		0	NR NR	NR NR	NR NR	NR NR	0 0
- Totals		0	18	35	22	13	0	88

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID MAP FINDINGS

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

Α1 **BASF CORP** RCRA-SQG 1000226857

WNW 210 E MEATS AVE TRIS 92665BSFCR210EM < 1/8 ORANGE, CA 92865

0.047 mi.

247 ft. Site 1 of 2 in cluster A

Relative: RCRA-SQG:

Lower Date form received by agency: 05/31/2012 Facility name: **BASF CORP** Actual: Facility address: 210 E MEATS AVE 199 ft.

ORANGE, CA 92865

EPA ID: CAD131842445 Mailing address: 138 E MEATS AVE

ORANGE, CA 92865

Contact: JOHN G ZOMER Contact address: 138 E MEATS AVE

ORANGE, CA 92865

Contact country: US

714-921-1430 Contact telephone:

Telephone ext.: 4418

Contact email: JOHN.ZOMER@BASF.COM

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:

BASF CORP Owner/operator name: Owner/operator address: Not reported Not reported

Owner/operator country: US

Owner/operator telephone: Not reported Not reported Owner/operator email: Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Operator Owner/Op start date: 01/01/1987 Owner/Op end date: Not reported

Owner/operator name: **BASF CORP** Owner/operator address: 100 PARK AVE

FLORHAM PARK, NJ 07932

US Owner/operator country:

973-245-6000 Owner/operator telephone: Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: 01/01/1987 Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:

Map ID MAP FINDINGS
Direction

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

BASF CORP (Continued) 1000226857

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: Nο On-site burner exemption: No Furnace exemption: No Used oil fuel burner: Nο Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: Nο Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: Nο

Waste code: 141

Waste name: Off-specification, aged, or surplus inorganics

Waste code: 214

Waste name: Unspecified solvent mixture

Waste code: 352

. Waste name: Other organic solids

. Waste code: D00

Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: D008 . Waste name: LEAD

. Waste code: F003

. Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL

ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL

ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT
MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT
NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS
CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED
SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR
MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL
BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT

MIXTURES.

Waste code: F005

. Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL

KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE,

2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF

THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

BASF CORP (Continued) 1000226857

Historical Generators:

Date form received by agency: 09/01/1996

BASF CORPOR ORANGE PLANT Site name:

Classification: Small Quantity Generator

Date form received by agency: 12/17/1985

BASF CORPOR ORANGE PLANT Site name:

Large Quantity Generator Classification:

Violation Status: No violations found

TRIS:

Click this hyperlink while viewing on your computer to access 3 additional US_TRIS: record(s) in the EDR Site Report.

A2 CA AST A100324707 N/A

NW 218 E MEATS AVE ORANGE, CA < 1/8

0.067 mi.

353 ft. Site 2 of 2 in cluster A

Relative: AST:

Lower Certified Unified Program Agencies: Orange

POLLARD - SWAIN INC Owner: Actual:

Total Gallons: 57,600 201 ft.

Property Owner Stat:

CERSID: Not reported Facility ID: Not reported Business Name: Not reported Phone: Not reported Fax: Not reported Not reported Mailing Address: Mailing Address City: Not reported Mailing Address State: Not reported Not reported Mailing Address Zip Code: Operator Name: Not reported Operator Phone: Not reported Owner Phone: Not reported Owner Mail Address: Not reported Owner State: Not reported Owner Zip Code: Not reported Owner Country: Not reported Property Owner Name: Not reported Not reported Property Owner Phone: Not reported Property Owner Mailing Address: Property Owner City: Not reported

Property Owner Zip Code: Not reported Property Owner Country: Not reported

Not reported

EPAID: Not reported

Direction Distance

Distance Elevation Site EDR ID Number Database(s) EPA ID Number

B3 CITY OF ORANGE FIRE STATION #3 CA SWEEPS UST S101589686
SE 1910 N SHAFFER CA FID UST N/A

SE 1910 N SHAFFER < 1/8 ORANGE, CA 92665

0.087 mi.

459 ft. Site 1 of 4 in cluster B

Relative: SWEEPS UST:

 Higher
 Status:
 Active

 Actual:
 Comp Number:
 2624

 204 ft.
 Number:
 4

Board Of Equalization: Not reported Referral Date: 12-05-91 Action Date: 12-05-91 Created Date: 10-13-88

Owner Tank Id:

SWRCB Tank Id: 30-030-002624-000001

Tank Status: A
Capacity: 750
Active Date: 12-05-91
Tank Use: M.V. FUEL
STG: P
Content: DIESEL

Number Of Tanks: 1

CA FID UST:

Facility ID: 30017897 Regulated By: UTNKA Regulated ID: 00002624 Cortese Code: Not reported SIC Code: Not reported Facility Phone: 7142882513 Mail To: Not reported Mailing Address: 637 W STRUCK Mailing Address 2: Not reported Mailing City, St, Zip: **ORANGE 92665** Contact: Not reported Contact Phone: Not reported DUNs Number: Not reported NPDES Number: Not reported EPA ID: Not reported Not reported Comments: Active Status:

B4 ORANGE FIRE STATION NO 3 CA AST A100423005
SE 1910 N SHAFFER ST N/A

< 1/8 ORANGE, CA 92865

0.087 mi.

459 ft. Site 2 of 4 in cluster B

Relative: AST:

HigherCertified Unified Program Agencies:Not reportedActual:Owner:City of Orange204 ft.Total Gallons:Not reportedCERSID:10563751

CERSID: 10563751 Facility ID: FA0051523

Business Name: CITY OF ORANGE FIRE DEPT STA # 3

Phone: 714-288-2500
Fax: Not reported
Mailing Address: 176 S Grand Street

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

ORANGE FIRE STATION NO 3 (Continued)

A100423005

Mailing Address City: Orange
Mailing Address State: CA
Mailing Address Zip Code: 92866

Operator Name: Orange City Fire Department

 Operator Phone:
 714-288-2500

 Owner Phone:
 714-288-2500

Owner Mail Address: 300 E Chapman Avenue

Owner State: CA Owner Zip Code: 92866 Owner Country: **United States** Property Owner Name: Not reported Property Owner Phone: Not reported Property Owner Mailing Address: Not reported Property Owner City: Not reported Property Owner Stat: Not reported Not reported Property Owner Zip Code: Property Owner Country: Not reported EPAID: Not reported

B5 CA AST A100336811 SE 1910 SHAFFER ST N/A

SE 1910 SHAFFER ST < 1/8 ORANGE, CA

0.087 mi.

459 ft. Site 3 of 4 in cluster B

EPAID:

Relative: AST:

Higher Certified Unified Program Agencies: Orange

Actual: Owner: CITY OF ORANGE FIRE DEPT STA # 3

204 ft. Total Gallons: 1,320
CERSID: Not reported

Facility ID: Not reported **Business Name:** Not reported Phone: Not reported Not reported Fax: Mailing Address: Not reported Mailing Address City: Not reported Mailing Address State: Not reported Not reported Mailing Address Zip Code: Operator Name: Not reported Operator Phone: Not reported Owner Phone: Not reported Owner Mail Address: Not reported Owner State: Not reported Not reported Owner Zip Code: Owner Country: Not reported Property Owner Name: Not reported Not reported Property Owner Phone: Property Owner Mailing Address: Not reported Not reported Property Owner City: Not reported Property Owner Stat: Property Owner Zip Code: Not reported Not reported Property Owner Country:

Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

B6 FIRE STATION 3 CA HIST UST U001577486 SE

1910 N SHAFFER ST N/A

< 1/8 ORANGE, CA 92665

0.087 mi.

459 ft. Site 4 of 4 in cluster B

Relative: HIST UST: Higher File Number: 0002E7BB

URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002E7BB.pdf Actual:

Region: STATE 204 ft. Facility ID: 00000002624

Facility Type: Not reported Other Type: GOVERNMENT DON BONTZ Contact Name: Telephone: 7145320288 Owner Name: CITY OF ORANGE Owner Address: 300 E. CHAPMAN AVE. Owner City, St, Zip: ORANGE, CA 92666

Total Tanks: 0001

Tank Num: 001 Container Num: 14 Year Installed: 1963 Tank Capacity: 00000750 Tank Used for: Not reported Type of Fuel: UNLEADED Container Construction Thickness: Not reported Leak Detection:

Visual

Click here for Geo Tracker PDF:

C7 NATES ARCO AUTOCARE EDR Hist Auto 1020273561 North 2101 ORANGE-OLIVE RD N/A

< 1/8 ORANGE, CA 92665 0.095 mi.

Site 1 of 9 in cluster C 503 ft.

Relative: **EDR Hist Auto**

Higher

Type: Actual: Year: Name:

1971 MC KINNEY SHELBY F Gasoline Service Stations 203 ft. MC KINNEY SHELBY F Gasoline Service Stations 1972 1973 MC KINNEY SHELBY F Gasoline Service Stations 1974 MC KINNEY SHELBY F Gasoline Service Stations MC KINNEY SHELBY F 1976 Gasoline Service Stations

1977 MC KINNEY SHELBY F Gasoline Service Stations Gasoline Service Stations 1982 NATES ARCO AUTOCARE 1983 NATES ARCO AUTOCARE Gasoline Service Stations 1985 NATES ARCO AUTOCARE **Gasoline Service Stations** 1986 NATES ARCO AUTOCARE Gasoline Service Stations 1987 ORANGE OLIVE AUTO CARE Gasoline Service Stations 1987 NATES ARCO AUTOCARE Gasoline Service Stations 1988 ORANGE OLIVE AUTO CARE Gasoline Service Stations

1989 ORANGE OLIVE AUTO CARE Gasoline Service Stations Gasoline Service Stations 1990 ORANGE OLIVE AUTO CARE

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

C8 ORANGE OLIVE AUTO CARE CA FID UST S101619674
North 2101 ORANGE OLIVE R ORANG N/A

2101 ORANGE OLIVE R ORANG ORANGE, CA 92665

< 1/8 0.095 mi.

503 ft. Site 2 of 9 in cluster C

Relative: CA FID UST:

Higher Facility ID: 30017909

Actual: Regulated By: UTNKA

203 ft. Regulated ID: 00057689

Cortese Code: Not reported

SIC Code: Not reported

SIC Code: Not reported Facility Phone: 7149747313 Mail To: Not reported

Mailing Address: 2101 ORANGE OLIVE R ORANG

Mailing Address 2: Not reported Mailing City, St, Zip: **ORANGE 92665** Contact: Not reported Contact Phone: Not reported Not reported **DUNs Number:** NPDES Number: Not reported EPA ID: Not reported Comments: Not reported Status: Active

C9 ORANGE OLIVE AUTO CARE CA HIST UST U001577496
North 2101 ORANGE OLIVE R ORANGE N/A

< 1/8 ORANGE, CA 92665

0.095 mi.

503 ft. Site 3 of 9 in cluster C

Relative: HIST UST:

Higher File Number: 0002EC6C

 Actual:
 URL:
 http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002EC6C.pdf

 203 ft.
 Region:
 STATE

Facility ID: 00000057689
Facility Type: Gas Station
Other Type: Not reported
Contact Name: Not reported
Telephone: 7149747313

Owner Name: ORANGE OLIVE GAS AND REPAIR CO

Owner Address: 2101 ORANGE OLIVE RD Owner City,St,Zip: ORANGE, CA 92665

Total Tanks: 0004

Tank Num: 001 Container Num: 1

Year Installed:
Tank Capacity:
O0005000
Tank Used for:
Type of Fuel:
Container Construction Thickness:
Leak Detection:
Not reported
Stock Inventor

Tank Num: 002 Container Num: 2

Year Installed:
Tank Capacity:
Tank Used for:
Type of Fuel:

Not reported
00005000
PRODUCT
REGULAR

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ORANGE OLIVE AUTO CARE (Continued)

U001577496

Container Construction Thickness: Not reported

Leak Detection: None

Tank Num: 003 Container Num: 3

Year Installed: Not reported Tank Capacity: 00005000 Tank Used for: **PRODUCT** Type of Fuel: **PREMIUM** Container Construction Thickness: Not reported Leak Detection: None

Tank Num: 004 Container Num:

Year Installed: Not reported Tank Capacity: 00000000 Tank Used for: WASTE WASTE OIL Type of Fuel: Container Construction Thickness: Not reported Leak Detection: None

Click here for Geo Tracker PDF:

C10 **ORANGE OLIVE AUTO CARE** CA LUST S104160906 North 2101 ORANGE OLIVE RD **CA HIST CORTESE** N/A

4/7/1988

8/25/1987

Not reported

Not reported

< 1/8 **ORANGE, CA 92665**

0.095 mi.

Site 4 of 9 in cluster C 503 ft.

Close Date:

Relative: LUST REG 8: Higher Region:

County: Orange Actual: 203 ft.

Date Prelim Assessment Workplan Submitted:

Date Pollution Characterization Began:

Date Remediation Plan Submitted:

Regional Board: Santa Ana Region Facility Status: Case Closed 083000304T Case Number: Local Case Num: Not reported Case Type: Soil only Substance: Gasoline

Qty Leaked: 100 Abate Method: Not reported Cross Street: **MEATS** Enf Type: CLOS Funding: Not reported How Discovered: Inventory Control How Stopped: Not reported Leak Cause: Corrosion Leak Source: Piping T0605900239 Global ID: 3/28/1987 How Stopped Date: Enter Date: 4/17/1987 Date Confirmation of Leak Began: Not reported Date Preliminary Assessment Began: Not reported 3/27/1987 Discover Date: **Enforcement Date:** Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ORANGE OLIVE AUTO CARE (Continued)

S104160906

Date Remedial Action Underway: Not reported Not reported Date Post Remedial Action Monitoring: Enter Date: 4/17/1987 **GW Qualifies:** Not reported Soil Qualifies: Not reported Operator: Not reported Facility Contact: Not reported Interim: Not reported Oversite Program: LUST Latitude: 33.823234 -117.8505993 Longitude: MTBE Date: Not reported Max MTBE GW: Not reported

MTBE Concentration:

Max MTBE Soil: Not reported

MTBE Fuel:

MTBE Tested: Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.

MTBE Class: Staff: PAH

Staff Initials: UNK Lead Agency:

Local Agency Local Agency: Orange, Orange County

Hydr Basin #: COASTAL PLAIN OF ORA Beneficial: Not reported

Priority: Not reported Cleanup Fund Id: Not reported Work Suspended: Not reported

Summary: PIPING TO BE REPLACED.

HIST CORTESE:

CORTESE Region: Facility County Code: 30 Reg By: **LTNKA** 083000304T Reg Id:

CA UST U004061490 C11 **ORANGE OLIVE ARCO**

North 2101 ORANGE OLIVE ROAD < 1/8 ORANGE, CA 92865

0.095 mi.

503 ft. Site 5 of 9 in cluster C

Relative: UST:

Higher Facility ID: 30-030-800067 Permitting Agency: ORANGE, CITY OF Actual: 203 ft. Latitude: 33.824654

Longitude: -117.848912 N/A

Direction Distance

Elevation Site Database(s) EPA ID Number

C12 ORANGE OLIVE AUTO CARE CA LUST S106930171
North 2101 N ORANGE OLIVE RD CA SWEEPS UST N/A

< 1/8 ORANGE, CA 92665

0.117 mi.

619 ft. Site 6 of 9 in cluster C

Relative: LUST:

HigherLead Agency:ORANGE, CITY OFActual:Case Type:LUST Cleanup Site

205 ft. Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605900239

 Global Id:
 T0605900239

 Latitude:
 33.823298

 Longitude:
 -117.850246

Status: Completed - Case Closed

04/07/1988 Status Date: Case Worker: UNK 083000304T RB Case Number: ORANGE, CITY OF Local Agency: File Location: Not reported Local Case Number: Not reported Potential Media Affect: Soil Potential Contaminants of Concern: Gasoline Site History: Not reported

LUST:

Global Id: T0605900239

Contact Type: Regional Board Caseworker
Contact Name: PATRICIA HANNON

Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500

City: RIVERSIDE

Email: phannon@waterboards.ca.gov

Phone Number: Not reported

Global Id: T0605900239

Contact Type: Local Agency Caseworker

Contact Name: UNK

Organization Name:
Address:
ORANGE, CITY OF
Not reported
r8 UNKNOWN
Email:
Not reported
Phone Number:
Not reported

LUST:

Global Id: T0605900239
Action Type: Other
Date: 03/27/1987
Action: Leak Discovery

 Global Id:
 T0605900239

 Action Type:
 Other

 Date:
 03/28/1987

 Action:
 Leak Stopped

 Global Id:
 T0605900239

 Action Type:
 ENFORCEMENT

 Date:
 04/07/1988

Action: Closure/No Further Action Letter

EDR ID Number

Direction Distance

Elevation Site Database(s) EPA ID Number

ORANGE OLIVE AUTO CARE (Continued)

S106930171

EDR ID Number

 Global Id:
 T0605900239

 Action Type:
 Other

 Date:
 04/09/1987

 Action:
 Leak Reported

LUST:

Global Id: T0605900239

Status: Completed - Case Closed

Status Date: 04/07/1988

Global Id: T0605900239

Status: Open - Case Begin Date

Status Date: 03/27/1987

Global Id: T0605900239

Status: Open - Site Assessment

Status Date: 08/25/1987

SWEEPS UST:

Status: Active
Comp Number: 800067
Number: 2

Board Of Equalization: Not reported Referral Date: 06-22-93
Action Date: 01-19-94
Created Date: 06-22-93
Owner Tank Id: 800067

SWRCB Tank ld: 30-030-800067-000001

Tank Status: A
Capacity: 5000
Active Date: 06-22-93
Tank Use: M.V. FUEL
STG: P

Content: LEADED
Number Of Tanks: 4

Status: Active Comp Number: 800067 Number: 2

Board Of Equalization: Not reported Referral Date: 06-22-93
Action Date: 01-19-94
Created Date: 06-22-93
Owner Tank Id: 800067

SWRCB Tank ld: 30-030-800067-000002

Tank Status:

 Capacity:
 5000

 Active Date:
 06-22-93

 Tank Use:
 M.V. FUEL

STG: P

Content: PRM UNLEADED Number Of Tanks: Not reported

Status: Active Comp Number: 800067

Direction Distance

EDR ID Number Elevation Site **EPA ID Number** Database(s)

ORANGE OLIVE AUTO CARE (Continued)

S106930171

Number:

Board Of Equalization: Not reported 06-22-93 Referral Date: Action Date: 01-19-94 Created Date: 06-22-93 Owner Tank Id: 800067

30-030-800067-000003 SWRCB Tank Id:

Tank Status: 5000 Capacity: Active Date: 06-22-93 M.V. FUEL Tank Use:

STG:

REG UNLEADED Content: Number Of Tanks: Not reported

Status: Active 800067 Comp Number: Number: 2

Board Of Equalization: Not reported Referral Date: 06-22-93 Action Date: 01-19-94 Created Date: 06-22-93 Owner Tank Id: 800067

SWRCB Tank Id: 30-030-800067-000004

Tank Status: Α 500 Capacity: Active Date: 06-22-93 Tank Use: OIL STG: W

WASTE OIL Content: Number Of Tanks: Not reported

C13 **ORANGE OLIVE AUTO CARE EDR Hist Auto** 2101 N ORANGE OLIVE RD North

< 1/8 0.117 mi.

Site 7 of 9 in cluster C 619 ft.

Relative:

EDR Hist Auto

ORANGE, CA 92665

Higher

Year: Name: Type: Actual: ORANGE OLIVE AUTO CARE 205 ft. 1991 Gasoline Service Stations 1992 ORANGE OLIVE AUTO CARE

Gasoline Service Stations ORANGE OLIVE AUTO CARE Gasoline Service Stations 1993 1994 **ORANGE OLIVE AUTO CARE** Gasoline Service Stations 1995 ORANGE OLIVE AUTO CARE Gasoline Service Stations 1996 ORANGE OLIVE AUTO CARE **Gasoline Service Stations** 1997 ORANGE OLIVE AUTO CARE **Gasoline Service Stations** 1997 **I & B CORPORATION** Gasoline Service Stations 1998 I & B CORPORATION **Gasoline Service Stations** 1999 ORANGE OLIVE AUTO CARE Gasoline Service Stations 1999 **I&B CORPORATION** Gasoline Service Stations 2000 **I&B CORPORATION** Gasoline Service Stations

2000 ORANGE OLIVE AUTO CARE Gasoline Service Stations

2000 R & J AUTOMOTIVE SERVICE General Automotive Repair Shops 2001 ORANGE OLIVE AUTO CARE Gasoline Service Stations

2001 I & B CORPORATION Gasoline Service Stations

2002 GEORGE MOBIL SERVICE General Automotive Repair Shops 1021470172

N/A

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ORANGE OLIVE AUTO CARE (Continued)

1021470172

KANGE CLIVE ACTO CAKE (COMMINGED)		
2002	GEORGE AUTO TECH	General Automotive Repair Shops
2002	I & B CORPORATION	Gasoline Service Stations
2002	ORANGE OLIVE AUTO CARE	Gasoline Service Stations
2003	GEORGE MOBIL SERVICE	General Automotive Repair Shops
2003	I & B CORPORATION	Gasoline Service Stations
2003	ORANGE OLIVE AUTO CARE	Gasoline Service Stations
2004	I & B CORPORATION	Gasoline Service Stations
2004	GEORGE MOBIL SERVICE	General Automotive Repair Shops
2004	ORANGE OLIVE AUTO CARE	Gasoline Service Stations
2005	ORANGE OLIVE AUTO CARE	Gasoline Service Stations
2005	I & B CORPORATION	Gasoline Service Stations
2005	CAND H AUTO REPAIR	General Automotive Repair Shops
2006	I & B CORPORATION	Gasoline Service Stations
2006	CAND H AUTO REPAIR	General Automotive Repair Shops
2006	ORANGE OLIVE AUTO CARE	Gasoline Service Stations
2007	CAND H AUTO REPAIR	General Automotive Repair Shops
2007	ORANGE OLIVE AUTO CARE	Gasoline Service Stations
2007	I & B CORPORATION	Gasoline Service Stations
2008	ORANGE OLIVE AUTO CARE	Gasoline Service Stations
2008	I & B CORPORATION	Gasoline Service Stations
2008	CAND H AUTO REPAIR	General Automotive Repair Shops
2009	I & B CORPORATION	Gasoline Service Stations
2009	CAND H AUTO REPAIR	General Automotive Repair Shops
2010	CAND H AUTO REPAIR	General Automotive Repair Shops
2010	I & B CORPORATION	Gasoline Service Stations
2011	BEACH CITIES AUTOMOTIVE	Automotive Repair Shops, NEC
2011	CHRIS CHAPPELL	General Automotive Repair Shops
2011	I & B CORPORATION	Gasoline Service Stations
2011	CAND H AUTO REPAIR	General Automotive Repair Shops
2012	I & B CORPORATION	Gasoline Service Stations
2012	BEACH CITIES AUTOMOTIVE	Automotive Repair Shops, NEC
2012	CAND H AUTO REPAIR	General Automotive Repair Shops
2012	CHRIS CHAPPELL	General Automotive Repair Shops
2013	I & B CORPORATION	Gasoline Service Stations
2013	BEACH CITIES AUTOMOTIVE	Automotive Repair Shops, NEC
2013	CHRIS CHAPPELL	General Automotive Repair Shops
2013	CAND H AUTO REPAIR	General Automotive Repair Shops
2014	CHRIS CHAPPELL	General Automotive Repair Shops
2014	I & B CORPORATION	Gasoline Service Stations
2014	BEACH CITIES AUTOMOTIVE	Automotive Repair Shops, NEC

C14 **ORANGE OLIVE GASOLINE** North 2101 N ORANGE OLIVE RD < 1/8 ORANGE, CA 92865 0.117 mi.

CA UST U004266097 N/A

619 ft. Site 8 of 9 in cluster C

Relative: UST:

Higher Facility ID: FA0036493

Permitting Agency: Orange County Environmental Health Actual:

Latitude: 33.8233 205 ft. Longitude: -117.85026

Direction Distance

Elevation Site Database(s) EPA ID Number

D15 MERCO MFG CO RCRA-SQG 1000596151
WSW 1927 GLASSEL ST FINDS CAD983601147

< 1/8 ORANGE, CA 92865

0.121 mi.

641 ft. Site 1 of 2 in cluster D

Relative: RCRA-SQG:

LowerDate form received by agency: 08/13/1991Actual:Facility name:MERCO MFG CO192 ft.Facility address:1927 GLASSEL ST

ORANGE, CA 92865

EPA ID: CAD983601147
Contact: DARYL ROSSMAN
Contact address: 1927 GLASSEL

ORANGE, CA 92665

Contact country: US

Contact telephone: 714-637-5500 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: MERCO MFG CO INC Owner/operator address: 1927 GLASSEL

ORANGE, CA 91665

Owner/operator country: Not reported Owner/operator telephone: 714-637-5500 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported 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: Nο 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

EDR ID Number

ECHO

Direction Distance

EDR ID Number Elevation Site **EPA ID Number** Database(s)

MERCO MFG CO (Continued)

1000596151

FINDS:

Registry ID: 110008282170

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.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000596151 Registry ID: 110008282170

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110008282170

C16 FINE FINISH SASH AND DOOR INC RCRA-SQG 1000183051 NNW 227 E MEATS AVE **FINDS** CAD981387921

1/8-1/4 ORANGE, CA 92865

0.128 mi.

676 ft. Site 9 of 9 in cluster C

Relative: RCRA-SQG:

Higher Date form received by agency: 03/16/1993

Facility name: FINE FINISH SASH AND DOOR INC Actual:

203 ft. Facility address: 227 E MEATS AVE ORANGE, CA 92865

CAD981387921 EPA ID: DON HILLMAN Contact: Contact address: 227 E MEATS AVE

ORANGE, CA 92665

Contact country: US

Contact telephone: 714-637-0484 Contact email: Not reported

EPA Region: 09

Small Small Quantity Generator Classification:

Handler: generates more than 100 and less than 1000 kg of hazardous Description:

> 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: FINE FINISHING SASH AND DOOR INC

Owner/operator address: 227 E MEATS AVE

ORANGE, CA 92665

ECHO

Map ID MAP FINDINGS
Direction

Distance Elevation S

Site Database(s) EPA ID Number

FINE FINISH SASH AND DOOR INC (Continued)

1000183051

EDR ID Number

Owner/operator country: Not reported Owner/operator telephone: 714-637-0484 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner Owner/Operator Type: 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 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Operator Not reported Owner/Op start date: 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: 110008266973

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

Direction Distance

Elevation Site Database(s) **EPA ID Number**

FINE FINISH SASH AND DOOR INC (Continued)

1000183051

EDR ID Number

corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

1000183051 Envid: Registry ID: 110008266973

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110008266973

RICKS TRUCKWORKS RCRA-SQG 1001126655

D17 wsw 1962 N GLASSELL ST **FINDS** CAR000017210 1/8-1/4 ORANGE, CA 92865 **ECHO**

0.141 mi. **CA HAZNET**

742 ft. Site 2 of 2 in cluster D

RCRA-SQG: Relative:

Lower Date form received by agency: 01/06/1997

Facility name: **RICKS TRUCKWORKS** Actual: Facility address: 1962 N GLASSELL ST 192 ft.

ORANGE, CA 92865 EPA ID: CAR000017210 Mailing address: PO BOX 3135

ORANGE, CA 92865 Contact: RICHARD BENVENUTO Contact address: 1962 N GLASSELL ST

ORANGE, CA 92865

Contact country: US

Contact telephone: 714-974-4949 Contact email: Not reported

EPA Region: 09

Classification: Small Small Quantity Generator

Handler: generates more than 100 and less than 1000 kg of hazardous Description:

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 BENVENUTO

Owner/operator address: 627 GATES ST

ORANGE, CA 92865

Owner/operator country: Not reported Owner/operator telephone: 714-282-8930 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported 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

Direction Distance Elevation

evation Site Database(s) EPA ID Number

RICKS TRUCKWORKS (Continued)

1001126655

EDR ID Number

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: 110002915604

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.

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1001126655 Registry ID: 110002915604

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002915604

HAZNET:

envid: 1001126655 Year: 1998

GEPAID: CAR000017210

Contact: RICHARD BENVENUTO

Telephone: 7149744949
Mailing Name: Not reported

Mailing Address: 1962 N GLASSELL ST Mailing City,St,Zip: ORANGE, CA 928650135

Gen County: Not reported
TSD EPA ID: CAD028409019
TSD County: Not reported
Waste Category: Tank bottom waste
Disposal Method: Treatment, Tank

Tons: .2085

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

RICKS TRUCKWORKS (Continued) 1001126655

Cat Decode: Not reported Method Decode: Not reported Facility County: Orange

E18 ANILLO INDUSTRIES, INC. CA HIST UST U001577551
WNW 2090 N GLASSELL ST N/A

WNW 2090 N GLASSELL ST 1/8-1/4 ORANGE, CA 92667

0.141 mi.

743 ft. Site 1 of 5 in cluster E

Relative: HIST UST:

 Lower
 File Number:
 Not reported

 Actual:
 URL:
 Not reported

 195 ft.
 Region:
 STATE

 Facility ID:
 00000056592

Facility Type: Other

Other Type: MANUFACTURER

Contact Name: P.D. YEATS, GENERAL MANAGER

Telephone: 7146377000

Owner Name: ANILLO INDUSTRIES, INC.
Owner Address: 2090 N. GLASSELL ST.
Owner City, St, Zip: ORANGE, CA 92667

Total Tanks: 0002

 Tank Num:
 001

 Container Num:
 2

 Year Installed:
 1979

 Tank Capacity:
 00001000

 Tank Used for:
 PRODUCT

 Type of Fuel:
 UNLEADED

Container Construction Thickness: 1/4

Leak Detection: Visual, Stock Inventor

Tank Num: 002
Container Num: 1
Year Installed: 1967
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: REGULAR

Container Construction Thickness: 1/4

Leak Detection: Visual, Stock Inventor

E19 HIGHTOWER METAL PRODUCTS INC CA HIST UST U001577550 WNW 2090 N GLASSELL ST CA WDS N/A

1/8-1/4 ORANGE, CA 92865

0.141 mi.

743 ft. Site 2 of 5 in cluster E

Relative: HIST UST:
Lower File Number: 0002E4E5

Actual: URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002E4E5.pdf

 195 ft.
 Region:
 STATE

 Facility ID:
 00000021280

 Facility Type:
 Other

Other Type: METAL STAMPING
Contact Name: DON YEATS

Direction Distance

Elevation Site Database(s) **EPA ID Number**

HIGHTOWER METAL PRODUCTS INC (Continued)

U001577550

EDR ID Number

Telephone: 7149782826

ANILLO INDUSTRIES INC. Owner Name: Owner Address: 2090 NORTH GLASSELL Owner City,St,Zip: ORANGE, CA 92667

Total Tanks: 0003

001 Tank Num: Container Num: 1 Year Installed: 1967 00001000 Tank Capacity: **PRODUCT** Tank Used for: Type of Fuel: **REGULAR**

Container Construction Thickness: 1/4

Leak Detection: Visual, Stock Inventor

Tank Num: 002 Container Num: 2 Year Installed: 1979 Tank Capacity: 00001000 **PRODUCT** Tank Used for: Type of Fuel: UNLEADED

Container Construction Thickness: 1/4

Leak Detection: Visual, Stock Inventor

Tank Num: 003 Container Num: 3 Year Installed: 1978 Tank Capacity: 00000100 Tank Used for: Not reported Type of Fuel: Not reported

Container Construction Thickness: 10 Leak Detection: Visual

Click here for Geo Tracker PDF:

WDS:

Facility ID: Santa Ana River 30I011571

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

are assigned by the Regional Board

Subregion: 8

7146379110 Facility Telephone: Facility Contact: **DON YEATS**

Agency Name: HIGHTOWER METAL PRODUCTS INC

Agency Address: 2090 GLASSELL ST Agency City,St,Zip: ORANGE 928653391 Agency Contact: TOM HORNE Agency Telephone: 7146379110 Agency Type: Private

SIC Code: 0

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

HIGHTOWER METAL PRODUCTS INC (Continued)

U001577550

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:

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 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.

E20 **ANILLO COMPANY** CA LUST S103641105 **CA HIST CORTESE** WNW 2090 GLASSELL ST N/A

1/8-1/4 ORANGE, CA 92665

0.141 mi.

743 ft. Site 3 of 5 in cluster E

Relative: LUST REG 8: Lower Region:

County: Orange Actual: Regional Board: Santa Ana Region 195 ft.

Facility Status: Case Closed Case Number: 083001985T Local Case Num: Not reported Case Type: Soil only Substance: Gasoline Qty Leaked: Not reported Abate Method: Not reported Cross Street: **MEATS** Enf Type: CLOS Funding: Not reported How Discovered: Tank Closure How Stopped: Not reported Leak Cause: UNK

Leak Source: UNK Global ID: T0605901485 How Stopped Date: 11/14/1991 Enter Date: 12/19/1991 Date Confirmation of Leak Began: Not reported Date Preliminary Assessment Began: Not reported Discover Date: 11/21/1991 **Enforcement Date:** Not reported 6/11/1992 Close Date: Date Prelim Assessment Workplan Submitted: 12/19/1991

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ANILLO COMPANY (Continued)

S103641105

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: 12/19/1991 **GW Qualifies:** Not reported Soil Qualifies: Not reported Operator: Not reported Facility Contact: Not reported Interim: Not reported Oversite Program: LUST Latitude: 33.822713 -117.8533184 Longitude: MTBE Date: Not reported Max MTBE GW: Not reported

MTBE Concentration:

Max MTBE Soil: Not reported

MTBE Fuel:

MTBE Tested: Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.

MTBE Class: Staff: CAB

UNK Staff Initials:

Local Agency Lead Agency:

Local Agency: Orange, Orange County COASTAL PLAIN OF ORA Hydr Basin #:

Beneficial: Not reported Priority: Not reported Cleanup Fund Id: Not reported Work Suspended: Not reported

Summary: Not reported

HIST CORTESE:

CORTESE Region: Facility County Code: 30 Reg By: **LTNKA** 083001985T Reg Id:

HIGHTOWER PLATING & MANUFACTURING CO CA LUST S108432081

WNW 2090 N GLASSELL BLVD **CA HIST UST** N/A

1/8-1/4 ORANGE, CA 92865 **CA EMI** 0.141 mi. **CA HAZNET**

CA NPDES 743 ft. Site 4 of 5 in cluster E **CA CIWQS**

Relative:

E21

Lower LUST:

ORANGE, CITY OF Lead Agency: Actual: 195 ft. Case Type: LUST Cleanup Site

Geo Track: $http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605901485$

T0605901485 Global Id: Latitude: 33.822456 -117.854038 Longitude:

Status: Completed - Case Closed

Status Date: 06/11/1992 Case Worker: UNK RB Case Number: 083001985T ORANGE, CITY OF Local Agency: File Location: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

HIGHTOWER PLATING & MANUFACTURING CO (Continued)

S108432081

EDR ID Number

Local Case Number: Not reported Potential Media Affect: Soil Potential Contaminants of Concern: Gasoline Site History: Not reported

LUST:

Global Id: T0605901485

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

Global Id: T0605901485

Contact Type: Local Agency Caseworker

Contact Name: UNK

Organization Name:
Address:
ORANGE, CITY OF
Not reported
r8 UNKNOWN
Email:
Not reported
Phone Number:
Not reported

LUST:

 Global Id:
 T0605901485

 Action Type:
 Other

 Date:
 11/14/1991

 Action:
 Leak Stopped

 Global Id:
 T0605901485

 Action Type:
 Other

 Date:
 11/21/1991

 Action:
 Leak Discovery

 Global Id:
 T0605901485

 Action Type:
 ENFORCEMENT

 Date:
 06/11/1992

Action: Closure/No Further Action Letter

 Global Id:
 T0605901485

 Action Type:
 Other

 Date:
 11/21/1991

 Action:
 Leak Reported

LUST:

Global Id: T0605901485

Status: Completed - Case Closed

Status Date: 06/11/1992

Global Id: T0605901485

Status: Open - Case Begin Date

Status Date: 11/14/1991

Global Id: T0605901485

Status: Open - Site Assessment

Status Date: 12/19/1991

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

HIGHTOWER PLATING & MANUFACTURING CO (Continued)

S108432081

HIST UST:

File Number: 0002E4E4

URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002E4E4.pdf

Region: Not reported Facility ID: Not reported Not reported Facility Type: Not reported Other Type: Contact Name: Not reported Telephone: Not reported Owner Name: Not reported Owner Address: Not reported Owner City, St, Zip: Not reported Total Tanks: Not reported

Tank Num: Not reported Not reported Container Num: Year Installed: Not reported Tank Capacity: Not reported Tank Used for: Not reported Type of Fuel: Not reported Not reported Container Construction Thickness: Leak Detection: Not reported

Click here for Geo Tracker PDF:

EMI:

Year: 2005 County Code: 30 Air Basin: SC Facility ID: 103703 Air District Name: SC SIC Code: 3471

SOUTH COAST AQMD Air District Name:

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported Total Organic Hydrocarbon Gases Tons/Yr: .23339 Reactive Organic Gases Tons/Yr: .161595154 Carbon Monoxide Emissions Tons/Yr: .0262 NOX - Oxides of Nitrogen Tons/Yr: .2405 SOX - Oxides of Sulphur Tons/Yr: .00045 Particulate Matter Tons/Yr: .23828927 Part. Matter 10 Micrometers and Smllr Tons/Yr:.0559394992

2006 Year: County Code: 30 Air Basin: SC 103703 Facility ID: Air District Name: SC SIC Code: 3471

SOUTH COAST AQMD Air District Name:

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: .3243427285646612979

Reactive Organic Gases Tons/Yr: .13 Carbon Monoxide Emissions Tons/Yr: .027 NOX - Oxides of Nitrogen Tons/Yr: 1.225

Direction Distance

Elevation Site Database(s) EPA ID Number

HIGHTOWER PLATING & MANUFACTURING CO (Continued)

S108432081

EDR ID Number

SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: .485
Part. Matter 10 Micrometers and Smllr Tons/Yr:.09747

 Year:
 2007

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 103703

 Air District Name:
 SC

 SIC Code:
 3471

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: .3243427285646612979

Reactive Organic Gases Tons/Yr: .13
Carbon Monoxide Emissions Tons/Yr: .027
NOX - Oxides of Nitrogen Tons/Yr: 1.225
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: .485
Part. Matter 10 Micrometers and Smllr Tons/Yr:.09747

 Year:
 2008

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 103703

 Air District Name:
 SC

 SIC Code:
 3399

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: .2699960271929891046

Reactive Organic Gases Tons/Yr: .10827078416

Carbon Monoxide Emissions Tons/Yr: .02
NOX - Oxides of Nitrogen Tons/Yr: 1.12
SOX - Oxides of Sulphur Tons/Yr: .000444

Particulate Matter Tons/Yr: 1.26316971662325 Part. Matter 10 Micrometers and Smllr Tons/Yr:.245924279519024

 Year:
 2009

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 103703

 Air District Name:
 SC

 SIC Code:
 3399

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Carbon Monoxide Emissions Tons/Yr: 0.02

 NOX - Oxides of Nitrogen Tons/Yr:
 0.849999999999999998

 SOX - Oxides of Sulphur Tons/Yr:
 3.78000000000000002

 Particulate Matter Tons/Yr:
 0.37046400000000002

 Part. Matter 10 Micrometers and Smllr Tons/Yr:7.5299660000000004E-2

Year: 2010 County Code: 30

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

HIGHTOWER PLATING & MANUFACTURING CO (Continued)

S108432081

Air Basin: SC 103703 Facility ID: Air District Name: SC SIC Code: 3399

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: 1.8334006552843101 Reactive Organic Gases Tons/Yr: 0.85275999999999996 Carbon Monoxide Emissions Tons/Yr: 2.024000000000001E-2 NOX - Oxides of Nitrogen Tons/Yr: 0.99563000000000001 SOX - Oxides of Sulphur Tons/Yr: 3.400000000000002E-4 Particulate Matter Tons/Yr: 0.39712999999999998

Part. Matter 10 Micrometers and Smllr Tons/Yr:0.0802393

2011 Year: County Code: 30 SC Air Basin: Facility ID: 103703 Air District Name: SC SIC Code: 3399

SOUTH COAST AQMD Air District Name:

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported 1.4019201464 Total Organic Hydrocarbon Gases Tons/Yr: Reactive Organic Gases Tons/Yr: 0.77243 Carbon Monoxide Emissions Tons/Yr: 0.0201 NOX - Oxides of Nitrogen Tons/Yr: 1.10562 SOX - Oxides of Sulphur Tons/Yr: 0.00034 Particulate Matter Tons/Yr: 0.37607166505 Part. Matter 10 Micrometers and Smllr Tons/Yr:0.076762045564

2012 Year: County Code: 30 SC Air Basin: 103703 Facility ID: Air District Name: SC SIC Code: 3399

SOUTH COAST AQMD Air District Name:

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported Total Organic Hydrocarbon Gases Tons/Yr: 3.1822883373 Reactive Organic Gases Tons/Yr: 1.42558 Carbon Monoxide Emissions Tons/Yr: 0.02042 NOX - Oxides of Nitrogen Tons/Yr: 1.531 0.00035 SOX - Oxides of Sulphur Tons/Yr: Particulate Matter Tons/Yr: 0.3465582299 Part. Matter 10 Micrometers and Smllr Tons/Yr:0.070562914427

2013 Year: County Code: 30 Air Basin: SC Facility ID: 103703 Air District Name: SC SIC Code: 3399

SOUTH COAST AQMD Air District Name:

Community Health Air Pollution Info System: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

HIGHTOWER PLATING & MANUFACTURING CO (Continued)

S108432081

EDR ID Number

Consolidated Emission Reporting Rule:
Not reported
Total Organic Hydrocarbon Gases Tons/Yr:
Reactive Organic Gases Tons/Yr:
Carbon Monoxide Emissions Tons/Yr:
NOX - Oxides of Nitrogen Tons/Yr:
SOX - Oxides of Sulphur Tons/Yr:
Particulate Matter Tons/Yr:
O.00033
Particulate Matter Tons/Yr:
O.34624766835
Part. Matter 10 Micrometers and Smllr Tons/Yr:0.069014098339

 Year:
 2014

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 103703

 Air District Name:
 SC

 SIC Code:
 3471

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: 3.1838789718 Reactive Organic Gases Tons/Yr: 2.86505 Carbon Monoxide Emissions Tons/Yr: 0.02691 NOX - Oxides of Nitrogen Tons/Yr: 2.25392 SOX - Oxides of Sulphur Tons/Yr: 0.00032 Particulate Matter Tons/Yr: 0.34874 Part. Matter 10 Micrometers and Smllr Tons/Yr:0.3264906

 Year:
 2015

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 103703

 Air District Name:
 SC

 SIC Code:
 3471

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: 3.0128101436 Reactive Organic Gases Tons/Yr: 2.73087234 Carbon Monoxide Emissions Tons/Yr: 0.024985 NOX - Oxides of Nitrogen Tons/Yr: 2.38 SOX - Oxides of Sulphur Tons/Yr: 0.000291 Particulate Matter Tons/Yr: 0.3487120022 Part. Matter 10 Micrometers and Smllr Tons/Yr:0.32643077057

HAZNET:

envid: \$108432081 Year: 2017

GEPAID: CAD009521089
Contact: KURT KOCH
Telephone: 7146379110
Mailing Name: Not reported

Mailing Address: 2090 N GLASSELL ST Mailing City,St,Zip: ORANGE, CA 926670000

Gen County: Orange TSD EPA ID: NVT330010000

TSD County: 99

Waste Category: Other inorganic solid waste

Disposal Method: Landfill Or Surface Impoundment That Will Be Closed As Landfill (To

Direction Distance

Elevation Site Database(s) EPA ID Number

HIGHTOWER PLATING & MANUFACTURING CO (Continued)

S108432081

EDR ID Number

Include On-Site Treatment And/Or Stabilization)

Tons: 5.3

Cat Decode: Other inorganic solid waste

Method Decode: Landfill Or Surface Impoundment That Will Be Closed As Landfill (To

Include On-Site Treatment And/Or Stabilization)

Facility County: Orange

envid: \$108432081 Year: 2017

GEPAID: CAD009521089
Contact: KURT KOCH
Telephone: 7146379110
Mailing Name: Not reported

Mailing Address: 2090 N GLASSELL ST Mailing City,St,Zip: ORANGE, CA 926670000

Gen County: Orange
TSD EPA ID: NVT330010000

TSD County: 99

Waste Category: Other organic solids

Disposal Method: Landfill Or Surface Impoundment That Will Be Closed As Landfill(To

Include On-Site Treatment And/Or Stabilization)

Tons: 0.325

Cat Decode: Other organic solids

Method Decode: Landfill Or Surface Impoundment That Will Be Closed As Landfill (To

Include On-Site Treatment And/Or Stabilization)

Facility County: Orange

envid: \$108432081 Year: 2017

GEPAID: CAD009521089
Contact: KURT KOCH
Telephone: 7146379110
Mailing Name: Not reported

Mailing Address: 2090 N GLASSELL ST Mailing City,St,Zip: ORANGE, CA 926670000

Gen County: Orange
TSD EPA ID: NVT330010000

TSD County: 99

Waste Category: Liquids with cadmium >= 100 Mg./L

Disposal Method: Landfill Or Surface Impoundment That Will Be Closed As Landfill (To

Include On-Site Treatment And/Or Stabilization)

Tons: 1.668

Cat Decode: Liquids with cadmium >= 100 Mg./L

Method Decode: Landfill Or Surface Impoundment That Will Be Closed As Landfill (To

Include On-Site Treatment And/Or Stabilization)

Facility County: Orange

envid: \$108432081 Year: 2017

GEPAID: CAD009521089
Contact: KURT KOCH
Telephone: 7146379110
Mailing Name: Not reported

Mailing Address: 2090 N GLASSELL ST Mailing City,St,Zip: ORANGE, CA 926670000

Gen County: Orange

TSD EPA ID: MXC130619001

Direction Distance

Elevation Site Database(s) EPA ID Number

HIGHTOWER PLATING & MANUFACTURING CO (Continued)

S108432081

EDR ID Number

TSD County: Not reported Waste Category: Other organic solids

Disposal Method: Energy Recovery At This Site--Use As Fuel(Includes On-Site Fuel

Blending)

Tons: 0.95

Cat Decode: Other organic solids

Method Decode: Energy Recovery At This Site--Use As Fuel(Includes On-Site Fuel

Blending)

Facility County: Orange

envid: \$108432081 Year: 2017

GEPAID: CAD009521089
Contact: KURT KOCH
Telephone: 7146379110
Mailing Name: Not reported

Mailing Address: 2090 N GLASSELL ST Mailing City, St, Zip: ORANGE, CA 926670000

Gen County: Orange

TSD EPA ID: AZD980735500

TSD County: 99

Waste Category: Metal sludge (Alkaline solution (pH >= 12.5) with metals)

Disposal Method: Metals Recovery Including Retoring, Smelting, Chemicals, Ect

Tons: 13.4848

Cat Decode: Metal sludge (Alkaline solution (pH >= 12.5) with metals)
Method Decode: Metals Recovery Including Retoring, Smelting, Chemicals, Ect

Facility County: Orange

<u>Click this hyperlink</u> while viewing on your computer to access 157 additional CA_HAZNET: record(s) in the EDR Site Report.

NPDES:

Facility Status: Active
NPDES Number: CAS000001
Region: 8

Agency Number: 0 Regulatory Measure ID: 208786 Place ID: Not reported 97-03-DWQ Order Number: 8 30NEC003335 WDID: Regulatory Measure Type: Enrollee Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 04/26/1995 Termination Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Discharge Address: 2090 N Glassell St

Discharge Name: Hightower Plating Manufacturing

Discharge City: Orange Discharge State: California Discharge Zip: 92865 Status: Not reported Status Date: Not reported Not reported Operator Name: Operator Address: Not reported Operator City: Not reported Operator State: Not reported

Distance

Elevation Site Database(s) EPA ID Number

HIGHTOWER PLATING & MANUFACTURING CO (Continued)

S108432081

EDR ID Number

Operator Zip: Not reported

NPDES as of 03/2018:

Place Size Unit:

NPDES Number: Not reported Status: Not reported Agency Number: Not reported

Region: Regulatory Measure ID: 208786 Not reported Order Number: Regulatory Measure Type: Industrial Place ID: Not reported WDID: 8 30NEC003335 Program Type: Not reported Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Discharge Name: Not reported Discharge Address: Not reported Discharge City: Not reported Discharge State: Not reported Discharge Zip: Not reported Received Date: 06/26/2017 Processed Date: 04/26/1995 Status: Active Status Date: 06/26/2017 Place Size: 172809

Contact: Bhupesh Amin
Contact Title: Plating Supervisor
Contact Phone: 714-637-9110
Contact Phone Ext: Not reported

Contact Email: plating@anilloinc.com

Operator Name: Hightower Plating Manufacturing

SaFt

Operator Address: 2090 N Glassell St

Operator City:
Operator State:
Operator State:
Operator Zip:
Operator Contact:
Operator Contact:
Operator Contact Title:
Operator Contact Phone:
Operator Contact Phone Ext:
Operator Contact Phone Ext:
Orange
Orange
Operator State:
Operator Contact Phone
Operator Contact Phone Ext:
Orange
Operator State:
Operator Contact Phone
Operator Contact Phone Ext:
Operator Contact Phone
Operator Conta

Operator Contact Email: plating@anilloinc.com Operator Type: **Private Business** Developer: Not reported Developer Address: Not reported Developer City: Not reported Developer State: California Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** 714-637-9110 Emergency Phone Ext: Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported

Direction Distance Elevation

ation Site Database(s) EPA ID Number

HIGHTOWER PLATING & MANUFACTURING CO (Continued)

S108432081

EDR ID Number

Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Not reported Constype Recons Ind: Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind:

Receiving Water Name:
Certifier:
Bhupesh Amin
Certifier Title:
Plating Supervisor
Certification Date:
26-JUN-17

Primary Sic: 3471-Electroplating, Polishing, Anodizing, and Coloring

Secondary Sic: 3469-Metal Stamping, NEC

Tertiary Sic: Not reported

NPDES Number: CAS000001 Active Status: Agency Number: 0 Region: Regulatory Measure ID: 208786 Order Number: 97-03-DWQ Regulatory Measure Type: Enrollee Place ID: Not reported WDID: 8 30NEC003335 Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 04/26/1995 Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported

Discharge Name: Hightower Plating Manufacturing

Discharge Address: 2090 N Glassell St

Discharge City: Orange Discharge State: California Discharge Zip: 92865 Received Date: Not reported Processed Date: Not reported Status: Not reported Not reported Status Date: Place Size: Not reported Place Size Unit: Not reported Contact: Not reported Contact Title: Not reported Contact Phone: Not reported Contact Phone Ext: Not reported Contact Email: Not reported Operator Name: Not reported Operator Address: Not reported Operator City: Not reported Operator State: Not reported Not reported Operator Zip: **Operator Contact:** Not reported

Distance Elevation Site

Database(s)

HIGHTOWER PLATING & MANUFACTURING CO (Continued)

S108432081

EDR ID Number

EPA ID Number

Operator Contact Title: Not reported Operator Contact Phone: Not reported Not reported Operator Contact Phone Ext: Not reported Operator Contact Email: Operator Type: Not reported Not reported Developer: Not reported Developer Address: Developer City: Not reported Developer State: Not reported Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** Not reported **Emergency Phone Ext:** Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Not reported Constype Industrial Ind: Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind: Not reported Receiving Water Name: Not reported Certifier: Not reported Certifier Title: Not reported Not reported Certification Date: Primary Sic: Not reported Secondary Sic: Not reported **Tertiary Sic:** Not reported

Facility Status: Not reported NPDES Number: Not reported Not reported Region: Not reported Agency Number: Regulatory Measure ID: Not reported Place ID: Not reported Order Number: Not reported WDID: 8 30NEC003335 Industrial Regulatory Measure Type: Program Type: Not reported Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Discharge Address: Not reported Discharge Name: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

HIGHTOWER PLATING & MANUFACTURING CO (Continued)

S108432081

EDR ID Number

Discharge City:

Not reported
Discharge State:

Not reported
Discharge Zip:

Not reported
Status:

Active
Status Date:

06/26/2017

Operator Name: Hightower Plating Manufacturing

Operator Address: 2090 N Glassell St

Operator City: Orange
Operator State: California
Operator Zip: 92865

NPDES as of 03/2018:

NPDES Number: Not reported Status: Not reported Agency Number: Not reported Region: 8

Regulatory Measure ID: 208786 Order Number: Not reported Regulatory Measure Type: Industrial Place ID: Not reported WDID: 8 30NEC003335 Program Type: Not reported Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Not reported Termination Date Of Regulatory Measure: Discharge Name: Not reported Discharge Address: Not reported Discharge City: Not reported Discharge State: Not reported Discharge Zip: Not reported Received Date: 06/26/2017 Processed Date: 04/26/1995 Status: Active Status Date: 06/26/2017 Place Size: 172809 Place Size Unit: SqFt

Contact: Bhupesh Amin
Contact Title: Plating Supervisor
Contact Phone: 714-637-9110
Contact Phone Ext: Not reported

Contact Email: plating@anilloinc.com

Operator Name: Hightower Plating Manufacturing

Operator Address: 2090 N Glassell St

Operator City:
Operator State:
Operator Zip:
Operator Contact:
Operator Contact:
Operator Contact Title:
Operator Contact Phone:
Operator Contact Phone Ext:

Operator Contact Email: plating@anilloinc.com
Operator Type: Private Business
Developer: Not reported
Developer Address: Not reported
Developer City: Not reported
Developer State: California
Developer Zip: Not reported

MAP FINDINGS Map ID Direction

Distance

Elevation Site Database(s) **EPA ID Number**

HIGHTOWER PLATING & MANUFACTURING CO (Continued)

S108432081

EDR ID Number

Developer Contact: Not reported **Developer Contact Title:** Not reported Not reported Constype Linear Utility Ind: Emergency Phone: 714-637-9110 **Emergency Phone Ext:** Not reported Constype Above Ground Ind: Not reported Not reported Constype Below Ground Ind: Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind: Ν

Receiving Water Name: Santa Ana River Certifier: Bhupesh Amin Certifier Title: **Plating Supervisor** Certification Date: 26-JUN-17

Primary Sic:

3471-Electroplating, Plating, Polishing, Anodizing, and Coloring

Secondary Sic: 3469-Metal Stamping, NEC

Tertiary Sic: Not reported

NPDES Number: CAS000001 Status: Active Agency Number: Region: 8 Regulatory Measure ID: 208786 97-03-DWQ Order Number: Regulatory Measure Type: Enrollee Place ID: Not reported 8 30NEC003335 WDID: Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 04/26/1995 **Expiration Date Of Regulatory Measure:** Not reported Termination Date Of Regulatory Measure: Not reported

Discharge Name: Hightower Plating Manufacturing

2090 N Glassell St Discharge Address:

Discharge City: Orange Discharge State: California Discharge Zip: 92865 Received Date: Not reported Processed Date: Not reported Status: Not reported Status Date: Not reported Place Size: Not reported Place Size Unit: Not reported Not reported Contact: Contact Title: Not reported

Direction Distance Elevation

nce EDR ID Number ation Site Database(s) EPA ID Number

HIGHTOWER PLATING & MANUFACTURING CO (Continued)

S108432081

Contact Phone: Not reported Contact Phone Ext: Not reported Not reported Contact Email: Not reported Operator Name: Operator Address: Not reported Operator City: Not reported Operator State: Not reported Operator Zip: Not reported **Operator Contact:** Not reported Operator Contact Title: Not reported Operator Contact Phone: Not reported Operator Contact Phone Ext: Not reported Operator Contact Email: Not reported Operator Type: Not reported Developer: Not reported Developer Address: Not reported Developer City: Not reported Developer State: Not reported Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** Not reported **Emergency Phone Ext:** Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind: Not reported Receiving Water Name: Not reported Certifier: Not reported Certifier Title: Not reported Certification Date: Not reported Primary Sic: Not reported Secondary Sic: Not reported Tertiary Sic: Not reported

CIWQS:

Agency: Hightower Plating Manufacturing
Agency Address: 2090 N Glassell St, Orange, CA 92865

Place/Project Type: Industrial - Electroplating, Plating, Polishing, Anodizing, and

Coloring

SIC/NAICS: Multiple Region: 8

Direction Distance

Distance EDR ID Number
Elevation Site EPA ID Number

HIGHTOWER PLATING & MANUFACTURING CO (Continued)

S108432081

1000244299

CAD009521089

RCRA-LQG

Program: INDSTW
Regulatory Measure Status: Active

Regulatory Measure Type: Storm water industrial Order Number: 2014-0057-DWQ WDID: 8 30NEC003335 NPDES Number: CAS000001 Adoption Date: Not reported Effective Date: 04/26/1995 Termination Date: Not reported Expiration/Review Date: Not reported Design Flow: Not reported Major/Minor: Not reported Complexity: Not reported TTWQ: Not reported

Enforcement Actions within 5 years: 0
Violations within 5 years: 0
Latitude: 33.82273

Longitude: -117.85305

E22 HIGHTOWER PLATING AND MANUFACTURING COMPANY

WNW 2090 NORTH GLASSELL STREET

EPA ID:

1/8-1/4 ORANGE, CA 92865

0.141 mi.

743 ft. Site 5 of 5 in cluster E

Relative: RCRA-LQG:

Lower Date form received by agency: 02/25/2016

Actual: Facility name: HIGHTOWER PLATING AND MANUFACTURING COMPANY

195 ft. Facility address: 2090 NORTH GLASSELL STREET

ORANGE, CA 92865 CAD009521089

Mailing address: NORTH GLASSELL STREET

ORANGE, CA 92865

Contact: BHUPESH AMIN

Contact address: NORTH GLASSELL STREET

ORANGE, CA 92865

Contact country: US

Contact telephone: 714-637-9110

Contact email: PLATING@ANILLOINC.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: HIGHTOWER PLATING AND MANUFACTURING CO.

Direction Distance Elevation

Site Database(s) EPA ID Number

HIGHTOWER PLATING AND MANUFACTURING COMPANY (Continued)

1000244299

EDR ID Number

Owner/operator address: NORTH GLASSELL STREET

ORANGE, CA 92865

Owner/operator country: US

Owner/operator telephone: 714-637-9110 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: 06/28/1954 Owner/Op end date: Not reported

Owner/operator name: HIGHTOWER PLATING AND MANUFACTURING CO.

Owner/operator address: Not reported

Not reported

Not reported

Owner/operator country: Not reported Owner/operator telephone: Not reported Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Operator 06/28/1954 Owner/Op start date:

Handler Activities Summary:

Owner/Op end date:

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

Waste code: 135

. Waste name: Unspecified aqueous solution

. Waste code: 171

Waste name: Metal sludge (see 121)

. Waste code: 181

Waste name: Other inorganic solid waste

Waste code: 212

Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

Waste code: 213

Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

HIGHTOWER PLATING AND MANUFACTURING COMPANY (Continued)

1000244299

. Waste code: 221

. Waste name: Waste oil and mixed oil

. Waste code: 223

. Waste name: Unspecified oil-containing waste

Waste code: 331

Waste name: Off-specification, aged, or surplus organics

. Waste code: 352

. Waste name: Other organic solids

Waste code: 722

. Waste name: Liquids with cadmium > 100 mg/l

Waste code: 723

Waste name: Liquids with chromium (VI) > 500 mg/l

Waste code: 726

. Waste name: Liquids with nickel > 134 mg/l

Waste code: D001

Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. 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: D006
Waste name: CADMIUM

Waste code: D007

Waste name: CHROMIUM

Waste code: D008
Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

Waste code: F005

. Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL

KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE,

2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS

Direction Distance Elevation

Site Database(s) EPA ID Number

HIGHTOWER PLATING AND MANUFACTURING COMPANY (Continued)

1000244299

EDR ID Number

LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F006

. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT

FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

Waste code: F007

Waste name: SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS

Waste code: F008

Waste name: PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM

ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.

Historical Generators:

Date form received by agency: 03/01/2014

Site name: HIGHTOWER PLATING AND MANUFACTURING COMPANY

Classification: Large Quantity Generator

Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

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: D003

. Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS

NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE

OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: D005
Waste name: BARIUM

Waste code: D006
Waste name: CADMIUM

Waste code: D007

. Waste name: CHROMIUM

Direction Distance Elevation

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HIGHTOWER PLATING AND MANUFACTURING COMPANY (Continued)

1000244299

. Waste code: D008 . Waste name: LEAD

Waste code: D035

. Waste name: METHYL ETHYL KETONE

Waste code: F003

. Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL

ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL

ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT

MIXTURES.

. Waste code: F005

Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL

KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE,

2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF

THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F006

. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT

FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

. Waste code: F007

Waste name: SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS

Date form received by agency: 03/15/2012

Site name: HIGHTOWER PLATING AND MANUFACTURING CORPORATION

Classification: Large Quantity Generator

Waste code: 135

. Waste name: Unspecified aqueous solution

Waste code: 171

. Waste name: Metal sludge (see 121)

. Waste code: 181

Waste name: Other inorganic solid waste

Waste code: 221

Waste name: Waste oil and mixed oil

. Waste code: 223

Waste name: Unspecified oil-containing waste

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

HIGHTOWER PLATING AND MANUFACTURING COMPANY (Continued)

1000244299

. Waste code: 331

. Waste name: Off-specification, aged, or surplus organics

. Waste code: 352

. Waste name: Other organic solids

. Waste code: 711

Waste name: Liquids with cyanides > 1000 mg/l

. Waste code: 722

. Waste name: Liquids with cadmium > 100 mg/l

Waste code: 726

Waste name: Liquids with nickel > 134 mg/l

Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

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: D003

. Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS

NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE

OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

. Waste code: D005 . Waste name: BARIUM

Waste code: D006
Waste name: CADMIUM

Waste code: D007

Waste name: CHROMIUM

. Waste code: D008 . Waste name: LEAD

Waste code: D009
Waste name: MERCURY

Waste code: D035

. Waste name: METHYL ETHYL KETONE

Direction Distance Elevation

EDR ID Number
Site Database(s) EPA ID Number

HIGHTOWER PLATING AND MANUFACTURING COMPANY (Continued)

1000244299

. Waste code: F003

. Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL

ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT

MIXTURES.

. Waste code: F005

. Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL

KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE,

2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF

THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F006

. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT

FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

. Waste code: F007

. Waste name: SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS

Waste code: F008

. Waste name: PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM

ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.

Date form received by agency: 02/09/2010

Site name: HIGHTOWER PLATING AND MANUFACTURING CORPORATION

Classification: Large Quantity Generator

Waste code: 135

. Waste name: Unspecified aqueous solution

. Waste code: 171

Waste name: Metal sludge (see 121)

Waste code: 181

. Waste name: Other inorganic solid waste

Waste code: 221

Waste name: Waste oil and mixed oil

. Waste code: 223

. Waste name: Unspecified oil-containing waste

. Waste code: 331

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

HIGHTOWER PLATING AND MANUFACTURING COMPANY (Continued)

1000244299

. Waste name: Off-specification, aged, or surplus organics

. Waste code: 352

. Waste name: Other organic solids

. Waste code: 722

. Waste name: Liquids with cadmium > 100 mg/l

Waste code: 726

. Waste name: Liquids with nickel > 134 mg/l

. Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

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: D003

. Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS

NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE

OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

. Waste code: D005
. Waste name: BARIUM

Waste code: D006
Waste name: CADMIUM

Waste code: D007

Waste name: CHROMIUM

Waste code: D008
Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

Waste code: D035

. Waste name: METHYL ETHYL KETONE

Waste code: F005

. Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL

KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE,

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HIGHTOWER PLATING AND MANUFACTURING COMPANY (Continued)

1000244299

EDR ID Number

2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F006

. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT

FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

Waste code: F007

Waste name: SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS

Waste code: F008

. Waste name: PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM

ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.

Date form received by agency: 02/20/2008

Site name: HIGHTOWER PLATING & MANUFACTURING CORP

Classification: Not a generator, verified

. Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

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: D003

. Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS

NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE

OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

. Waste code: D005 . Waste name: BARIUM

. Waste code: D006 . Waste name: CADMIUM

Distance Elevation

tion Site Database(s) EPA ID Number

HIGHTOWER PLATING AND MANUFACTURING COMPANY (Continued)

1000244299

EDR ID Number

. Waste code: D007 . Waste name: CHROMIUM

. Waste code: D008 . Waste name: LEAD

. Waste code: D009 . Waste name: MERCURY

Waste code: D035

. Waste name: METHYL ETHYL KETONE

Waste code: F005

. Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL

KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE,

2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF

THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F006

. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT

FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

. Waste code: F007

. Waste name: SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS

Waste code: F008

. Waste name: PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM

ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.

Date form received by agency: 02/24/2006

Site name: HIGHTOWER PLATING & MFG CORP

Classification: Large Quantity Generator

Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

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

Direction Distance Elevation

Site Database(s) EPA ID Number

HIGHTOWER PLATING AND MANUFACTURING COMPANY (Continued)

1000244299

EDR ID Number

DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D003

. Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS

NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE

OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

. Waste code: D006 . Waste name: CADMIUM

Waste code: D007
Waste name: CHROMIUM

Waste code: F006

. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT

FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

Waste code: F008

. Waste name: PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM

ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.

Date form received by agency: 03/08/2004

Site name: HIGHTOWER PLATING AND MANUFACTURING CO

Classification: Large Quantity Generator

Waste code: D006
Waste name: CADMIUM

. Waste code: D007 . Waste name: CHROMIUM

Waste code: F006

Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT

FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

Waste code: F008

Waste name: PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM

ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.

Date form received by agency: 02/08/2002

Site name: HIGHTOWER PLATING AND MANUFACTURING COMP

Classification: Large Quantity Generator

. Waste code: D006 . Waste name: CADMIUM

Direction Distance

Elevation Site Database(s) EPA ID Number

HIGHTOWER PLATING AND MANUFACTURING COMPANY (Continued)

1000244299

EDR ID Number

. Waste code: D007 . Waste name: CHROMIUM

. Waste code: F006

. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT

FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

Date form received by agency: 10/12/2000

Site name: HIGHTOWER PLATING & MFG. CO.

Classification: Large Quantity Generator

Date form received by agency: 03/04/1999

Site name: HIGHTOWER PLATING & MFG. CO

Classification: Large Quantity Generator

Date form received by agency: 03/31/1998

Site name: HIGHTOWER PLATING AND MFG CORP

Classification: Large Quantity Generator

Date form received by agency: 09/01/1996

Site name: HIGHTOWER PLATING AND MFG CORP

Classification: Large Quantity Generator

Date form received by agency: 02/27/1996

Site name: ANILLO IND.,INC.DBA HIGHTOWER PLATING

Classification: Large Quantity Generator

Date form received by agency: 02/21/1995

Site name: ANILLO IND., INC. DBA HIGHTOWER

Classification: Large Quantity Generator

Date form received by agency: 08/15/1980

Site name: HIGHTOWER PLATING AND MFG CORP

Classification: Large Quantity Generator

Biennial Reports:

Last Biennial Reporting Year: 2017

Annual Waste Handled:

Waste code: D001

Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Amount (Lbs): 930

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

Direction Distance

Elevation Site Database(s) EPA ID Number

HIGHTOWER PLATING AND MANUFACTURING COMPANY (Continued)

1000244299

EDR ID Number

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.

Amount (Lbs): 6255

Waste code: D006
Waste name: CADMIUM
Amount (Lbs): 4170

Waste code: D007
Waste name: CHROMIUM
Amount (Lbs): 18655

Waste code: F006

Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT

FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

Amount (Lbs): 45620

Facility Has Received Notices of Violations:

Regulation violated: Not reported

Area of violation: Generators - General

Date violation determined: 01/27/2010
Date achieved compliance: Not reported
Violation lead agency: State

Enforcement action: Not reported Not reported Enforcement action date: Not reported Enf. disposition status: 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

Regulation violated: Not reported

Area of violation: TSD - General Facility Standards

Date violation determined: 01/22/2003
Date achieved compliance: 02/22/2004
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 01/22/2003

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Paid penalty amount: Not reported
Not reported
Not reported

Regulation violated: Not reported

Area of violation: TSD - General Facility Standards

Direction Distance

Elevation Site Database(s) EPA ID Number

HIGHTOWER PLATING AND MANUFACTURING COMPANY (Continued)

1000244299

EDR ID Number

Date violation determined: 01/22/2003
Date achieved compliance: 02/22/2004
Violation lead agency: State

Enforcement action: SINGLE SITE CA/FO

Enforcement action date: 07/08/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 162500
Paid penalty amount: Not reported

Regulation violated: Not reported

Area of violation: TSD - General Facility Standards
Date violation determined: 01/22/2003

Date achieved compliance: 02/22/2004 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

Regulation violated: Not reported

Area of violation: TSD - General Facility Standards

Date violation determined: 01/22/2003
Date achieved compliance: 02/22/2004
Violation lead agency: State

Enforcement action: LETTER OF INTENT TO INITIATE ENFORCEMENT ACTION

Enforcement action date: 09/11/2003
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 - 262.10-12.A Area of violation: Generators - General

Date violation determined: 11/15/1993
Date achieved compliance: 09/29/1998
Violation lead agency: EPA

Enforcement action: Not reported Not reported Enforcement action date: 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

Regulation violated: F - 262.30-34.C Area of violation: Generators - General

Date violation determined: 11/15/1993

Direction Distance Elevation

vation Site Database(s) EPA ID Number

HIGHTOWER PLATING AND MANUFACTURING COMPANY (Continued)

1000244299

EDR ID Number

Date achieved compliance: 09/29/1998 **EPA** Violation lead agency: 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

Regulation violated: F - 262.20-23.B Area of violation: Generators - General

Date violation determined: 11/15/1993
Date achieved compliance: 09/29/1998
Violation lead agency: EPA

Enforcement action: Not reported Enforcement action date: Not reported Enf. disposition status: Not reported Enf. disp. status date: Not reported Not reported Enforcement lead agency: Proposed penalty amount: Not reported Final penalty amount: Not reported Paid penalty amount: Not reported

Regulation violated: F - 262.50-60
Area of violation: Generators - General

Date violation determined: 11/15/1993
Date achieved compliance: 09/29/1998
Violation lead agency: EPA

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

Regulation violated: F - 268.7
Area of violation: LDR - General
Date violation determined: 11/15/1993
Date achieved compliance: 09/29/1998
Violation lead agency: EPA

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

Regulation violated: F - 262.10-12.A Area of violation: Generators - General

Date violation determined: 09/28/1993
Date achieved compliance: 09/29/1998

Direction Distance

Elevation Site Database(s) EPA ID Number

HIGHTOWER PLATING AND MANUFACTURING COMPANY (Continued)

1000244299

EDR ID Number

Violation lead agency: EPA

Enforcement action: INITIAL 3008(A) COMPLIANCE

Enforcement action date: 03/08/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 253300
Final penalty amount: 94000
Paid penalty amount: Not reported

Regulation violated: F - 262.30-34.C Area of violation: Generators - General

Date violation determined: 09/28/1993
Date achieved compliance: 09/29/1998
Violation lead agency: EPA

Enforcement action: INITIAL 3008(A) COMPLIANCE

Enforcement action date: 03/08/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 253300
Final penalty amount: 94000

Paid penalty amount: Not reported

Regulation violated: F - 268 ALL
Area of violation: LDR - General
Date violation determined: 09/28/1993
Date achieved compliance: 09/29/1998
Violation lead agency: EPA

Enforcement action: FINAL 3008(A) COMPLIANCE ORDER

Enforcement action date: 09/30/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA

Proposed penalty amount: Not reported Final penalty amount: 94000 Paid penalty amount: 95000

Regulation violated: F - 262.20-23.B Area of violation: Generators - General

Date violation determined: 09/28/1993
Date achieved compliance: 09/29/1998
Violation lead agency: EPA

Enforcement action: INITIAL 3008(A) COMPLIANCE

Enforcement action date: 03/08/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 253300
Final penalty amount: 94000
Paid penalty amount: Not reported

Regulation violated: F - 262.10-12.A
Area of violation: Generators - General

Date violation determined: 09/28/1993
Date achieved compliance: 09/29/1998
Violation lead agency: EPA

Direction Distance

Elevation Site Database(s) EPA ID Number

HIGHTOWER PLATING AND MANUFACTURING COMPANY (Continued)

1000244299

EDR ID Number

Enforcement action: FINAL 3008(A) COMPLIANCE ORDER

95000

Enforcement action date: 09/30/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Proposed 94000

Regulation violated: F - 268 ALL
Area of violation: LDR - General
Date violation determined: 09/28/1993
Date achieved compliance: 09/29/1998

Violation lead agency: EPA

Paid penalty amount:

Enforcement action: INITIAL 3008(A) COMPLIANCE

Enforcement action date: 03/08/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 253300
Final penalty amount: 94000
Paid penalty amount: Not reported

Regulation violated: F - 262.20-23.B Area of violation: Generators - General

Date violation determined: 09/28/1993
Date achieved compliance: 09/29/1998
Violation lead agency: EPA

Enforcement action: FINAL 3008(A) COMPLIANCE ORDER

Enforcement action date: 09/30/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 94000
Paid penalty amount: 95000

Regulation violated: F - 262.30-34.C Area of violation: Generators - General

Date violation determined: 09/28/1993
Date achieved compliance: 09/29/1998
Violation lead agency: EPA

Enforcement action: FINAL 3008(A) COMPLIANCE ORDER

Enforcement action date: 09/30/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Paid penalty amount: 94000
Paid penalty amount: 95000

Evaluation Action Summary:

Evaluation date: 04/28/2016

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:

Date achieved compliance:

Evaluation lead agency:

Not reported
Not reported
State

Direction Distance

Elevation Site Database(s) EPA ID Number

HIGHTOWER PLATING AND MANUFACTURING COMPANY (Continued)

1000244299

EDR ID Number

Evaluation date: 04/21/2016

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:
Date achieved compliance:
Evaluation lead agency:

Not reported
Not reported
State

Evaluation date: 01/06/2015

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:

Date achieved compliance:

Evaluation lead agency:

Not reported
Not reported
State

Evaluation date: 09/05/2014

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:

Date achieved compliance:

Evaluation lead agency:

Not reported

Not reported

State

Evaluation date: 09/04/2014

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:

Date achieved compliance:

Evaluation lead agency:

Not reported
Not reported
State

Evaluation date: 08/25/2014

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:

Date achieved compliance:

Evaluation lead agency:

Not reported
Not reported
State

Evaluation date: 08/20/2014

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:
Date achieved compliance:
Evaluation lead agency:
Not reported
State

Evaluation date: 03/07/2014

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported Evaluation lead agency: State

Evaluation date: 03/06/2014

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:

Date achieved compliance:

Evaluation lead agency:

Not reported

Not reported

State

Evaluation date: 01/15/2013

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:

Date achieved compliance:

Evaluation lead agency:

Not reported

Not reported

State

Evaluation date: 02/07/2012

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

HIGHTOWER PLATING AND MANUFACTURING COMPANY (Continued)

1000244299

EDR ID Number

Date achieved compliance: Not reported Evaluation lead agency: State

Evaluation date: 06/09/2011

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:
Date achieved compliance:
Evaluation lead agency:
Not reported
Not reported
State

Evaluation date: 01/27/2010

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: Not reported Evaluation lead agency: State

Evaluation date: 12/29/2009

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:
Date achieved compliance:
Evaluation lead agency:
Not reported
Not reported
State

Evaluation date: 06/25/2009

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:

Date achieved compliance:

Evaluation lead agency:

Not reported

Not reported

State

Evaluation date: 06/26/2006

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:

Date achieved compliance:

Evaluation lead agency:

Not reported

Not reported

Local

Evaluation date: 06/28/2005

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:

Date achieved compliance:

Not reported

Not reported

Evaluation lead agency: State Contractor/Grantee

Evaluation date: 02/22/2004

Evaluation: NOT A SIGNIFICANT NON-COMPLIER

Area of violation:

Date achieved compliance:

Evaluation lead agency:

Not reported
Not reported
State

Evaluation date: 09/29/2003

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported

Evaluation lead agency: State Contractor/Grantee

Evaluation date: 01/22/2003

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: TSD - General Facility Standards

Date achieved compliance: 02/22/2004 Evaluation lead agency: State

Direction Distance

EDR ID Number Elevation Site **EPA ID Number** Database(s)

HIGHTOWER PLATING AND MANUFACTURING COMPANY (Continued)

1000244299

Evaluation date: 01/22/2003

SIGNIFICANT NON-COMPLIER Evaluation:

Area of violation: Not reported Not reported Date achieved compliance: Evaluation lead agency: State

Evaluation date: 09/29/1998

Evaluation: NOT A SIGNIFICANT NON-COMPLIER

Area of violation: Not reported Date achieved compliance: Not reported Evaluation lead agency: **EPA**

Evaluation date: 12/10/1993

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported

State Contractor/Grantee Evaluation lead agency:

Evaluation date: 11/15/1993

SIGNIFICANT NON-COMPLIER Evaluation:

Area of violation: Not reported Date achieved compliance: Not reported

EPA Evaluation lead agency:

Evaluation date: 09/28/1993

COMPLIANCE EVALUATION INSPECTION ON-SITE Evaluation:

Area of violation: Generators - General

Date achieved compliance: 09/29/1998 Evaluation lead agency: **EPA**

Evaluation date: 09/28/1993

COMPLIANCE EVALUATION INSPECTION ON-SITE Evaluation:

Area of violation: LDR - General Date achieved compliance: 09/29/1998 Evaluation lead agency: **EPA**

Evaluation date: 01/07/1981

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported **EPA** Evaluation lead agency:

30-AB-0363

F23 WASTE MANAGEMENT OF ORANGE TRANSFER STATION West

2050 NORTH GLASSELL AVENUE

1/8-1/4 **ORANGE, CA 92865**

0.158 mi.

832 ft. Site 1 of 4 in cluster F

SWF/LF (SWIS): Relative: Lower Facility ID:

Lat/Long: 33.82155 / -117.8543 Actual:

Owner Name: Hambarian Properties 192 ft. Owner Telephone: 7146377970

Owner Address: Not reported Owner Address2: 10401 Carmel Drive Owner City, St, Zip: Villa Park, CA 92861

Operational Status: Active

Operator: USA Waste Of California, Inc.

Operator Phone: 7144802333 CA SWF/LF S102361456

N/A

Direction Distance

Elevation Site Database(s) EPA ID Number

WASTE MANAGEMENT OF ORANGE TRANSFER STATION (Continued)

S102361456

EDR ID Number

Operator Address: Not reported

Operator Address2: 2050 N. Glassell Street
Operator City,St,Zip: Orange, CA 92865
Permit Date: 03/30/2017
Permit Status: Permitted

Permitted Acreage:

Activity: Large Volume Transfer/Proc Facility

Regulation Status: Permitted
Landuse Name: Not reported
GIS Source: Map

Category: Transfer/Processing

Unit Number: 01
Inspection Frequency: Monthly

Accepted Waste: Construction/demolition, Food Wastes, Mixed municipal

Not reported Closure Date: Closure Type: Not reported Disposal Acreage: Not reported SWIS Num: 30-AB-0363 Waste Discharge Requirement Num: Not reported Program Type: Not reported Permitted Throughput with Units: 1500 Actual Throughput with Units: Tons/day Permitted Capacity with Units: 1880 Remaining Capacity: Not reported Remaining Capacity with Units: Tons/day 33.82155 / -117.8543 Lat/Long:

LOS ANGELES CO. LF:

Site ID: 2325

Alt. Address: Not reported
Site Contact: Not reported
Site Contact Phone: (714) 480-2315
Site Email: Not reported

Site Website: http://www.wmorangecounty.com/services/transfer.asp

Site Type: Out-of-County Facility

Site SWIS Number: 30-AB-0363
Beginning Operation Date: 4-Sep-96
Ending Operation Date: Not reported

Local Enforcement Agency: County of Orange Health Care Agency

Maximun Depth Fill(Ft): Not reported Permitted Capacity: 1500

Present Use: Transfer/Processing Facility

Remaining Capacity(Million): Not reported Status: Active

Waste Accepted: Construction & Demolition; Green Materials; Household Trash; Industrial Non-Hazardous;

Hours of Operation: Monday - Friday 7 am - 5 pm; Saturday 6 am - 2 pm

Disposal Area (Acre): Not reported

Detail As Of 01/2014:

Operator Name: USA Waste of California, Inc.
Operator Address: 633 E Broadway Room 209

Operator City/State/Zip: Glendale, CA 91206
Operator Contact: Jesus Gonzales
Operator Telephone: (626) 334-0719
Operator Email: jgonzal6@wm.com
Owner Name: Hambarian Properties
Owner Address: 12 TIDE LINE BLUFF

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

WASTE MANAGEMENT OF ORANGE TRANSFER STATION (Continued)

S102361456

Owner City/State/Zip: NEWPORT BEACH, ca 92657

Owner Contact: Not reported Owner Telephone: (714) 637-7970 Owner Email: Not reported

ORANGE RESOURCE RECOVERY SYSTEM CA UST U004061491 F24

N/A

N/A

CA PROC

West 2050 N. GLASSELL 1/8-1/4 ORANGE, CA 92865

0.158 mi.

Site 2 of 4 in cluster F 832 ft.

UST: Relative:

Lower Facility ID: 30-030-800070 Permitting Agency: ORANGE, CITY OF Actual: 33.8229489 Latitude: 192 ft. Longitude: -117.852566

F25 ORANGE RESOURCE RECYCLING **CA SWEEPS UST** S104577451

2050 N GLASSELL West 1/8-1/4 ORANGE, CA 92665

0.158 mi.

832 ft. Site 3 of 4 in cluster F

Relative: SWEEPS UST:

Lower Status: Active Comp Number: 800070 Actual: 192 ft. Number:

Board Of Equalization: 44-035735 03-02-94 Referral Date: Action Date: 03-02-94 Created Date: 03-02-94

Owner Tank Id: Not reported SWRCB Tank Id: 30-030-800070-800070

Tank Status: Capacity: 12000 03-02-94 Active Date: M.V. FUEL Tank Use: STG: Ρ DIESEL Content:

Number Of Tanks:

PROC:

18883 Reg Id: PR18883.001 Cert Id: Organization Id: 18883

Organization Name: Waste Management of Orange

P O Box 73356 Mailing Address: Mailing City: Chicago Mailing State: Mailing Zip Code: 60673 Website: Not reported Email: Not reported Phone Number: (714) 450-4357

Rural: N/A

Operation Begin Date: 10/13/2012

Aluminium:

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

ORANGE RESOURCE RECYCLING (Continued)

S104577451

Glass: Y
Plastic: Y
Bimetal: N

Hours of Operation: Mon - Fri 6:00 am - 5:00 pm; Sat 6:00 am - 2:00 pm; Sun Closed

F26 WASTE MANAGEMENT OF ORANGE COUNTY CA UST U004264329

N/A

West 2050 N GLASSELL ST 1/8-1/4 ORANGE, CA 92865

0.158 mi.

832 ft. Site 4 of 4 in cluster F

Relative: UST:

Lower Facility ID: FA0026139

Actual: Permitting Agency: Orange County Environmental Health

192 ft. Latitude: 33.8216 Longitude: -117.85391

 27
 HONEYCUTT TEAR OFF
 RCRA-SQG
 1000905218

 NNW
 2163 N GLASSELL ST
 FINDS
 CA0000371278

1/8-1/4 ORANGE, CA 92865 ECHO
0.170 mi. CA HAZNET

899 ft.

Relative: RCRA-SQG:

Lower Date form received by agency: 06/16/1994

Actual: Facility name: HONEYCUTT TEAR OFF 200 ft. Facility address: 2163 N GLASSELL ST

ORANGE, CA 92865
EPA ID: CA0000371278
Contact: RICK MAC LEAN
Contact address: 2163 N GLASSELL ST

ORANGE, CA 92665

Contact country: US

Contact telephone: 714-974-8636 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: JOHN HONEYCUTT
Owner/operator address: 2163 N GLASSELL ST

ORANGE, CA 92665

Owner/operator country: Not reported Owner/operator telephone: 714-974-8636 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: Not reported Owner/Op end date: Not reported

Distance Elevation

n Site Database(s) EPA ID Number

HONEYCUTT TEAR OFF (Continued)

1000905218

EDR ID Number

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: Nο 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: 110008258660

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.

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000905218 Registry ID: 110008258660

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110008258660

HAZNET:

envid: 1000905218 Year: 1999

GEPAID: CA0000371278
Contact: JOHN HONEYCUTT

Telephone: 7149748636 Mailing Name: Not reported

Mailing Address: 2163 N GLASSELL ST Mailing City,St,Zip: ORANGE, CA 928653307

Gen County: Not reported
TSD EPA ID: CAT000613893
TSD County: Not reported

Waste Category: Aqueous solution with total organic residues less than 10 percent

Disposal Method: Transfer Station

Tons: .0625 Cat Decode: Not reported

Direction Distance

EDR ID Number Elevation Site **EPA ID Number** Database(s)

HONEYCUTT TEAR OFF (Continued)

1000905218

92665CVTCH250EA

CA ENVIROSTOR

TRIS

CA WDS

CA CIWQS

Method Decode: Not reported Facility County: Orange

1000905218 envid: Year: 1998

GEPAID: CA0000371278 Contact: JOHN HONEYCUTT Telephone: 7149748636 Mailing Name: Not reported

Mailing Address: 2163 N GLASSELL ST Mailing City, St, Zip: ORANGE, CA 928653307

Gen County: Not reported CAT000613893 TSD EPA ID: TSD County: Not reported

Waste Category: Aqueous solution with total organic residues less than 10 percent

Disposal Method: **Transfer Station**

.0417 Tons: Cat Decode: Not reported Method Decode: Not reported Facility County: Orange

G28 CIRTECH INC RCRA-LQG 1000398155

250 EAST EMERSON AVE North 1/8-1/4 ORANGE, CA 92865

0.175 mi. **RAATS** 922 ft. Site 1 of 2 in cluster G **RI MANIFEST CA NPDES** Relative:

Higher

Actual:

RCRA-LQG: 203 ft.

> Date form received by agency: 02/22/2016 Facility name: CIRTECH INC

250 EAST EMERSON AVE Facility address:

ORANGE, CA 92865 EPA ID: CAD981388655

Mailing address: EAST EMERSON AVE ORANGE, CA 92865

JUAN P MARTINEZ Contact: Contact address: EAST EMERSON AVE ORANGE, CA 92865

Contact country: US

714-921-0860 Contact telephone:

243 Telephone ext.:

JMARTINEZ@CIRTECH.COM Contact email:

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

Direction Distance Elevation

EDR ID Number
tion Site Database(s) EPA ID Number

CIRTECH INC (Continued)

1000398155

hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name: BRAD REESE

Owner/operator address: EAST EMERSON AVE

ORANGE, CA 92865

Owner/operator country: US

Owner/operator telephone: 714-921-0860 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: 01/01/1970 Owner/Op end date: Not reported

Owner/operator name: BRAD REESE Owner/operator address: Not reported

owner/operator address: Not reported

Not reported

Not reported Owner/operator country: Owner/operator telephone: Not reported Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Operator Owner/Op start date: 01/01/1970 Owner/Op end date: Not reported

Handler Activities Summary:

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

Waste code: 132

Waste name: Aqueous solution w/metals (< restricted levels and see waste code 121

for a list of metals)

Waste code: 171

. Waste name: Metal sludge (see 121)

. Waste code: 181

. Waste name: Other inorganic solid waste

Direction Distance Elevation

ation Site Database(s) EPA ID Number

CIRTECH INC (Continued) 1000398155

. Waste code: 212

. Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

. Waste code: 223

. Waste name: Unspecified oil-containing waste

Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

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: D008
Waste name: LEAD

Waste code: F006

. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT

FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

Historical Generators:

Date form received by agency: 03/01/2014
Site name: CIRTECH INC

Classification: Large Quantity Generator

Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. 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

EDR ID Number

Distance Elevation

EDR ID Number EPA ID Number Site Database(s)

CIRTECH INC (Continued) 1000398155

DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

D008 Waste code: LEAD Waste name:

Waste code: F006 Waste name:

WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS)

ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

Date form received by agency: 10/31/2012 Site name: CIRTECH INC.

Classification: Large Quantity Generator

Waste code:

IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF Waste name:

> LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET. WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002

A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS Waste name:

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.

D008 Waste code: Waste name: **LEAD**

Waste code: F006

WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT Waste name:

FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM: (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL: (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

Waste code: F007

SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS Waste name:

Date form received by agency: 03/01/2010 CIRTECH INC Site name:

Classification: Large Quantity Generator

Waste code:

Aqueous solution w/metals (< restricted levels and see waste code 121 Waste name:

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

CIRTECH INC (Continued) 1000398155

for a list of metals)

. Waste code: 171

. Waste name: Metal sludge (see 121)

. Waste code: 181

. Waste name: Other inorganic solid waste

Waste code: 212

. Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

Waste code: 223

Waste name: Unspecified oil-containing waste

Waste code: 331

. Waste name: Off-specification, aged, or surplus organics

. Waste code: 792

. Waste name: Liquids with pH < 2 with metals

Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

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: D008
Waste name: LEAD

Waste code: F006

. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT

FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

Waste code: F007

. Waste name: SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS

Date form received by agency: 02/27/2008 Site name: CIRTECH INC

Classification: Large Quantity Generator

Distance **EDR ID Number** Elevation **EPA ID Number** Site Database(s)

CIRTECH INC (Continued) 1000398155

Waste code: D001

IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF Waste name:

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002

A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS Waste name:

> 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: D008 LEAD Waste name:

Waste code: F006

WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT Waste name:

> FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS)

ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL: (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

Waste code: F007

Waste name: SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS

Date form received by agency: 02/20/2006 Site name: CIRTECH INC.

Classification: Large Quantity Generator

Waste code:

Waste name: Aqueous solution w/metals (< restricted levels and see waste code 121

for a list of metals)

Waste code: 171

Waste name: Metal sludge (see 121)

Waste code: 181

Waste name: Other inorganic solid waste

Waste code:

Waste name: Unspecified solvent mixture

Waste code: 223

Waste name: Unspecified oil-containing waste

Waste code:

Waste name: Off-specification, aged, or surplus organics

Waste code: 343

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

CIRTECH INC (Continued) 1000398155

. Waste name: Unspecified organic liquid mixture

. Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. 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: D008
Waste name: LEAD

Waste code: F006

. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT

FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

. Waste code: F007

Waste name: SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS

Date form received by agency: 01/26/2004 Site name: CIRTECH INC

Classification: Large Quantity Generator

Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

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.

Direction Distance

Elevation Site Database(s) EPA ID Number

CIRTECH INC (Continued) 1000398155

. Waste code: D008 . Waste name: LEAD

Waste code: F006

. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT

FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

Waste code: F007

. Waste name: SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS

Date form received by agency: 02/20/2002 Site name: CIRTECH INC

Classification: Large Quantity Generator

Date form received by agency: 10/12/2000 Site name: CIRTECH, INC.

Classification: Large Quantity Generator

Date form received by agency: 03/16/1999
Site name: CIRTECH, INC.

Classification: Large Quantity Generator

Date form received by agency: 09/01/1996
Site name: CIRTECH, INC

Classification: Large Quantity Generator

Date form received by agency: 05/26/1996
Site name: CIRTECH INC.

Classification: Large Quantity Generator

Date form received by agency: 03/31/1994 Site name: CIRTECH

Classification: Large Quantity Generator

Date form received by agency: 03/23/1992 Site name: CIRTECH INC.

Classification: Large Quantity Generator

Date form received by agency: 02/18/1986 Site name: CIRTECH, INC

Classification: Large Quantity Generator

Biennial Reports:

Last Biennial Reporting Year: 2017

Annual Waste Handled:

Waste code: D001

Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE

EDR ID Number

Direction Distance

Elevation Site Database(s) EPA ID Number

CIRTECH INC (Continued) 1000398155

MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

EDR ID Number

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Amount (Lbs): 200

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.

Amount (Lbs): 41600

Waste code: D008
Waste name: LEAD
Amount (Lbs): 1820

Waste code: F006

Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT

FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM

PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

Amount (Lbs): 5280

Facility Has Received Notices of Violations:

Regulation violated: Not reported

Area of violation: Generators - General Date violation determined: 06/07/2010

Date achieved compliance: Not reported Violation lead agency: State Enforcement action: Not reported Not reported Enforcement action date: Enf. disposition status: Not reported Not reported Enf. disp. status date: Not reported Enforcement lead agency: Proposed penalty amount: Not reported Final penalty amount: Not reported Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General

Date violation determined: 03/11/2009
Date achieved compliance: 06/30/2009
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 03/11/2009
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

Direction Distance Elevation

stance EDR ID Number evation Site Database(s) EPA ID Number

CIRTECH INC (Continued) 1000398155

Regulation violated: Not reported
Area of violation: Generators - General

Date violation determined: 06/19/2007 Date achieved compliance: Not reported Violation lead agency: State Enforcement action: Not reported Enforcement action date: Not reported Enf. disposition status: Not reported Not reported Enf. disp. status date: Enforcement lead agency: Not reported Not reported Proposed penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General

Date violation determined: 11/20/2006
Date achieved compliance: 01/22/2007
Violation lead agency: State

Final penalty amount: Paid penalty amount:

Enforcement action: WRITTEN INFORMAL

Not reported

Enforcement action date:

Enf. disposition status:

Enf. disp. status date:

Enforcement lead agency:

Proposed penalty amount:

Final penalty amount:

Paid penalty amount:

In/20/2006

Not reported

Not reported

Not reported

Not reported

Not reported

Regulation violated: Not reported
Area of violation: Generators - General

Date violation determined: 05/11/2006
Date achieved compliance: 06/08/2006
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 05/11/2006
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: Not reported

Area of violation: Generators - Records/Reporting

Date violation determined: 06/25/1992
Date achieved compliance: 06/25/1992
Violation lead agency: EPA

Enforcement action: FINAL 3008(A) COMPLIANCE ORDER

Enforcement action date: 01/14/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 7630
Paid penalty amount: Not reported

Regulation violated: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

CIRTECH INC (Continued) 1000398155

Area of violation: Generators - Records/Reporting

Date violation determined: 06/25/1992
Date achieved compliance: 06/25/1992
Violation lead agency: EPA

Enforcement action: INITIAL 3008(A) COMPLIANCE

Enforcement action date: 09/28/1992
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: 11400
Final penalty amount: 7630

Evaluation Action Summary:

Evaluation date: 08/08/2017

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:

Date achieved compliance:

Evaluation lead agency:

Not reported

Not reported

State

Evaluation date: 09/23/2016

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported Evaluation lead agency: State

Evaluation date: 08/07/2014

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/01/2014

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:

Date achieved compliance:

Evaluation lead agency:

Not reported

Not reported

State

Evaluation date: 05/07/2014

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/15/2014

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported Evaluation lead agency: State

Evaluation date: 04/14/2014

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:

Date achieved compliance:

Evaluation lead agency:

Not reported

Not reported

State

Evaluation date: 11/07/2013

EDR ID Number

Direction Distance

EDR ID Number Elevation Site **EPA ID Number** Database(s)

CIRTECH INC (Continued) 1000398155

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Not reported Area of violation: Date achieved compliance: Not reported Evaluation lead agency: State

11/04/2013 Evaluation date:

COMPLIANCE EVALUATION INSPECTION ON-SITE Evaluation:

Area of violation: Not reported Date achieved compliance: Not reported Evaluation lead agency: State

06/14/2013 Evaluation date:

COMPLIANCE EVALUATION INSPECTION ON-SITE Evaluation:

Area of violation: Not reported Date achieved compliance: Not reported Evaluation lead agency: State

Evaluation date: 06/22/2012

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported Evaluation lead agency: State

Evaluation date: 06/28/2011

COMPLIANCE EVALUATION INSPECTION ON-SITE Evaluation:

Area of violation: Not reported Date achieved compliance: Not reported Evaluation lead agency: State

06/07/2010 Evaluation date:

COMPLIANCE EVALUATION INSPECTION ON-SITE Evaluation:

Area of violation: Generators - General

Date achieved compliance: Not reported Evaluation lead agency: State

Evaluation date: 06/30/2009

COMPLIANCE EVALUATION INSPECTION ON-SITE Evaluation:

Area of violation: Not reported Date achieved compliance: Not reported Evaluation lead agency: State

03/11/2009 Evaluation date:

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Not reported Area of violation: Date achieved compliance: Not reported Evaluation lead agency: State

Evaluation date: 03/11/2009

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: 06/30/2009 Evaluation lead agency: State

Evaluation date: 06/19/2007

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

CIRTECH INC (Continued) 1000398155

Evaluation lead agency: State

Evaluation date: 01/22/2007

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/20/2006

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: 01/22/2007 Evaluation lead agency: State

Evaluation date: 05/11/2006

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: 06/08/2006 Evaluation lead agency: Local

Evaluation date: 06/08/2005

Evaluation: FOCUSED COMPLIANCE INSPECTION

Area of violation: Not reported

Date achieved compliance: Not reported

Evaluation lead agency: State Contractor/Grantee

Evaluation date: 04/06/2005

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported

Evaluation lead agency: State Contractor/Grantee

Evaluation date: 08/28/2003

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported

Evaluation lead agency: State Contractor/Grantee

Evaluation date: 05/16/1994

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported

Evaluation lead agency: State Contractor/Grantee

Evaluation date: 05/04/1992

Evaluation: NON-FINANCIAL RECORD REVIEW Area of violation: Generators - Records/Reporting

Date achieved compliance: 06/25/1992 Evaluation lead agency: EPA

ENVIROSTOR:

Facility ID: 71002789

Status: Inactive - Needs Evaluation

Status Date: 05/19/2015
Site Code: Not reported
Site Type: Tiered Permit
Site Type Detailed: Tiered Permit

Acres: 4

EDR ID Number

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CIRTECH INC (Continued)

1000398155

NPL: NO

NONE SPECIFIED Regulatory Agencies: NONE SPECIFIED Lead Agency: Program Manager: Not reported Supervisor: Robert Senga Division Branch: Cleanup Cypress

Assembly: 68 Senate: 37

Special Program: Not reported

Restricted Use: NO

NONE SPECIFIED Site Mgmt Req: Not reported Funding: 33.82414 Latitude: Longitude: -117.8508

NONE SPECIFIED APN: NONE SPECIFIED Past Use: Potential COC: NONE SPECIFIED NONE SPECIFIED Confirmed COC: Potential Description: NONE SPECIFIED Alias Name: CAD981388655

Alias Type: **EPA Identification Number**

Alias Name: 110000480113 Alias Type: EPA (FRS #) Alias Name: 71002789

Envirostor ID Number Alias Type:

Completed Info:

Completed Area Name: Not reported Completed Sub Area Name: Not reported Completed Document Type: Not reported Completed Date: Not reported Comments: Not reported

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

TRIS:

Click this hyperlink while viewing on your computer to access 2 additional US_TRIS: record(s) in the EDR Site Report.

RI MANIFEST:

CAD981388655 EPA Id: **GEN Cert Date:** 2/22/2002 Manifest Document Number: RIH0018379 Waste Description: **CYANDIE** TSDF Id: RID059735761

TSDF Name: ADVANCED CHEMICAL CO INC

Qty: 55 WT/Vol Units:

TSDF Date: Not reported

Distance
Elevation Site

CIRTECH INC (Continued) 1000398155

Transporter 2 ld: Not reported

Item Number: 1

Transporter 2 Name: Not reported

Transporter Name 2: HAZMAT ENV GROUP INC

Transporter EPAID: NYD980769947
Transporter Receipt Date: Not reported

Number Of Containers:

Container Type: Not reported Waste Code1: F007 Waste Code2: D003 Waste Code3: Not reported Not reported Waste Code4: Waste Code5: Not reported Waste Code6: Not reported Fee Exempt Code: Not reported Comment: Not reported Transporter Name 2: Not reported Company Permit Number: Not reported Year: Not reported Quarter: Not reported Transporter Contact Name: Not reported Transporter Contact Email: Not reported Filing Date: Not reported Total Fee: Not reported Billing Name: Not reported Paid Date: Not reported Paid Time: Not reported Facility Receipt Date: Not reported Not reported Manifest Created Date: Not reported Manifest Updated Date: Not reported

RI MANIFEST:

Transporter Receipt Date: Not reported

Number Of Containers:

Container Type:

Waste Code1:

Waste Code2:

Waste Code3:

Waste Code4:

Waste Code4:

Not reported

Not reported

Not reported

Not reported

Not reported

Waste Code5:
Waste Code6:
Comment:
Not reported
Not reported
Not reported
Not reported
Not reported
Not reported

TSDF Name: ADVANCED CHEMICAL CO INC

TSDF Id: RID059735761 Transporter Name 2: Not reported Company Permit Number: Not reported Year: Not reported CAD981388655 EPA ID: Manifest Docket Number: RIH0018379 Not reported Quarter: Waste Description: **CYANDIE** Transporter Contact Name: Not reported

Quantity: 55

Transporter Contact Email: Not reported

WT/Vol Units: G

Filing Date: Not reported

EDR ID Number

EPA ID Number

Database(s)

MAP FINDINGS Map ID Direction

Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CIRTECH INC (Continued) 1000398155

ADVANCED CHEMICAL CO INC

Total Fee: Not reported

Item Number:

Transporter Name: HAZMAT ENV GROUP INC

Billing Name: Not reported NYD980769947 Transporter EPA ID: Date Paid: Not reported Time Paid: Not reported GEN Cert Date: 2/22/2002 Not reported Facility Receipt Date: Not reported Transporter 2 Receipt Date: Not reported Manifest Created Date: Not reported TSDF Receipt Date: Not reported Transporter 2 ID: Not reported Manifest Updated Date: Not reported

Transporter Receipt Date: Not reported

Number Of Containers:

TSDF Name:

Container Type: Not reported Waste Code1: F007 Waste Code2: D003 Waste Code3: Not reported Waste Code4: Not reported Waste Code5: Not reported Waste Code6:

Not reported Not reported Comment: Fee Exempt Code: Not reported

TSDF Id: RID059735761 Transporter Name 2: Not reported Company Permit Number: Not reported Year: Not reported EPA ID: CAD981388655 Manifest Docket Number: RIH0018379

Not reported Quarter: **CYANDIE** Waste Description: Not reported Transporter Contact Name: Quantity: 55

Transporter Contact Email: Not reported

WT/Vol Units: G

Filing Date: Not reported Total Fee: Not reported

Item Number:

HAZMAT ENV GROUP INC Transporter Name:

Billing Name: Not reported NYD980769947 Transporter EPA ID: Date Paid: Not reported Time Paid: Not reported **GEN Cert Date:** 2/22/2002 Facility Receipt Date: Not reported Not reported Fee: Transporter 2 Receipt Date: Not reported Manifest Created Date: Not reported TSDF Receipt Date: Not reported Transporter 2 ID: Not reported Manifest Updated Date: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CIRTECH INC (Continued) 1000398155

NPDES:

Facility Status: Active NPDES Number: CAS000001

Region: Agency Number: 0 Regulatory Measure ID: 208325 Not reported Place ID: Order Number: 97-03-DWQ WDID: 8 301002919 Regulatory Measure Type: Enrollee Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 04/02/1992 Termination Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported

250 E Emerson Ave Discharge Address:

Discharge Name: Cirtech Discharge City: Orange Discharge State: California Discharge Zip: 92865 Status: Not reported Status Date: Not reported Operator Name: Not reported Operator Address: Not reported Operator City: Not reported Operator State: Not reported Operator Zip: Not reported

NPDES as of 03/2018:

Contact Phone:

NPDES Number: Not reported Status: Not reported Agency Number: Not reported

Region: Regulatory Measure ID: 208325 Order Number: Not reported Industrial Regulatory Measure Type: Place ID: Not reported WDID: 8 301002919 Program Type: Not reported Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Not reported Discharge Name: Discharge Address: Not reported Discharge City: Not reported Discharge State: Not reported Discharge Zip: Not reported Received Date: 05/09/2008 Processed Date: 04/02/1992 Status: Active Status Date: 04/02/1992 Place Size: 32481 Place Size Unit: SqFt Contact: Juan Martinez Contact Title: Not reported

714-921-0860

Distance EDR ID Number
Elevation Site EDR ID Number
Database(s) EPA ID Number

CIRTECH INC (Continued) 1000398155

Contact Phone Ext: Not reported

Contact Email: jmartinez@cirtech.com

Operator Name: Cirtech

Operator Address: 250 E Emerson Ave

Operator City: Orange
Operator State: California
Operator Zip: 92865
Operator Contact: Juan Martinez
Operator Contact Title: Not reported
Operator Contact Phone: 714-921-0860

Operator Contact Phone Ext: 243

jmartinez@cirtech.com Operator Contact Email: Operator Type: **Private Business** Developer: Not reported Developer Address: Not reported Developer City: Not reported Developer State: California Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** 714-921-0860 Emergency Phone Ext: Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported

Dir Discharge Uswater Ind: N

Receiving Water Name: Santa Ana River Certifier: Juan Martinez

Certifier Title: Environmental Manager

Certification Date: 22-MAY-15

Primary Sic: 3672-Printed Circuit Boards

Secondary Sic: Not reported Tertiary Sic: Not reported

NPDES Number: CAS000001 Active Status: Agency Number: 0 Region: Regulatory Measure ID: 208325 Order Number: 97-03-DWQ Regulatory Measure Type: Enrollee Place ID: Not reported WDID: 8 301002919

Distance Elevation Site

Database(s)

Not reported

1000398155

EDR ID Number

EPA ID Number

CIRTECH INC (Continued)

Program Type: Industrial
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: 04/02/1992
Expiration Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported
Discharge Name: Cirtech

Discharge Address: 250 E Emerson Ave

Discharge City: Orange Discharge State: California Discharge Zip: 92865 Received Date: Not reported Processed Date: Not reported Status: Not reported Status Date: Not reported Place Size: Not reported Place Size Unit: Not reported Not reported Contact: Contact Title: Not reported Contact Phone: Not reported Contact Phone Ext: Not reported Not reported Contact Email: Operator Name: Not reported Operator Address: Not reported Operator City: Not reported Operator State: Not reported Operator Zip: Not reported **Operator Contact:** Not reported Operator Contact Title: Not reported Operator Contact Phone: Not reported Operator Contact Phone Ext: Not reported Operator Contact Email: Not reported Operator Type: Not reported Developer: Not reported Developer Address: Not reported Not reported Developer City: Developer State: Not reported Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** Not reported Not reported **Emergency Phone Ext:** Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported

Constype Utility Ind:

Distance Elevation Site

e Database(s) EPA ID Number

CIRTECH INC (Continued)

1000398155

EDR ID Number

Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind: Not reported Receiving Water Name: Not reported Certifier: Not reported Certifier Title: Not reported Certification Date: Not reported Primary Sic: Not reported Secondary Sic: Not reported Tertiary Sic: Not reported

Facility Status: Not reported NPDES Number: Not reported Not reported Region: Agency Number: Not reported Regulatory Measure ID: Not reported Place ID: Not reported Not reported Order Number: WDID: 8 301002919 Regulatory Measure Type: Industrial Program Type: Not reported Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Discharge Address: Not reported Discharge Name: Not reported Discharge City: Not reported Discharge State: Not reported Discharge Zip: Not reported Status: Active Status Date: 04/02/1992 Operator Name: Cirtech

Operator Address: 250 E Emerson Ave

Operator City: Orange
Operator State: California
Operator Zip: 92865

NPDES as of 03/2018:

NPDES Number: Not reported Status: Not reported Agency Number: Not reported Region: 8

Regulatory Measure ID: 208325 Order Number: Not reported Regulatory Measure Type: Industrial Place ID: Not reported WDID: 8 301002919 Program Type: Not reported Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Not reported Discharge Name: Discharge Address: Not reported Discharge City: Not reported Discharge State: Not reported Discharge Zip: Not reported

Direction

Elevation Site Database(s) EPA ID Number

CIRTECH INC (Continued)

1000398155

EDR ID Number

 Received Date:
 05/09/2008

 Processed Date:
 04/02/1992

 Status:
 Active

 Status Date:
 04/02/1992

 Place Size:
 32481

 Place Size Unit:
 SqFt

 Contact:
 Juan Martinez

Contact Title: Not reported
Contact Phone: 714-921-0860
Contact Phone Ext: Not reported

Contact Email: jmartinez@cirtech.com

Operator Name: Cirtech

Operator Address: 250 E Emerson Ave

Operator City:
Operator State:
California
Operator Zip:
Operator Contact:
Operator Contact:
Operator Contact Title:
Operator Contact Phone:
Operator Contact Phone:
Operator Contact Operator Contact Phone:
Operator Contact

Operator Contact Phone Ext: 243 Operator Contact Email: jmartinez@cirtech.com Operator Type: **Private Business** Developer: Not reported Developer Address: Not reported Developer City: Not reported California Developer State: Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported Emergency Phone: 714-921-0860 Emergency Phone Ext: Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported

Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Not reported Constype Residential Ind: Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind:

Receiving Water Name: Santa Ana River
Certifier: Juan Martinez

Certifier Title: Environmental Manager

Certification Date: 22-MAY-15

Primary Sic: 3672-Printed Circuit Boards

Secondary Sic: Not reported Tertiary Sic: Not reported

Distance Elevation Site

e Database(s) EPA ID Number

CIRTECH INC (Continued)

1000398155

EDR ID Number

NPDES Number: CAS000001 Active Status: Agency Number: n Region: Regulatory Measure ID: 208325 97-03-DWQ Order Number: Regulatory Measure Type: Enrollee Place ID: Not reported WDID: 8 301002919 Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 04/02/1992 Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Discharge Name: Cirtech

Discharge Address: 250 E Emerson Ave

Discharge City: Orange Discharge State: California Discharge Zip: 92865 Received Date: Not reported Processed Date: Not reported Status: Not reported Status Date: Not reported Place Size: Not reported Place Size Unit: Not reported Contact: Not reported Contact Title: Not reported Contact Phone: Not reported Contact Phone Ext: Not reported Not reported Contact Email: Operator Name: Not reported Operator Address: Not reported Operator City: Not reported Operator State: Not reported Not reported Operator Zip: Operator Contact: Not reported Operator Contact Title: Not reported Operator Contact Phone: Not reported Operator Contact Phone Ext: Not reported Operator Contact Email: Not reported Operator Type: Not reported Not reported Developer: Developer Address: Not reported Developer City: Not reported Developer State: Not reported Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** Not reported Emergency Phone Ext: Not reported Constype Above Ground Ind: Not reported Not reported Constype Below Ground Ind: Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported

Not reported

Constype Electrical Line Ind:

MAP FINDINGS Map ID Direction

Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CIRTECH INC (Continued) 1000398155

Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind: Not reported Receiving Water Name: Not reported Certifier: Not reported Certifier Title: Not reported Certification Date: Not reported Primary Sic: Not reported Not reported Secondary Sic: Tertiary Sic: Not reported

WDS:

Facility ID: Santa Ana River 30I002919

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

are assigned by the Regional Board

Subregion:

Facility Telephone: 7149210860

Facility Contact: **GORDON J SIMMONS** Agency Name: REESE FRANK Agency Address: 250 E EMERSON AVE Agency City, St, Zip: **ORANGE 92865** Agency Contact: **GORDON J SIMMONS**

Agency Telephone: 7149210860 Agency Type: Private SIC Code:

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: Baseline Flow:

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

Direction Distance

Elevation Site Database(s) EPA ID Number

CIRTECH INC (Continued) 1000398155

considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to

represent no threat to water quality.

Complexity: Category C - Facilities having no waste treatment systems, such as

cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as

dairy waste ponds.

CIWQS:

Agency: Cirtech

Agency Address: 250 E Emerson Ave, Orange, CA 92865
Place/Project Type: Industrial - Printed Circuit Boards

SIC/NAICS: 3672
Region: 8
Program: INDSTW
Regulatory Measure Status: Active

Regulatory Measure Type: Storm water industrial Order Number: 2014-0057-DWQ 8 301002919 WDID: NPDES Number: CAS000001 Adoption Date: Not reported Effective Date: 04/02/1992 Not reported Termination Date: Expiration/Review Date: Not reported Design Flow: Not reported Major/Minor: Not reported Complexity: Not reported Not reported TTWQ:

Enforcement Actions within 5 years: 3
Violations within 5 years: 3
Latitude: 33

Latitude: 33.82462 Longitude: -117.85142

29 CENTURY INDEX CORP RCRA-SQG 1000820093
SW 1870 N GLASSELL ST FINDS CAD983661166
1/8-1/4 ORANGE, CA 92865 ECHO

1/8-1/4 0.179 mi. 943 ft.

Relative: RCRA-SQG:

Lower Date form received by agency: 09/02/1993

Actual: Facility name: CENTURY INDEX CORP
193 ft. Facility address: 1870 N GLASSELL ST
ORANGE, CA 92865

EPA ID: CAD983661166
Contact: MIKE HANEY
Contact address: 1870 N GLASSELL
ORANGE, CA 92665

Contact country: US

Contact telephone: 714-921-1222 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

EDR ID Number

Distance Elevation

Site Database(s) EPA ID Number

CENTURY INDEX CORP (Continued)

1000820093

EDR ID Number

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: CENTURY INDEX CORP
Owner/operator address: 1870 N GLASSELL
ORANGE, CA 92665

Owner/operator country: Not reported Owner/operator telephone: 714-921-1221 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported 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: 110008284766

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.

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000820093 Registry ID: 110008284766

Direction Distance

Elevation Site **EPA ID Number** Database(s)

CENTURY INDEX CORP (Continued)

1000820093

EDR ID Number

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110008284766

30 **BURLINGTON ENGINEERING, INC.** RCRA-LQG 1001481063 CA EMI CAR000049858

wsw 220 WEST GROVE AVENUE ORANGE, CA 92865 1/8-1/4

CA NPDES 0.186 mi. **CA WDS CA CIWQS** 983 ft.

Relative: RCRA-LQG:

Lower Date form received by agency: 02/15/2008

BURLINGTON ENGINEERING, INC. Facility name: Actual:

Facility address: 220 WEST GROVE AVENUE 192 ft.

ORANGE, CA 92865 EPA ID: CAR000049858 KAREN CORBELL Contact: Contact address: Not reported

Not reported

Contact country: US

Contact telephone: 714-921-4045

KC@BURLINGTONENG.COM Contact email:

EPA Region: 09 Land type: Private

Classification: Large Quantity Generator

Handler: generates 1,000 kg or more of hazardous waste during any Description:

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: BURLINGTON ENGINEERING, INC. Owner/operator address: 220 WEST GROVE AVENUE

ORANGE, CA 92865

Owner/operator country: US

Owner/operator telephone: Not reported Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: 01/01/1997 Owner/Op end date: Not reported

BURLINGTON ENGINEERING, INC. Owner/operator name:

Owner/operator address: Not reported

Not reported

Owner/operator country: US

Owner/operator telephone: Not reported Owner/operator email: Not reported Not reported Owner/operator fax:

Map ID MAP FINDINGS
Direction

Distance Elevation Site

Site Database(s) EPA ID Number

BURLINGTON ENGINEERING, INC. (Continued)

1001481063

EDR ID Number

Owner/operator extension: Not reported Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1997
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: Nο 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: Nο Used oil transporter: No

. Waste code: D001

Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

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: D003

. Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS

NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE

OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

. Waste code: D006
. Waste name: CADMIUM

Waste code: D007

. Waste name: CHROMIUM

Waste code: D008
Waste name: LEAD

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

BURLINGTON ENGINEERING, INC. (Continued)

1001481063

Waste code: D009 **MERCURY** Waste name:

F008 Waste code:

Waste name: PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM

ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.

Historical Generators:

Date form received by agency: 02/20/2006

Site name: BURLINGTON ENGINEERING, INC.

Classification: Large Quantity Generator

Waste code: D006 Waste name: **CADMIUM**

D007 Waste code: Waste name: **CHROMIUM**

Waste code: D008 Waste name: **LEAD**

Date form received by agency: 02/23/2004

Site name: BURLINGTON ENGINEERING, INC

Classification: Large Quantity Generator

Waste code: D007 **CHROMIUM** Waste name:

Waste code: D008 LEAD Waste name:

Date form received by agency: 02/12/2002

BURLINGTON ENGINEERING INC Site name:

Classification: Large Quantity Generator

Date form received by agency: 10/12/2000

Site name: BURLINGTON ENGINEERING, INC.

Classification: Large Quantity Generator

Date form received by agency: 03/08/1999

BURLINGTON ENGINEERING INC Site name:

Classification: Small Quantity Generator

Waste code: D000 Not Defined Waste name:

Waste code: D001

IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF Waste name:

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D008 Waste name: **LEAD**

Distance Elevation

ation Site Database(s) EPA ID Number

BURLINGTON ENGINEERING, INC. (Continued)

1001481063

EDR ID Number

. Waste code: F006

Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT

FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

Facility Has Received Notices of Violations:

Regulation violated: Not reported
Area of violation: Generators - General

Date violation determined: 05/28/2010
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 Not reported Proposed penalty amount: Final penalty amount: Not reported Paid penalty amount: Not reported

Regulation violated: Not reported

Area of violation: Generators - General

Date violation determined: 06/07/2006
Date achieved compliance: 07/31/2006
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 06/07/2006
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

Final penalty amount: Not reported Not reported

Regulation violated: Not reported
Area of violation: Generators - General

Date violation determined: 06/07/2006
Date achieved compliance: 07/31/2006
Violation lead agency: State

Enforcement action: Not reported Enforcement action date: 08/17/2006

Enf. disposition status: Action Satisfied (Case Closed)

Enf. disp. status date: 08/17/2006
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 2500
Paid penalty amount: Not reported

Regulation violated: Not reported

Area of violation: Generators - General

Date violation determined: 06/07/2006
Date achieved compliance: 07/31/2006
Violation lead agency: State

Direction Distance

Elevation Site Database(s) **EPA ID Number**

BURLINGTON ENGINEERING, INC. (Continued)

1001481063

EDR ID Number

Enforcement action: WRITTEN INFORMAL

07/28/2004 Enforcement action date: Enf. disposition status: Not reported Enf. disp. status date: Not reported Enforcement lead agency: State Proposed penalty amount: Not reported Not reported Final penalty amount: Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 06/02/2011

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported

Evaluation lead agency: State

Evaluation date: 05/28/2010

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: Not reported Evaluation lead agency: State

Evaluation date: 04/01/2009

COMPLIANCE EVALUATION INSPECTION ON-SITE Evaluation:

Area of violation: Not reported Date achieved compliance: Not reported Evaluation lead agency: State

Evaluation date: 06/07/2006

COMPLIANCE EVALUATION INSPECTION ON-SITE Evaluation:

Generators - General Area of violation:

Date achieved compliance: 07/31/2006 Evaluation lead agency: Local

07/28/2004 Evaluation date:

COMPLIANCE EVALUATION INSPECTION ON-SITE Evaluation:

Area of violation: Generators - General

Date achieved compliance: 07/31/2006

State Contractor/Grantee Evaluation lead agency:

EMI:

2002 Year: County Code: 30 Air Basin: SC Facility ID: 113705 Air District Name: SC SIC Code: 3471

SOUTH COAST AQMD Air District Name:

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 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: Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Direction Distance Elevation

ce EDR ID Number ion Site Database(s) EPA ID Number

BURLINGTON ENGINEERING, INC. (Continued)

1001481063

 Year:
 2003

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 113705

 Air District Name:
 SC

 SIC Code:
 3471

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 4
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 and Smllr Tons/Yr:0

 Year:
 2004

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 113705

 Air District Name:
 SC

 SIC Code:
 3471

Air District Name: SOUTH COAST AQMD Community Health Air Pollution Info System: Not reported

Not reported Consolidated Emission Reporting Rule: Not reported Total Organic Hydrocarbon Gases Tons/Yr: 3.5131 Reactive Organic Gases Tons/Yr: 2.44 Carbon Monoxide Emissions Tons/Yr: 0.114 NOX - Oxides of Nitrogen Tons/Yr: 0.423 SOX - Oxides of Sulphur Tons/Yr: 0.0027 Particulate Matter Tons/Yr: 0.0258 Part. Matter 10 Micrometers and Smllr Tons/Yr:0.02

 Year:
 2005

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 113705

 Air District Name:
 SC

 SIC Code:
 3471

Air District Name: SOUTH COAST AQMD Community Health Air Pollution Info System: Not reported

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported Total Organic Hydrocarbon Gases Tons/Yr: 3.1903
Reactive Organic Gases Tons/Yr: 2.21785342
Carbon Monoxide Emissions Tons/Yr: .197
NOX - Oxides of Nitrogen Tons/Yr: .731
SOX - Oxides of Sulphur Tons/Yr: .00338
Particulate Matter Tons/Yr: .05108

 Year:
 2006

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 113705

 Air District Name:
 SC

 SIC Code:
 3471

Part. Matter 10 Micrometers and Smllr Tons/Yr:.0498368

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

BURLINGTON ENGINEERING, INC. (Continued)

1001481063

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: 2.647977826126639148

Reactive Organic Gases Tons/Yr: 1.825 Carbon Monoxide Emissions Tons/Yr: .192 NOX - Oxides of Nitrogen Tons/Yr: .712 SOX - Oxides of Sulphur Tons/Yr: .003 Particulate Matter Tons/Yr: .049 Part. Matter 10 Micrometers and Smllr Tons/Yr:.04386

2007 Year: County Code: 30 Air Basin: SC Facility ID: 113705 Air District Name: SC SIC Code: 3471

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: 2.647977826126639148

Reactive Organic Gases Tons/Yr: 1.825 Carbon Monoxide Emissions Tons/Yr: .192 NOX - Oxides of Nitrogen Tons/Yr: .712 SOX - Oxides of Sulphur Tons/Yr: .003 Particulate Matter Tons/Yr: .049 Part. Matter 10 Micrometers and Smllr Tons/Yr:.04386

2008 Year: County Code: 30 Air Basin: SC Facility ID: 113705 Air District Name: SC SIC Code: 3471

SOUTH COAST AQMD Air District Name:

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

2.492627999858416162 Total Organic Hydrocarbon Gases Tons/Yr:

Reactive Organic Gases Tons/Yr: 1.7282566 Carbon Monoxide Emissions Tons/Yr: .14 NOX - Oxides of Nitrogen Tons/Yr: .54 SOX - Oxides of Sulphur Tons/Yr: .002538 Particulate Matter Tons/Yr: .05 Part. Matter 10 Micrometers and Smllr Tons/Yr:.0472

2009 Year: County Code: 30 Air Basin: SC 113705 Facility ID: Air District Name: SC SIC Code: 3471

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: 0.78922605310777205 Reactive Organic Gases Tons/Yr: 0.53825999999999996

Carbon Monoxide Emissions Tons/Yr: 0.12

Direction Distance Elevation

tion Site Database(s) EPA ID Number

BURLINGTON ENGINEERING, INC. (Continued)

1001481063

EDR ID Number

SOX - Oxides of Sulphur Tons/Yr: 0.00215

 Year:
 2010

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 113705

 Air District Name:
 SC

 SIC Code:
 3471

Air District Name: SOUTH COAST AQMD

Particulate Matter Tons/Yr: 0.04267

Part. Matter 10 Micrometers and Smllr Tons/Yr:4.139999999999999E-2

 Year:
 2011

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 113705

 Air District Name:
 SC

 SIC Code:
 3471

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported 1.0779960883 Total Organic Hydrocarbon Gases Tons/Yr: Reactive Organic Gases Tons/Yr: 0.73989 Carbon Monoxide Emissions Tons/Yr: 0.1008 NOX - Oxides of Nitrogen Tons/Yr: 0.3744 SOX - Oxides of Sulphur Tons/Yr: 0.00172 Particulate Matter Tons/Yr: 0.04541 Part. Matter 10 Micrometers and Smllr Tons/Yr:0.0439436

 Year:
 2012

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 113705

 Air District Name:
 SC

 SIC Code:
 3471

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: 0.3956905216 Reactive Organic Gases Tons/Yr: 0.26094 Carbon Monoxide Emissions Tons/Yr: 0.1183 NOX - Oxides of Nitrogen Tons/Yr: 0.4394 SOX - Oxides of Sulphur Tons/Yr: 0.00202 Particulate Matter Tons/Yr: 0.04071 Part. Matter 10 Micrometers and Smllr Tons/Yr:0.0399596

Year: 2013

Direction Distance

Elevation Site Database(s) EPA ID Number

BURLINGTON ENGINEERING, INC. (Continued)

1001481063

EDR ID Number

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 113705

 Air District Name:
 SC

 SIC Code:
 1799

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: 0.24856680947 Reactive Organic Gases Tons/Yr: 0.15958 0.10745 Carbon Monoxide Emissions Tons/Yr: NOX - Oxides of Nitrogen Tons/Yr: 0.3991 SOX - Oxides of Sulphur Tons/Yr: 0.00184 Particulate Matter Tons/Yr: 0.03689 Part. Matter 10 Micrometers and Smllr Tons/Yr:0.0349482

NPDES:

Facility Status: Active
NPDES Number: CAS000001

Region: Agency Number: 0 Regulatory Measure ID: 208902 Place ID: Not reported Order Number: 97-03-DWQ WDID: 8 30NEC003937 Regulatory Measure Type: Enrollee Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 11/10/1997 Termination Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported

Discharge Address: 220 West Grove Ave
Discharge Name: Burlington Engineering Inc

Discharge City: Orange Discharge State: California Discharge Zip: 92865 Status: Not reported Status Date: Not reported Not reported Operator Name: Not reported Operator Address: Not reported Operator City: Operator State: Not reported Operator Zip: Not reported

NPDES as of 03/2018:

NPDES Number: CAS000001 Status: Active Agency Number: Region: 8 Regulatory Measure ID: 208902 Order Number: 97-03-DWQ Regulatory Measure Type: Enrollee Place ID: Not reported WDID: 8 30NEC003937 Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 11/10/1997

Distance EDR ID Number
Elevation Site EDR ID Number
Database(s) EPA ID Number

BURLINGTON ENGINEERING, INC. (Continued)

1001481063

Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported

Discharge Name: Burlington Engineering Inc Discharge Address: 220 West Grove Ave

Discharge City: Orange Discharge State: California Discharge Zip: 92865 Received Date: Not reported Processed Date: Not reported Status: Not reported Status Date: Not reported Place Size: Not reported Place Size Unit: Not reported Contact: Not reported Contact Title: Not reported Contact Phone: Not reported Contact Phone Ext: Not reported Contact Email: Not reported Operator Name: Not reported Operator Address: Not reported Operator City: Not reported Operator State: Not reported Not reported Operator Zip: **Operator Contact:** Not reported Operator Contact Title: Not reported **Operator Contact Phone:** Not reported Operator Contact Phone Ext: Not reported Operator Contact Email: Not reported Operator Type: Not reported Developer: Not reported Developer Address: Not reported Developer City: Not reported **Developer State:** Not reported Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** Not reported Emergency Phone Ext: Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind: Not reported Receiving Water Name: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

BURLINGTON ENGINEERING, INC. (Continued)

1001481063

EDR ID Number

Certifier: Not reported
Certifier Title: Not reported
Certification Date: Not reported
Primary Sic: Not reported
Secondary Sic: Not reported
Tertiary Sic: Not reported

Facility Status: Not reported NPDES Number: Not reported Region: Not reported Agency Number: Not reported Regulatory Measure ID: Not reported Place ID: Not reported Order Number: Not reported WDID: 8 30NEC003937 Regulatory Measure Type: Industrial Program Type: Not reported Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Discharge Address: Not reported Discharge Name: Not reported Discharge City: Not reported Discharge State: Not reported Discharge Zip: Not reported Status: Active Status Date: 01/18/2018

Operator Name: Burlington Engineering Inc Operator Address: 220 West Grove Ave

Operator City: Orange
Operator State: California
Operator Zip: 92865

NPDES as of 03/2018:

NPDES Number: CAS000001 Status: Active Agency Number: 0 Region: 8 Regulatory Measure ID: 208902 97-03-DWQ Order Number: Regulatory Measure Type: Enrollee Place ID: Not reported WDID: 8 30NEC003937 Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 11/10/1997 Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported

Discharge Name: Burlington Engineering Inc Discharge Address: 220 West Grove Ave

Discharge City:
Discharge State:
Discharge State:
Discharge Zip:
Processed Date:
Processed Date:
Status:

Orange
California
92865
Not reported
Not reported
Not reported
Not reported

Distance Elevation

Site Database(s) EPA ID Number

BURLINGTON ENGINEERING, INC. (Continued)

1001481063

EDR ID Number

Status Date: Not reported Place Size: Not reported Place Size Unit: Not reported Contact: Not reported Contact Title: Not reported Not reported Contact Phone: Contact Phone Ext: Not reported Contact Email: Not reported Not reported Operator Name: Operator Address: Not reported Operator City: Not reported Operator State: Not reported Operator Zip: Not reported **Operator Contact:** Not reported Operator Contact Title: Not reported Operator Contact Phone: Not reported Not reported Operator Contact Phone Ext: Operator Contact Email: Not reported Operator Type: Not reported Developer: Not reported Developer Address: Not reported Developer City: Not reported Developer State: Not reported Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** Not reported Emergency Phone Ext: Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Not reported Constype Electrical Line Ind: Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind: Not reported Receiving Water Name: Not reported Certifier: Not reported Certifier Title: Not reported Certification Date: Not reported Primary Sic: Not reported Secondary Sic: Not reported Not reported **Tertiary Sic:**

WDS:

Facility ID: Santa Ana River 30I013499

Direction Distance

Elevation Site Database(s) EPA ID Number

BURLINGTON ENGINEERING, INC. (Continued)

1001481063

EDR ID Number

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

are assigned by the Regional Board

Subregion: 8

Facility Telephone: 7149214045 Facility Contact: BILL WELSH

Agency Name: BURLINGTON ENGINEERING INC

Agency Address: 220 W GROVE AVE.
Agency City,St,Zip: ORANGE 92865
Agency Contact: BILL WELSH
Agency Telephone: 7149214045
Agency Type: Private
SIC Code: 3479
SIC Code 2: 3398

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 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.

CIWQS:

Agency: Burlington Engineering Inc

Agency Address: 220 West Grove Ave, Orange, CA 92865

Place/Project Type: Industrial - Electroplating, Plating, Polishing, Anodizing, and

Coloring Multiple

SIC/NAICS: Multiple
Region: 8
Program: INDSTW
Regulatory Measure Status: Active

Regulatory Measure Type: Storm water industrial Order Number: 2014-0057-DWQ WDID: 8 30NEC003937

Direction Distance

Elevation Site Database(s) **EPA ID Number**

BURLINGTON ENGINEERING, INC. (Continued)

1001481063

EDR ID Number

NPDES Number: CAS000001 Not reported Adoption Date: Effective Date: 11/10/1997 Termination Date: Not reported Expiration/Review Date: Not reported Design Flow: Not reported Major/Minor: Not reported Complexity: Not reported TTWQ: Not reported

Enforcement Actions within 5 years: Violations within 5 years: Latitude: 33.82102 Longitude: -117.85425

G31 APPLIED FRICTION TECHNIQUES INC NNW 230 E EMERSON AVE STE B

RCRA NonGen / NLR 1000593417 **FINDS** CAD982442592

ECHO

1/8-1/4 ORANGE, CA 92865 0.194 mi.

1023 ft. Site 2 of 2 in cluster G

Relative: RCRA NonGen / NLR:

Higher Date form received by agency: 05/10/1991

APPLIED FRICTION TECHNIQUES INC Facility name: Actual: 230 E EMERSON AVE STE B Facility address: 202 ft.

ORANGE, CA 92865

EPA ID: CAD982442592

Contact: **ENVIRONMENTAL MANAGER**

Contact address: 230 E EMERSON B ORANGE, CA 92665

US Contact country:

Contact telephone: 714-921-2695 Contact email: Not reported

EPA Region: 09

Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

NOT REQUIRED Owner/operator name: Owner/operator address: NOT REQUIRED

NOT REQUIRED, ME 99999

Owner/operator country: Not reported Owner/operator telephone: 415-555-1212 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Operator Owner/Op start date: Not reported Owner/Op end date: Not reported

ROBERT C BROOKS Owner/operator name: Owner/operator address: NOT REQUIRED

NOT REQUIRED, ME 99999

Owner/operator country: Not reported Owner/operator telephone: 415-555-1212 Owner/operator email: Not reported Owner/operator fax: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

APPLIED FRICTION TECHNIQUES INC (Continued)

1000593417

Not reported Owner/operator extension: 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: Nο 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: 110008277961

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.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000593417 110008277961 Registry ID:

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110008277961

U001577481 **C S MATTRESS CA HIST UST** 1821 N GLASSELL N/A

SSW 1/8-1/4 ORANGE, CA 92665

0.223 mi.

H32

1178 ft. Site 1 of 2 in cluster H

Relative: HIST UST: Lower File Number: 0002E91E

URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002E91E.pdf Actual:

Region: STATE 194 ft. Facility ID: 00000048457

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

C S MATTRESS (Continued) U001577481

Facility Type: Other **PRIVATE** Other Type:

Contact Name: FRANK BRANNEN Telephone: 2135472781 Owner Name: FRANK BRANNEN 29677 HIGHPOINT RD Owner Address:

RANCHO PALOS VERDES, CA 90742 Owner City, St, Zip:

Total Tanks: 0001

Tank Num: 001 Container Num: 1 Year Installed: 1976 00003000 Tank Capacity: Tank Used for: **PRODUCT** Type of Fuel: UNLEADED Container Construction Thickness: Not reported Leak Detection: Visual, Stock Inventor

Click here for Geo Tracker PDF:

H33 PREFERRED AUTO BODY & PAINT, F PILLARELL CA FID UST S101619673 CA EMI N/A

SSW **1821 N GLASSELL** 1/8-1/4 ORANGE, CA 92865

0.223 mi.

1178 ft. Site 2 of 2 in cluster H

Relative: CA FID UST: Lower Facility ID:

Regulated By: **UTNKA** Actual: Regulated ID: 00048457 194 ft. Cortese Code: Not reported

SIC Code: Not reported 2135472781 Facility Phone: Mail To: Not reported Mailing Address: 1821 N GLASSELL Not reported Mailing Address 2: Mailing City, St, Zip: **ORANGE 92665**

30002652

Not reported Contact: Not reported Contact Phone: DUNs Number: Not reported NPDES Number: Not reported EPA ID: Not reported Not reported Comments: Status: Active

EMI:

Year: 2008 County Code: 30 Air Basin: SC Facility ID: 101040 Air District Name: SC SIC Code: 7532

SOUTH COAST AQMD Air District Name:

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

.2959109590116243576 Total Organic Hydrocarbon Gases Tons/Yr: .29417777569917328 Reactive Organic Gases Tons/Yr:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

PREFERRED AUTO BODY & PAINT, F PILLARELL (Continued)

S101619673

Carbon Monoxide Emissions Tons/Yr: 0 0 NOX - Oxides of Nitrogen Tons/Yr: SOX - Oxides of Sulphur Tons/Yr: 0 Particulate Matter Tons/Yr: .01 Part. Matter 10 Micrometers and Smllr Tons/Yr:.0096

34 LIQUINOX COMPANY **CA HIST UST** 1000590041 WNW **221 W MEATS AVENUE CA FID UST** N/A

1/8-1/4 0.225 mi. 1189 ft.

Relative: HIST UST: Lower File Number: 0002EADB

ORANGE, CA 92665

URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002EADB.pdf Actual:

Region: STATE 193 ft. Facility ID: 00000028616 Facility Type: Other

FERTILIZER MFG. Other Type: HAP GARNER Contact Name: Telephone: 7146376300

Owner Name: LIQUINOX COMPANY 221 W. MEATS AVENUE Owner Address: Owner City, St, Zip: ORANGE, CA 92665

Total Tanks: 0001

Tank Num: 001 Container Num: 1970 Year Installed: Tank Capacity: 00001000 Tank Used for: **PRODUCT** Type of Fuel: **UNLEADED** Container Construction Thickness: Not reported

Leak Detection: None

Click here for Geo Tracker PDF:

CA FID UST:

Facility ID: 30004551 Regulated By: UTNKA Regulated ID: 00028616 Cortese Code: Not reported SIC Code: Not reported Facility Phone: 7146376300 Mail To: Not reported 221 W MEATS AVE Mailing Address: Mailing Address 2: Not reported Mailing City, St, Zip: **ORANGE 92665** Not reported Contact: Contact Phone: Not reported Not reported DUNs Number: NPDES Number: Not reported EPA ID: Not reported Comments: Not reported Status: Active

Direction Distance

Elevation Site Database(s) EPA ID Number

 I35
 CABLESCAN INC
 RCRA-SQG
 1000281482

 NNW
 145 E EMERSON
 FINDS
 CAD051977098

1/8-1/4 ORANGE, CA 92865

0.227 mi.

1198 ft. Site 1 of 4 in cluster I

Relative: RCRA-SQG:

LowerDate form received by agency: 09/01/1996Actual:Facility name:CABLESCAN INC200 ft.Facility address:145 E EMERSON

ORANGE, CA 92865

EPA ID: CAD051977098
Contact: Not reported
Contact address: Not reported

Not reported

Contact country: US

Contact telephone: Not reported Contact email: Not reported

EPA Region: 09

Land type: Facility is not located on Indian land. Additional information is not known.

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: CABLESCAN INC
Owner/operator address: NOT REQUIRED

NOT REQUIRED, ME 99999

Owner/operator country: Not reported Owner/operator telephone: 415-555-1212 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported 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 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported 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

EDR ID Number

ECHO

Direction Distance

Elevation Site Database(s) EPA ID Number

CABLESCAN INC (Continued)

1000281482

EDR ID Number

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: Nο 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: 08/18/1980
Site name: CABLESCAN INC
Classification: Large Quantity Generator

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 06/09/1994

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported

Evaluation lead agency: State Contractor/Grantee

FINDS:

Registry ID: 110008262138

Environmental Interest/Information System

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

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.

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000281482 Registry ID: 110008262138

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110008262138

Direction Distance

Elevation Site Database(s) EPA ID Number

J36 ANR FRIEGHT TERMINAL CA HIST UST S117694728
West 310 WEST GROVE CA NPDES N/A

ORANGE, CA 92665 CA CIWQS

1/8-1/4 0.229 mi.

1207 ft. Site 1 of 4 in cluster J

Relative: HIST UST:
Lower File Number: 0002ED6E

Actual: URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002ED6E.pdf

190 ft.

Region: Not reported Facility ID: Not reported Facility Type: Not reported Other Type: Not reported Not reported Contact Name: Telephone: Not reported Owner Name: Not reported Owner Address: Not reported Owner City, St, Zip: Not reported Total Tanks: Not reported

Tank Num: Not reported Container Num: Not reported Year Installed: Not reported Tank Capacity: Not reported Tank Used for: Not reported Type of Fuel: Not reported Container Construction Thickness: Not reported Leak Detection: Not reported

Click here for Geo Tracker PDF:

NPDES:

Facility Status: Not reported NPDES Number: Not reported Region: Not reported Agency Number: Not reported Regulatory Measure ID: Not reported Place ID: Not reported Order Number: Not reported 8 301007014 WDID: Industrial Regulatory Measure Type: Program Type: Not reported Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Discharge Address: Not reported Discharge Name: Not reported Discharge City: Not reported Discharge State: Not reported Discharge Zip: Not reported Status: Terminated Status Date: 05/27/1992

Operator Name: ANR Freight Systems
Operator Address: 9 E Greenway Plz

Operator City: Houston
Operator State: Texas
Operator Zip: 77046

EDR ID Number

MAP FINDINGS Map ID Direction

Distance

Elevation Site Database(s) **EPA ID Number**

05/09/2008

05/27/1992

Terminated

ANR FRIEGHT TERMINAL (Continued)

S117694728

EDR ID Number

NPDES as of 03/2018:

Received Date:

Status:

Processed Date:

NPDES Number: Not reported Status: Not reported Agency Number: Not reported

Region: Regulatory Measure ID: 208607 Not reported Order Number: Industrial Regulatory Measure Type: Place ID: Not reported WDID: 8 301007014 Program Type: Not reported Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Discharge Name: Not reported Discharge Address: Not reported Discharge City: Not reported Discharge State: Not reported Discharge Zip: Not reported

05/27/1992 Status Date: Place Size: Place Size Unit: Acres Contact: Not reported Contact Title: Not reported Contact Phone: Not reported Contact Phone Ext: Not reported Not reported Contact Email:

Operator Name: ANR Freight Systems Operator Address: 9 E Greenway Plz

Operator City: Houston Operator State: Texas Operator Zip: 77046 **Operator Contact:** Not reported Operator Contact Title: Not reported Operator Contact Phone: Not reported Not reported Operator Contact Phone Ext: Not reported Operator Contact Email: Operator Type: **Private Business** Developer: Not reported Developer Address: Not reported Developer City: Not reported Developer State: California Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** Not reported **Emergency Phone Ext:** Not reported Not reported Constype Above Ground Ind: Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

ANR FRIEGHT TERMINAL (Continued)

S117694728

EDR ID Number

Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind: Not reported Receiving Water Name: T.b.d. Certifier: Not reported Not reported Certifier Title: Not reported Certification Date:

Primary Sic: 4231-Terminal and Joint Terminal Maintenance Facilities for Motor

Freight Transportation

Secondary Sic: Not reported Tertiary Sic: Not reported

CIWQS:

Agency: ANR Freight Systems

Agency Address: 9 E Greenway Plz, Houston, TX 77046

Place/Project Type: Industrial - Terminal and Joint Terminal Maintenance Facilities for

Motor Freight Transportation

SIC/NAICS: 4231
Region: 8
Program: INDSTW
Regulatory Measure Status: Terminated

Regulatory Measure Type: Storm water industrial Order Number: 2014-0057-DWQ WDID: 8 301007014 NPDES Number: CAS000001 Adoption Date: Not reported Effective Date: 05/27/1992 Termination Date: Not reported Expiration/Review Date: Not reported Design Flow: Not reported Major/Minor: Not reported Complexity: Not reported TTWQ: Not reported

Enforcement Actions within 5 years: 0
Violations within 5 years: 0

Latitude: Not reported Longitude: Not reported

Direction Distance

Distance EDR ID Number
Elevation Site EPA ID Number

J37 RYDER/PIE NATIONWIDE, INC. CA HIST UST U001577501

Not reported

Not reported

N/A

West 310 W GROVE AVE 1/8-1/4 ORANGE, CA 92665

0.229 mi.

1207 ft. Site 2 of 4 in cluster J

Relative: HIST UST:
Lower File Number:

Actual: URL:
190 ft. Region:

Region: STATE
Facility ID: 00000035997
Facility Type: Other

Other Type: TRUCK TERMINAL
Contact Name: CARL MILLER
Telephone: 7149984120

Owner Name: RYDER/PIE NATIONWIDE, INC.

Owner Address: 2050 KINGS ROAD
Owner City,St,Zip: JACKSONVILLE, FL 32203

Total Tanks: 0003

Tank Num: 001
Container Num: 1-658
Year Installed: Not reported
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: Not reported

Leak Detection: Visual, Stock Inventor

Tank Num: 002
Container Num: 2-658
Year Installed: Not reported
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported

Leak Detection: Visual, Stock Inventor

Tank Num: 003

Container Num: 3-658

Year Installed: Not reported
Tank Capacity: 00010000

Tank Used for: PRODUCT
Type of Fuel: DIESEL

Container Construction Thickness: Not reported

Leak Detection: Visual, Stock Inventor

J38 FEDEX FREIGHT ONG RCRA-SQG 1000819101
West 310 W GROVE CA LUST CAD983650680

 West
 310 W GROVE
 CA LUST

 1/8-1/4
 ORANGE, CA 92865
 FINDS

0.229 mi. ECHO 1207 ft. Site 3 of 4 in cluster J CA HIST CORTESE

Relative:

CA NPDES

CA WDS

Lower

CA CIWQS

Actual:

190 ft. RCRA-SQG:

Date form received by agency: 04/03/2017

Facility name: FEDEX FREIGHT ONG Facility address: FEDEX FREIGHT ONG 310 W GROVE

Direction Distance Elevation

ation Site Database(s) EPA ID Number

FEDEX FREIGHT ONG (Continued)

1000819101

EDR ID Number

ORANGE, CA 92865

EPA ID: CAD983650680 Mailing address: ALCOA RD

BENTON, AR 72015

Contact: STEVEN CHANEY

Contact address: ALCOA RD

BENTON, AR 72015

Contact country: US

Contact telephone: 501-860-7904

Contact email: STEVEN.CHANEY@FEDEX.COM

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: FEDEX FREIGHT INC

Owner/operator address: FORWARD DR

HARRISON, AR 72601

Owner/operator country: US

Owner/operator telephone: 800-603-3828
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner

Owner/Op end date:

Owner/operator name: FEDEX FREIGHT INC

Owner/operator address:

Not reported
Not reported
Owner/operator country:

Owner/operator telephone:
Owner/operator email:
Owner/operator fax:

Owner/operator extension:

Not reported
Not reported
Not reported
Not reported
Not reported

Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/2000
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 Map ID MAP FINDINGS
Direction

Distance EDR ID Number
Elevation Site EDR ID Number
Database(s) EPA ID Number

FEDEX FREIGHT ONG (Continued)

1000819101

User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Waste code: 141

. Waste name: Off-specification, aged, or surplus inorganics

. Waste code: 181

Waste name: Other inorganic solid waste

Waste code: 211

. Waste name: Halogenated solvents (chloroform, methyl chloride, perchloroethylene,

etc.)

Waste code: 212

Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

Waste code: 213

. Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

Waste code: 223

. Waste name: Unspecified oil-containing waste

. Waste code: 232

. Waste name: Pesticides and other waste associated with pesticide production

. Waste code: 281 . Waste name: Adhesives

Waste code: 311

Waste name: Pharmaceutical waste

. Waste code: 331

. Waste name: Off-specification, aged, or surplus organics

Waste code: 352

. Waste name: Other organic solids

. Waste code: 512

Waste name: Other empty containers 30 gallons or more

Waste code: 561

Waste name: Detergent and soap

Waste code: 791

Waste name: Liquids with pH < 2

. Waste code: 792

Waste name: Liquids with pH < 2 with metals

Waste code: D001

Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET,

Distance EDR ID Number
Elevation Site EDR ID Number
Database(s) EPA ID Number

FEDEX FREIGHT ONG (Continued)

1000819101

WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. 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: D003

Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS

NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE

OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: D005
Waste name: BARIUM

Waste code: D007

Waste name: CHROMIUM

. Waste code: D008 . Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

Waste code: D016
Waste name: 2,4-D

Waste code: D026
Waste name: CRESOL

Waste code: D035

. Waste name: METHYL ETHYL KETONE

Waste code: D039

Waste name: TETRACHLOROETHYLENE

Waste code: D040

Waste name: TRICHLOROETHYLENE

Waste code: U002

Waste name: ACETONE (I)

Waste code: U068

. Waste name: METHANE, DIBROMO-

. Waste code: U080

. Waste name: METHANE, DICHLORO-

. Waste code: U122

Direction Distance Elevation

EDR ID Number
Site Database(s) EPA ID Number

FEDEX FREIGHT ONG (Continued)

1000819101

. Waste name: FORMALDEHYDE

. Waste code: U125

. Waste name: 2-FURANCARBOXALDEHYDE (I)

. Waste code: U133

. Waste name: HYDRAZINE (R,T)

. Waste code: U154

Waste name: METHANOL (I)

. Waste code: U159

. Waste name: 2-BUTANONE (I,T)

Waste code: U160

. Waste name: 2-BUTANONE, PEROXIDE (R,T)

. Waste code: U161

. Waste name: METHYL ISOBUTYL KETONE (I)

. Waste code: U210

. Waste name: ETHENE, TETRACHLORO-

. Waste code: U219 . Waste name: THIOUREA

. Waste code: U220

. Waste name: BENZENE, METHYL-

. Waste code: U223

. Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T)

. Waste code: U239

. Waste name: BENZENE, DIMETHYL- (I,T)

Waste code: U240

. Waste name: ACETIC ACID, (2,4-DICHLOROPHENOXY)-, SALTS & ESTERS

Historical Generators:

Date form received by agency: 10/11/2011

Site name: FEDEX FREIGHT INC ONG
Classification: Small Quantity Generator

Waste code: 122

Waste name: Alkaline solution without metals (pH > 12.5)

. Waste code: 141

. Waste name: Off-specification, aged, or surplus inorganics

Waste code: 181

Waste name: Other inorganic solid waste

Waste code: 211

Waste name: Halogenated solvents (chloroform, methyl chloride, perchloroethylene,

etc.)

. Waste code: 212

Distance EDR ID Number
Elevation Site EDR ID Number
Database(s) EPA ID Number

FEDEX FREIGHT ONG (Continued)

1000819101

. Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

. Waste code: 213

. Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

. Waste code: 214

. Waste name: Unspecified solvent mixture

Waste code: 221

Waste name: Waste oil and mixed oil

Waste code: 232

Waste name: Pesticides and other waste associated with pesticide production

Waste code: 272

Waste name: Polymeric resin waste

Waste code: 281
Waste name: Adhesives

. Waste code: 291

. Waste name: Latex waste

Waste code: 311

. Waste name: Pharmaceutical waste

. Waste code: 331

. Waste name: Off-specification, aged, or surplus organics

Waste code: 352

. Waste name: Other organic solids

. Waste code: 541

Waste name: Photochemicals / photo processing waste

. Waste code: 561

. Waste name: Detergent and soap

Waste code: 791

Waste name: Liquids with pH < 2

Waste code: D001

Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

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

Direction Distance Elevation

EPA ID Number Site Database(s)

FEDEX FREIGHT ONG (Continued)

1000819101

EDR ID Number

DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

D003 Waste code:

A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS Waste name:

> NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE

OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: D007 **CHROMIUM** Waste name:

Waste code: D008 Waste name: **LEAD** Waste code: D010 SELENIUM

Waste code: D035

Waste name:

METHYL ETHYL KETONE Waste name:

Waste code: D039

TETRACHLOROETHYLENE Waste name:

Waste code: D040

TRICHLOROETHYLENE Waste name:

Waste code: U080

Waste name: METHANE, DICHLORO-

Waste code: 11240

Waste name: ACETIC ACID, (2,4-DICHLOROPHENOXY)-, SALTS & ESTERS

Date form received by agency: 10/29/2008

Site name: FEDEX NATIONAL LTL Small Quantity Generator Classification:

Waste code: D001

IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF Waste name:

> LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET. WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Date form received by agency: 10/20/1992

Site name: A N R FREIGHT SYSTEM INC Classification: **Small Quantity Generator**

Violation Status: No violations found

LUST:

Lead Agency: ORANGE, CITY OF Case Type: **LUST Cleanup Site**

Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605901123

Global Id: T0605901123 33.82094 Latitude:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

FEDEX FREIGHT ONG (Continued)

1000819101

Longitude: -117.8553264

Completed - Case Closed Status:

Status Date: 11/10/1992 Case Worker: UNK RB Case Number: 083001477T Local Agency: ORANGE, CITY OF File Location: Not reported Local Case Number: Not reported Potential Media Affect: Soil Potential Contaminants of Concern: Diesel Site History: Not reported

LUST:

Global Id: T0605901123

Regional Board Caseworker Contact Type: Contact Name: PATRICIA HANNON

Organization Name: SANTA ANA RWQCB (REGION 8) Address: 3737 MAIN STREET, SUITE 500

City: **RIVERSIDE**

Email: phannon@waterboards.ca.gov

Phone Number: Not reported

T0605901123 Global Id:

Contact Type: Local Agency Caseworker

Contact Name: UNK

ORANGE, CITY OF Organization Name: Address: Not reported City: r8 UNKNOWN Email: Not reported Phone Number: Not reported

LUST:

Global Id: T0605901123 Action Type: Other 10/22/1991 Date: Action: Leak Stopped

T0605901123 Global Id: Action Type: Other Date: 10/24/1991 Action: Leak Discovery

Global Id: T0605901123 Action Type: **ENFORCEMENT** Date: 11/10/1992

Closure/No Further Action Letter Action:

Global Id: T0605901123 Action Type: Other 01/06/1992 Date: Action: Leak Reported

LUST:

Global Id: T0605901123

Status: Completed - Case Closed

Status Date: 11/10/1992

Direction

Elevation Site Database(s) EPA ID Number

FEDEX FREIGHT ONG (Continued)

1000819101

EDR ID Number

Global Id: T0605901123

Status: Open - Case Begin Date

Status Date: 10/22/1991

Global Id: T0605901123

Status: Open - Site Assessment

Status Date: 10/24/1991

Global Id: T0605901123

Status: Open - Site Assessment

Status Date: 01/06/1992

LUST REG 8:

Region: 8
County: Orange

Regional Board: Santa Ana Region Facility Status: Case Closed Case Number: 083001477T Local Case Num: Not reported Soil only Case Type: Substance: Diesel Qty Leaked: Not reported Not reported Abate Method: **GLASSELL** Cross Street: Enf Type: **CLOS** Not reported Fundina: How Discovered: Tank Closure How Stopped: Not reported Leak Cause: UNK

Leak Source: UNK Global ID: T0605901123 How Stopped Date: 10/22/1991 Enter Date: 2/11/1992 Date Confirmation of Leak Began: 10/24/1991 Date Preliminary Assessment Began: Not reported Discover Date: 10/24/1991 **Enforcement Date:** Not reported 11/10/1992 Close Date: Date Prelim Assessment Workplan Submitted: 1/6/1992 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 Not reported Operator: Facility Contact: Not reported Interim: Not reported Oversite Program: LUST Latitude: 33.82094 Longitude: -117.8553264 MTBE Date: Not reported Max MTBE GW: Not reported

MTBE Concentration: 0

Max MTBE Soil: Not reported

Direction Distance Elevation

vation Site Database(s) EPA ID Number

FEDEX FREIGHT ONG (Continued)

1000819101

EDR ID Number

MTBE Fuel:

MTBE Tested: Not Required to be Tested.

MTBE Class: *
Staff: PAH
Staff Initials: UNK

Lead Agency: Local Agency

Local Agency: Orange, Orange County
Hydr Basin #: COASTAL PLAIN OF ORA

Beneficial: Not reported Priority: Not reported Cleanup Fund Id: Not reported Work Suspended: Not reported

Summary: Not reported

FINDS:

Registry ID: 110008284249

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.

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000819101 Registry ID: 110008284249

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110008284249

HIST CORTESE:

Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083001477T

NPDES:

Facility Status: Active NPDES Number: CAS000001

Region: Agency Number: Regulatory Measure ID: 209146 Place ID: Not reported Order Number: 97-03-DWQ WDID: 8 301017748 Regulatory Measure Type: Enrollee Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 01/14/2003 Termination Date Of Regulatory Measure: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

FEDEX FREIGHT ONG (Continued)

1000819101

EDR ID Number

Expiration Date Of Regulatory Measure: Not reported
Discharge Address: 310 West Grove
Discharge Name: FedEx Freight Inc ONG

Discharge City: Orange Discharge State: California Discharge Zip: 92865 Status: Not reported Status Date: Not reported Operator Name: Not reported Operator Address: Not reported Operator City: Not reported Operator State: Not reported Operator Zip: Not reported

NPDES as of 03/2018:

Operator Contact:

NPDES Number: Not reported Status: Not reported Agency Number: Not reported

Region: Regulatory Measure ID: 209146 Order Number: Not reported Regulatory Measure Type: Industrial Place ID: Not reported WDID: 8 301017748 Not reported Program Type: Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Discharge Name: Not reported Discharge Address: Not reported Discharge City: Not reported Discharge State: Not reported

Discharge State:

Not reported
Discharge Zip:

Received Date:

Processed Date:

Status:

Status:

Active
Status Date:

Place Size:

Place Size Unit:

Not reported
Not reporte

Contact: Frank Valentin

Contact Title: Service Center Manager

Contact Phone: 714-637-9383
Contact Phone Ext: Not reported

Contact Email: frank.valentin@fedex.com
Operator Name: FedEx Freight Inc
Operator Address: 3405 Victor St
Operator City: Santa Clara
Operator State: California
Operator Zip: 95054

Operator Contact Title: Manager Envrionmental Services

Chong Lee

Operator Contact Phone: 408-654-3112
Operator Contact Phone Ext: Not reported

Operator Contact Email: chong.lee@fedex.com
Operator Type: Private Business
Developer: Not reported
Developer Address: Not reported

Distance

Elevation Site Database(s) **EPA ID Number**

FEDEX FREIGHT ONG (Continued)

1000819101

EDR ID Number

Developer City: Not reported Developer State: California Developer Zip: Not reported Developer Contact: Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported Emergency Phone: 714-637-9383 Emergency Phone Ext: Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind: Receiving Water Name: Santa Ana River

Certifier: Frank Valentin

Certifier Title: Service Center Manager

Certification Date: 13-MAY-15

4213-Trucking, Except Local Primary Sic:

Secondary Sic: Not reported Tertiary Sic: Not reported

NPDES Number: CAS000001 Active Status: Agency Number: n Region: Regulatory Measure ID: 209146 97-03-DWQ Order Number: Regulatory Measure Type: Enrollee Place ID: Not reported WDID: 8 301017748 Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 01/14/2003 Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Discharge Name: FedEx Freight Inc Discharge Address: 3405 Victor St Discharge City: Santa Clara Discharge State: California Discharge Zip: 95054 Received Date: Not reported Processed Date: Not reported Status: Not reported Not reported Status Date:

Not reported

Place Size:

Distance EDR ID Number
Elevation Site EDR ID Number
Database(s) EPA ID Number

FEDEX FREIGHT ONG (Continued)

1000819101

Place Size Unit: Not reported Not reported Contact: Not reported Contact Title: Not reported Contact Phone: Contact Phone Ext: Not reported Not reported Contact Email: Not reported Operator Name: Operator Address: Not reported Operator City: Not reported Operator State: Not reported Operator Zip: Not reported **Operator Contact:** Not reported Operator Contact Title: Not reported **Operator Contact Phone:** Not reported Operator Contact Phone Ext: Not reported Operator Contact Email: Not reported Not reported Operator Type: Developer: Not reported Developer Address: Not reported Developer City: Not reported Developer State: Not reported Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** Not reported Emergency Phone Ext: Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Not reported Constype Industrial Ind: Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind: Not reported Receiving Water Name: Not reported Certifier: Not reported Certifier Title: Not reported Certification Date: Not reported Primary Sic: Not reported Not reported Secondary Sic: Tertiary Sic: Not reported

Facility Status:

Not reported

NPDES Number:

Region:

Agency Number:

Not reported

Not reported

Not reported

Not reported

Distance Elevation Site

Site Database(s) EPA ID Number

FEDEX FREIGHT ONG (Continued)

1000819101

EDR ID Number

Regulatory Measure ID: Not reported Place ID: Not reported Order Number: Not reported WDID: 8 301017748 Regulatory Measure Type: Industrial Program Type: Not reported Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Discharge Address: Not reported Discharge Name: Not reported Discharge City: Not reported Discharge State: Not reported Discharge Zip: Not reported Status: Active 01/14/2003 Status Date:

Operator Name: FedEx Freight Inc ONG
Operator Address: 310 West Grove

Operator City: Orange
Operator State: California
Operator Zip: 92865

NPDES as of 03/2018:

NPDES Number: Not reported Status: Not reported Agency Number: Not reported

Region: Regulatory Measure ID: 209146 Order Number: Not reported Regulatory Measure Type: Industrial Place ID: Not reported WDID: 8 301017748 Program Type: Not reported Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Discharge Name: Not reported Discharge Address: Not reported Discharge City: Not reported Discharge State: Not reported Discharge Zip: Not reported Received Date: 05/09/2008 Processed Date: 01/14/2003 Status: Active Status Date: 01/14/2003 Place Size:

Place Size Unit: Acres
Contact: Frank Valentin

Contact Title: Service Center Manager

Contact Phone: 714-637-9383
Contact Phone Ext: Not reported

Contact Email: frank.valentin@fedex.com

Operator Name: FedEx Freight Inc
Operator Address: 3405 Victor St
Operator City: Santa Clara
Operator State: California

Distance
Elevation Site Database(s)

FEDEX FREIGHT ONG (Continued)

1000819101

EDR ID Number

EPA ID Number

Operator Zip: 95054
Operator Contact: Chong Lee

Operator Contact Title: Manager Environmental Services

Operator Contact Phone: 408-654-3112
Operator Contact Phone Ext: Not reported

Operator Contact Email: chong.lee@fedex.com Private Business Operator Type: Developer: Not reported Developer Address: Not reported Developer City: Not reported Developer State: California Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported 714-637-9383 **Emergency Phone:** Emergency Phone Ext: Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Not reported Constype Electrical Line Ind: Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported

Dir Discharge Uswater Ind: N

Constype Water Sewer Ind:

Receiving Water Name: Santa Ana River Certifier: Frank Valentin

Certifier Title: Service Center Manager

Certification Date: 13-MAY-15

Primary Sic: 4213-Trucking, Except Local

Not reported

Secondary Sic: Not reported Tertiary Sic: Not reported

NPDES Number: CAS000001 Active Status: Agency Number: 0 Region: Regulatory Measure ID: 209146 Order Number: 97-03-DWQ Regulatory Measure Type: Enrollee Place ID: Not reported 8 301017748 WDID: Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 01/14/2003 Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Discharge Name: FedEx Freight Inc

Distance Elevation Site

Database(s)

FEDEX FREIGHT ONG (Continued)

1000819101

EDR ID Number

EPA ID Number

Discharge Address: 3405 Victor St Discharge City: Santa Clara Discharge State: California Discharge Zip: 95054 Received Date: Not reported Processed Date: Not reported Status: Not reported Status Date: Not reported Place Size: Not reported Place Size Unit: Not reported Contact: Not reported Contact Title: Not reported Contact Phone: Not reported Contact Phone Ext: Not reported Contact Email: Not reported Operator Name: Not reported Not reported Operator Address: Operator City: Not reported Operator State: Not reported Operator Zip: Not reported **Operator Contact:** Not reported Operator Contact Title: Not reported Not reported **Operator Contact Phone:** Operator Contact Phone Ext: Not reported Operator Contact Email: Not reported Operator Type: Not reported Developer: Not reported Developer Address: Not reported Developer City: Not reported Developer State: Not reported Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported Not reported **Emergency Phone:** Emergency Phone Ext: Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Not reported Constype Electrical Line Ind: Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Not reported Dir Discharge Uswater Ind: Receiving Water Name: Not reported Certifier: Not reported Certifier Title: Not reported Certification Date: Not reported

Direction Distance Elevation

vation Site Database(s) EPA ID Number

FEDEX FREIGHT ONG (Continued)

1000819101

EDR ID Number

Primary Sic: Not reported Secondary Sic: Not reported Tertiary Sic: Not reported

WDS:

Facility ID: Santa Ana River 30I017748

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

are assigned by the Regional Board

Subregion: 8

Facility Telephone: 7146379346
Facility Contact: JUAN GUTIERREZ
Agency Name: WATKINS MOTOR LINES

Agency Address: PO BOX 95002 Agency City,St,Zip: LAKELAND 338045002

Agency Contact: HAL BROWER
Agency Telephone: 8636874545
Agency Type: Private
SIC Code: 0

SIC Code 2: Not reported Primary Waste Type: Not reported Not reported Primary Waste: Waste Type2: Not reported Waste2: Not reported Primary Waste Type: Not reported Not reported Secondary Waste: 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 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.

CIWQS:

Agency: FedEx Freight Inc ONG

Agency Address: 310 West Grove, Orange, CA 92865
Place/Project Type: Industrial - Trucking, Except Local

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

FEDEX FREIGHT ONG (Continued)

1000819101

SIC/NAICS: 4213 Region: 8 **INDSTW** Program: Regulatory Measure Status: Active

Regulatory Measure Type: Storm water industrial Order Number: 2014-0057-DWQ WDID: 8 301017748 NPDES Number: CAS000001 Adoption Date: Not reported Effective Date: 01/14/2003 Termination Date: Not reported Expiration/Review Date: Not reported Design Flow: Not reported Major/Minor: Not reported Complexity: Not reported TTWQ: Not reported

Enforcement Actions within 5 years: 0 Violations within 5 years: 0

Latitude: 33.820146 -117.85536 Longitude:

CA HIST UST U001577500 J39 RYDER PIG 310 W GROVE West N/A

1/8-1/4 ORANGE, CA 92665

0.229 mi.

190 ft.

1207 ft. Site 4 of 4 in cluster J

Relative: HIST UST: Lower File Number: 0002ED6B

URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002ED6B.pdf Actual:

Region: STATE Facility ID: 00000047931 Facility Type: Other TRUCK LINE Other Type: Contact Name: **CARL MILLER** Telephone: 7149984120

Owner Name: RYDER PIG NW-CORP.

Owner Address: P.O. BX 2408

Owner City, St, Zip: JACKSONVILLE, FL 32203

Total Tanks: 0002

Tank Num: 001 Container Num: 65801 Year Installed: 1973 00012000 Tank Capacity: Tank Used for: **PRODUCT** DIESEL Type of Fuel: Container Construction Thickness: 1/4

Leak Detection: Stock Inventor

Tank Num: 002 Container Num: 65802 1973 Year Installed: Tank Capacity: 00000000 Tank Used for: WASTE Type of Fuel: 06

Container Construction Thickness: Not reported Leak Detection: None

Direction Distance

Elevation Site Database(s) **EPA ID Number**

RYDER PIG (Continued) U001577500

Click here for Geo Tracker PDF:

140 MARBIL INDUSTRIES INC RCRA-SQG 1012175897 NNW 2201 N GLASSELL ST **CA HAZNET** CAR000197079

ORANGE, CA 92865 1/8-1/4

0.240 mi.

Site 2 of 4 in cluster I 1267 ft.

Relative: RCRA-SQG:

Lower Date form received by agency: 11/14/2016

MARBIL INDUSTRIES INC Facility name: Actual: Facility address: 2201 N GLASSELL ST 199 ft. ORANGE, CA 92865

EPA ID: CAR000197079 N GLASSELL ST Mailing address:

ORANGE, CA 92865

WILLIAM B THOMSON Contact: Contact address: N GLASSELL ST

ORANGE, CA 92865

Contact country: US

Contact telephone: 714-974-4032

Contact email: WBTCM@YAHOO.COM

EPA Region:

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: MARBIL INDUSTRIES

Owner/operator address: Not reported

Not reported

Owner/operator country: Not reported Owner/operator telephone: Not reported Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Operator

Owner/Op start date: 04/01/1979 Owner/Op end date: Not reported

Owner/operator name: **ALLAN THOMSON** Owner/operator address: HAMDEN LN

HUNTINGTON BEACH, CA 92646

Owner/operator country: US

Owner/operator telephone: Not reported Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: 12/01/2004 Owner/Op end date: Not reported **EDR ID Number**

Distance EDR ID Number
Elevation Site EDR ID Number
Database(s) EPA ID Number

MARBIL INDUSTRIES INC (Continued)

1012175897

Owner/operator name: WILLIAM THOMSON

Owner/operator address: JAVA ROAD

COSTA MESA, CA 92626

Owner/operator country: US

Owner/operator telephone: Not reported Owner/operator email: Not reported Not reported Owner/operator fax: Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: 12/01/2004 Not reported Owner/Op end date:

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: Nο Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Waste code: 223

. Waste name: Unspecified oil-containing waste

. Waste code: 352

Waste name: Other organic solids

. Waste code: 791

. Waste name: Liquids with pH < 2

Waste code: 792

Waste name: Liquids with pH < 2 with metals

. Waste code: D001

Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: D007 . Waste name: CHROMIUM

Waste code: F006

. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT

FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM;

Direction Distance Elevation

vation Site Database(s) EPA ID Number

MARBIL INDUSTRIES INC (Continued)

1012175897

EDR ID Number

(2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

Historical Generators:

Date form received by agency: 12/04/2008

Site name: MARBIL INDUSTRIES INC Classification: Small Quantity Generator

Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: D007
. Waste name: CHROMIUM

Waste code: F006

Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT

FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

Violation Status: No violations found

HAZNET:

envid: 1012175897 Year: 2017

GEPAID: CAR000197079
Contact: WILLIAM THOMSON

Telephone: 7149744032
Mailing Name: Not reported

Mailing Address: 2201 N. GLASSELL ST.
Mailing City,St,Zip: ORANGE, CA 928650000

Gen County: Orange
TSD EPA ID: CAT080013352
TSD County: Los Angeles

Waste Category: Oil/water separation sludge

Disposal Method: Other Recovery Of Reclamation For Reuse Including Acid Regeneration,

Organics Recovery Ect

Tons: 1.43865

Cat Decode: Oil/water separation sludge

Method Decode: Other Recovery Of Reclamation For Reuse Including Acid Regeneration,

Organics Recovery Ect

Facility County: Orange

envid: 1012175897 Year: 2017

Direction Distance

Elevation Site Database(s) EPA ID Number

MARBIL INDUSTRIES INC (Continued)

1012175897

EDR ID Number

GEPAID: CAR000197079
Contact: WILLIAM THOMSON

Telephone: 7149744032 Mailing Name: Not reported

Mailing Address: 2201 N. GLASSELL ST.
Mailing City,St,Zip: ORANGE, CA 928650000

Gen County: Orange
TSD EPA ID: AZR000515924

TSD County: 99

Waste Category: Unspecified oil-containing waste

Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery

(H010-H129) Or (H131-H135)

Tons: 1.14675

Cat Decode: Unspecified oil-containing waste

Method Decode: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery

(H010-H129) Or (H131-H135)

Facility County: Orange

envid: 1012175897 Year: 2016

GEPAID: CAR000197079
Contact: WILLIAM THOMSON

Telephone: 7149744032 Mailing Name: Not reported

Mailing Address: 2201 N. GLASSELL ST.
Mailing City,St,Zip: ORANGE, CA 928650000

Gen County: Orange
TSD EPA ID: CAT080013352
TSD County: Los Angeles

Waste Category: Oil/water separation sludge

Disposal Method: Other Recovery Of Reclamation For Reuse Including Acid Regeneration,

Organics Recovery Ect

Tons: 1.14675
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Orange

envid: 1012175897 Year: 2016

GEPAID: CAR000197079
Contact: WILLIAM THOMSON

Telephone: 7149744032 Mailing Name: Not reported

Mailing Address: 2201 N. GLASSELL ST.
Mailing City, St, Zip: ORANGE, CA 928650000

Gen County: Orange

TSD EPA ID: NVT330010000

TSD County: 99

Waste Category: Liquids with pH <= 2 with metals

Disposal Method: Landfill Or Surface Impoundment That Will Be Closed As Landfill (To

Include On-Site Treatment And/Or Stabilization)

Tons: 0.4587
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Orange

envid: 1012175897

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

MARBIL INDUSTRIES INC (Continued)

1012175897

Year: 2016

CAR000197079 GEPAID: Contact: WILLIAM THOMSON

Telephone: 7149744032 Mailing Name: Not reported

Mailing Address: 2201 N. GLASSELL ST. Mailing City, St, Zip: ORANGE, CA 928650000

Gen County: Orange TSD EPA ID: NVT330010000

TSD County: 99

Waste Category: Other organic solids

Disposal Method: Landfill Or Surface Impoundment That Will Be Closed As Landfill (To

Include On-Site Treatment And/Or Stabilization)

Tons:

Cat Decode: Not reported Method Decode: Not reported Facility County: Orange

> Click this hyperlink while viewing on your computer to access 20 additional CA_HAZNET: record(s) in the EDR Site Report.

I41 RONEL ENTERPRISES RCRA-SQG 1000203528 NNW 2207 N GLASSELL ST **FINDS** CAD981391246 1/8-1/4 ORANGE, CA 92865 **ECHO**

0.241 mi.

1270 ft. Site 3 of 4 in cluster I

EPA ID:

Contact:

Contact address:

Relative: RCRA-SQG:

Lower Date form received by agency: 09/01/1996

Facility name: **RONEL ENTERPRISES** Actual: Facility address: 2207 N GLASSELL ST 199 ft. ORANGE, CA 92865

CAD981391246 Not reported

Not reported Not reported

Contact country: US Contact telephone: Not reported

Contact email: Not reported

EPA Region:

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:

NOT REQUIRED Owner/operator name: Owner/operator address: NOT REQUIRED

NOT REQUIRED, ME 99999

Owner/operator country: Not reported Owner/operator telephone: 415-555-1212 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Private Legal status:

Distance Elevation Site

Site Database(s) EPA ID Number

RONEL ENTERPRISES (Continued)

1000203528

EDR ID Number

Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: VALEO RONALD Owner/operator address: NOT REQUIRED

NOT REQUIRED, ME 99999

Owner/operator country: Not reported Owner/operator telephone: 415-555-1212 Owner/operator email: Not reported Owner/operator fax: Not reported Not reported Owner/operator extension: 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: Mixed waste (haz. and radioactive): No Recycler of hazardous waste: Nο 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: Nο Used oil transfer facility: No Used oil transporter: No

Historical Generators:

Date form received by agency: 02/24/1986

Site name: RONEL ENTERPRISES
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110008267160

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.

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

RONEL ENTERPRISES (Continued)

1000203528

ECHO:

1000203528 Envid: Registry ID: 110008267160

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110008267160

142 **SUMMIT INTERCONNECT INC., ORANGE DIVISION** CA ENVIROSTOR S110494035 **CA HAZNET** N/A

NNW 230 BRISTOL LN 1/8-1/4 ORANGE, CA 92665

0.246 mi.

1299 ft. Site 4 of 4 in cluster I

Relative: **ENVIROSTOR:**

Lower Facility ID: 71002927

Status: Refer: Local Agency Actual: Status Date: 07/01/2015 201 ft.

Site Code: Not reported Site Type: Tiered Permit Site Type Detailed: **Tiered Permit**

Acres: 4 NPL: NO

Regulatory Agencies: NONE SPECIFIED Lead Agency: NONE SPECIFIED Program Manager: Not reported Supervisor: Robert Senga Division Branch: Cleanup Cypress

Assembly: 68 Senate: 37

Special Program: Not reported

Restricted Use: NO

Site Mgmt Req: NONE SPECIFIED Funding: Not reported Latitude: 33.82515 -117.8516 Longitude:

APN: NONE SPECIFIED Past Use: NONE SPECIFIED Potential COC: NONE SPECIFIED Confirmed COC: NONE SPECIFIED Potential Description: NONE SPECIFIED Alias Name: CAD981967797

Alias Type: **EPA Identification Number**

Alias Name: 71002927

Alias Type: **Envirostor ID Number**

Completed Info:

Completed Area Name: Not reported Completed Sub Area Name: Not reported Not reported Completed Document Type: Completed Date: Not reported Comments: Not reported

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

Direction Distance

Elevation Site Database(s) EPA ID Number

SUMMIT INTERCONNECT INC., ORANGE DIVISION (Continued)

S110494035

EDR ID Number

Schedule Revised Date: Not reported

HAZNET:

envid: S110494035

Year: 2017

GEPAID: CAD981967797
Contact: RAY HERNANDEZ
Telephone: 7149748590
Mailing Name: Not reported

Mailing Address: 130 W BRISTOL LANE
Mailing City, St, Zip: ORANGE, CA 928650000

Gen County: Orange

TSD EPA ID: NVT330010000

TSD County: 99

Waste Category: Other organic solids

Disposal Method: Landfill Or Surface Impoundment That Will Be Closed As Landfill (To

Include On-Site Treatment And/Or Stabilization)

Tons: 34.7956

Cat Decode: Other organic solids

Method Decode: Landfill Or Surface Impoundment That Will Be Closed As Landfill (To

Include On-Site Treatment And/Or Stabilization)

Facility County: Orange

envid: \$110494035 Year: 2017

GEPAID: CAD981967797
Contact: RAY HERNANDEZ
Telephone: 7149748590
Mailing Name: Not reported

Mailing Address: 130 W BRISTOL LANE
Mailing City,St,Zip: ORANGE, CA 928650000

Gen County: Orange
TSD EPA ID: NVT330010000

TSD County: 99

Waste Category: Liquids with nickel >= 134 Mg./L

Disposal Method: Other Recovery Of Reclamation For Reuse Including Acid Regeneration,

Organics Recovery Ect

Tons: 5.73375

Cat Decode: Liquids with nickel >= 134 Mg./L

Method Decode: Other Recovery Of Reclamation For Reuse Including Acid Regeneration,

Organics Recovery Ect

Facility County: Orange

envid: \$110494035 Year: 2017

GEPAID: CAD981967797
Contact: RAY HERNANDEZ
Telephone: 7149748590
Mailing Name: Not reported

Mailing Address: 130 W BRISTOL LANE
Mailing City,St,Zip: ORANGE, CA 928650000

Gen County: Orange TSD EPA ID: NVT330010000

TSD County: 99

Waste Category: Empty containers less than 30 gallons

Disposal Method: Landfill Or Surface Impoundment That Will Be Closed As Landfill (To

Include On-Site Treatment And/Or Stabilization)

Direction Distance

Elevation Site Database(s) EPA ID Number

SUMMIT INTERCONNECT INC., ORANGE DIVISION (Continued)

S110494035

EDR ID Number

Tons: 0.45

Cat Decode: Empty containers less than 30 gallons

Method Decode: Landfill Or Surface Impoundment That Will Be Closed As Landfill (To

Include On-Site Treatment And/Or Stabilization)

Facility County: Orange

envid: \$110494035 Year: 2017

GEPAID: CAD981967797
Contact: RAY HERNANDEZ
Telephone: 7149748590
Mailing Name: Not reported

Mailing Address: 130 W BRISTOL LANE
Mailing City, St, Zip: ORANGE, CA 928650000

Gen County: Orange TSD EPA ID: NVT330010000

TSD County: 99

Waste Category: Waste oil and mixed oil

Disposal Method: Other Recovery Of Reclamation For Reuse Including Acid Regeneration,

Organics Recovery Ect

Tons: 1.463

Cat Decode: Waste oil and mixed oil

Method Decode: Other Recovery Of Reclamation For Reuse Including Acid Regeneration,

Organics Recovery Ect

Facility County: Orange

envid: \$110494035 Year: 2017

GEPAID: CAD981967797
Contact: RAY HERNANDEZ
Telephone: 7149748590
Mailing Name: Not reported

Mailing Address: 130 W BRISTOL LANE
Mailing City,St,Zip: ORANGE, CA 928650000

Gen County: Orange TSD EPA ID: NVT330010000

TSD County: 99

Waste Category: Auto shredder waste

Disposal Method: Landfill Or Surface Impoundment That Will Be Closed As Landfill (To

Include On-Site Treatment And/Or Stabilization)

Tons: 0.15

Cat Decode: Auto shredder waste

Method Decode: Landfill Or Surface Impoundment That Will Be Closed As Landfill (To

Include On-Site Treatment And/Or Stabilization)

Facility County: Orange

<u>Click this hyperlink</u> while viewing on your computer to access 440 additional CA_HAZNET: record(s) in the EDR Site Report.

Direction Distance

Elevation Site Database(s) EPA ID Number

K43 HAMILTON MATERIALS INC CA LUST 1000254743
WNW 345 W MEATS AV CA HIST UST N/A

WNW 345 W MEATS AV CA HIST UST N/A 1/4-1/2 ORANGE, CA 92665 CA EMI

0.277 mi.

1462 ft. Site 1 of 2 in cluster K

Relative: ORANGE CO. LUST: Lower Region:

LowerRegion:ORANGEActual:Facility Id:02UT016

193 ft. Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded

Date Closed: 04/17/2003 Record ID: RO0003070

HIST UST:

File Number:
URL:
Region:
Facility ID:
Other
Other Type:
Not reported
Not reported
Not reported
Not reported
Other Ported
Not reported
Other Ported
Not reported

Contact Name: KURT HAMILTON Telephone: 7146372770

Owner Name: HAMILTON MATERIALS INC.

Owner Address: 345 W. MEATS
Owner City,St,Zip: ORANGE, CA 92665

Total Tanks: 0005

 Tank Num:
 001

 Container Num:
 1

 Year Installed:
 1973

 Tank Capacity:
 00001000

 Tank Used for:
 PRODUCT

 Type of Fuel:
 UNLEADED

Container Construction Thickness: 12

Leak Detection: Visual, Stock Inventor, Pressure Test

 Tank Num:
 002

 Container Num:
 2

 Year Installed:
 1973

 Tank Capacity:
 00001000

 Tank Used for:
 PRODUCT

 Type of Fuel:
 PREMIUM

Container Construction Thickness: 12

Leak Detection: Visual, Stock Inventor, Pressure Test

Tank Num: 003
Container Num: 3
Year Installed: 1973
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: PREMIUM

Container Construction Thickness: 12

Leak Detection: Visual, Stock Inventor, Pressure Test

 Tank Num:
 004

 Container Num:
 3

 Year Installed:
 1973

 Tank Capacity:
 00004000

 Tank Used for:
 PRODUCT

EDR ID Number

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

HAMILTON MATERIALS INC (Continued)

1000254743

Type of Fuel: DIESEL Container Construction Thickness: 12

Leak Detection: Visual, Stock Inventor, Pressure Test

Tank Num: 005 Container Num:

Not reported Year Installed: 00005000 Tank Capacity: Tank Used for: **PRODUCT** Type of Fuel: 06 Container Construction Thickness: 1/4 Leak Detection: Visual

EMI:

1987 Year: County Code: 30 Air Basin: SC Facility ID: 14091 Air District Name: SC SIC Code: 3272

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: 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: 20 Part. Matter 10 Micrometers and Smllr Tons/Yr:6

Year: 1990 County Code: 30 Air Basin: SC 14091 Facility ID: Air District Name: SC SIC Code: 3272

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: 16 Reactive Organic Gases Tons/Yr: 14 Carbon Monoxide Emissions Tons/Yr: 2 NOX - Oxides of Nitrogen Tons/Yr: 3 SOX - Oxides of Sulphur Tons/Yr: 0 Particulate Matter Tons/Yr: 13 Part. Matter 10 Micrometers and Smllr Tons/Yr:4

1993 Year: County Code: 30 Air Basin: SC Facility ID: 14091 Air District Name: SC SIC Code: 3272

SOUTH COAST AQMD Air District Name:

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

HAMILTON MATERIALS INC (Continued)

1000254743

Total Organic Hydrocarbon Gases Tons/Yr: 9 Reactive Organic Gases Tons/Yr: 1 Carbon Monoxide Emissions Tons/Yr: 3 NOX - Oxides of Nitrogen Tons/Yr: 3 SOX - Oxides of Sulphur Tons/Yr: 0 Particulate Matter Tons/Yr: 12 Part. Matter 10 Micrometers and Smllr Tons/Yr:11

1995 Year: County Code: 30 Air Basin: SC Facility ID: 14091 Air District Name: SC SIC Code: 3272

SOUTH COAST AQMD Air District Name:

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 9 Reactive Organic Gases Tons/Yr: Carbon Monoxide Emissions Tons/Yr: 3 NOX - Oxides of Nitrogen Tons/Yr: 3 SOX - Oxides of Sulphur Tons/Yr: 0 Particulate Matter Tons/Yr: Part. Matter 10 Micrometers and Smllr Tons/Yr:11

Year: 1996 County Code: 30 Air Basin: SC Facility ID: 14091 Air District Name: SC SIC Code: 3272

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: 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: Part. Matter 10 Micrometers and Smllr Tons/Yr:1

Year: 1997 County Code: 30 Air Basin: SC 14091 Facility ID: Air District Name: SC SIC Code: 3274

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: 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:

Direction Distance Elevation

Site Database(s) EPA ID Number

HAMILTON MATERIALS INC (Continued)

1000254743

EDR ID Number

Part. Matter 10 Micrometers and Smllr Tons/Yr:0

 Year:
 1998

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 14091

 Air District Name:
 SC

 SIC Code:
 3274

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: 1
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

 Year:
 1999

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 14091

 Air District Name:
 SC

 SIC Code:
 3274

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: 1
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

 Year:
 2000

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 14091

 Air District Name:
 SC

 SIC Code:
 3274

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: 1
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

 Year:
 2001

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 14091

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

HAMILTON MATERIALS INC (Continued)

1000254743

Air District Name: SC SIC Code: 3274

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: 1
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

WESTPAC MATERIALS CA LUST 1000853847

WNW 345 W MEATS AVE CA SWEEPS UST 92665HMLTN345WE

1/4-1/2 ORANGE, CA 92865 CA FID UST

0.277 mi. TRIS
1462 ft. Site 2 of 2 in cluster K CA HIST CORTESE

Relative:

CA NPDES
CA WDS
Lower

CA CIWQS

Actual:

K44

193 ft. LUST:
Lead Agency: ORANGE COUNTY LOP

Case Type: UST Cleanup Site

Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605900139

Global Id: T0605900139
Latitude: 33.8229869
Longitude: -117.8550464

Status: Completed - Case Closed

Status Date: 04/17/2003 Case Worker: SR

RB Case Number: 083000183T

Local Agency: ORANGE COUNTY LOP

File Location:
Local Agency
Local Case Number:
Potential Media Affect:
Potential Contaminants of Concern:
Site History:
Local Agency
O2UT016
Soil
Potential Contaminants of Concern:
Gasoline
Not reported

LUST:

Global Id: T0605900139

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: rose.scott@waterboards.ca.gov

Phone Number: 9513206375

Global Id: T0605900139

Contact Type: Local Agency Caseworker
Contact Name: SHYAMALA RAJAGOPAL
Organization Name: ORANGE COUNTY LOP
Address: 1241 E. DYER ROAD SUITE 120

City: SANTA ANA

Email: srajagopal@ochca.com

Phone Number: 7144336262

Direction Distance Elevation

Site Database(s) **EPA ID Number**

WESTPAC MATERIALS (Continued)

1000853847

EDR ID Number

LUST:

T0605900139 Global Id: **ENFORCEMENT** Action Type: Date: 04/17/2003

Action: Closure/No Further Action Letter

LUST:

Global Id: T0605900139

Status: Completed - Case Closed

04/17/2003 Status Date:

Global Id: T0605900139

Status: Open - Case Begin Date

03/13/2003 Status Date:

Global Id: T0605900139

Open - Verification Monitoring Status:

Status Date: 03/13/2003

LUST REG 8:

Region: 8 Orange County:

Santa Ana Region Regional Board: Facility Status: Case Closed Case Number: 083000183T Local Case Num: 02UT016 Case Type: Soil only Gasoline Substance:

Qty Leaked: 0 Abate Method: Not reported

Cross Street: Not reported Enf Type: Not reported Funding: Not reported How Discovered: Tank Closure How Stopped: Close Tank Leak Cause: Unknown Leak Source: Unknown T0605900139 Global ID: How Stopped Date: 9/9/9999 Enter Date: Not reported Date Confirmation of Leak Began: Not reported Date Preliminary Assessment Began: Not reported Discover Date: 1/1/1965 Not reported **Enforcement Date:** Close Date: 4/17/2003 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 3/13/2003 Date Post Remedial Action Monitoring: Enter Date: Not reported **GW Qualifies:** Not reported

Soil Qualifies: ND

Operator: Not reported Not reported Facility Contact:

Direction Distance

Elevation Site Database(s) EPA ID Number

WESTPAC MATERIALS (Continued)

1000853847

EDR ID Number

Interim: Not reported
Oversite Program: LUST
Latitude: 33.8229869
Longitude: -117.8550464
MTBE Date: Not reported
Max MTBE GW: Not reported

MTBE Concentration: 0
Max MTBE Soil: 0
MTBE Fuel: 1

MTBE Tested: MTBE Detected. Site tested for MTBE & MTBE detected

MTBE Class: *
Staff: RS
Staff Initials: KC

Lead Agency:Local AgencyLocal Agency:30000LHydr Basin #:Not reportedBeneficial:MUNPriority:Not reportedCleanup Fund Id:Not reportedWork Suspended:Not reported

Summary: Not reported

SWEEPS UST:

Status: Active Comp Number: 59308 Number: 1

Board Of Equalization: Not reported Referral Date: 11-16-92 Action Date: 10-04-93 Created Date: 10-13-88 Owner Tank Id: Not reported

SWRCB Tank Id: 30-030-059308-000001

Tank Status: A
Capacity: 10000
Active Date: 11-16-92
Tank Use: CHEMICAL
STG: P

Content: MINERAL SPIR

Number Of Tanks: 2

Status: Active
Comp Number: 59308
Number: 1

Board Of Equalization: Not reported Referral Date: 11-16-92 Action Date: 10-04-93 Created Date: 10-13-88 Owner Tank Id: Not reported

SWRCB Tank Id: 30-030-059308-000002

Tank Status: A
Capacity: 15000
Active Date: 11-16-92
Tank Use: CHEMICAL

STG: P

Content: DIETHYLENEGL Number Of Tanks: Not reported

Direction Distance Elevation

n Site Database(s) EPA ID Number

WESTPAC MATERIALS (Continued)

1000853847

EDR ID Number

CA FID UST:

30009574 Facility ID: UTNKA Regulated By: Regulated ID: 00059308 Cortese Code: Not reported SIC Code: Not reported Facility Phone: 7146372770 Not reported Mail To: Mailing Address: 345 W MEATS Mailing Address 2: Not reported Mailing City, St, Zip: **ORANGE 92665** Contact: Not reported Contact Phone: Not reported DUNs Number: Not reported NPDES Number: Not reported Not reported EPA ID: Not reported Comments: Status: Active

TRIS:

Click this hyperlink while viewing on your computer to access 1 additional US_TRIS: record(s) in the EDR Site Report.

HIST CORTESE:

Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083000183T

NPDES:

Facility Status: Not reported NPDES Number: Not reported Not reported Region: Not reported Agency Number: Regulatory Measure ID: Not reported Place ID: Not reported Order Number: Not reported 8 301019791 WDID: Regulatory Measure Type: Industrial Program Type: Not reported Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Discharge Address: Not reported Discharge Name: Not reported Discharge City: Not reported Discharge State: Not reported Discharge Zip: Not reported Status: Active Status Date: 09/15/2005

Operator Name: Westpac Materials Inc Operator Address: 345 W Meats Ave

Operator City: Orange
Operator State: California

Distance Elevation

Site Database(s) **EPA ID Number**

WESTPAC MATERIALS (Continued)

1000853847

EDR ID Number

Operator Zip: 92865

NPDES as of 03/2018:

CAS000001 NPDES Number: Status: Active Agency Number: Region: 8 288991 Regulatory Measure ID: 97-03-DWQ Order Number: Regulatory Measure Type: Enrollee Place ID: Not reported WDID: 8 301019791 Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 09/15/2005 Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported

Discharge Name: Westpac Materials Inc

Discharge Address: 345 W Meats Ave

Discharge City: Orange Discharge State: California Discharge Zip: 92865 Received Date: Not reported Processed Date: Not reported Status: Not reported Status Date: Not reported Place Size: Not reported Not reported Place Size Unit: Contact: Not reported Contact Title: Not reported Contact Phone: Not reported Contact Phone Ext: Not reported Contact Email: Not reported Operator Name: Not reported Operator Address: Not reported Operator City: Not reported Operator State: Not reported Operator Zip: Not reported **Operator Contact:** Not reported Operator Contact Title: Not reported Not reported **Operator Contact Phone:** Not reported Operator Contact Phone Ext: Operator Contact Email: Not reported Operator Type: Not reported Developer: Not reported Developer Address: Not reported Developer City: Not reported Developer State: Not reported Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** Not reported Emergency Phone Ext: Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported

Not reported

Constype Comm Line Ind:

Distance Elevation Site

EDR ID Number Database(s) **EPA ID Number**

WESTPAC MATERIALS (Continued)

1000853847

Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Not reported Constype Recons Ind: Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind: Not reported Receiving Water Name: Not reported Certifier: Not reported Certifier Title: Not reported Certification Date: Not reported Primary Sic: Not reported Secondary Sic: Not reported **Tertiary Sic:** Not reported

NPDES Number: Not reported Not reported Status: Agency Number: Not reported Region: Regulatory Measure ID: 288991 Order Number: Not reported Regulatory Measure Type: Industrial Place ID: Not reported WDID: 8 301019791 Program Type: Not reported Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Discharge Name: Not reported Discharge Address: Not reported Discharge City: Not reported Discharge State: Not reported Discharge Zip: Not reported Received Date: 05/09/2008 Processed Date: 09/15/2005 Status: Active Status Date: 09/15/2005

Place Size: 3 Place Size Unit: Acres

Contact: **Robert Martinez** Contact Title: Not reported Contact Phone: 714-974-6837 Not reported Contact Phone Ext:

Contact Email: r.martinez@westpac.bz Operator Name: Westpac Materials Inc 345 W Meats Ave Operator Address:

Operator City: Orange Operator State: California 92865 Operator Zip: **Operator Contact:** Eric Cox

EDR ID Number Distance Elevation Site Database(s) **EPA ID Number**

WESTPAC MATERIALS (Continued)

1000853847

Operator Contact Title: Not reported 714-974-6837 Operator Contact Phone: Operator Contact Phone Ext: Not reported eric@westpac.bz Operator Contact Email: Operator Type: **Private Business** Developer: Not reported Developer Address: Not reported Developer City: Not reported Developer State: California Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** 714-974-6837 **Emergency Phone Ext:** Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Not reported Constype Industrial Ind: Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported

Dir Discharge Uswater Ind:

Receiving Water Name: Santa Ana River Certifier: Eric Cox

Certifier Title: **Production Manager**

Certification Date: 22-JUN-15

9999-Nonclassifiable Establishments Primary Sic:

Secondary Sic: Not reported

Tertiary Sic: 3275-Gypsum Products

Facility Status: Active NPDES Number: CAS000001

Region: 8 Agency Number: 0 288991 Regulatory Measure ID: Place ID: Not reported 97-03-DWQ Order Number: WDID: 8 301019791 Regulatory Measure Type: Enrollee Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 09/15/2005 Termination Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Discharge Address: 345 W Meats Ave

Discharge Name: Westpac Materials Inc

Distance Elevation Site

Site Database(s) EPA ID Number

WESTPAC MATERIALS (Continued)

1000853847

EDR ID Number

Discharge City: Orange California Discharge State: Discharge Zip: 92865 Status: Not reported Status Date: Not reported Operator Name: Not reported Operator Address: Not reported Operator City: Not reported Operator State: Not reported Operator Zip: Not reported

NPDES as of 03/2018:

NPDES Number: CAS000001 Status: Active Agency Number: Region: 8 Regulatory Measure ID: 288991 97-03-DWQ Order Number: Regulatory Measure Type: Enrollee Place ID: Not reported WDID: 8 301019791 Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 09/15/2005 Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported

Discharge Name: Westpac Materials Inc Discharge Address: 345 W Meats Ave

Discharge City: Orange Discharge State: California Discharge Zip: 92865 Received Date: Not reported Processed Date: Not reported Status: Not reported Not reported Status Date: Place Size: Not reported Not reported Place Size Unit: Contact: Not reported Contact Title: Not reported Not reported Contact Phone: Not reported Contact Phone Ext: Not reported Contact Email: Operator Name: Not reported Operator Address: Not reported Operator City: Not reported Operator State: Not reported Not reported Operator Zip: **Operator Contact:** Not reported Not reported Operator Contact Title: Not reported Operator Contact Phone: Operator Contact Phone Ext: Not reported Operator Contact Email: Not reported Operator Type: Not reported Not reported Developer: Developer Address: Not reported Developer City: Not reported **Developer State:** Not reported Developer Zip: Not reported

Distance Elevation

on Site Database(s) EPA ID Number

WESTPAC MATERIALS (Continued)

1000853847

EDR ID Number

Developer Contact: Not reported **Developer Contact Title:** Not reported Not reported Constype Linear Utility Ind: Emergency Phone: Not reported **Emergency Phone Ext:** Not reported Constype Above Ground Ind: Not reported Not reported Constype Below Ground Ind: Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind: Not reported Receiving Water Name: Not reported Certifier: Not reported Certifier Title: Not reported Certification Date: Not reported Primary Sic: Not reported Secondary Sic: Not reported **Tertiary Sic:** Not reported

NPDES Number: Not reported Status: Not reported Agency Number: Not reported

Region: Regulatory Measure ID: 288991 Not reported Order Number: Regulatory Measure Type: Industrial Place ID: Not reported WDID: 8 301019791 Program Type: Not reported Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Not reported Discharge Name: Discharge Address: Not reported Discharge City: Not reported Discharge State: Not reported Discharge Zip: Not reported Received Date: 05/09/2008 Processed Date: 09/15/2005 Status: Active 09/15/2005 Status Date:

Place Size: 3
Place Size Unit: Acres

Contact: Robert Martinez
Contact Title: Not reported

Direction
Distance
Elevation

Site Database(s) EPA ID Number

WESTPAC MATERIALS (Continued)

1000853847

EDR ID Number

Contact Phone: 714-974-6837 Contact Phone Ext: Not reported

Contact Email: r.martinez@westpac.bz
Operator Name: Westpac Materials Inc
Operator Address: 345 W Meats Ave

Operator City: Orange Operator State: California Operator Zip: 92865 **Operator Contact:** Eric Cox Operator Contact Title: Not reported Operator Contact Phone: 714-974-6837 Operator Contact Phone Ext: Not reported Operator Contact Email: eric@westpac.bz Operator Type: **Private Business** Developer: Not reported Developer Address: Not reported Developer City: Not reported **Developer State:** California Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** 714-974-6837 **Emergency Phone Ext:** Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Not reported Constype Transport Ind:

Dir Discharge Uswater Ind: N

Constype Utility Description:

Constype Water Sewer Ind:

Constype Utility Ind:

Receiving Water Name: Santa Ana River

Certifier: Eric Cox

Certifier Title: Production Manager

Certification Date: 22-JUN-15

Primary Sic: 9999-Nonclassifiable Establishments

Not reported

Not reported

Not reported

Secondary Sic: Not reported

Tertiary Sic: 3275-Gypsum Products

WDS:

Facility ID: Santa Ana River 30I000605

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

Direction Distance

Elevation Site Database(s) EPA ID Number

WESTPAC MATERIALS (Continued)

1000853847

EDR ID Number

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

are assigned by the Regional Board

Subregion: 8

Facility Telephone: 7146372770 Facility Contact: JOHN DEVLIN

Agency Name: HAMILTON MATERIALS INC.
Agency Address: 345 WEST MEATS AVENUE

Agency City,St,Zip: ORANGE 92665
Agency Contact: WILLIS HAMILTON
Agency Telephone: 7146372770

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:

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 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.

CIWQS:

Agency: Westpac Materials Inc

Agency Address: 345 W Meats Ave, Orange, CA 92865
Place/Project Type: Industrial - Nonclassifiable Establishments

SIC/NAICS: Multiple
Region: 8
Program: INDSTW
Regulatory Measure Status: Active

Regulatory Measure Type: Storm water industrial Order Number: 2014-0057-DWQ WDID: 8 301019791 NPDES Number: CAS000001 Adoption Date: Not reported 09/15/2005 Effective Date: **Termination Date:** Not reported Expiration/Review Date: Not reported Design Flow: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

WESTPAC MATERIALS (Continued)

1000853847

Major/Minor: Not reported Complexity: Not reported TTWQ: Not reported

Enforcement Actions within 5 years: 0 Violations within 5 years: 0 Latitude: 33.82292 -117.85498 Longitude:

CA LUST L45 **AIR CABIN ENGINEERING INC** S113146625 SW 231 W BLUERIDGE AVE **CA HAZNET** N/A

1/4-1/2 ORANGE, CA 92865

0.280 mi.

1477 ft. Site 1 of 2 in cluster L Relative: ORANGE CO. LUST:

Lower Region: **ORANGE** Facility Id: 97UT044 Actual:

Released Substance: Gasoline-Automotive (motor gasoline and additives), leaded & unleaded 185 ft.

Date Closed: 05/12/2000 Record ID: RO0002117

HAZNET:

envid: S113146625 Year: 2016

GEPAID: CAL000317224 Contact: JOHN SCHEBECK Telephone: 7146374111 Mailing Name: Not reported

Mailing Address: 231 W BLUERIDGE AVE Mailing City, St, Zip: ORANGE, CA 928654226

Gen County: Orange TSD EPA ID: Not reported TSD County: Not reported

Waste Category: Waste oil and mixed oil

Disposal Method: Fuel Blending Prior To Energy Recovery At Another Site

Tons: 0.3

Cat Decode: Not reported Method Decode: Not reported Facility County: Orange

envid: S113146625 Year: 2015

GEPAID: CAL000317224 JOHN SCHEBECK Contact: Telephone: 7146374111 Mailing Name: Not reported

Mailing Address: 231 W BLUERIDGE AVE Mailing City, St, Zip: ORANGE, CA 928654226

Gen County: Orange TSD EPA ID: CAD008302903 TSD County: Los Angeles

Waste Category: Waste oil and mixed oil Disposal Method: Solvents Recovery

Tons: 0.4

Cat Decode: Not reported Method Decode: Not reported Facility County: Orange

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

AIR CABIN ENGINEERING INC (Continued)

S113146625

envid: S113146625 Year: 2014 GEPAID: CAL000317224 Contact: JOHN SCHEBECK Telephone: 7146374111 Mailing Name: Not reported

231 W BLUERIDGE AVE Mailing Address: Mailing City,St,Zip: ORANGE, CA 928654226

Gen County: Orange TSD EPA ID: CAD008302903 TSD County: Los Angeles

Off-specification, aged or surplus organics Waste Category:

Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery Disposal Method:

(H010-H129) Or (H131-H135)

Tons: 0.06 Cat Decode: Not reported Method Decode: Not reported Facility County: Orange

S113146625 envid: Year: 2014 GEPAID: CAL000317224

Contact: JOHN SCHEBECK Telephone: 7146374111 Mailing Name: Not reported

Mailing Address: 231 W BLUERIDGE AVE Mailing City,St,Zip: ORANGE, CA 928654226

Gen County: Orange CAD008302903 TSD EPA ID: Los Angeles TSD County:

Waste Category: Waste oil and mixed oil

Disposal Method: Fuel Blending Prior To Energy Recovery At Another Site

Tons:

Cat Decode: Not reported Method Decode: Not reported Facility County: Orange

envid: S113146625 Year: 2014

CAL000317224 GEPAID: Contact: JOHN SCHEBECK Telephone: 7146374111 Mailing Name: Not reported

Mailing Address: 231 W BLUERIDGE AVE Mailing City, St, Zip: ORANGE, CA 928654226

Gen County: Orange TSD EPA ID: CAD008302903 TSD County: Los Angeles

Waste Category: Off-specification, aged or surplus organics

Disposal Method: Fuel Blending Prior To Energy Recovery At Another Site

Tons: 0.2

Cat Decode: Not reported Method Decode: Not reported Orange Facility County:

Direction Distance

Elevation Site Database(s) **EPA ID Number**

AIR CABIN ENGINEERING INC (Continued)

S113146625

EDR ID Number

Click this hyperlink while viewing on your computer to access 5 additional CA_HAZNET: record(s) in the EDR Site Report.

FORMER SANTIAGO HEATING & AIR CONDITIONING L46 CA LUST S106447924 SW

N/A

231 BLUERIDGE

1/4-1/2 ORANGE, CA 92867

0.284 mi.

1498 ft. Site 2 of 2 in cluster L

Relative: LUST:

Lower ORANGE COUNTY LOP Lead Agency: Case Type: LUST Cleanup Site Actual:

Geo Track: 185 ft. http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605902100

Global Id: T0605902100 33.818331 Latitude: Longitude: -117.8552223

Status: Completed - Case Closed

Status Date: 05/12/2000 Case Worker: SR

RB Case Number: 083003080T

ORANGE COUNTY LOP Local Agency:

File Location: Local Agency Local Case Number: 97UT044

Other Groundwater (uses other than drinking water) Potential Media Affect:

Potential Contaminants of Concern: Gasoline Not reported Site History:

LUST:

Global Id: T0605902100

Contact Type: Local Agency Caseworker Contact Name: SHYAMALA RAJAGOPAL Organization Name: ORANGE COUNTY LOP Address: 1241 E. DYER ROAD SUITE 120

SANTA ANA City:

srajagopal@ochca.com Email:

Phone Number: 7144336262

T0605902100 Global Id:

Regional Board Caseworker Contact Type: Contact Name: VALERIE JAHN-BULL

Organization Name: SANTA ANA RWQCB (REGION 8) Address: 3737 MAIN STREET, SUITE 500

RIVERSIDE City:

Email: valerie.jahn-bull@waterboards.ca.gov

Phone Number: 9517824903

LUST:

Global Id: T0605902100 Action Type: Other 10/27/1997 Date: Action: Leak Reported

Global Id: T0605902100 Action Type: Other Date: 10/27/1997 Action: Leak Discovery

Distance Elevation

ion Site Database(s) EPA ID Number

FORMER SANTIAGO HEATING & AIR CONDITIONING (Continued)

S106447924

EDR ID Number

LUST:

Global Id: T0605902100

Status: Completed - Case Closed

Status Date: 05/12/2000

Global Id: T0605902100

Status: Open - Case Begin Date

Status Date: 10/27/1997

LUST REG 8:

Region: 8
County: Orange

Regional Board: Santa Ana Region
Facility Status: Case Closed
Case Number: 083003080T
Local Case Num: 97UT044

Case Type: Other ground water affected

Substance: Gasoline

Qty Leaked: 0

Abate Method: Not reported Cross Street: Not reported Enf Type: Not reported Funding: Not reported How Discovered: Tank Closure How Stopped: Close Tank Leak Cause: Unknown Leak Source: Unknown Global ID: T0605902100 How Stopped Date: 9/9/9999 Enter Date: Not reported

Date Confirmation of Leak Began: Not reported Date Preliminary Assessment Began: Not reported 10/27/1997 Discover Date: Not reported **Enforcement Date:** Close Date: 5/12/2000 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: Not reported **GW Qualifies:** Not reported Not reported Soil Qualifies: Operator: Not reported Facility Contact: Not reported

Interim:

Oversite Program:

LuST

Latitude:

33.818331

Longitude:

-117.8552223

MTBE Date:

Max MTBE GW:

Not reported

Not reported

MTBE Concentration:

Max MTBE Soil: Not reported

MTBE Fuel:

MTBE Tested: Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

FORMER SANTIAGO HEATING & AIR CONDITIONING (Continued)

S106447924

MTBE Class: VJJStaff: Staff Initials: AR

Lead Agency: Local Agency Local Agency: 30000L Hydr Basin #: Not reported Beneficial: MUN Priority: Not reported Cleanup Fund Id: Not reported Work Suspended: Not reported

Summary: Not reported

STRAUB DISTRIBUTION CO **CA HIST CORTESE** S105710199 M47

West N/A

1/4-1/2 ORANGE, CA 92867

0.304 mi.

1604 ft. Site 1 of 3 in cluster M HIST CORTESE: Relative:

Lower CORTESE Region: Facility County Code: Actual: 30 Reg By: **LTNKA** 190 ft. 083003033T Reg Id:

M48 STRAUB DISTRIBUTING CO CA LUST S111760371

West 410 GROVE N/A

ORANGE, CA 92865 1/4-1/2

0.304 mi.

1604 ft. Site 2 of 3 in cluster M

Relative: LUST:

Lower ORANGE COUNTY LOP Lead Agency: Case Type: LUST Cleanup Site Actual:

Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605902068 190 ft.

> Global Id: T0605902068 Latitude: 33.8207572 Longitude: -117.8500615

Status: Completed - Case Closed

Status Date: 09/13/2002 Case Worker: SR

RB Case Number: 083003033T

ORANGE COUNTY LOP Local Agency:

File Location: Local Agency Local Case Number: 97UT046 Potential Media Affect: Soil Potential Contaminants of Concern: Diesel Site History: Not reported

LUST:

Global Id: T0605902068

Contact Type: Local Agency Caseworker Contact Name: SHYAMALA RAJAGOPAL Organization Name: ORANGE COUNTY LOP Address: 1241 E. DYER ROAD SUITE 120

City: SANTA ANA

Email: srajagopal@ochca.com

7144336262 Phone Number:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

STRAUB DISTRIBUTING CO (Continued)

S111760371

Global Id: T0605902068

Regional Board Caseworker Contact Type: Contact Name: VALERIE JAHN-BULL

Organization Name: SANTA ANA RWQCB (REGION 8) Address: 3737 MAIN STREET, SUITE 500

RIVERSIDE City:

Email: valerie.jahn-bull@waterboards.ca.gov

Phone Number: 9517824903

LUST:

Global Id: T0605902068 Action Type: Other Date: 10/30/1997 Action: Leak Reported

Global Id: T0605902068 Action Type: Other Date: 10/30/1997 Action: Leak Discovery

T0605902068 Global Id: Action Type: **ENFORCEMENT** Date: 09/13/2002

Action: Closure/No Further Action Letter

LUST:

Global Id: T0605902068

Status: Completed - Case Closed

09/13/2002 Status Date:

Global Id: T0605902068

Status: Open - Case Begin Date

Status Date: 10/30/1997

U001577504 M49 STRAUB FAMILY TRUST DIST CO IN **CA LUST**

West 410 W GROVE AV **CA HIST UST** N/A

1/4-1/2 ORANGE, CA 92665

0.319 mi.

1684 ft. Site 3 of 3 in cluster M

ORANGE CO. LUST: Relative:

Lower Region: **ORANGE** 97UT046 Facility Id: Actual:

Released Substance: Diesel fuel oil and additives, Nos.1-D, 2-D, 2-4 189 ft.

09/13/2002 Date Closed: RO0002171 Record ID:

HIST UST:

File Number: 0002EEA1

URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002EEA1.pdf

Region: STATE Facility ID: 00000009119 Facility Type: Other Other Type: Not reported Contact Name: FRANK BORGESE **CA EMI**

Direction Distance

Elevation Site Database(s) EPA ID Number

STRAUB FAMILY TRUST DIST CO IN (Continued)

Telephone:

Owner Name: STRAUB DISTRIBUTING COMPANY LT

7146377333

Owner Address: 410 W GROVE AVE Owner City,St,Zip: ORANGE, CA 92665

Total Tanks: 0015

001 Tank Num: Container Num: 1 Year Installed: 1975 Tank Capacity: 00009940 **PRODUCT** Tank Used for: Type of Fuel: DIESEL Container Construction Thickness: 1/4 Leak Detection: None

Tank Num: 002 Container Num: 2 1975 Year Installed: Tank Capacity: 00009940 **PRODUCT** Tank Used for: Type of Fuel: DIESEL Container Construction Thickness: 1/4 Leak Detection: None

003 Tank Num: Container Num: 3 Year Installed: 1975 Tank Capacity: 00009940 **PRODUCT** Tank Used for: Type of Fuel: **REGULAR** Container Construction Thickness: 1/4 Leak Detection: None

 Tank Num:
 004

 Container Num:
 4

 Year Installed:
 1975

 Tank Capacity:
 00009940

 Tank Used for:
 PRODUCT

 Type of Fuel:
 UNLEADED

Container Construction Thickness: 1/4
Leak Detection: None

Tank Num: 005
Container Num: 6
Year Installed: 1980
Tank Capacity: 00000550
Tank Used for: PRODUCT
Type of Fuel: Not reported
Container Construction Thickness: #12

Leak Detection:

None

Tank Num:

Container Num:

Year Installed:

None

006

1080

1980

Tank Capacity: 00000550
Tank Used for: WASTE
Type of Fuel: WASTE OIL

U001577504

EDR ID Number

Direction Distance

Elevation Site Database(s) EPA ID Number

STRAUB FAMILY TRUST DIST CO IN (Continued)

U001577504

EDR ID Number

Container Construction Thickness: #12 Leak Detection: None

 Tank Num:
 007

 Container Num:
 7

 Year Installed:
 1975

 Tank Capacity:
 00000550

 Tank Used for:
 WASTE

 Type of Fuel:
 WASTE OIL

Container Construction Thickness: #12
Leak Detection: None

 Tank Num:
 008

 Container Num:
 1

 Year Installed:
 1979

 Tank Capacity:
 00009970

 Tank Used for:
 PRODUCT

 Type of Fuel:
 UNLEADED

Container Construction Thickness: 1/4
Leak Detection: None

Tank Num: 009
Container Num: 2
Year Installed: 1979
Tank Capacity: 00009970
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: 1/4

Container Construction Thickness: 1/4
Leak Detection: None

Tank Num: 010
Container Num: 3
Year Installed: 1979
Tank Capacity: 00009970
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: 1/4

Container Construction Thickness: 1/4
Leak Detection: None

 Tank Num:
 011

 Container Num:
 4

 Year Installed:
 1979

 Tank Capacity:
 00000550

 Tank Used for:
 WASTE

 Type of Fuel:
 WASTE OIL

Container Construction Thickness: #12 Leak Detection: None

 Tank Num:
 012

 Container Num:
 1

 Year Installed:
 1977

 Tank Capacity:
 00009970

 Tank Used for:
 PRODUCT

 Type of Fuel:
 UNLEADED

Container Construction Thickness: 1/4
Leak Detection: None

Direction Distance

Elevation Site Database(s) EPA ID Number

STRAUB FAMILY TRUST DIST CO IN (Continued)

U001577504

EDR ID Number

Tank Num: 013 Container Num: 2 Year Installed: 1977 Tank Capacity: 00009970 Tank Used for: **PRODUCT** Type of Fuel: **REGULAR** Container Construction Thickness: 1/4 Leak Detection: None

Tank Num: 014 Container Num: 3 Year Installed: 1977 Tank Capacity: 00009970 Tank Used for: **PRODUCT** Type of Fuel: **REGULAR** Container Construction Thickness: 1/4 Leak Detection: None

Tank Num: 015 Container Num: 4 Year Installed: 1977 Tank Capacity: 00000550 Tank Used for: WASTE Type of Fuel: WASTE OIL Container Construction Thickness: #12 Leak Detection: None

Click here for Geo Tracker PDF:

EMI:

 Year:
 1987

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 10620

 Air District Name:
 SC

 SIC Code:
 5199

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 1
Reactive Organic Gases Tons/Yr: 1
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 0
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

 Year:
 1990

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 10620

 Air District Name:
 SC

 SIC Code:
 5199

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:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

STRAUB FAMILY TRUST DIST CO IN (Continued)

U001577504

Reactive Organic Gases Tons/Yr: 0 Carbon Monoxide Emissions Tons/Yr: NOX - Oxides of Nitrogen Tons/Yr: 0 SOX - Oxides of Sulphur Tons/Yr: 0 Particulate Matter Tons/Yr: Part. Matter 10 Micrometers and Smllr Tons/Yr:0

50 THOMPSON BUILDING MATERIALS CA LUST S101619695

SW **CA SWEEPS UST** 141 W TAFT AVE N/A

1/4-1/2 ORANGE, CA 92867 **CA FID UST**

0.350 mi. 1847 ft.

Relative: LUST:

Lower ORANGE, CITY OF Lead Agency: Case Type: **LUST Cleanup Site** Actual:

Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605902324 190 ft.

T0605902324 Global Id: 33.816526 Latitude: -117.853503 Longitude:

Status: Completed - Case Closed

Status Date: 09/17/1999 KD Case Worker: RB Case Number: 083003552T

Local Agency: ORANGE, CITY OF Not reported File Location: Local Case Number: Not reported Potential Media Affect: Soil Potential Contaminants of Concern: Diesel Site History: Not reported

LUST:

Global Id: T0605902324

Local Agency Caseworker Contact Type: Contact Name: KATHY DASCOMB Organization Name: ORANGE, CITY OF

2009 EAST EDINGER AVENUE Address:

City: SANTA ANA

Email: kdascomb@cityoforange.org

Phone Number: 7146673773

Global Id: T0605902324

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

LUST:

Global Id: T0605902324 Action Type: Other Date: 06/09/1999 Action: Leak Reported

T0605902324 Global Id: Action Type: Other

Direction Distance

Elevation Site Database(s) EPA ID Number

THOMPSON BUILDING MATERIALS (Continued)

S101619695

EDR ID Number

Date: 06/09/1999
Action: Leak Discovery

 Global Id:
 T0605902324

 Action Type:
 ENFORCEMENT

 Date:
 09/17/1999

Action: Closure/No Further Action Letter

LUST:

Global Id: T0605902324

Status: Completed - Case Closed

Status Date: 09/17/1999

Global Id: T0605902324

Status: Open - Case Begin Date

Status Date: 06/09/1999

Global Id: T0605902324
Status: Open - Remediation

Status Date: 06/09/1999

SWEEPS UST:

Status: Active Comp Number: 21921 Number: 1

Board Of Equalization: 44-016916
Referral Date: 08-24-93
Action Date: 08-24-93
Created Date: 10-13-88
Owner Tank Id: Not reported

SWRCB Tank ld: 30-030-021921-000001

Tank Status: A
Capacity: 20000
Active Date: 08-24-93
Tank Use: M.V. FUEL
STG: P

Content: DIESEL
Number Of Tanks: 1

CA FID UST:

Facility ID: 30004416 UTNKA Regulated By: Regulated ID: 00021921 Cortese Code: Not reported SIC Code: Not reported Facility Phone: 7146377373 Not reported Mail To: 141 W TAFT Mailing Address: Mailing Address 2: Not reported Mailing City, St, Zip: **ORANGE 92667** Contact: Not reported Contact Phone: Not reported Not reported DUNs Number: NPDES Number: Not reported Not reported EPA ID:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

THOMPSON BUILDING MATERIALS (Continued)

Comments: Not reported Status: Active

THOMPSON BUILDING MATERIALS CA LUST S104405161 SSW 141 TAFT AVE N/A

8

ORANGE, CA 92867 1/4-1/2

0.370 mi. 1954 ft.

Relative: LUST REG 8: Lower Region:

County: Orange Actual: 193 ft. Regional Board:

Santa Ana Region Facility Status: Case Closed Case Number: 083003552T Local Case Num: Not reported Case Type: Soil only Substance: Diesel Qty Leaked: Not reported

> Abate Method: Excavate and Dispose - remove contaminated soil and dispose in

> > approved site

Not reported 9/16/1999

Cross Street: **GLASSELL CLOS** Enf Type: Funding: Not reported How Discovered: OM

How Stopped: Not reported Leak Cause: UNK Leak Source: UNK

T0605902324 Global ID: How Stopped Date: Not reported Enter Date: 9/16/1999 Date Confirmation of Leak Began: Not reported Date Preliminary Assessment Began: Not reported 6/9/1999 Discover Date: **Enforcement Date:** Not reported Close Date: 9/17/1999 Date Prelim Assessment Workplan Submitted: Not reported Not reported Date Pollution Characterization Began: Date Remediation Plan Submitted: Not reported Date Remedial Action Underway: 6/9/1999

GW Qualifies: Not reported Not reported Soil Qualifies: Operator: Not reported Facility Contact: Not reported Interim: Not reported Oversite Program: LUST Latitude: 33.8158061 Longitude: -117.8538543 MTBE Date: Not reported Max MTBE GW: Not reported

MTBE Concentration: Λ

Date Post Remedial Action Monitoring:

Enter Date:

Max MTBE Soil: Not reported

MTBE Fuel:

MTBE Tested: Not Required to be Tested.

MTBE Class:

Staff: TME S101619695

Direction Distance

Elevation Site Database(s) **EPA ID Number**

THOMPSON BUILDING MATERIALS (Continued)

S104405161

EDR ID Number

Staff Initials: Not reported Lead Agency: Local Agency

Local Agency: Orange, Orange County Hydr Basin #: COASTAL PLAIN OF ORA

Beneficial: Not reported Priority: Not reported Cleanup Fund Id: Not reported

Work Suspended: No

Summary: Not reported

CONTINUOUS COATING CORP. 52

CA ENVIROSTOR S118757409 West **520 W. GROVE** N/A

1/4-1/2 ORANGE, CA 92665

0.383 mi. 2023 ft.

Relative: **ENVIROSTOR:**

Lower Facility ID: 71002438 Status: No Action Required Actual: Not reported Status Date: 189 ft.

Not reported Site Code: Site Type: Tiered Permit Site Type Detailed: **Tiered Permit** Not reported Acres: NO NPL:

Regulatory Agencies: NONE SPECIFIED Lead Agency: NONE SPECIFIED Program Manager: Not reported Supervisor: Not reported Division Branch: Cleanup Cypress

Assembly: 68 Senate: 37

Special Program: Not reported Restricted Use: NO

Site Mgmt Req: NONE SPECIFIED Not reported Funding: Latitude: 33.82095 -117.8579 Longitude:

APN: NONE SPECIFIED

Past Use: NONE

Potential COC: NONE SPECIFIED No Contaminants found

Confirmed COC: No Contaminants found

Potential Description: NMA

Alias Name: CAD050758648

EPA Identification Number Alias Type:

Alias Name: 110000481130 EPA (FRS#) Alias Type: 71002438 Alias Name:

Envirostor ID Number Alias Type:

Completed Info:

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported Completed Document Type: Phase I Verification Completed Date: 01/07/2005 Comments: Not reported

Future Area Name: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

CONTINUOUS COATING CORP. (Continued)

S118757409

EDR ID Number

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

N53 COCA COLA BOTTLING CO - ORANGE CA LUST S101589306

West 700 W GROVE CA SWEEPS UST N/A

1/4-1/2 ORANGE, CA 92665 CA FID UST

0.461 mi. CA NPDES 2435 ft. Site 1 of 3 in cluster N CA CIWQS

Relative: LUST:

Lower Lead Agency: SANTA ANA RWQCB (REGION 8)

Actual: Case Type: LUST Cleanup Site

189 ft. Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605901952

Global Id: T0605901952 Latitude: 33.820108 Longitude: -117.859334

Status: Completed - Case Closed

Status Date: 08/13/1996
Case Worker: VJB
RB Case Number: 083002846T
Local Agency: ORANGE, CITY OF
File Location: Not reported
Local Case Number: Not reported
Potential Media Affect: Soil

Potential Contaminants of Concern: Gasoline Site History: Not reported

LUST:

Global Id: T0605901952

Contact Type: Local Agency Caseworker

Contact Name: UNK

Organization Name:
Address:
ORANGE, CITY OF
Not reported
r8 UNKNOWN
Email:
Not reported
Not reported
Not reported

Global Id: T0605901952

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: valerie.jahn-bull@waterboards.ca.gov

Phone Number: 9517824903

LUST:

 Global Id:
 T0605901952

 Action Type:
 Other

 Date:
 06/12/1996

 Action:
 Leak Reported

Direction Distance

Elevation Site Database(s) EPA ID Number

COCA COLA BOTTLING CO - ORANGE (Continued)

S101589306

EDR ID Number

 Global Id:
 T0605901952

 Action Type:
 Other

 Date:
 12/12/1995

 Action:
 Leak Discovery

LUST:

Global Id: T0605901952

Status: Completed - Case Closed

Status Date: 08/13/1996

Global Id: T0605901952

Status: Open - Case Begin Date

Status Date: 12/12/1995

Global Id: T0605901952

Status: Open - Site Assessment

Status Date: 12/12/1995

SWEEPS UST:

Status: Active Comp Number: 800010

Number:

Board Of Equalization: 44-016995
Referral Date: 11-06-91
Action Date: 09-30-93
Created Date: 04-03-89
Owner Tank Id: Not reported

SWRCB Tank Id: 30-030-800010-000001

Tank Status: A
Capacity: 12000
Active Date: 11-06-91
Tank Use: M.V. FUEL

STG: P
Content: DIESEL
Number Of Tanks: 5

Status: Active
Comp Number: 800010
Number: 1

Board Of Equalization: 44-016995
Referral Date: 11-06-91
Action Date: 09-30-93
Created Date: 04-03-89
Owner Tank Id: Not reported

SWRCB Tank ld: 30-030-800010-000002

Tank Status:

 Capacity:
 12000

 Active Date:
 11-06-91

 Tank Use:
 M.V. FUEL

 STG:
 P

Content: DIESEL
Number Of Tanks: Not reported

Status: Active Comp Number: 800010

Direction Distance

Elevation Site Database(s) EPA ID Number

COCA COLA BOTTLING CO - ORANGE (Continued)

S101589306

EDR ID Number

Number:

Board Of Equalization: 44-016995
Referral Date: 11-06-91
Action Date: 09-30-93
Created Date: 04-03-89
Owner Tank Id: Not reported

SWRCB Tank Id: 30-030-800010-000003

Tank Status: A
Capacity: 12000
Active Date: 11-06-91
Tank Use: M.V. FUEL

STG: P

Content: REG UNLEADED Number Of Tanks: Not reported

Status: Active
Comp Number: 800010

Number: 1 Board Of Equalization: 44

Board Of Equalization: 44-016995
Referral Date: 11-06-91
Action Date: 09-30-93
Created Date: 04-03-89
Owner Tank Id: Not reported

SWRCB Tank ld: 30-030-800010-000004

Tank Status: A

Capacity: 500
Active Date: 11-06-91
Tank Use: OIL
STG: W

Content: WASTE OIL Number Of Tanks: Not reported

Status: Active
Comp Number: 800010
Number: 1

Board Of Equalization: 44-016995
Referral Date: 11-06-91
Action Date: 09-30-93
Created Date: 04-03-89
Owner Tank Id: Not reported

SWRCB Tank Id: 30-030-800010-000005

Tank Status: A
Capacity: 500
Active Date: 11-06-91
Tank Use: OIL
STG: P

Content: FRESH OIL Number Of Tanks: Not reported

CA FID UST:

Facility ID: 30005734
Regulated By: UTNKA
Regulated ID: 000S0655T
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 7149741900
Mail To: Not reported

Direction Distance Elevation

ance EDR ID Number vation Site Database(s) EPA ID Number

COCA COLA BOTTLING CO - ORANGE (Continued)

S101589306

Mailing Address: 14655 WICKS Mailing Address 2: Not reported **ORANGE 92665** Mailing City, St, Zip: Contact: Not reported Contact Phone: Not reported Not reported **DUNs Number:** Not reported NPDES Number: EPA ID: Not reported Not reported Comments: Status: Active

NPDES:

Facility Status: Terminated NPDES Number: CAS000001

Region: 8 Agency Number: 0 208590 Regulatory Measure ID: Place ID: Not reported Order Number: 97-03-DWQ WDID: 8 301006472 Regulatory Measure Type: Enrollee Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 04/24/1992 Termination Date Of Regulatory Measure: 10/31/2017 Expiration Date Of Regulatory Measure: Not reported Discharge Address: 700 W Grove Ave

Discharge Name: Coca Cola Bottling Company of LA

Discharge City: Orange Discharge State: California Discharge Zip: 92865 Status: Not reported Status Date: Not reported Operator Name: Not reported Operator Address: Not reported Operator City: Not reported Operator State: Not reported Operator Zip: Not reported

NPDES as of 03/2018:

NPDES Number: Not reported Status: Not reported Agency Number: Not reported Not reported

Region: Regulatory Measure ID: 208590 Order Number: Not reported Regulatory Measure Type: Industrial Place ID: Not reported WDID: 8 301006472 Program Type: Not reported Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Discharge Name: Not reported Discharge Address: Not reported Discharge City: Not reported

Direction Distance Elevation

vation Site Database(s) EPA ID Number

COCA COLA BOTTLING CO - ORANGE (Continued)

S101589306

EDR ID Number

Discharge State: Not reported Not reported Discharge Zip: Received Date: 05/09/2008 Processed Date: 04/24/1992 Status: Active Status Date: 04/24/1992 Place Size: 8.93 Place Size Unit: Acres Contact: Alex Foster

Contact Title: Distribution Center Manager

Contact Phone: 714-282-2000 Contact Phone Ext: Not reported

Contact Email: afoster@coca-cola.com

Operator Name: Coca Cola Bottling Company of LA

Operator Address: 700 W Grove Ave

Operator City: Orange
Operator State: California
Operator Zip: 92865
Operator Contact: Alex Foster

Operator Contact Title: Distribution Center Manager

Operator Contact Phone: 714-282-2000
Operator Contact Phone Ext: Not reported

afoster@coca-cola.com Operator Contact Email: Operator Type: **Private Business** Developer: Not reported Developer Address: Not reported Developer City: Not reported **Developer State:** Florida Developer Zip: Not reported **Developer Contact:** Not reported Developer Contact Title: Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** Not reported **Emergency Phone Ext:** Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported

Constype Water Sewer Ind:

Dir Discharge Uswater Ind:

Receiving Water Name:

Certifier:

Not reported

N

Santa Ana River

Alex Foster

Constype Transport Ind:

Constype Utility Ind:

Constype Utility Description:

Certifier Title: Distribution Center Manager

Not reported

Not reported

Not reported

Certification Date: 09-JUN-15

Primary Sic: 4213-Trucking, Except Local

Secondary Sic: Not reported

MAP FINDINGS Map ID Direction

Distance Elevation

Site Database(s) **EPA ID Number**

COCA COLA BOTTLING CO - ORANGE (Continued)

S101589306

EDR ID Number

Tertiary Sic: Not reported

NPDES Number: CAS000001 **Terminated** Status:

Agency Number: 0 Region: 8 208590 Regulatory Measure ID: Order Number: 97-03-DWQ Regulatory Measure Type: Enrollee Place ID: Not reported WDID: 8 301006472 Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 04/24/1992 Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: 10/31/2017

Discharge Name: Coca Cola Bottling Company of LA

700 W Grove Ave Discharge Address:

Discharge City: Orange California Discharge State: Discharge Zip: 92865 Received Date: Not reported Processed Date: Not reported Status: Not reported Status Date: Not reported Place Size: Not reported Place Size Unit: Not reported Contact: Not reported Contact Title: Not reported Not reported Contact Phone: Contact Phone Ext: Not reported Contact Email: Not reported Operator Name: Not reported Operator Address: Not reported Not reported Operator City: Not reported Operator State: Not reported Operator Zip: **Operator Contact:** Not reported Operator Contact Title: Not reported **Operator Contact Phone:** Not reported Operator Contact Phone Ext: Not reported Not reported Operator Contact Email: Operator Type: Not reported Not reported Developer: Developer Address: Not reported Developer City: Not reported Developer State: Not reported Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** Not reported **Emergency Phone Ext:** Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported

Not reported

Not reported

Constype Cable Line Ind:

Constype Comm Line Ind:

Direction Distance Elevation

Site Database(s) EPA ID Number

COCA COLA BOTTLING CO - ORANGE (Continued)

S101589306

EDR ID Number

Constype Commertial Ind: Not reported Not reported Constype Electrical Line Ind: Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind: Not reported Receiving Water Name: Not reported Certifier: Not reported Certifier Title: Not reported Certification Date: Not reported Primary Sic: Not reported Secondary Sic: Not reported **Tertiary Sic:** Not reported

Facility Status: Active
NPDES Number: CAS000001

Region: Agency Number: 0 Regulatory Measure ID: 492314 Place ID: Not reported Order Number: 97-03-DWQ WDID: 8 301027419 Enrollee Regulatory Measure Type: Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 10/31/2017 Termination Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported

Discharge Address: 700 West Grove Avenue
Discharge Name: Reyes Coca Cola Bottling LLC

Discharge City: Orange Discharge State: California Discharge Zip: 92865 Not reported Status: Status Date: Not reported Operator Name: Not reported Operator Address: Not reported Operator City: Not reported Operator State: Not reported Operator Zip: Not reported

NPDES as of 03/2018:

CAS000001 NPDES Number: Active Status: Agency Number: 0 Region: 8 492314 Regulatory Measure ID: Order Number: 97-03-DWQ Regulatory Measure Type: Enrollee Place ID: Not reported

Distance Elevation Site

Site Database(s)

S101589306

EDR ID Number

EPA ID Number

COCA COLA BOTTLING CO - ORANGE (Continued)

WDID: 8 301027419
Program Type: Industrial
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: 10/31/2017
Expiration Date Of Regulatory Measure: Not reported
Termination Date Of Regulatory Measure: Not reported

Discharge Name: Reyes Coca Cola Bottling LLC
Discharge Address: 700 West Grove Avenue

Discharge Address: Discharge City: Orange Discharge State: California Discharge Zip: 92865 Received Date: Not reported Processed Date: Not reported Status: Not reported Status Date: Not reported Place Size: Not reported Place Size Unit: Not reported Contact: Not reported Contact Title: Not reported Contact Phone: Not reported Contact Phone Ext: Not reported Contact Email: Not reported Operator Name: Not reported Operator Address: Not reported Operator City: Not reported Operator State: Not reported Operator Zip: Not reported **Operator Contact:** Not reported Operator Contact Title: Not reported **Operator Contact Phone:** Not reported Operator Contact Phone Ext: Not reported Operator Contact Email: Not reported Operator Type: Not reported Developer: Not reported Developer Address: Not reported Developer City: Not reported Developer State: Not reported Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** Not reported **Emergency Phone Ext:** Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported

Not reported

Not reported

Constype Transport Ind:

Constype Utility Description:

Distance Elevation

Site Database(s) EPA ID Number

COCA COLA BOTTLING CO - ORANGE (Continued)

S101589306

EDR ID Number

Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind: Not reported Receiving Water Name: Not reported Certifier: Not reported Certifier Title: Not reported Certification Date: Not reported Primary Sic: Not reported Secondary Sic: Not reported **Tertiary Sic:** Not reported

Facility Status: Not reported NPDES Number: Not reported Region: Not reported Agency Number: Not reported Regulatory Measure ID: Not reported Place ID: Not reported Order Number: Not reported 8 301006472 WDID: Regulatory Measure Type: Industrial Program Type: Not reported Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Discharge Address: Not reported Discharge Name: Not reported Discharge City: Not reported Discharge State: Not reported Discharge Zip: Not reported Status: **Terminated** Status Date: 11/28/2017

Operator Name: Coca Cola Bottling Company of LA

Not reported

Not reported

Operator Address: 700 W Grove Ave

Operator City: Orange
Operator State: California
Operator Zip: 92865

NPDES as of 03/2018: NPDES Number:

Discharge State:

Status: Not reported Agency Number: Not reported Region: Regulatory Measure ID: 208590 Order Number: Not reported Regulatory Measure Type: Industrial Place ID: Not reported WDID: 8 301006472 Program Type: Not reported Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Discharge Name: Not reported Discharge Address: Not reported Discharge City: Not reported

Direction
Distance

Elevation Site Database(s) EPA ID Number

COCA COLA BOTTLING CO - ORANGE (Continued)

S101589306

EDR ID Number

Not reported Discharge Zip: 05/09/2008 Received Date: Processed Date: 04/24/1992 Status: Active Status Date: 04/24/1992 Place Size: 8.93 Place Size Unit: Acres Contact: Alex Foster

Contact Title: Distribution Center Manager

Contact Phone: 714-282-2000
Contact Phone Ext: Not reported

Contact Email: afoster@coca-cola.com

Operator Name: Coca Cola Bottling Company of LA

Operator Address: 700 W Grove Ave

Operator City: Orange
Operator State: California
Operator Zip: 92865
Operator Contact: Alex Foster

Operator Contact Title: Distribution Center Manager

Operator Contact Phone: 714-282-2000
Operator Contact Phone Ext: Not reported

Operator Contact Phone Ext: Not reported afoster@coca-cola.com Operator Contact Email: Operator Type: **Private Business** Developer: Not reported Developer Address: Not reported Developer City: Not reported Developer State: Florida Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Not reported Constype Linear Utility Ind: **Emergency Phone:** Not reported Emergency Phone Ext: Not reported Constype Above Ground Ind: Not reported Not reported Constype Below Ground Ind: Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported

Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Not reported Constype Recons Ind: Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind:

Receiving Water Name: Santa Ana River Certifier: Alex Foster

Certifier Title: Distribution Center Manager

Certification Date: 09-JUN-15

Primary Sic: 4213-Trucking, Except Local

Secondary Sic: Not reported Tertiary Sic: Not reported

MAP FINDINGS Map ID Direction

Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

COCA COLA BOTTLING CO - ORANGE (Continued)

Termination Date Of Regulatory Measure:

S101589306

NPDES Number: CAS000001 **Terminated** Status: Agency Number: n Region: 208590 Regulatory Measure ID: 97-03-DWQ Order Number: Regulatory Measure Type: Enrollee Place ID: Not reported WDID: 8 301006472 Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 04/24/1992 Expiration Date Of Regulatory Measure: Not reported

Discharge Name: Coca Cola Bottling Company of LA

10/31/2017

Not reported

Discharge Address: 700 W Grove Ave

Discharge City: Orange Discharge State: California Discharge Zip: 92865 Received Date: Not reported Processed Date: Not reported Status: Not reported Status Date: Not reported Place Size: Not reported Place Size Unit: Not reported Contact: Not reported Contact Title: Not reported Contact Phone: Not reported Contact Phone Ext: Not reported Contact Email: Not reported Operator Name: Not reported Operator Address: Not reported Operator City: Not reported Operator State: Not reported Not reported Operator Zip: Operator Contact: Not reported Operator Contact Title: Not reported Operator Contact Phone: Not reported Operator Contact Phone Ext: Not reported Operator Contact Email: Not reported Operator Type: Not reported Not reported Developer: Developer Address: Not reported Developer City: Not reported Developer State: Not reported Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** Not reported Emergency Phone Ext: Not reported Constype Above Ground Ind: Not reported Not reported Constype Below Ground Ind: Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported

Constype Electrical Line Ind:

Direction Distance Elevation

nce EDR ID Number tition Site Database(s) EPA ID Number

COCA COLA BOTTLING CO - ORANGE (Continued)

S101589306

Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Not reported Constype Transport Ind: Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind: Not reported Receiving Water Name: Not reported Certifier: Not reported Certifier Title: Not reported Certification Date: Not reported Primary Sic: Not reported Secondary Sic: Not reported Tertiary Sic: Not reported

Facility Status: Not reported NPDES Number: Not reported Not reported Region: Agency Number: Not reported Regulatory Measure ID: Not reported Place ID: Not reported Order Number: Not reported WDID: 8 301027419 Regulatory Measure Type: Industrial Not reported Program Type: Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Not reported Discharge Address: Discharge Name: Not reported Discharge City: Not reported Discharge State: Not reported Discharge Zip: Not reported Status: Active Status Date: 10/31/2017

Operator Name: Reyes Coca Cola Bottling LLC
Operator Address: 700 West Grove Avenue

Operator City: Orange
Operator State: California
Operator Zip: 92865

NPDES as of 03/2018:

CAS000001 NPDES Number: Status: Active Agency Number: 0 Region: 8 Regulatory Measure ID: 492314 97-03-DWQ Order Number: Regulatory Measure Type: Enrollee Place ID: Not reported WDID: 8 301027419 Program Type: Industrial

Distance EDR ID Number
Elevation Site EDR ID Number
Database(s) EPA ID Number

Not reported

COCA COLA BOTTLING CO - ORANGE (Continued)

S101589306

Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 10/31/2017 Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported

Discharge Name: Reyes Coca Cola Bottling LLC
Discharge Address: 700 West Grove Avenue

Discharge City: Orange Discharge State: California Discharge Zip: 92865 Received Date: Not reported Processed Date: Not reported Status: Not reported Status Date: Not reported Place Size: Not reported Place Size Unit: Not reported Contact: Not reported Contact Title: Not reported Contact Phone: Not reported Contact Phone Ext: Not reported Contact Email: Not reported Not reported Operator Name: Operator Address: Not reported Operator City: Not reported Operator State: Not reported Operator Zip: Not reported Operator Contact: Not reported Operator Contact Title: Not reported **Operator Contact Phone:** Not reported Operator Contact Phone Ext: Not reported Not reported Operator Contact Email: Operator Type: Not reported Developer: Not reported Developer Address: Not reported Developer City: Not reported Not reported Developer State: Not reported Developer Zip: Developer Contact: Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported Not reported **Emergency Phone:** Emergency Phone Ext: Not reported Not reported Constype Above Ground Ind: Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported

Constype Water Sewer Ind:

Direction Distance

Elevation Site Database(s) EPA ID Number

COCA COLA BOTTLING CO - ORANGE (Continued)

S101589306

EDR ID Number

Dir Discharge Uswater Ind: Not reported Receiving Water Name: Not reported Certifier: Not reported Certifier Title: Not reported Certification Date: Not reported Primary Sic: Not reported Secondary Sic: Not reported Tertiary Sic: Not reported

CIWQS:

Agency: Reyes Coca Cola Bottling LLC

Agency Address: 700 West Grove Avenue, Orange, CA 92865

Place/Project Type: Industrial - Trucking, Except Local

SIC/NAICS: 4213
Region: 8
Program: INDSTW
Regulatory Measure Status: Active

Regulatory Measure Type: Storm water industrial 2014-0057-DWQ Order Number: WDID: 8 301027419 CAS000001 NPDES Number: Adoption Date: Not reported 10/31/2017 Effective Date: Termination Date: Not reported Expiration/Review Date: Not reported Not reported Design Flow: Major/Minor: Not reported Complexity: Not reported TTWQ: Not reported

Enforcement Actions within 5 years: 0
Violations within 5 years: 0

Latitude: 33.82052 Longitude: -117.85876

Agency: Coca Cola Bottling Company of LA
Agency Address: 700 W Grove Ave, Orange, CA 92865
Place/Project Type: Industrial - Trucking, Except Local

SIC/NAICS:4213Region:8Program:INDSTWRegulatory Measure Status:Terminated

Regulatory Measure Type: Storm water industrial Order Number: 2014-0057-DWQ WDID: 8 301006472 NPDES Number: CAS000001 Adoption Date: Not reported Effective Date: 04/24/1992 Termination Date: 10/31/2017 Expiration/Review Date: Not reported Design Flow: Not reported Major/Minor: Not reported Complexity: Not reported TTWQ: Not reported

Enforcement Actions within 5 years: 0
Violations within 5 years: 0

Latitude: 33.82052

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

COCA COLA BOTTLING CO - ORANGE (Continued)

S101589306

Longitude: -117.85876

CA PROC S111859575 **O54 SA RECYCLING** NNW

2411 N GLASSEL ST N/A

1/4-1/2 ORANGE, CA 92865

0.475 mi.

2508 ft. Site 1 of 3 in cluster O

Relative: PROC:

Lower Reg Id: 153938 Cert Id: PR153938.001 Actual:

Organization Id: 201 ft. 41342

SA Recycling LLC Organization Name: Mailing Address: 2411 N Glassell

Mailing City: Orange Mailing State: CA Mailing Zip Code: 92865 Website: Not reported Email: Not reported Phone Number: (714) 283-6188

Rural: N/A Operation Begin Date:

03/23/2012 Aluminium: Not reported Not reported Glass: Plastic: Not reported Bimetal: Not reported

Hours of Operation: Mon - Fri 8:00 am - 4:30 pm; Sat 8:00 am - 12:00 am; Sun Closed

N55 **COCA-COLA ENTERPRISES** CA LUST S102428192 **CA HIST CORTESE** West 700 GROVE AVE N/A

1/4-1/2 0.480 mi.

2532 ft. Site 2 of 3 in cluster N

ORANGE, CA 92865

Relative: LUST REG 8: Lower Region:

County: Orange Actual: Regional Board: Santa Ana Region 190 ft.

Facility Status: Case Closed Case Number: 083002846T Local Case Num: Not reported Case Type: Soil only Substance: Gasoline Qty Leaked: Not reported

Abate Method: Excavate and Dispose - remove contaminated soil and dispose in

approved site Cross Street: **BATAVIA**

Enf Type: Not reported Funding: Not reported How Discovered: Tank Closure How Stopped: Not reported Leak Cause: UNK Leak Source: UNK

Global ID: T0605901952 How Stopped Date: Not reported Enter Date: 8/8/1996

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

COCA-COLA ENTERPRISES (Continued)

S102428192

Date Confirmation of Leak Began: 12/12/1995 Date Preliminary Assessment Began: Not reported Discover Date: 12/12/1995 **Enforcement Date:** Not reported Close Date: 8/13/1996 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: 8/8/1996 **GW Qualifies:** Not reported Soil Qualifies: Not reported Operator: Not reported Facility Contact: Not reported Interim: Not reported LUST Oversite Program: 33.820871 Latitude: Longitude: -117.8597775 MTBE Date: Not reported Max MTBE GW: Not reported MTBE Concentration: 0 Max MTBE Soil: Not reported

MTBE Fuel:

MTBE Tested: Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.

MTBE Class:

Staff: VJJStaff Initials: UNK

Lead Agency: Regional Board

Local Agency: Orange, Orange County Hydr Basin #: COASTAL PLAIN OF ORA

Beneficial: Not reported Priority: Not reported Cleanup Fund Id: Not reported Work Suspended: Not reported ALSO DIESEL, WASTE OIL AND NEW OIL Summary:

HIST CORTESE:

CORTESE Region: Facility County Code: 30 LTNKA Reg By: Reg Id: 083002846T

O56 DESERT PETROLEUM SS #0090 CA LUST S100933856 N/A

NNW 2440 N GLASSELL ST 1/4-1/2 ORANGE, CA 92665

0.493 mi.

2605 ft. Site 2 of 3 in cluster O

Relative: LUST:

Lower ORANGE, CITY OF Lead Agency: Case Type: LUST Cleanup Site Actual:

 $http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605901372$ Geo Track: 200 ft.

Global Id: T0605901372 Latitude: 33.828285 Longitude: -117.854167

Completed - Case Closed Status:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

DESERT PETROLEUM SS #0090 (Continued)

04/05/1995 Status Date: Case Worker: UNK RB Case Number: 083001834T Local Agency: ORANGE, CITY OF File Location: Not reported Local Case Number: Not reported Potential Media Affect: Soil Potential Contaminants of Concern: Gasoline

LUST:

Site History:

T0605901372 Global Id:

Contact Type: Regional Board Caseworker

Contact Name: CARL BERNHARDT

SANTA ANA RWQCB (REGION 8) Organization Name: Address: 3737 MAIN STREET, SUITE 500

Not reported

City: **RIVERSIDE**

Email: cbernhardt@waterboards.ca.gov

Phone Number: 9517824495

T0605901372 Global Id:

Contact Type: Local Agency Caseworker

Contact Name: UNK

Organization Name: ORANGE, CITY OF Address: Not reported r8 UNKNOWN City: Email: Not reported Phone Number: Not reported

LUST:

Global Id: T0605901372 Action Type: Other Date: 03/04/1991 Action: Leak Discovery

Global Id: T0605901372 Action Type: Other 12/24/1989 Date: Action: Leak Stopped

T0605901372 Global Id: Action Type: Other Date: 04/11/1991 Leak Reported Action:

LUST:

T0605901372 Global Id:

Completed - Case Closed Status:

04/05/1995 Status Date:

Global Id: T0605901372

Status: Open - Case Begin Date

Status Date: 12/24/1989 S100933856

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

057 **DESERT PETROLEUM SS #0090 CA LUST** S104761147 **CA HIST CORTESE** NNW 2440 GLASSELL ST N/A

1/4-1/2 ORANGE, CA 92665

0.493 mi.

2605 ft. Site 3 of 3 in cluster O

Relative: LUST REG 8: Lower

Region: County: Orange

Actual: Santa Ana Region Regional Board: 200 ft.

Facility Status: Case Closed Case Number: 083001834T Local Case Num: Not reported Soil only Case Type: Substance: Gasoline Qty Leaked: Not reported Abate Method: Vapor Extraction Cross Street: **FLETCHER** Enf Type: Not reported Funding: Not reported How Discovered: Tank Closure How Stopped: Not reported Leak Cause: UNK Leak Source: UNK

Global ID: T0605901372 How Stopped Date: 12/24/1989 Enter Date: 4/15/1991 Date Confirmation of Leak Began: Not reported Date Preliminary Assessment Began: Not reported Discover Date: 3/4/1991 **Enforcement Date:** Not reported 4/5/1995 Close Date: 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: 4/15/1991 **GW Qualifies:** Not reported Soil Qualifies: Not reported Operator: Not reported Facility Contact: Not reported Interim: Not reported Oversite Program: LUST Latitude: 33.8289618 Longitude: -117.8533145 MTBE Date: Not reported Max MTBE GW:

Not reported MTBE Concentration: Max MTBE Soil: Not reported

MTBE Fuel:

MTBE Tested: Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.

MTBE Class:

CAB Staff: Staff Initials: UNK

Lead Agency: Local Agency

Local Agency: Orange, Orange County Hvdr Basin #: COASTAL PLAIN OF ORA

Beneficial: Not reported

Direction Distance

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

DESERT PETROLEUM SS #0090 (Continued)

S104761147

Priority: Not reported Cleanup Fund Id: Not reported Work Suspended: Not reported

Summary: Not reported

HIST CORTESE:

Region: CORTESE
Facility County Code: 30
Reg By: LTNKA
Reg Id: 083001834T

RSA SOIL PRODUCTS, INC. CA LUST S101589304

West 701 W GROVE CA SWEEPS UST N/A

1/4-1/2 ORANGE, CA 92665 CA FID UST

0.494 mi.

N58

2607 ft. Site 3 of 3 in cluster N

Relative: LUST:

Lower Lead Agency: SANTA ANA RWQCB (REGION 8)

Actual: Case Type: LUST Cleanup Site

189 ft. Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605901916

Global Id: T0605901916 Latitude: 33.821091 Longitude: -117.8597815

Status: Completed - Case Closed

Status Date: 11/18/1996
Case Worker: VJB
RB Case Number: 083002776T
Local Agency: ORANGE, CITY OF
File Location: Not reported
Local Case Number: Not reported

Potential Media Affect: Aquifer used for drinking water supply

Potential Contaminants of Concern: Gasoline Site History: Not reported

LUST:

Global Id: T0605901916

Contact Type: Local Agency Caseworker

Contact Name: UNK

Organization Name:
Address:
Not reported
City:
r8 UNKNOWN
Email:
Not reported
Not reported
Not reported
Not reported

Global Id: T0605901916

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: valerie.jahn-bull@waterboards.ca.gov

Phone Number: 9517824903

LUST:

Global Id: T0605901916

Action Type: Other

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

RSA SOIL PRODUCTS, INC. (Continued)

S101589304

Date: 06/08/1995 Leak Reported Action:

Global Id: T0605901916 Action Type: **ENFORCEMENT** Date: 11/18/1996

Action: Closure/No Further Action Letter

Global Id: T0605901916 Action Type: Other Date: 03/27/1995 Action: Leak Discovery

Global Id: T0605901916 Action Type: Other 03/27/1995 Date: Action: Leak Stopped

LUST:

T0605901916 Global Id:

Status: Completed - Case Closed

11/18/1996 Status Date:

Global Id: T0605901916

Open - Case Begin Date Status:

Status Date: 03/27/1995

Global Id: T0605901916 Status: Open - Remediation

05/17/1996 Status Date:

Global Id: T0605901916

Open - Site Assessment Status:

04/01/1995 Status Date:

SWEEPS UST:

Status: Active 800011 Comp Number: Number: 1

Board Of Equalization: 44-016996 Referral Date: 10-28-92 10-06-93 Action Date: Created Date: 04-03-89 Owner Tank Id: Not reported

SWRCB Tank Id: 30-030-800011-000001

Tank Status:

Capacity: 10000 10-30-91 Active Date: Tank Use: M.V. FUEL STG:

DIESEL Content: Number Of Tanks: 3

Status: Active Comp Number: 800011

Direction Distance

Elevation Site Database(s) EPA ID Number

RSA SOIL PRODUCTS, INC. (Continued)

S101589304

EDR ID Number

Number:

Board Of Equalization: 44-016996
Referral Date: 10-28-92
Action Date: 10-06-93
Created Date: 04-03-89
Owner Tank Id: Not reported

SWRCB Tank Id: 30-030-800011-000002

 Tank Status:
 A

 Capacity:
 1000

 Active Date:
 10-28-92

 Tank Use:
 M.V. FUEL

STG: P

Content: PRM UNLEADED Number Of Tanks: Not reported

Status: Active
Comp Number: 800011
Number: 1

Board Of Equalization: 44-016996 Referral Date: 10-28-92 Action Date: 10-06-93 Created Date: 04-03-89 Owner Tank Id: Not reported

SWRCB Tank ld: 30-030-800011-000003

Tank Status: A
Capacity: 250
Active Date: 10-28-92
Tank Use: OIL
STG: W

Content: WASTE OIL Number Of Tanks: Not reported

CA FID UST:

Facility ID: 30005459 Regulated By: UTNKA Regulated ID: 000G0701T Cortese Code: Not reported SIC Code: Not reported 7149987720 Facility Phone: Mail To: Not reported Mailing Address: 701 W GROVE Mailing Address 2: Not reported Mailing City, St, Zip: **ORANGE 92665** Contact: Not reported Contact Phone: Not reported DUNs Number: Not reported NPDES Number: Not reported EPA ID: Not reported Not reported Comments: Status: Active

Direction Distance

Distance EDR ID Number
Elevation Site EPA ID Number

P59 RICK HAMM CONSTRUCTION CA LUST S104791914
NW 2314 PACIFIC ST N/A

NW 2314 PACIFIC ST 1/4-1/2 ORANGE, CA 92865

0.495 mi.

2614 ft. Site 1 of 2 in cluster P

Relative: LUST REG 8: Lower Region:

Actual: County: Orange

193 ft. Regional Board: Santa Ana Region
Facility Status: Case Closed

Case Number: 083003772T Local Case Num: Not reported Soil only Case Type: Substance: Gasoline Qty Leaked: Not reported Abate Method: Not reported Cross Street: Not reported 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: T0605999277 How Stopped Date: Not reported 8/28/2000 Enter Date: Date Confirmation of Leak Began: Not reported Date Preliminary Assessment Began: Not reported Discover Date: Not reported

Enforcement Date: Not reported Close Date: 11/16/1999 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: 8/28/2000 **GW Qualifies:** Not reported Soil Qualifies: Not reported Operator: Not reported Facility Contact: Not reported Interim: Not reported Oversite Program: LUST

Latitude: 33.826
Longitude: -117.857464
MTBE Date: Not reported
Max MTBE GW: Not reported
MTBE Concentration: 0
Max MTBE Soil: Not reported

MTBE Fuel:

MTBE Tested: Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.

MTBE Class:

Staff: TME
Staff Initials: Not reported
Lead Agency: Regional Board
Local Agency: 30000

Hydr Basin #: COASTAL PLAIN OF ORA

Beneficial: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

RICK HAMM CONSTRUCTION (Continued)

S104791914

Priority: Not reported Cleanup Fund Id: Not reported

Work Suspended: No

Summary: Not reported

P60 RICK HAMM CONSTRUCTION, INC. S101589328 **CA LUST** NW 2314 N PACIFIC **CA SWEEPS UST** N/A

CA FID UST

1/4-1/2 ORANGE, CA 92665

0.495 mi.

2614 ft. Site 2 of 2 in cluster P

LUST: Relative:

SANTA ANA RWQCB (REGION 8) Lower Lead Agency:

Case Type: **LUST Cleanup Site** Actual:

Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605999277 193 ft.

Global Id: T0605999277 Latitude: 33.826 Longitude: -117.857464

Completed - Case Closed Status:

11/16/1999 Status Date: Case Worker: TME RB Case Number: 083003772T Local Agency: Not reported Not reported File Location: Local Case Number: Not reported Potential Media Affect: Soil Potential Contaminants of Concern: Gasoline

Site History: Not reported

LUST:

Global Id: T0605999277

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

LUST:

Global Id: T0605999277 Action Type: Other 11/16/1999 Date: Action: Leak Reported

LUST:

Global Id: T0605999277

Status: Completed - Case Closed

11/16/1999 Status Date:

Global Id: T0605999277

Open - Case Begin Date Status:

Status Date: 11/16/1999

SWEEPS UST:

Status: Active

Direction Distance

Elevation Site Database(s) EPA ID Number

RICK HAMM CONSTRUCTION, INC. (Continued)

Comp Number: 68798 Number: 1

Board Of Equalization: 44-016988
Referral Date: 12-22-91
Action Date: 01-11-94
Created Date: 10-13-88
Owner Tank Id: Not reported

SWRCB Tank Id: 30-030-068798-000001

Tank Status: A
Capacity: 4000
Active Date: 12-22-91
Tank Use: M.V. FUEL

STG: P

Content: REG UNLEADED

Number Of Tanks: 2

Status: Active
Comp Number: 68798
Number: 1

Board Of Equalization: 44-016988
Referral Date: 12-22-91
Action Date: 01-11-94
Created Date: 10-13-88
Owner Tank Id: Not reported

SWRCB Tank Id: 30-030-068798-000002

Tank Status: A
Capacity: 4000
Active Date: 12-22-91
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

CA FID UST:

30006509 Facility ID: Regulated By: UTNKA Regulated ID: 00068798 Cortese Code: Not reported SIC Code: Not reported Facility Phone: 7146372454 Mail To: Not reported Mailing Address: 2314 N PACIFIC Mailing Address 2: Not reported Mailing City, St, Zip: **ORANGE 92665** Contact: Not reported Contact Phone: Not reported DUNs Number: Not reported Not reported NPDES Number: Not reported EPA ID: Not reported Comments: Status: Active

S101589328

EDR ID Number

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

61 **ORANGE POST OFFICE** CA LUST S109284848 SE **1075 N TAFT**

N/A

1/4-1/2 ORANGE, CA 92865

0.496 mi. 2620 ft.

Relative: LUST:

Higher Lead Agency: SANTA ANA RWQCB (REGION 8)

Case Type: **LUST Cleanup Site** Actual:

Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605999124 223 ft.

Global Id: T0605999124 Latitude: 33.8158692 -117.8433406 Longitude:

Completed - Case Closed Status:

06/03/1999 Status Date:

Case Worker: RS

083003744T RB Case Number: Local Agency: ORANGE, CITY OF File Location: Not reported Local Case Number: Not reported

Potential Media Affect: Soil

Potential Contaminants of Concern: Other Solvent or Non-Petroleum Hydrocarbon

Site History: Not reported

LUST:

Global Id: T0605999124

Local Agency Caseworker Contact Type: Contact Name: KATHY DASCOMB ORANGE, CITY OF Organization Name:

Address: 2009 EAST EDINGER AVENUE

City: SANTA ANA

Email: kdascomb@cityoforange.org

Phone Number: 7146673773

Global Id: T0605999124

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: rose.scott@waterboards.ca.gov

Phone Number: 9513206375

LUST:

Global Id: T0605999124 Action Type: Other Date: 06/03/1999 Action: Leak Reported

T0605999124 Global Id: Action Type: **ENFORCEMENT** 06/03/1999 Date:

Action: Closure/No Further Action Letter

LUST:

Global Id: T0605999124

Status: Completed - Case Closed

Status Date: 06/03/1999

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ORANGE POST OFFICE (Continued)

S109284848

CA LUST

FINDS ECHO

CA EMI

CA HIST CORTESE

Global Id: T0605999124

Open - Case Begin Date Status:

06/03/1999 Status Date:

Q62 CIRCUIT CONNECTION INC RCRA-SQG 1000427084 SW 1739 N. CASE ST CA ENVIROSTOR CAD046055893

1/2-1 ORANGE, CA 92665

0.517 mi. 2731 ft. Site 1 of 2 in cluster Q

Relative: Lower

RCRA-SQG: Actual:

183 ft. Date form received by agency: 10/12/2000

Facility name: CIRCUIT CONNECTION INC Site name: MCCURDY CIRCUITS, INC.

Facility address: 1739 N. CASE ST

ORANGE, CA 92665

EPA ID: CAD046055893 Mailing address: 4900 E. HUNTER AVE. ANAHEIM, CA 92807-2057

Contact: ROGER MLCOCH Not reported Contact address: Not reported

Contact country: US

Contact telephone: 714-507-4900

Telephone ext.: 226

Not reported Contact email: EPA Region: 09 Land type: Private

Classification: Small Small Quantity Generator

Handler: generates more than 100 and less than 1000 kg of hazardous Description:

waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of

hazardous waste at any time

Handler Activities Summary:

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

Historical Generators:

Date form received by agency: 04/04/2000

Direction Distance

Elevation Site Database(s) EPA ID Number

CIRCUIT CONNECTION INC (Continued)

1000427084

EDR ID Number

Site name: CIRCUIT CONNECTION INC Classification: Small Quantity Generator

. 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: F006

. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT

FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

Date form received by agency: 03/04/1999

Site name: MC CURDY CIRCUITS, INC. Classification: Large Quantity Generator

Date form received by agency: 09/01/1996

Site name: CIRCUIT CONNECTION INC Classification: Large Quantity Generator

Date form received by agency: 04/29/1996

Site name: MCCURDY CIRCUITS, INC. Classification: Large Quantity Generator

Date form received by agency: 03/22/1994

Site name: MCCURDY CIRCUITS INC Classification: Large Quantity Generator

Date form received by agency: 03/02/1992

Site name: MCCURDY CIRCUITS INC Classification: Large Quantity Generator

Date form received by agency: 04/16/1990

Site name: MCCURDY CIRCUITS INC Classification: Large Quantity Generator

Facility Has Received Notices of Violations:

Regulation violated: FR - 262.10-12.A Area of violation: Generators - General

03/19/1993 Date violation determined: Date achieved compliance: 03/19/1998 Violation lead agency: State Enforcement action: Not reported Not reported Enforcement action date: Enf. disposition status: Not reported Enf. disp. status date: Not reported Enforcement lead agency: Not reported Proposed penalty amount: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

CIRCUIT CONNECTION INC (Continued)

1000427084

EDR ID Number

Final penalty amount: Not reported Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 03/19/1993

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: 03/19/1998

Evaluation lead agency: State Contractor/Grantee

ENVIROSTOR:

Facility ID: 71002406

Status: Inactive - Needs Evaluation

Status Date: Not reported
Site Code: Not reported
Site Type: Tiered Permit
Site Type Detailed: Tiered Permit
Acres: Not reported

NPL: NO

Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Not reported
Division Branch: Cleanup Cypress

Assembly: 68 Senate: 37

Special Program: Not reported

Restricted Use: NO

Site Mgmt Req: NONE SPECIFIED Funding: Not reported Latitude: 33.81641 Longitude: -117.8583

APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CAD046055893

Alias Type: EPA Identification Number

Alias Name: 71002406

Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: Not reported Completed Sub Area Name: Not reported Completed Document Type: Not reported Comments: Not reported Not reported Not reported Not reported

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

Direction Distance

Elevation Site Database(s) EPA ID Number

CIRCUIT CONNECTION INC (Continued)

1000427084

EDR ID Number

LUST:

Lead Agency: SANTA ANA RWQCB (REGION 8)

Case Type: LUST Cleanup Site

Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0605901559

Global Id: T0605901559
Latitude: 33.816411
Longitude: -117.858351

Status: Completed - Case Closed Status Date: 03/07/2001

Case Worker: TME
RB Case Number: 083002098T
Local Agency: ORANGE, CITY OF
File Location: Not reported
Local Case Number: Not reported
Potential Media Affect: Soil

Potential Media Affect: Soil
Potential Contaminants of Concern: Copper
Site History: Not reported

LUST:

Global Id: T0605901559

Contact Type: Local Agency Caseworker
Contact Name: KATHY DASCOMB
Organization Name: ORANGE, CITY OF

Address: 2009 EAST EDINGER AVENUE

City: SANTA ANA

Email: kdascomb@cityoforange.org

Phone Number: 7146673773

Global Id: T0605901559

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

LUST:

Global Id: T0605901559
Action Type: ENFORCEMENT
Date: 03/07/2001

Action: Closure/No Further Action Letter

 Global Id:
 T0605901559

 Action Type:
 Other

 Date:
 01/28/1987

 Action:
 Leak Reported

Global Id: T0605901559
Action Type: Other
Date: 09/02/1986
Action: Leak Discovery

LUST:

Global Id: T0605901559

Status: Completed - Case Closed

Direction Distance

Elevation Site Database(s) **EPA ID Number**

CIRCUIT CONNECTION INC (Continued)

1000427084

EDR ID Number

Status Date: 03/07/2001

T0605901559 Global Id:

Status: Open - Case Begin Date

Status Date: 09/02/1986

T0605901559 Global Id:

Status: Open - Site Assessment

09/02/1992 Status Date:

LUST REG 8:

Region: 8 County: Orange

Regional Board: Santa Ana Region Facility Status: Case Closed Case Number: 083002098T Local Case Num: Not reported Case Type: Soil only Substance: Copper Qty Leaked: Not reported Abate Method: Not reported Cross Street: **TAFT** Not reported Enf Type: Funding: Not reported

How Discovered: OM How Stopped: Not reported Leak Cause: Not reported Leak Source: Not reported T0605901559 Global ID: How Stopped Date: Not reported Enter Date: 7/23/1992 Date Confirmation of Leak Began: Not reported Date Preliminary Assessment Began: Not reported 9/2/1986 Discover Date: **Enforcement Date:** Not reported Close Date: 3/7/2001 Date Prelim Assessment Workplan Submitted: Not reported 9/2/1992 Date Pollution Characterization Began: Date Remediation Plan Submitted: Not reported Date Remedial Action Underway: Not reported Date Post Remedial Action Monitoring: Not reported Enter Date: 7/23/1992 **GW Qualifies:** Not reported Soil Qualifies: Not reported Operator: Not reported

Facility Contact: Not reported Interim: Not reported Oversite Program: LUST Latitude: 33.8162181 Longitude: -117.8587654 MTBE Date: Not reported Max MTBE GW: Not reported MTBE Concentration: Λ

Max MTBE Soil: Not reported

MTBE Fuel:

Not Required to be Tested. MTBE Tested:

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CIRCUIT CONNECTION INC (Continued)

1000427084

MTBE Class: TME Staff: KAT Staff Initials:

Lead Agency: Regional Board Local Agency: Orange, Orange County COASTAL PLAIN OF ORA Hydr Basin #:

Beneficial: Not reported Priority: Not reported Cleanup Fund Id: Not reported Work Suspended: Not reported

COPPER AND ACID SOLUTIONS. FIRE DEPT CLOSED CASE. GROUNDWATER HAS NOT BEEN Summary:

INVESTIGATED. Called and left messages for Ragelio of McCurdy Circuits at 714

- 507 -4900 on Nov. 7, 2000. Site closed March 7, 2001.

FINDS:

Registry ID: 110008261816

Environmental Interest/Information System

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

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.

STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

1000427084 Envid: Registry ID: 110008261816

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110008261816

EMI:

Year: 1990 County Code: 30 Air Basin: SC Facility ID: 74191 Air District Name: SC SIC Code: 3672

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

Direction Distance

EDR ID Number Elevation Site **EPA ID Number** Database(s)

CIRCUIT CONNECTION INC (Continued)

1000427084

CA NPDES

SOX - Oxides of Sulphur Tons/Yr: 0 Particulate Matter Tons/Yr: 0 Part. Matter 10 Micrometers and Smllr Tons/Yr:0

HIST CORTESE:

CORTESE Region: Facility County Code: 30 LTNKA Reg By: Reg Id: 083002098T

Q63 **ULTRA-PURE METAL FINISHING INC** RCRA-LQG 1000352574 **WSW 1764 CASE ST** CA ENVIROSTOR CAD981449028

ORANGE, CA 92865 1/2-1

Contact:

CA WDS 0.520 mi. 2747 ft. Site 2 of 2 in cluster Q **CA CIWQS**

Relative: RCRA-LQG:

Lower Date form received by agency: 04/18/2017

Facility name: ULTRA-PURE METAL FINISHING INC Actual:

Facility address: 1764 CASE ST 184 ft.

ORANGE, CA 92865

EPA ID: CAD981449028

Mailing address: CASE ST

ORANGE, CA 92865 RAFAEL SALCEDO

Contact address: CASE ST

ORANGE, CA 92865

Contact country: US

Contact telephone: 714-637-3150

Contact email: ULTRAPUREMETAL@SBCGLOBAL.NET

EPA Region: 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: NINA U. JUAREZ Owner/operator address: SUMMERPLACE CT.

CORONA, CA 92881

Owner/operator country: Not reported Owner/operator telephone: 951-735-1417 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner

Direction Distance Elevation

Site Database(s) EPA ID Number

ULTRA-PURE METAL FINISHING INC (Continued)

1000352574

EDR ID Number

Owner/Op start date: 10/17/1996 Owner/Op end date: Not reported

Owner/operator name: ULTRA PURE METAL FINISHING INC

Owner/operator address: N. CASE ST

ORANGE, CA 92865

Owner/operator country: Not reported Owner/operator telephone: 714-637-3150 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Private Legal status: Owner/Operator Type: Operator Owner/Op start date: 03/15/1985 Owner/Op end date: Not reported

Owner/operator name: NINA U JUAREZ

Owner/operator address: CASE ST

ORANGE, CA 92865

Owner/operator country: US

Owner/operator telephone: 714-637-3150 Not reported Owner/operator email: Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner Owner/Operator Type: Owner/Op start date: 01/01/1985 Owner/Op end date: Not reported

Owner/operator name: ULTRA-PURE METAL FINISHING INC.

Owner/operator address: Not reported

Not reported Not reported

Owner/operator telephone: Not reported Owner/operator email: Not reported Not reported Owner/operator fax: Not reported Owner/operator extension: Legal status: Private Owner/Operator Type: Operator 01/01/1985 Owner/Op start date: Owner/Op end date: Not reported

Handler Activities Summary:

Owner/operator country:

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: Nο Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Map ID MAP FINDINGS
Direction

Distance EDR ID Number
Elevation Site EPA ID Number

ULTRA-PURE METAL FINISHING INC (Continued)

1000352574

Used oil transporter: No

. Waste code: 121

. Waste name: Alkaline solution (pH >12.5) with metals (antimony, arsenic, barium,

beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)

. Waste code: 181

. Waste name: Other inorganic solid waste

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: F006

. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT

FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM;

(2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

Historical Generators:

Date form received by agency: 02/24/2016

Site name: ULTRA-PURE METAL FINISHING INC

Classification: Large Quantity Generator

. Waste code: 181

. Waste name: Other inorganic solid waste

. Waste code: D007 . Waste name: CHROMIUM

Waste code: F006

Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM;

(2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS)
ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON
STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM
PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

Date form received by agency: 05/22/2012

Site name: ULTRA-PURE METAL FINISHING INC

Classification: Large Quantity Generator

Waste code: 123

. Waste name: Unspecified alkaline solution

Map ID MAP FINDINGS
Direction

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

ULTRA-PURE METAL FINISHING INC (Continued)

1000352574

. Waste code: 181

. Waste name: Other inorganic solid waste

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: F006

. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT

FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

Date form received by agency: 08/24/2010

Site name: ULTRA-PURE METAL FINISHING INC.

Classification: Large Quantity Generator

. Waste code: 123

. Waste name: Unspecified alkaline solution

Waste code: 135

. Waste name: Unspecified aqueous solution

. Waste code: 181

. Waste name: Other inorganic solid waste

Waste code: 792

. Waste name: Liquids with pH < 2 with metals

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: F006

. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT

FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM;

(2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

Direction Distance

Elevation Site Database(s) **EPA ID Number**

ULTRA-PURE METAL FINISHING INC (Continued)

1000352574

EDR ID Number

Date form received by agency: 03/03/2008

ULTRA-PURE METAL FINISHING, INC. Site name:

Classification: Large Quantity Generator

Waste code: D002

A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS Waste name:

> 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: F006

WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT Waste name:

FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

Date form received by agency: 09/01/1996

Site name: ULTRA PURE METAL FINISHING Classification: Small Quantity Generator

Date form received by agency: 03/25/1986

Site name: ULTRA PURE METAL FINISHING Classification: Large Quantity Generator

F006

Biennial Reports:

Waste code:

Last Biennial Reporting Year: 2017

Annual Waste Handled:

D007 Waste code: CHROMIUM Waste name:

Amount (Lbs): 350

WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT Waste name:

FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM

PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF

ALUMINUM.

Amount (Lbs): 18000

Facility Has Received Notices of Violations: Regulation violated: Not reported

Generators - General Area of violation:

Date violation determined: 06/19/2014 Date achieved compliance: Not reported Violation lead agency: State Enforcement action: Not reported

Direction Distance Elevation

evation Site Database(s) EPA ID Number

ULTRA-PURE METAL FINISHING INC (Continued)

1000352574

EDR ID Number

Enforcement action date:
Enf. disposition status:
Enf. disp. status date:
Enforcement lead agency:
Proposed penalty amount:
Final penalty amount:
Paid penalty amount:
Not reported

Regulation violated: Not reported
Area of violation: Generators - General

Date violation determined: 05/31/2011 Not reported Date achieved compliance: Violation lead agency: State Enforcement action: Not reported Enforcement action date: Not reported Enf. disposition status: Not reported Enf. disp. status date: Not reported Enforcement lead agency: Not reported Proposed penalty amount: Not reported Final penalty amount: Not reported Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 07/07/2015

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/12/2015

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:

Date achieved compliance:

Evaluation lead agency:

Not reported

Not reported

State

Evaluation date: 01/06/2015

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:

Date achieved compliance:

Evaluation lead agency:

Not reported

Not reported

State

Evaluation date: 06/19/2014

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/19/2014

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: Not reported Evaluation lead agency: State

Evaluation date: 10/09/2013

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

ULTRA-PURE METAL FINISHING INC (Continued)

1000352574

EDR ID Number

Evaluation lead agency: State

Evaluation date: 05/30/2013

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/12/2012

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:

Date achieved compliance:

Evaluation lead agency:

Not reported

Not reported

State

Evaluation date: 05/31/2011

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: Not reported Evaluation lead agency: State

Evaluation date: 06/24/2010

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/23/2009

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:

Date achieved compliance:

Evaluation lead agency:

Not reported

Not reported

State

Evaluation date: 09/16/2008

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:
Date achieved compliance:
Evaluation lead agency:
Not reported
Not reported
State

Evaluation date: 08/04/2008

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:

Date achieved compliance:

Evaluation lead agency:

Not reported

Not reported

State

ENVIROSTOR:

Facility ID: 71002846

Status: Inactive - Needs Evaluation

Status Date: Not reported
Site Code: Not reported
Site Type: Tiered Permit
Site Type Detailed: Tiered Permit
Acres: Not reported

NPL: NO

Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Not reported
Division Branch: Cleanup Cypress

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ULTRA-PURE METAL FINISHING INC (Continued)

1000352574

Assembly: 68 Senate: 37

Special Program: Not reported

Restricted Use: NO

Site Mgmt Req: NONE SPECIFIED Funding: Not reported Latitude: 33.81686 Longitude: -117.8591

APN: NONE SPECIFIED Past Use: NONE SPECIFIED Potential COC: NONE SPECIFIED Confirmed COC: NONE SPECIFIED NONE SPECIFIED Potential Description: Alias Name: CAD981449028

Alias Type: **EPA Identification Number**

Alias Name: 110008269284 EPA (FRS #) Alias Type: Alias Name: 71002846

Alias Type: **Envirostor ID Number**

Completed Info:

Completed Area Name: Not reported Completed Sub Area Name: Not reported Completed Document Type: Not reported Completed Date: Not reported Comments: Not reported

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

NPDES:

Discharge Address:

Facility Status: Active CAS000001 NPDES Number:

8 Region: Agency Number: Regulatory Measure ID: 208962 Place ID: Not reported Order Number: 97-03-DWQ WDID: 8 301015113 Regulatory Measure Type: Enrollee Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 05/07/1999 Termination Date Of Regulatory Measure: Not reported **Expiration Date Of Regulatory Measure:** Not reported

Discharge Name: Ultra Pure Metal Finishing Inc

1764 N Case St

Discharge City: Orange Discharge State: California Discharge Zip: 92865

Distance Elevation

ion Site Database(s) EPA ID Number

ULTRA-PURE METAL FINISHING INC (Continued)

1000352574

EDR ID Number

Status: Not reported
Status Date: Not reported
Operator Name: Not reported
Operator Address: Not reported
Operator City: Not reported
Operator State: Not reported
Operator Zip: Not reported

NPDES as of 03/2018:

NPDES Number: CAS000001 Status: Active Agency Number: n Region: 8 208962 Regulatory Measure ID: Order Number: 97-03-DWQ Regulatory Measure Type: Enrollee Place ID: Not reported WDID: 8 301015113 Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 05/07/1999 Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported

Discharge Name: Ultra Pure Metal Finishing Inc

Discharge Address: 1764 N Case St
Discharge City: Orange
Discharge State: California
Discharge Zip: 92865
Received Date: Not reported
Processed Date: Not reported
Status: Not reported

Status Date: Not reported Place Size: Not reported Place Size Unit: Not reported Not reported Contact: Not reported Contact Title: Contact Phone: Not reported Contact Phone Ext: Not reported Contact Email: Not reported Operator Name: Not reported Not reported Operator Address: Operator City: Not reported Operator State: Not reported Operator Zip: Not reported **Operator Contact:** Not reported Operator Contact Title: Not reported **Operator Contact Phone:** Not reported Operator Contact Phone Ext: Not reported

Developer City:

Developer State:

Developer Zip:

Developer Contact:

Developer Contact:

Developer Contact Title:

Constype Linear Utility Ind:

Not reported

Operator Contact Email:

Operator Type:

Developer Address:

Developer:

Distance Elevation

Site Database(s) EPA ID Number

Not reported

David Juarez

714-637-3150

Not reported

General Manager

ULTRA-PURE METAL FINISHING INC (Continued)

1000352574

EDR ID Number

Emergency Phone: Not reported Not reported Emergency Phone Ext: Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind: Not reported Receiving Water Name: Not reported Certifier: Not reported Certifier Title: Not reported Certification Date: Not reported Primary Sic: Not reported Secondary Sic: Not reported Tertiary Sic: Not reported

Status: Not reported Agency Number: Not reported Region: Regulatory Measure ID: 208962 Order Number: Not reported Regulatory Measure Type: Industrial Not reported Place ID: WDID: 8 301015113 Program Type: Not reported Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Discharge Name: Not reported Discharge Address: Not reported Discharge City: Not reported Discharge State: Not reported Discharge Zip: Not reported Received Date: 05/09/2008 Processed Date: 05/07/1999 Status: Active 05/07/1999 Status Date: Place Size: 21820 Place Size Unit: SqFt

NPDES Number:

Contact:

Contact Title:

Contact Phone:

Contact Phone Ext:

Contact Email: ultrapuremetal@sbcglobal.com

MAP FINDINGS Map ID Direction

Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ULTRA-PURE METAL FINISHING INC (Continued)

1000352574

Operator Name: Ultra Pure Metal Finishing Inc

1764 N Case St Operator Address: Operator City: Orange Operator State: California Operator Zip: 92865 **Operator Contact:** Rafael Salcedo Operator Contact Title: Not reported

Operator Contact Phone: 714-637-3150 Operator Contact Phone Ext: Not reported

Operator Contact Email: ultrapuremetal@sbcglobal.net

Operator Type: **Private Business** Developer: Not reported Developer Address: Not reported Developer City: Not reported Developer State: California Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported 714-637-3150 **Emergency Phone:** Emergency Phone Ext: Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported

Dir Discharge Uswater Ind:

Constype Water Sewer Ind:

Municipal storm water system Receiving Water Name:

Certifier: **David Juarez** Certifier Title: General Manager Certification Date: 27-JUL-15

Primary Sic: 3471-Electroplating, Plating, Polishing, Anodizing, and Coloring

Not reported

Secondary Sic: Not reported **Tertiary Sic:** Not reported

Facility Status: Not reported NPDES Number: Not reported Not reported Region: Agency Number: Not reported Regulatory Measure ID: Not reported Not reported Place ID: Order Number: Not reported WDID: 8 301015113 Regulatory Measure Type: Industrial Program Type: Not reported

Distance

Elevation Site Database(s) EPA ID Number

ULTRA-PURE METAL FINISHING INC (Continued)

1000352574

EDR ID Number

Adoption Date Of Regulatory Measure: Not reported Not reported Effective Date Of Regulatory Measure: Termination Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Discharge Address: Not reported Discharge Name: Not reported Discharge City: Not reported Discharge State: Not reported Discharge Zip: Not reported Status: Active Status Date: 05/07/1999

Operator Name: Ultra Pure Metal Finishing Inc

Operator Address: 1764 N Case St
Operator City: Orange
Operator State: California
Operator Zip: 92865

NPDES as of 03/2018:

NPDES Number: CAS000001 Status: Active Agency Number: n Region: R Regulatory Measure ID: 208962 Order Number: 97-03-DWQ Regulatory Measure Type: Enrollee Place ID: Not reported WDID: 8 301015113 Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 05/07/1999 Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported

Discharge Name: Ultra Pure Metal Finishing Inc

Discharge Address: 1764 N Case St

Discharge City: Orange Discharge State: California 92865 Discharge Zip: Received Date: Not reported Processed Date: Not reported Status: Not reported Not reported Status Date: Place Size: Not reported Place Size Unit: Not reported Contact: Not reported Contact Title: Not reported Contact Phone: Not reported Contact Phone Ext: Not reported Contact Email: Not reported Operator Name: Not reported Operator Address: Not reported Operator City: Not reported Operator State: Not reported Operator Zip: Not reported Operator Contact: Not reported Operator Contact Title: Not reported **Operator Contact Phone:** Not reported Operator Contact Phone Ext: Not reported Operator Contact Email: Not reported

Distance EDR ID Number
Elevation Site EDR ID Number
Database(s) EPA ID Number

ULTRA-PURE METAL FINISHING INC (Continued)

1000352574

Operator Type: Not reported Not reported Developer: Developer Address: Not reported Developer City: Not reported Developer State: Not reported Developer Zip: Not reported Developer Contact: Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** Not reported Emergency Phone Ext: Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Not reported Constype Residential Ind: Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind: Not reported Receiving Water Name: Not reported Certifier: Not reported Certifier Title: Not reported Certification Date: Not reported Not reported Primary Sic: Secondary Sic: Not reported Not reported **Tertiary Sic:**

NPDES Number: Not reported Status: Not reported Agency Number: Not reported

Region: 8 Regulatory Measure ID: 208962 Order Number: Not reported Regulatory Measure Type: Industrial Place ID: Not reported WDID: 8 301015113 Program Type: Not reported Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Discharge Name: Not reported Discharge Address: Not reported Discharge City: Not reported Discharge State: Not reported Discharge Zip: Not reported 05/09/2008 Received Date: Processed Date: 05/07/1999

Direction Distance

Elevation Site Database(s) EPA ID Number

ULTRA-PURE METAL FINISHING INC (Continued)

1000352574

EDR ID Number

Status: Active 05/07/1999 Status Date: Place Size: 21820 Place Size Unit: SqFt Contact: **David Juarez** General Manager Contact Title: 714-637-3150 Contact Phone: Contact Phone Ext: Not reported

Contact Email: ultrapuremetal@sbcglobal.com
Operator Name: Ultra Pure Metal Finishing Inc

Operator Address: 1764 N Case St Operator City: Orange Operator State: California Operator Zip: 92865 **Operator Contact:** Rafael Salcedo Operator Contact Title: Not reported 714-637-3150 Operator Contact Phone: Operator Contact Phone Ext: Not reported

Operator Contact Email: ultrapuremetal@sbcglobal.net

Operator Type: **Private Business** Developer: Not reported Developer Address: Not reported Developer City: Not reported Developer State: California Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** 714-637-3150 Emergency Phone Ext: Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Not reported Constype Residential Ind: Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported

Dir Discharge Uswater Ind: N

Constype Water Sewer Ind:

Receiving Water Name: Municipal storm water system

Certifier: David Juarez
Certifier Title: General Manager
Certification Date: 27-JUL-15

Primary Sic: 3471-Electroplating, Plating, Polishing, Anodizing, and Coloring

Not reported

Secondary Sic: Not reported Tertiary Sic: Not reported

Direction Distance Elevation

vation Site Database(s) EPA ID Number

ULTRA-PURE METAL FINISHING INC (Continued)

1000352574

EDR ID Number

WDS:

Facility ID: Santa Ana River 30I015113

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

are assigned by the Regional Board

Subregion: 8

Facility Telephone: Not reported Not reported

Agency Name: ULTRA PURE METAL FINISHING INC

Agency Address: 1790 NORTH CASE STREET

Agency City, St, Zip: ORANGE 92865
Agency Contact: DAVID JUAREZ
Agency Telephone: 7146373150
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 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.

CIWQS:

Agency: Ultra Pure Metal Finishing Inc
Agency Address: 1764 N Case St. Orange, CA 92865

Place/Project Type: Industrial - Electroplating, Polishing, Anodizing, and

Coloring

SIC/NAICS: 3471
Region: 8
Program: INDSTW
Regulatory Measure Status: Active

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ULTRA-PURE METAL FINISHING INC (Continued)

1000352574

S103980190

N/A

CA ENVIROSTOR

CA EMI

Regulatory Measure Type: Storm water industrial 2014-0057-DWQ Order Number: WDID: 8 301015113 NPDES Number: CAS000001 Adoption Date: Not reported Effective Date: 05/07/1999 Not reported Termination Date: Expiration/Review Date: Not reported Design Flow: Not reported Major/Minor: Not reported Complexity: Not reported TTWQ: Not reported

Enforcement Actions within 5 years: Violations within 5 years:

Latitude: 33.81667 Longitude: -117.85879

VAN DOREN RUBBER CO, INC. 2095 NORTH BATAVIA

West 1/2-1 ORANGE, CA 92667

0.622 mi. 3285 ft.

64

ENVIROSTOR: Relative:

Lower Facility ID: 30340167

Refer: Other Agency Status: Actual: Status Date: 06/01/1995 192 ft.

Site Code: Not reported Site Type: Historical Site Type Detailed: * Historical Acres: Not reported

NPL:

Regulatory Agencies: NONE SPECIFIED NONE SPECIFIED Lead Agency: Program Manager: Not reported Supervisor: * Mmonroy Division Branch: Cleanup Cypress

Assembly: 68 Senate: 37 Special Program: * CERC2 Restricted Use:

Site Mgmt Req: NONE SPECIFIED Funding: Not reported Latitude: 33.81722 -117.8619 Longitude: APN: NONE SPECIFIED NONE SPECIFIED Past Use:

* HYDROCARBON SOLVENTS * Metals - Other Inorganic Solid Waste * Potential COC:

OXYGENATED SOLVENTS * CONTAMINATED SOIL * ALKALINE SOLUTION

2<PH<12.5, WITH METALS Lead Nickel

Confirmed COC: NONE SPECIFIED NONE SPECIFIED Potential Description:

MARLEY HEAT TRANSFER COMPANY, THE Alias Name:

Alias Type: Alternate Name

Alias Name: VAN DOREN RUBBER COMPANY

Alias Type: Alternate Name Alias Name: CAD982360646

EPA Identification Number Alias Type:

Direction Distance

Elevation Site Database(s) **EPA ID Number**

VAN DOREN RUBBER CO, INC. (Continued)

S103980190

EDR ID Number

Alias Name: 30340167

Envirostor ID Number Alias Type:

Completed Info:

Completed Area Name: **PROJECT WIDE** Completed Sub Area Name: Not reported Completed Document Type: * Discovery Completed Date: 06/23/1982

FACILITY IDENTIFIED ID DURING A FIELD CHECK IN ORANGE. Comments:

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported Site Screening Completed Document Type: Completed Date: 06/01/1995

Comments: File review indicates that the site is a generator. County of Orange Health Care Agency issued an Order to clean up the site on 12/11/84.

NFA for DTSC.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported Completed Document Type: Site Screening Completed Date: 05/02/1995

Comments: File review indicates that the site is a generator. County of Orange

Health Care Agency issued an order to cleanup the site in December

11, 1984.

Completed Area Name: **PROJECT WIDE** Completed Sub Area Name: Not reported

Completed Document Type: Preliminary Assessment Report

Completed Date: 05/09/1988

PRELIM ASSESS DONE PRESENCE OF METALLIC DUST AT REAR OF FAC Comments:

UNAUTHORIZED DISPOSAL OF WST TO SOIL

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported Completed Document Type: Site Screening Completed Date: 09/12/1986

SITE SCREENING DONE RATIONALE FOR PA: VACANT VACILITY WITH ABANDONED Comments:

DRUMS. ADDITIONAL RESEARCH REQ TO DETERMINE TYPES OF CHEMICALS USED

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

EMI:

Year: 1987 County Code: 30 Air Basin: SC Facility ID: 42972 Air District Name: SC SIC Code: 306

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

VAN DOREN RUBBER CO, INC. (Continued)

S103980190

RCRA-TSDF

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: 122 Reactive Organic Gases Tons/Yr: 111 Carbon Monoxide Emissions Tons/Yr: 0 NOX - Oxides of Nitrogen Tons/Yr: 2 SOX - Oxides of Sulphur Tons/Yr: 0 Particulate Matter Tons/Yr: 0 Part. Matter 10 Micrometers and Smllr Tons/Yr:0

65 **ORANGE PRECISION CIRCUITS** SEMS-ARCHIVE 1000315092 WNW **812 SOUTHERN AVE CORRACTS** CAD097577035

1/2-1 ORANGE, CA 92865 0.630 mi.

RCRA-SQG **CA ENVIROSTOR** 3324 ft. **CA HIST UST** Relative: **FINDS** Lower **ECHO**

Actual: **CA HWP** 193 ft.

SEMS Archive:

901690 Site ID: CAD097577035 EPA ID:

Cong District: 39 FIPS Code: 6059 FF: Ν

NPL: Not on the NPL

Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

Latitude: 33.825000000000003

Longitude: -117.859722

SEMS Archive Detail:

9 Region: Site ID: 901690 EPA ID: CAD097577035

Site Name: ORANGE PRECISION CIRCUITS

NPL: Ν FF: N OU: 0 Action Code: VS

Action Name: ARCH SITE

SEQ:

Start Date: Not reported Finish Date: 1985-11-01 00:00:00 Qual: Not reported **Current Action Lead:** EPA Perf In-Hse

Region: 9 Site ID: 901690 EPA ID: CAD097577035

Site Name: ORANGE PRECISION CIRCUITS

NPL: FF: Ν OU: 0 Action Code: DS **DISCVRY** Action Name:

SEQ: 1

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ORANGE PRECISION CIRCUITS (Continued)

1000315092

Start Date: 1980-12-01 00:00:00 Finish Date: 1980-12-01 00:00:00 Qual: Not reported **Current Action Lead:** EPA Perf

Region: Site ID: 901690 EPA ID: CAD097577035

Site Name: ORANGE PRECISION CIRCUITS

NPL: FF: Ν OU: 0 Action Code: PΑ Action Name: PΑ SEQ:

Start Date: 1985-04-01 00:00:00 Finish Date: 1985-11-01 00:00:00

Qual: Ν **Current Action Lead:** St Perf

CORRACTS:

EPA ID: CAD097577035

EPA Region:

Area Name: **ENTIRE FACILITY**

Actual Date: 19851101

CA075LO - CA Prioritization, Facility or area was assigned a low Action:

corrective action priority

NAICS Code(s): 334419

Other Electronic Component Manufacturing

Not reported Original schedule date: Schedule end date: Not reported

RCRA-TSDF:

Date form received by agency: 09/01/1996

ORANGE PRECISION CIRCUITS Facility name:

Facility address: 812 SOUTHERN AVE

ORANGE, CA 92865

EPA ID: CAD097577035

Mailing address: 812 SOUTHERN AVENUE

ORANGE, CA 92665

Contact: Not reported Contact address: Not reported Not reported Contact country:

US

Contact telephone: Not reported Contact email: Not reported

EPA Region: 09

Land type: Facility is not located on Indian land. Additional information is not known.

TSDF Classification:

Description: Handler is engaged in the treatment, storage or disposal of hazardous

waste

Owner/Operator Summary:

Owner/operator name: ORANGE PRECISION CIRCUITS Owner/operator address: 812 SOUTHERN AVENUE

Direction Distance Elevation

evation Site Database(s) EPA ID Number

ORANGE PRECISION CIRCUITS (Continued)

1000315092

EDR ID Number

ORANGE, CA 92665

Owner/operator country: Not reported Owner/operator telephone: 714-637-2210 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: Not reported Owner/Op end date: Not reported

Owner/operator name: ORANGE PRECISION CIRCUITS
Owner/operator address: 812 SOUTHERN AVENUE

CITY NOT REPORTED, CA 99999

Owner/operator country: Not reported Owner/operator telephone: 714-637-2210 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Operator Owner/Op start date: Not reported Owner/Op end date: Not reported

Handler Activities Summary:

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

Historical Generators:

Date form received by agency: 12/17/1980

Site name: ORANGE PRECISION CIRCUITS
Classification: Large Quantity Generator

Corrective Action Summary:

Event date: 11/01/1985

Event: LEAD AGENCY DETERMINATION

Event date: 11/01/1985

Event: CA PRIORITIZATION-LOW CA PRIORITY

Event date: 11/01/1985

Event: NCAPS RANKING/PRIORITY

Map ID MAP FINDINGS
Direction

Distance

Elevation Site Database(s) EPA ID Number

ORANGE PRECISION CIRCUITS (Continued)

1000315092

EDR ID Number

Event date: 11/01/1985

Event: PA OR CERCLA INSPECTION

Facility Has Received Notices of Violations:

Regulation violated: F - 264.110-120.G

Area of violation: TSD - Closure/Post-Closure

Date violation determined: 12/13/1989
Date achieved compliance: 12/13/1989
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 Not reported Proposed penalty amount: Not reported Final penalty amount: Paid penalty amount: Not reported

Regulation violated: F - 264.140-150.H

Area of violation: TSD - Financial Requirements

Date violation determined: 11/06/1989
Date achieved compliance: 12/13/1989
Violation lead agency: State

Enforcement action: INITIAL 3008(A) COMPLIANCE

Enforcement action date: 02/24/1989
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 19374
Final penalty amount: 19374
Paid penalty amount: Not reported

Regulation violated: F - 270
Area of violation: TSD - General
Date violation determined: 10/30/1989
Date achieved compliance: 12/13/1989
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 12/13/1989
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Paid penalty amount: Not reported
Not reported

Regulation violated: F - 264.140-150.H

Area of violation: TSD - Financial Requirements

Date violation determined: 10/18/1988
Date achieved compliance: 12/13/1989
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 11/18/1988
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported

Direction Distance Elevation

ation Site Database(s) EPA ID Number

ORANGE PRECISION CIRCUITS (Continued)

1000315092

EDR ID Number

Final penalty amount: Not reported Paid penalty amount: Not reported

Regulation violated: F - 270
Area of violation: TSD - General
Date violation determined: 10/18/1988
Date achieved compliance: 12/15/1989
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date:

Enf. disposition status:

Enf. disp. status date:

Enforcement lead agency:

Proposed penalty amount:

Final penalty amount:

Paid penalty amount:

Not reported

Not reported

Not reported

Not reported

Not reported

Regulation violated: F - 264.140-150.H

Area of violation: TSD - Financial Requirements

Date violation determined: 10/12/1988
Date achieved compliance: 12/13/1989
Violation lead agency: State

Enforcement action: INITIAL 3008(A) COMPLIANCE

Enforcement action date: 02/24/1989
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 19374
Final penalty amount: 19374
Paid penalty amount: Not reported

Regulation violated: F - 264.140-150.H

Area of violation: TSD - Financial Requirements

Date violation determined: 10/12/1988
Date achieved compliance: 12/13/1989
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 11/21/1988
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 - FEA

Area of violation: Formal Enforcement Agreement or Order

Date violation determined: 07/22/1987
Date achieved compliance: 08/11/1987
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported

Enf. disposition status:

Enf. disposition status:

Enf. disposition status:

Enf. disposition status:

Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

ORANGE PRECISION CIRCUITS (Continued)

Paid penalty amount: Not reported

Regulation violated: FR - 270
Area of violation: TSD - General
Date violation determined: 05/07/1987
Date achieved compliance: 08/11/1987
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 06/15/1987
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: 11/06/1989

Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements

Date achieved compliance: 12/13/1989 Evaluation lead agency: State

Evaluation date: 10/30/1989

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: TSD - Closure/Post-Closure

Date achieved compliance: 12/13/1989 Evaluation lead agency: State

Evaluation date: 10/30/1989

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: TSD - General Date achieved compliance: 12/13/1989 Evaluation lead agency: State

Evaluation date: 10/18/1988

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: TSD - General Date achieved compliance: 12/15/1989 Evaluation lead agency: State

Evaluation date: 10/18/1988

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: TSD - Financial Requirements

Date achieved compliance: 12/13/1989 Evaluation lead agency: State

Evaluation date: 10/12/1988

Evaluation: FINANCIAL RECORD REVIEW Area of violation: TSD - Financial Requirements

Date achieved compliance: 12/13/1989 Evaluation lead agency: State

Evaluation date: 07/22/1987

Evaluation: COMPLIANCE SCHEDULE EVALUATION Area of violation: Formal Enforcement Agreement or Order

Date achieved compliance: 08/11/1987

EDR ID Number

1000315092

Direction Distance

Elevation Site Database(s) EPA ID Number

ORANGE PRECISION CIRCUITS (Continued)

1000315092

EDR ID Number

Evaluation lead agency: State

Evaluation date: 05/07/1987

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: TSD - General Date achieved compliance: 08/11/1987 Evaluation lead agency: State

RCRA-SQG:

Date form received by agency: 09/01/1996

Facility name: ORANGE PRECISION CIRCUITS

Facility address: 812 SOUTHERN AVE ORANGE, CA 92865

EPA ID: CAD097577035
Mailing address: 812 SOUTHERN AVENUE

ORANGE, CA 92665

Contact: Not reported
Contact address: Not reported
Not reported

Contact country: US

Contact telephone: Not reported Contact email: Not reported

EPA Region: 09

Land type: Facility is not located on Indian land. Additional information is not known.

Classification: TSDF

Description: Handler is engaged in the treatment, storage or disposal of hazardous

waste

Owner/Operator Summary:

Owner/operator name: ORANGE PRECISION CIRCUITS
Owner/operator address: 812 SOUTHERN AVENUE

ORANGE, CA 92665

Owner/operator country: Not reported 714-637-2210 Owner/operator telephone: Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: Not reported Owner/Op end date: Not reported

Owner/operator name: ORANGE PRECISION CIRCUITS
Owner/operator address: 812 SOUTHERN AVENUE

CITY NOT REPORTED, CA 99999

Owner/operator country: Not reported Owner/operator telephone: 714-637-2210 Owner/operator email: Not reported Owner/operator fax: Not reported Not reported Owner/operator extension: 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

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ORANGE PRECISION CIRCUITS (Continued)

1000315092

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: Nο 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: 12/17/1980

ORANGE PRECISION CIRCUITS Site name: Classification: Large Quantity Generator

Corrective Action Summary:

Event date: 11/01/1985

Event: LEAD AGENCY DETERMINATION

Event date: 11/01/1985

Event: CA PRIORITIZATION-LOW CA PRIORITY

Event date: 11/01/1985

NCAPS RANKING/PRIORITY Event:

Event date: 11/01/1985

PA OR CERCLA INSPECTION Event:

Facility Has Received Notices of Violations:

Regulation violated: F - 264.110-120.G

Area of violation: TSD - Closure/Post-Closure Date violation determined: 12/13/1989

12/13/1989 Date achieved compliance: 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

Regulation violated: F - 264.140-150.H

Area of violation: TSD - Financial Requirements

Date violation determined: 11/06/1989 Date achieved compliance: 12/13/1989 Violation lead agency: State

Enforcement action: INITIAL 3008(A) COMPLIANCE

Enforcement action date: 02/24/1989 Enf. disposition status: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

ORANGE PRECISION CIRCUITS (Continued)

1000315092

EDR ID Number

Enf. disp. status date:

Enforcement lead agency:

Proposed penalty amount:

Final penalty amount:

Paid penalty amount:

Not reported

Not reported

Regulation violated: F - 270
Area of violation: TSD - General
Date violation determined: 10/30/1989
Date achieved compliance: 12/13/1989
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 12/13/1989
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: F - 264.140-150.H

Area of violation: TSD - Financial Requirements

Date violation determined: 10/18/1988
Date achieved compliance: 12/13/1989
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date:

Enf. disposition status:

Enf. disp. status date:

Enforcement lead agency:

Proposed penalty amount:

Final penalty amount:

Paid penalty amount:

11/18/1988

Not reported

Not reported

Not reported

Not reported

Regulation violated: F - 270
Area of violation: TSD - General
Date violation determined: 10/18/1988
Date achieved compliance: 12/15/1989
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date:
Enf. disposition status:
Enf. disp. status date:
Enforcement lead agency:
Proposed penalty amount:
Final penalty amount:

11/18/1988
Not reported
Not reported
Not reported

Regulation violated: F - 264.140-150.H

Area of violation: TSD - Financial Requirements

Not reported

Date violation determined: 10/12/1988
Date achieved compliance: 12/13/1989
Violation lead agency: State

Paid penalty amount:

Enforcement action: INITIAL 3008(A) COMPLIANCE

Enforcement action date: 02/24/1989
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ORANGE PRECISION CIRCUITS (Continued)

1000315092

Enforcement lead agency: State Proposed penalty amount: 19374 Final penalty amount: 19374 Paid penalty amount: Not reported

Regulation violated: F - 264.140-150.H

TSD - Financial Requirements Area of violation:

Date violation determined: 10/12/1988 Date achieved compliance: 12/13/1989 Violation lead agency: State

WRITTEN INFORMAL Enforcement action:

11/21/1988 Enforcement action date: 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

F - FEA Regulation violated:

Area of violation: Formal Enforcement Agreement or Order Date violation determined: 07/22/1987

Date achieved compliance: 08/11/1987 Violation lead agency: State Enforcement action: Not reported Not reported Enforcement action date: 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

Regulation violated: FR - 270 Area of violation: TSD - General 05/07/1987 Date violation determined: 08/11/1987 Date achieved compliance: Violation lead agency: State

WRITTEN INFORMAL Enforcement action:

Enforcement action date: 06/15/1987 Enf. disposition status: Not reported Enf. disp. status date: Not reported Enforcement lead agency: State Proposed penalty amount: Not reported Not reported Final penalty amount: Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 11/06/1989

Evaluation: FINANCIAL RECORD REVIEW TSD - Financial Requirements Area of violation:

Date achieved compliance: 12/13/1989 Evaluation lead agency: State

Evaluation date: 10/30/1989

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: TSD - Closure/Post-Closure

Direction Distance

Elevation Site Database(s) EPA ID Number

ORANGE PRECISION CIRCUITS (Continued)

1000315092

EDR ID Number

Date achieved compliance: 12/13/1989 Evaluation lead agency: State

Evaluation date: 10/30/1989

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: TSD - General Date achieved compliance: 12/13/1989 Evaluation lead agency: State

Evaluation date: 10/18/1988

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: TSD - General Date achieved compliance: 12/15/1989 Evaluation lead agency: State

Evaluation date: 10/18/1988

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: TSD - Financial Requirements

Date achieved compliance: 12/13/1989 Evaluation lead agency: State

Evaluation date: 10/12/1988

Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements

Date achieved compliance: 12/13/1989 Evaluation lead agency: State

Evaluation date: 07/22/1987

Evaluation: COMPLIANCE SCHEDULE EVALUATION Area of violation: Formal Enforcement Agreement or Order

Date achieved compliance: 08/11/1987 Evaluation lead agency: State

Evaluation date: 05/07/1987

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: TSD - General Date achieved compliance: 08/11/1987 Evaluation lead agency: State

ENVIROSTOR:

Facility ID: 30360250
Status: Refer: RCRA
Status Date: 08/28/1995
Site Code: 400312
Site Type: Historical
Site Type Detailed: * Historical
Acres: Not reported

NPL: NO Regulatory Agencies: NON

Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: * Mmonroy
Division Branch: Cleanup Cypress

Assembly: 68 Senate: 37

Special Program: * Site Char & Assess Grant (CERCLA 104)

Restricted Use: NO

Site Mgmt Req: NONE SPECIFIED

Direction Distance

EDR ID Number Elevation Site **EPA ID Number** Database(s)

ORANGE PRECISION CIRCUITS (Continued)

1000315092

Funding: Not reported Latitude: 33.82507 -117.8608 Longitude:

NONE SPECIFIED APN: Past Use: NONE SPECIFIED

* HALOGENATED SOLVENTS * TANK BOTTOM WASTES * UNSPECIFIED ACID Potential COC:

SOLUTION * UNSPECIFIED AQUEOUS SOLUTION * UNSPECIFIED SOLVENT MIXTURES

Not reported

Confirmed COC: NONE SPECIFIED Potential Description: NONE SPECIFIED Alias Name: CAD097577035

Alias Type: **EPA Identification Number**

Alias Name: 110008263645 Alias Type: EPA (FRS #) Alias Name: 400312

Alias Type: Project Code (Site Code)

30360250 Alias Name:

Alias Type: **Envirostor ID Number**

Completed Info:

PROJECT WIDE Completed Area Name: Completed Sub Area Name: Not reported Completed Document Type: * Discovery Completed Date: 02/02/1983

Comments: Facility identified. DHS ISD inspection - permit exemption required.

> No storage over ninety days. Records Search: County Sanititation issued Class I Waste- water Permit (06/01/79). ISD issued 01/04/82. County Sanitation Inspection (01/27/82) - Faulty back-up for overflow

of waste tank.

PROJECT WIDE Completed Area Name: Completed Sub Area Name: Not reported Completed Document Type: Site Screening Completed Date:

Database Validation Program confirms NFA for DTSC. Comments:

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Preliminary Assessment Report

Completed Date: 04/01/1985

Preliminary Assessment Done (Cercla 104): Operation is manufacturing Comments: of printed circuit boards. 1000-gallon tanks, 1500-gallon underground

sump onsite. Preliminary Assessment submitted to EPA.

Future Area Name: Not reported Not reported Future Sub Area Name: 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

80001732 Facility ID: Status: No Further Action Status Date: 05/01/2012 Site Code: 400312

Direction Distance

Elevation Site Database(s) **EPA ID Number**

ORANGE PRECISION CIRCUITS (Continued)

1000315092

EDR ID Number

Site Type: Corrective Action Site Type Detailed: Corrective Action

Acres: 0.5 NPL: NO **SMBRP** Regulatory Agencies: WM Lead Agency: Program Manager:

Richard Allen Supervisor: Rita Kamat Division Branch: Cleanup Chatsworth

Assembly: 68 Senate: 37

Special Program: Not reported

Restricted Use: NO

Site Mgmt Req: NONE SPECIFIED Funding: Not reported Latitude: 33.82512 Longitude: -117.8608 374-613-04 APN:

Past Use: ABOVE GROUND STORAGE TANKS, METAL RECLAMATION, RECYCLING - OTHER

Lead Trichloroethylene (TCE Copper and compounds Potential COC: Confirmed COC: 30013-NO Copper and compounds 30027-NO

Potential Description: SOIL, SV 374-613-04 Alias Name: Alias Type: APN

Alias Name: CAD097577035 Alias Type: **EPA Identification Number**

Alias Name: 110008263645

Alias Type: EPA (FRS#) Alias Name: 400312

Project Code (Site Code) Alias Type:

30360250 Alias Name:

Alias Type: **Envirostor ID Number**

Alias Name: 80001732

Alias Type: **Envirostor ID Number**

Completed Info:

PROJECT WIDE Completed Area Name: Completed Sub Area Name: Not reported

Completed Document Type: Preliminary Assessment Report

Completed Date: 11/01/1985 Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported Completed Document Type: Public Notice Completed Date: 01/31/2011 Comments: Not reported

Completed Area Name: **PROJECT WIDE** Completed Sub Area Name: Not reported Completed Document Type: Other Report Completed Date: 07/19/2011

Comments: The report was deemed necessary to terminate corrective action and is

approved via the ytermination of corrective action

PROJECT WIDE Completed Area Name: Completed Sub Area Name: Not reported Completed Document Type: Other Report

Direction Distance

Elevation Site Database(s) **EPA ID Number**

ORANGE PRECISION CIRCUITS (Continued)

1000315092

EDR ID Number

Completed Date: 11/16/2011 Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: RCRA Facility Assessment Report

Completed Date: 08/05/2002

Comments: RFA's are completed in-house and need not be approved

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

HIST UST:

File Number: 0002EC6D

URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002EC6D.pdf

Region: STATE Facility ID: 00000054227 Facility Type: Other

PRINTED CIR. MFG. Other Type: Contact Name: **DENNIS WOJTKIEWICZ**

Telephone: 7146372210

ORANGE PRECISION CIRCUITS DIV. Owner Name:

812 SOUTHERN AVE. Owner Address: Owner City,St,Zip: ORANGE, CA 92665

Total Tanks: 0002

Tank Num: 001 Container Num: 002 Year Installed: 1978 Tank Capacity: 00001500 Tank Used for: WASTE Type of Fuel: Not reported Not reported Container Construction Thickness:

Leak Detection: None

Tank Num: 002 Container Num: 001 Year Installed: 1979 00005000 Tank Capacity: Tank Used for: **PRODUCT UNLEADED** Type of Fuel: Container Construction Thickness: Not reported

Leak Detection: None

Click here for Geo Tracker PDF:

FINDS:

Registry ID: 110008263645

Direction Distance

Elevation Site Database(s) EPA ID Number

ORANGE PRECISION CIRCUITS (Continued)

1000315092

EDR ID Number

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.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000315092 Registry ID: 110008263645

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110008263645

HWP:

EPA Id: CAD097577035
Cleanup Status: CLOSED
Latitude: 33.82512
Longitude: -117.8608

Facility Type: Historical - Non-Operating

Facility Size:

Team:

Supervisor:

Site Code:

Assembly District:

Senate District:

Not reported

Not reported

400312

400312

400312

Public Information Officer: Not reported Public Information Officer: Not reported

Activities:

EPA ld: CAD097577035

Facility Type: Historical - Non-Operating

Unit Names: Not reported

Event Description: New Operating Permit - CALL-IN LETTER ISSUED

Actual Date: 04/29/1988

EPA Id: CAD097577035

Facility Type: Historical - Non-Operating

Unit Names: Not reported

Event Description: New Operating Permit - FINAL PERMIT - WITHDRAWAL REQUEST RECEIVED

Actual Date: 04/25/1989

Closure:

EPA Id: CAD097577035

Facility Type: Historical - Non-Operating Unit Names: TANKSTR1, TANKTRT1

Event Description: Closure Final - RECEIVE CLOSURE CERTIFICATION

Actual Date: 04/29/1992

EPA Id: CAD097577035

Facility Type: Historical - Non-Operating Unit Names: TANKSTR1, TANKTRT1

Event Description: Closure Final - ISSUE CLOSURE VERIFICATION

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ORANGE PRECISION CIRCUITS (Continued)

1000315092

S105749951

N/A

Actual Date: 06/11/1993

Alias:

EPA Id: CAD097577035

Facility Type: Historical - Non-Operating

Alias Type: **FRS**

Alias: 110008263645

EPA Id: CAD097577035

Facility Type: Historical - Non-Operating Envirostor ID Number Alias Type:

Alias: 30360250

EPA Id: CAD097577035

Facility Type: Historical - Non-Operating Alias Type: Project Code (Site Code)

400312 Alias:

CA RESPONSE

CONTINENTAL MOLDING 66 **WSW 1841 N. BATAVIA STREET** ORANGE, CA 92666 1/2-1

CA ENVIROSTOR CA HIST Cal-Sites

0.632 mi. 3337 ft.

Relative: RESPONSE:

Lower Facility ID: 30240011 Site Type: State Response Actual: Site Type Detail: State Response or NPL 185 ft.

Acres: 12 National Priorities List: NO

NONE SPECIFIED Cleanup Oversight Agencies: Not reported Lead Agency Description: Project Manager: Not reported Supervisor: Thomas Cota Division Branch: Cleanup Cypress

400038 Site Code:

NONE SPECIFIED Site Mgmt. Req.:

Assembly: 68 Senate: 37

Special Program Status: Not reported Certified Status: 11/19/1987 Status Date:

NO Restricted Use:

Funding: Responsible Party 33.81799 Latitude: Longitude: -117.8620

APN: NONE SPECIFIED

MANUFACTURING - OTHER Past Use:

Potential COC: Acetone Methyl ethyl ketone (2-Butanone Xylenes

Confirmed COC: 30032-NO 30386-NO 30593-NO

Potential Description: SOIL

CONTINENTAL MOULDING FACILITY Alias Name:

Alias Type: Alternate Name Alias Name: 110033605962 EPA (FRS#) Alias Type: 400038 Alias Name:

Direction Distance

Elevation Site Database(s) EPA ID Number

CONTINENTAL MOLDING (Continued)

S105749951

EDR ID Number

Alias Type: Project Code (Site Code)
Alias Name: 30240011

Alias Name: 30240011
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
11/19/1987
Comments: Not reported

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

ENVIROSTOR:

Facility ID: 30240011
Status: Certified
Status Date: 11/19/1987
Site Code: 400038
Site Type: State Response
Site Type Detailed: State Response or NPL

Acres: 12 NPL: NO

Regulatory Agencies: NONE SPECIFIED
Lead Agency: NONE SPECIFIED
Program Manager: Not reported
Supervisor: Thomas Cota
Division Branch: Cleanup Cypress

Assembly: 68 Senate: 37

Special Program: Not reported

Restricted Use: NO

Site Mgmt Req: NONE SPECIFIED Funding: Responsible Party

Latitude: 33.81799 Longitude: -117.8620

APN: NONE SPECIFIED

Past Use: MANUFACTURING - OTHER

Potential COC: Acetone Methyl ethyl ketone (2-Butanone Xylenes

Confirmed COC: 30032-NO 30386-NO 30593-NO

Potential Description: SOIL

Alias Name: CONTINENTAL MOULDING FACILITY

Alias Type: Alternate Name
Alias Name: 110033605962
Alias Type: EPA (FRS #)
Alias Name: 400038

Alias Type: Project Code (Site Code)

Alias Name: 30240011

Alias Type: Envirostor ID Number

Direction Distance

Elevation Site Database(s) EPA ID Number

CONTINENTAL MOLDING (Continued)

S105749951

EDR ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
11/19/1987
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 Not reported Schedule Sub Area Name: Schedule Document Type: Not reported Schedule Due Date: Not reported Schedule Revised Date: Not reported

Calsite:

Region: CYPRESS Facility ID: 30240011

Facility Type: RP

Type: RESPONSIBLE PARTY

Branch: SB

Branch Name: SO CAL - CYPRESS

File Name: Not reported State Senate District: 11191987

Status: CERTIFIED AS HAVING BEEN REMEDIED SATISFACTORILY UNDER DTSC OVERSIGHT

Status Name: CERTIFIED
Lead Agency: N/A
NPL: Not Listed
SIC Code: 24

SIC Name: MANU - LUMBER & WOOD PRODUCTS

Access: Not reported
Cortese: Not reported

Hazardous Ranking Score: Not reported Date Site Hazard Ranked: Not reported Groundwater Contamination: Not reported Staff Member Responsible for Site: Not reported Supervisor Responsible for Site: Not reported Region Water Control Board: Not reported Region Water Control Board Name: Not reported Lat/Long Direction: Not reported Lat/Long (dms): 000/000 Lat/long Method: Not reported

Lat/Long Description: DATA PROVIDED BY PM 1/03

State Assembly District Code: 72
State Senate District Code: 33
Facility ID: 30240011
Activity: CERT

Activity Name: CERTIFICATION AWP Code: Not reported

Proposed Budget: 0

AWP Completion Date: Not reported Revised Due Date: Not reported Comments Date: 11191987

Est Person-Yrs to complete: 0

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

CONTINENTAL MOLDING (Continued)

S105749951

Estimated Size: Not reported Not reported Request to Delete Activity:

Activity Status: СОМ

Definition of Status: **CERTIFIED / OPERATION & MAINTENANCE**

Liquids Removed (Gals): Liquids Treated (Gals):

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: CORNER OF BATAVIA STREET AND TAFT AVENUE

ORANGE, CA 92665 Alternate City, St, Zip: 1841 BATAVIA STREET Alternate Address: Alternate City, St, Zip: ORANGE, CA 92666 1841 N. BATAVIA STREET Alternate Address: Alternate City, St, Zip: ORANGE, CA 92666

Background Info: Not reported 04281989 Comments Date:

Comments: Site is certified as of 11/19/87.

Comments Date: 05011986

This is the date the site was first listed AWP pursuant to Comments:

Comments Date: 05011986 Comments: Section 25356. Comments Date: 10221986

Removal of 105 cubic yards of contaminated soil. Drums and Comments:

Comments Date: 10221986

Comments: tank bottoms removed. ID Name: CALSTARS CODE

ID Value: 400038

CONTINENTAL MOULDING FACILITY Alternate Name:

CONTINENTAL MOLDING Alternate Name:

Alternate Name: Not reported Special Programs Code: Not reported Special Programs Name: Not reported

R67 FXI, INC. CA ENVIROSTOR S112872180 2060 NORTH BATAVIA West **CA VCP** N/A

1/2-1 **ORANGE, CA 92665** 0.746 mi.

3941 ft. Site 1 of 2 in cluster R

ENVIROSTOR: Relative:

Lower 30280027 Facility ID:

Status: Certified O&M - Land Use Restrictions Only Actual: Status Date: 10/23/2013

188 ft. Site Code: 401710

Site Type: Voluntary Cleanup Site Type Detailed: Voluntary Cleanup

Acres: 25 NPL: NO Regulatory Agencies: **SMBRP SMBRP** Lead Agency: Program Manager: Isaac Hirbawi CA DEED

CA HAZNET

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

FXI, INC. (Continued) S112872180

Supervisor: Maryam Tasnif-Abbasi Cleanup Cypress Division Branch:

Assembly: 68 Senate: 37

Special Program: Voluntary Cleanup Program

Restricted Use: YES

NONE SPECIFIED Site Mgmt Req: Funding: Responsible Party Latitude: 33.82116

Longitude: -117.8642 APN: 374-751-30 NONE SPECIFIED Past Use:

* HALOGENATED SOLVENTS * WASTE OIL & MIXED OIL * POLYMERIC RESIN Potential COC:

WASTE Cyanide (free

NONE SPECIFIED Confirmed COC: NONE SPECIFIED Potential Description:

FOAMEX INTERNATIONAL INC. Alias Name:

Alias Type: Alternate Name

Alias Name: **GENERAL TIRE & RUBBER COMPANY**

Alias Type: Alternate Name

Alias Name: **GREAT WESTERN CARPET CUSHION COMPANY**

Alias Type: Alternate Name Alias Name: 374-751-30 Alias Type: APN Alias Name: CAD008352361

Alias Type: **EPA Identification Number**

Alias Name: 110000480122

Alias Type: EPA (FRS#) Alias Name: 400519

Alias Type: Site Code - Historical

401613 Alias Name:

Alias Type: Site Code - Historical

Alias Name: 401613

Alias Type: Project Code (Site Code)

401613 Alias Name:

Project Code (Site Code) Alias Type:

Alias Name: 401682

Alias Type: Project Code (Site Code) Alias Name: 401682

Alias Type:

Project Code (Site Code) Alias Name: 401710

Project Code (Site Code) Alias Type:

Alias Name: 30280027

Envirostor ID Number Alias Type:

Completed Info:

PROJECT WIDE Completed Area Name: Completed Sub Area Name: Not reported

Completed Document Type: Land Use Restriction - Site Inspection/Visit

Completed Date: 01/11/2016 Comments: Not reported

PROJECT WIDE Completed Area Name: Completed Sub Area Name: Not reported Completed Document Type: Correspondence Completed Date: 01/09/2015 Comments: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

FXI, INC. (Continued) S112872180

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Annual Oversight Cost Estimate

Completed Date: 09/30/2015 Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Annual Oversight Cost Estimate

Completed Date: 09/26/2016 Comments: Not reported

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: Land Use Restriction - Site Inspection/Visit

Completed Date: 03/01/2017
Comments: Action completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
10/23/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 12/10/1992

Comments: A Hazard Ranking Scoring package was prepared by DTSC staff using the

SI performed in Sept. 1988. The migration score was 17.43. Other pathway scores were: Sgw = 30.04; Ssw = 2.61; Sa = 0; Sfe = 20.83;

and Sdc = 0.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 10/04/1989

Comments: SITE SCREENING DONE EPA EVALUATED DHS' SITE INSPECTION AND CHANGED

RECOMMENDATION TO LISTING SITE INSPECTION.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: *Site Inspection (SI) Report

Completed Date: 08/30/1988

Comments: SITE INSP DONE STAFF RECOMMENDS COMPLIANCE INSPECTIONS BE CONDUCTED

BY LOCAL AND STATE AGENCIES HRS PACKAGE WILL BE PREPARED

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Preliminary Assessment Report

Completed Date: 06/04/1987

Direction Distance

Elevation Site Database(s) EPA ID Number

FXI, INC. (Continued) S112872180

Comments: INSPECTION(LOCAL) 1987, 85, 86-VIOLATIONS NOTED AT EACH DRIVEBY.

LABELING AND STORAGEPROBLEMS. RELEASED WASTE NEEDS REMEDIATING.

PRELIM ASSESS DONE AREA OF SUSP. DUMPING SHOULDBE SAMPLED

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 11/05/1986

Comments: SITE SCREENING DONE RATIONALE FOR PA: ADDITIONAL INFO NEEDED

MANUFACTURES POLYURETHANE FOAM PRODUCTS

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Site Characterization Report

Completed Date: 11/01/2012 Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Preliminary Endangerment Assessment Workplan

Completed Date: 11/01/2012 Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Preliminary Endangerment Assessment Report

Completed Date: 10/22/2013 Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 03/12/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 06/18/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Land Use Restriction Monitoring Report

Completed Date: 01/15/2014 Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction
Completed Date: 10/04/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Annual Oversight Cost Estimate

Completed Date: 12/26/2017

Direction Distance

Elevation Site Database(s) EPA ID Number

FXI, INC. (Continued) S112872180

Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Land Use Restriction - Site Inspection/Visit

Completed Date: 12/28/2017 Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 07/23/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Voluntary Cleanup Agreement

Completed Date: 04/18/2012

Comments: Voluntary Cleanup Agreement fully executed.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Annual Oversight Cost Estimate

Completed Date: 10/22/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Land Use Restriction - Site Inspection/Visit

Completed Date: 03/19/2015 Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 06/23/1982

Comments: FACILITY IDENTIFIED FROM INDUSTRIAL WASTE SURVEY-1980.

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

VCP:

Facility ID: 30280027 Site Type: Voluntary 0

Site Type: Voluntary Cleanup
Site Type Detail: Voluntary Cleanup
Site Mgmt. Req.: NONE SPECIFIED

Acres: 25
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP

Direction Distance

Elevation Site Database(s) EPA ID Number

FXI, INC. (Continued) S112872180

Lead Agency Description: DTSC - Site Cleanup Program

Project Manager: Isaac Hirbawi
Supervisor: Maryam Tasnif-Abbasi
Division Branch: Cleanup Cypress

 Site Code:
 401710

 Assembly:
 68

 Senate:
 37

Special Programs Code: Voluntary Cleanup Program

Status: Certified O&M - Land Use Restrictions Only

Status Date: 10/23/2013 Restricted Use: YES

Funding: Responsible Party Lat/Long: 33.82116 / -117.8642

APN: 374-751-30
Past Use: NONE SPECIFIED

Potential COC: 10003, 10199, 20015, 30160

Confirmed COC: NONE SPECIFIED Potential Description: NONE SPECIFIED

Alias Name: FOAMEX INTERNATIONAL INC.

Alias Type: Alternate Name

Alias Name: GENERAL TIRE & RUBBER COMPANY

Alias Type: Alternate Name

Alias Name: GREAT WESTERN CARPET CUSHION COMPANY

Alias Type: Alternate Name
Alias Name: 374-751-30
Alias Type: APN

Alias Name: CAD008352361

Alias Type: EPA Identification Number

Alias Name: 110000480122
Alias Type: EPA (FRS #)
Alias Name: 400519

Alias Type: Site Code - Historical

Alias Name: 401613

Alias Type: Site Code - Historical

Alias Name: 401613

Alias Type: Project Code (Site Code)

Alias Name: 401613

Alias Type: Project Code (Site Code)

Alias Name: 401682

Alias Type: Project Code (Site Code)

Alias Name: 401682

Alias Type: Project Code (Site Code)

Alias Name: 401710

Alias Type: Project Code (Site Code)

Alias Name: 30280027

Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Land Use Restriction - Site Inspection/Visit

Completed Date: 01/11/2016 Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
O1/09/2015

Direction Distance

Elevation Site Database(s) EPA ID Number

FXI, INC. (Continued) S112872180

Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Annual Oversight Cost Estimate

Completed Date: 09/30/2015 Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Annual Oversight Cost Estimate

Completed Date: 09/26/2016 Comments: Not reported

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: Land Use Restriction - Site Inspection/Visit

Completed Date: 03/01/2017 Comments: Action completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 10/23/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 12/10/1992

Comments: A Hazard Ranking Scoring package was prepared by DTSC staff using the

SI performed in Sept. 1988. The migration score was 17.43. Other pathway scores were: Sgw = 30.04; Ssw = 2.61; Sa = 0; Sfe = 20.83;

and Sdc = 0.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 10/04/1989

Comments: SITE SCREENING DONE EPA EVALUATED DHS' SITE INSPECTION AND CHANGED

RECOMMENDATION TO LISTING SITE INSPECTION.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: *Site Inspection (SI) Report

Completed Date: 08/30/1988

Comments: SITE INSP DONE STAFF RECOMMENDS COMPLIANCE INSPECTIONS BE CONDUCTED

BY LOCAL AND STATE AGENCIES HRS PACKAGE WILL BE PREPARED

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

FXI, INC. (Continued) S112872180

Completed Document Type: Preliminary Assessment Report

Completed Date: 06/04/1987

Comments: INSPECTION(LOCAL) 1987, 85, 86-VIOLATIONS NOTED AT EACH DRIVEBY. LABELING AND STORAGEPROBLEMS. RELEASED WASTE NEEDS REMEDIATING.

PRELIM ASSESS DONE AREA OF SUSP. DUMPING SHOULDBE SAMPLED

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 11/05/1986

Comments: SITE SCREENING DONE RATIONALE FOR PA: ADDITIONAL INFO NEEDED

MANUFACTURES POLYURETHANE FOAM PRODUCTS

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Site Characterization Report

Completed Date: 11/01/2012 Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Preliminary Endangerment Assessment Workplan

Completed Date: 11/01/2012 Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Preliminary Endangerment Assessment Report

Completed Date: 10/22/2013 Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Workplan
Completed Date: 03/12/2013

Completed Date: 03/12/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 06/18/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Land Use Restriction Monitoring Report

Completed Date: 01/15/2014 Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction

Completed Date: 10/04/2013 Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

FXI, INC. (Continued) S112872180

Completed Document Type: Annual Oversight Cost Estimate

Completed Date: 12/26/2017 Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Land Use Restriction - Site Inspection/Visit

Completed Date: 12/28/2017 Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Ompleted Date: 07/23/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Voluntary Cleanup Agreement

Completed Date: 04/18/2012

Comments: Voluntary Cleanup Agreement fully executed.

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Annual Oversight Cost Estimate

Completed Date: 10/22/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Land Use Restriction - Site Inspection/Visit

Completed Date: 03/19/2015 Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Discovery
Completed Date: 06/23/1982

Comments: FACILITY IDENTIFIED FROM INDUSTRIAL WASTE SURVEY-1980.

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

DEED:

Envirostor ID: 30280027
Area: PROJECT WIDE
Sub Area: Not reported

Site Type: VOLUNTARY CLEANUP

Status: CERTIFIED O&M - LAND USE RESTRICTIONS ONLY

Agency: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

FXI, INC. (Continued) S112872180

Covenant Uploaded: Not reported Deed Date(s): Not reported

File Name: **Envirostor Land Use Restrictions**

HAZNET:

S112872180 envid: Year: 1999

GEPAID: CAC001178416

Contact: **GORDON TRUCKING INC**

Telephone: 000000000 Mailing Name: Not reported Mailing Address: 151 STEWART

PACIFIC, WA 980470000 Mailing City, St, Zip:

Gen County: Not reported TSD EPA ID: CAT080033681 TSD County: Not reported Waste Category: Other organic solids Disposal Method: Disposal, Land Fill

5.0000 Tons: Cat Decode: Not reported Not reported Method Decode: Facility County: Orange

R68 **FXI INC SEMS-ARCHIVE** 1000158746

West 2060 N BATAVIA ST **RCRA-TSDF** 92665GRFMX2060N 1/2-1 **ORANGE, CA 92865 RCRA-LQG**

0.746 mi. **CA ENVIROSTOR CA SWEEPS UST** Site 2 of 2 in cluster R 3941 ft. **CA HIST UST** Relative: **CA FID UST** Lower Actual: 188 ft.

TRIS CA EMI CA HWP CA NPDES CA WDS CA CIWQS

SEMS Archive:

903287 Site ID: EPA ID: CAD008352361

Cong District: 39 FIPS Code: 6059 FF: Ν

NPL: Not on the NPL

Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

Latitude: 33.826667 Longitude: -117.841667

SEMS Archive Detail:

Region: 9 Site ID: 903287 EPA ID: CAD008352361

Site Name: GREAT WESTERN CARPET CUSHION CO INC

NPL: Ν FF: Ν OU: 0 Action Code: ٧S

Action Name: ARCH SITE

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

FXI INC (Continued) 1000158746

SEQ: 1

Start Date: Not reported Finish Date: 1991-11-04 00:00:00 Qual: Not reported EPA Perf In-Hse Current Action Lead:

Region: 9 Site ID: 903287 EPA ID: CAD008352361

Site Name: GREAT WESTERN CARPET CUSHION CO INC

NPL: Ν FF: Ν OU: 0 Action Code: PΑ Action Name: PΑ SEQ:

Start Date: Not reported Finish Date: 1988-06-01 00:00:00

Qual:

EPA Perf Current Action Lead:

Region: 9 Site ID: 903287 EPA ID: CAD008352361

Site Name: GREAT WESTERN CARPET CUSHION CO INC

NPL: Ν FF: Ν OU: 0 Action Code: DS Action Name: **DISCVRY**

SEQ:

Start Date: 1988-05-01 00:00:00 Finish Date: 1988-05-01 00:00:00 Qual: Not reported EPA Perf Current Action Lead:

Region: 9 Site ID: 903287 CAD008352361 EPA ID:

Site Name: GREAT WESTERN CARPET CUSHION CO INC

NPL: Ν FF: Ν OU: 0 Action Code: ES Action Name: ESI

SEQ:

Start Date: 1990-09-18 00:00:00 Finish Date: 1991-11-04 00:00:00

Qual:

EPA Perf **Current Action Lead:**

9 Region: Site ID: 903287 EPA ID: CAD008352361

Site Name: GREAT WESTERN CARPET CUSHION CO INC

NPL: Ν FF: Ν

Direction Distance

Elevation Site Database(s) EPA ID Number

FXI INC (Continued) 1000158746

 OU:
 0

 Action Code:
 SI

 Action Name:
 SI

 SEQ:
 1

Start Date: Not reported Finish Date: 1989-10-04 00:00:00

Qual: H
Current Action Lead: St Perf

RCRA-TSDF:

Date form received by agency: 01/17/2018 Facility name: FXI, INC

Facility address: 2060 N BATAVIA ST

ORANGE, CA 92865

EPA ID: CAD008352361 Mailing address: N BATAVIA ST

ORANGE, CA 92865

Contact: LIDIA GALLARDO Contact address: N BATAVIA ST

ORANGE, CA 92865

Contact country: US

Contact telephone: 714-685-7287

Contact email: LGALLARDO@FXI.COM

EPA Region: 09
Land type: Private
Classification: TSDF

Description: Handler is engaged in the treatment, storage or disposal of hazardous

waste

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/Op end date:

Owner/operator name: FXI INC

Owner/operator address: 1400 N PROVIDENCE RD STE 200

MEDIA, PA 19063

Not reported

Owner/operator country: US

Owner/operator telephone:
Owner/operator email:
Owner/operator fax:
Owner/operator extension:
Legal status:
Owner/Operator Type:
Owner
Owner/Op start date:
Owner/Operator delephone:
Out reported
Not reported
Private
Owner
Owner
Owner
Owner

Direction Distance Elevation

tion Site Database(s) EPA ID Number

FXI INC (Continued) 1000158746

Owner/operator name: KYLE SUNDANAM

Owner/operator address: Not reported

Not reported

Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator

Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 12/01/2010
Owner/Op end date: Not reported

Owner/operator name: FXI INC
Owner/operator address: N BATAVIA ST

ORANGE, CA 92865

UCANOL,

Owner/operator country: US

Owner/operator telephone: Not reported Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: Not reported Not reported Owner/Op end date:

Owner/operator name: LUIS CARBAJAL
Owner/operator address: N BATAVIA ST

ORANGE, CA 92865

Owner/operator country: US

Owner/operator telephone: 714-637-0110

Owner/operator email: LCARBAJAL@FXI.COM

Owner/operator fax:
Owner/operator extension:
Legal status:
Owner/Operator Type:
Owner/Op start date:
Owner/Op end date:
Not reported
Not reported
Not reported
Not reported
Not reported

Handler Activities Summary:

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

. Waste code: 141

Map ID
Direction
Distance

Elevation

MAP FINDINGS

Site EDR ID Number

Database(s) EPA ID Number

FXI INC (Continued) 1000158746

. Waste name: Off-specification, aged, or surplus inorganics

. Waste code: 181

. Waste name: Other inorganic solid waste

. Waste code: 212

Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

. Waste code: 221

. Waste name: Waste oil and mixed oil

. Waste code: 223

. Waste name: Unspecified oil-containing waste

Waste code: 331

. Waste name: Off-specification, aged, or surplus organics

Waste code: 352

Waste name: Other organic solids

Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D003

. Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS

NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE

OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

. Waste code: F003

Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL

ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT
MIXTURES/BLENDS CONTAINING BEFORE USE ONLY THE ABOVE SPENT

MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT

MIXTURES.

Waste code: F005

Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL

KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE,

2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF

THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Map ID MAP FINDINGS
Direction

Distance

Elevation Site Database(s) EPA ID Number

FXI INC (Continued) 1000158746

Historical Generators:

Date form received by agency: 10/09/2012 Site name: FXI INC

Classification: Large Quantity Generator

Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Date form received by agency: 08/30/2010

Site name: FXI FOAMEX INNOVATIONS
Classification: Large Quantity Generator

. Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002

Waste code:

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 name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS

NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE

OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

. Waste code: D005
. Waste name: BARIUM

Waste code: U223

Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T)

Date form received by agency: 07/08/2009

Site name: FOAMEX INNOVATIONS INC Classification: Large Quantity Generator

Waste code: D001

Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE

Map ID MAP FINDINGS Direction

Distance **EDR ID Number** Elevation **EPA ID Number** Site Database(s)

FXI INC (Continued) 1000158746

> FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002

A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS Waste name:

> 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:

Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS

> NORMALLY UNSTABLE. REACTS VIOLENTLY WITH WATER. GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE

OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: U223

BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) Waste name:

Date form received by agency: 02/22/2008 Site name: FOAMEX, L.P.

Large Quantity Generator Classification:

Waste code: D001

IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF Waste name:

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002

A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS Waste name:

> 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: D003

A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS Waste name:

> NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS. OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE

OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

11223 Waste code:

Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T)

Date form received by agency: 02/27/2006

Map ID MAP FINDINGS
Direction

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

FXI INC (Continued) 1000158746

Site name: FOAMEX, L.P.

Classification: Large Quantity Generator

. Waste code: 122

. Waste name: Alkaline solution without metals (pH > 12.5)

. Waste code: 135

. Waste name: Unspecified aqueous solution

. Waste code: 214

. Waste name: Unspecified solvent mixture

Waste code: 221

. Waste name: Waste oil and mixed oil

Waste code: 331

. Waste name: Off-specification, aged, or surplus organics

Waste code: 343

. Waste name: Unspecified organic liquid mixture

Waste code: 352

Waste name: Other organic solids

Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. 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: D003

. Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS

NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE

OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: U223

. Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T)

Date form received by agency: 02/05/2004
Site name: FOAMEX LP

Classification: Large Quantity Generator

. Waste code: D001

Direction Distance Elevation

ance EDR ID Number ation Site Database(s) EPA ID Number

FXI INC (Continued) 1000158746

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. 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: D003

. Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS

NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE

OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: F002

Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE,

METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE,

CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND

1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND

SPENT SOLVENT MIXTURES.

. Waste code: U223

. Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T)

Date form received by agency: 02/04/2002 Site name: FOAMEX, L.P.

Classification: Large Quantity Generator

Date form received by agency: 10/12/2000

Site name: FOAMEX LP - ORANGE
Classification: Large Quantity Generator

Date form received by agency: 03/04/1999 Site name: FOAMEX, L.P.

Classification: Large Quantity Generator

Date form received by agency: 11/25/1997
Site name: FOAMEX LP

Classification: Large Quantity Generator

. Waste code: D003

. Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS

NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES

Direction Distance

Elevation Site Database(s) EPA ID Number

FXI INC (Continued) 1000158746

WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE

EDR ID Number

OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

. Waste code: U223

. Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T)

Date form received by agency: 11/25/1997
Site name: FOAMEX LP

Classification: Large Quantity Generator

Date form received by agency: 09/01/1996
Site name: FOAMEX LP

Classification: Large Quantity Generator

Date form received by agency: 03/14/1996 Site name: FOAMEX

Classification: Large Quantity Generator

Date form received by agency: 03/14/1994 Site name: FOAMEX

Classification: Large Quantity Generator

Date form received by agency: 02/17/1992

Site name: GREAT WESTERN FOAM PRODUCTS

Classification: Large Quantity Generator

Date form received by agency: 03/26/1990

Site name: GREAT WESTERN FOAM PRODUCTS CO.

Classification: Large Quantity Generator

Date form received by agency: 07/21/1980
Site name: FOAMEX LP

Classification: Large Quantity Generator

Corrective Action Summary:

Event date: 06/01/1988

Event: PA OR CERCLA INSPECTION

Event date: 10/04/1989

Event: PA OR CERCLA INSPECTION

Event date: 01/01/1990

Event: LEAD AGENCY DETERMINATION

Facility Has Received Notices of Violations:

Regulation violated: Not reported
Area of violation: Generators - General

Date violation determined: 06/10/2009
Date achieved compliance: 06/10/2009
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 06/10/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

FXI INC (Continued) 1000158746

Proposed penalty amount: Not reported Not reported Final penalty amount: Paid penalty amount: Not reported

Regulation violated: Not reported Area of violation: Generators - General

Date violation determined: 06/27/2006 Date achieved compliance: 08/31/2006 Violation lead agency: State

WRITTEN INFORMAL Enforcement action:

06/27/2006 Enforcement action date: 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 - 262.10-12.A Area of violation: Generators - General Date violation determined: 07/23/1992

05/16/1994

Date achieved compliance: 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

Regulation violated: F - 262.50-60 Area of violation: Generators - General

Date violation determined: 12/21/1988 10/10/1989 Date achieved compliance: Violation lead agency: State

Enforcement action date:

Enforcement action: WRITTEN INFORMAL

01/30/1989

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: F - 268.7 Area of violation: LDR - General Date violation determined: 12/21/1988 10/10/1989 Date achieved compliance: Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 01/30/1989 Enf. disposition status: Not reported Enf. disp. status date: Not reported Enforcement lead agency: State Proposed penalty amount: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

FXI INC (Continued) 1000158746

Final penalty amount: Not reported Paid penalty amount: Not reported

Regulation violated: F - 264.140-150.H

Area of violation: TSD - Financial Requirements

12/01/1988 Date violation determined: 12/21/1988 Date achieved compliance: 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

Regulation violated: F - 262.50-60
Area of violation: Generators - General

Date violation determined: 05/15/1987
Date achieved compliance: 10/10/1989

Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 08/11/1987
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: 06/26/2012

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/06/2009

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported Evaluation lead agency: State

Evaluation date: 06/10/2009

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:

Date achieved compliance:

Evaluation lead agency:

Not reported

Not reported

State

Evaluation date: 06/10/2009

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: 06/10/2009 Evaluation lead agency: State

Evaluation date: 10/14/2008

Direction Distance

Elevation Site Database(s) EPA ID Number

FXI INC (Continued) 1000158746

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/27/2006

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: 08/31/2006 Evaluation lead agency: Local

Evaluation date: 06/28/2005

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported

Evaluation lead agency: State Contractor/Grantee

Evaluation date: 11/25/2003

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported

Evaluation lead agency: State Contractor/Grantee

Evaluation date: 05/16/1994

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported

Evaluation lead agency: State Contractor/Grantee

Evaluation date: 07/23/1992

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: 05/16/1994

Evaluation lead agency: State Contractor/Grantee

Evaluation date: 12/21/1988

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: LDR - General Date achieved compliance: 10/10/1989 Evaluation lead agency: State

Evaluation date: 12/21/1988

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: 10/10/1989 Evaluation lead agency: State

Evaluation date: 12/01/1988

Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements

Date achieved compliance: 12/21/1988 Evaluation lead agency: State

Evaluation date: 05/15/1987

Evaluation: NON-FINANCIAL RECORD REVIEW

Area of violation: Generators - General

Date achieved compliance: 10/10/1989

Direction Distance

Elevation Site Database(s) **EPA ID Number**

FXI INC (Continued) 1000158746

Evaluation lead agency: State

05/15/1987 Evaluation date:

COMPLIANCE EVALUATION INSPECTION ON-SITE Evaluation:

Area of violation: Not reported Date achieved compliance: Not reported Evaluation lead agency: State

RCRA-LQG:

Date form received by agency: 01/17/2018 Facility name: FXI, INC

2060 N BATAVIA ST Facility address:

ORANGE, CA 92865 CAD008352361 EPA ID: Mailing address:

N BATAVIA ST

ORANGE, CA 92865 LIDIA GALLARDO Contact: Contact address:

N BATAVIA ST ORANGE, CA 92865

Contact country: US

714-685-7287 Contact telephone:

LGALLARDO@FXI.COM Contact email:

EPA Region: 09 Land type: Private Classification: **TSDF**

Handler is engaged in the treatment, storage or disposal of hazardous Description:

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: **FXI INC**

1400 N PROVIDENCE RD STE 200 Owner/operator address:

MEDIA, PA 19063

Owner/operator country: US

Owner/operator telephone: 610-744-2300 Owner/operator email: Not reported Owner/operator fax: Not reported Not reported Owner/operator extension: Legal status: Private Owner/Operator Type: Owner 06/01/2009 Owner/Op start date: Owner/Op end date: Not reported

KYLE SUNDANAM Owner/operator name: Owner/operator address: Not reported

Direction Distance Elevation

Site Database(s) EPA ID Number

FXI INC (Continued) 1000158746

Not reported Owner/operator country: Not reported Not reported Owner/operator telephone: Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Operator Owner/Op start date: 12/01/2010 Owner/Op end date: Not reported

Owner/operator name: FXI INC
Owner/operator address: N BATAVIA ST
ORANGE, CA 92865

Owner/operator country: US

Owner/operator telephone: Not reported Not reported Owner/operator email: Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: Not reported Owner/Op end date: Not reported

Owner/operator name: LUIS CARBAJAL
Owner/operator address: N BATAVIA ST
ORANGE, CA 92865

Owner/operator country: US

Owner/operator telephone: 714-637-0110

Owner/operator email: LCARBAJAL@FXI.COM

Owner/operator fax:

Owner/operator extension:

Legal status:

Owner/Operator Type:

Owner/Op start date:

Owner/Op end date:

Not reported

Not reported

Not reported

Not reported

Not reported

Handler Activities Summary:

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

Waste code: 141

. Waste name: Off-specification, aged, or surplus inorganics

Map ID MAP FINDINGS
Direction

Distance Elevation

Site Database(s) EPA ID Number

FXI INC (Continued) 1000158746

. Waste code: 181

. Waste name: Other inorganic solid waste

. Waste code: 212

. Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

Waste code: 221

. Waste name: Waste oil and mixed oil

Waste code: 223

Waste name: Unspecified oil-containing waste

Waste code: 331

. Waste name: Off-specification, aged, or surplus organics

. Waste code: 352

Waste name: Other organic solids

Waste code: D00

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D003

Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS

NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE

OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: F003

Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL

ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL

ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT
MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT
NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS
CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED
SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR
MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL

BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT

MIXTURES.

Waste code: F005

Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL

KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE,

2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF

THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Historical Generators:

Date form received by agency: 10/09/2012

Map ID MAP FINDINGS
Direction

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

FXI INC (Continued) 1000158746

Site name: FXI INC

Classification: Large Quantity Generator

. Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Date form received by agency: 08/30/2010

Site name: FXI FOAMEX INNOVATIONS
Classification: Large Quantity Generator

Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

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: D003

Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS

NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE

OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

. Waste code: D005 . Waste name: BARIUM

Waste code: U223

Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T)

Date form received by agency: 07/08/2009

Site name: FOAMEX INNOVATIONS INC Classification: Large Quantity Generator

. Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE

Direction Distance Elevation

EDR ID Number EPA ID Number Site Database(s)

FXI INC (Continued) 1000158746

MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code:

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:

A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS Waste name:

> NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE

OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: U223

Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T)

Date form received by agency: 02/22/2008 Site name: FOAMEX, L.P.

Classification: Large Quantity Generator

Waste code:

Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

> LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET. WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code:

A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS Waste name:

> 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.

D003 Waste code:

A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS Waste name:

NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE

OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code:

Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T)

Date form received by agency: 02/27/2006 Site name: FOAMEX, L.P.

Classification: Large Quantity Generator Map ID MAP FINDINGS
Direction

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

FXI INC (Continued) 1000158746

. Waste code: 122

. Waste name: Alkaline solution without metals (pH > 12.5)

. Waste code: 135

. Waste name: Unspecified aqueous solution

Waste code: 214

Waste name: Unspecified solvent mixture

Waste code: 221

. Waste name: Waste oil and mixed oil

Waste code: 331

. Waste name: Off-specification, aged, or surplus organics

. Waste code: 343

Waste name: Unspecified organic liquid mixture

Waste code: 352

Waste name: Other organic solids

Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. 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: D003

Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS

NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE

OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: U223

. Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T)

Date form received by agency: 02/05/2004
Site name: FOAMEX LP

Classification: Large Quantity Generator

. Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE

Direction Distance Elevation

stance EDR ID Number evation Site Database(s) EPA ID Number

FXI INC (Continued) 1000158746

FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. 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: D003

. Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS

NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE

OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: F002

Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE,

METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE,

CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND

1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND

SPENT SOLVENT MIXTURES.

. Waste code: U223

. Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T)

Date form received by agency: 02/04/2002 Site name: FOAMEX, L.P.

Classification: Large Quantity Generator

Date form received by agency: 10/12/2000

Site name: FOAMEX LP - ORANGE
Classification: Large Quantity Generator

Date form received by agency: 03/04/1999
Site name: FOAMEX, L.P.

Classification: Large Quantity Generator

Date form received by agency: 11/25/1997 Site name: FOAMEX LP

Classification: Large Quantity Generator

. Waste code: D003

. Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS

NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE

OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

MAP FINDINGS Map ID

Direction Distance

Elevation Site Database(s) **EPA ID Number**

FXI INC (Continued) 1000158746

Waste code: U223

BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) Waste name:

Date form received by agency: 11/25/1997 Site name: FOAMEX LP

Classification: Large Quantity Generator

Date form received by agency: 09/01/1996 FOAMEX LP Site name:

Classification: Large Quantity Generator

Date form received by agency: 03/14/1996 Site name: **FOAMEX**

Classification: Large Quantity Generator

Date form received by agency: 03/14/1994 Site name: **FOAMEX**

Classification: Large Quantity Generator

Date form received by agency: 02/17/1992

Site name: **GREAT WESTERN FOAM PRODUCTS**

Classification: Large Quantity Generator

Date form received by agency: 03/26/1990

GREAT WESTERN FOAM PRODUCTS CO. Site name:

Classification: Large Quantity Generator

Date form received by agency: 07/21/1980 Site name: FOAMEX LP

Large Quantity Generator Classification:

Corrective Action Summary:

Event date: 06/01/1988

PA OR CERCLA INSPECTION Event:

Event date: 10/04/1989

Event: PA OR CERCLA INSPECTION

Event date: 01/01/1990

LEAD AGENCY DETERMINATION Event:

Not reported

Facility Has Received Notices of Violations:

Regulation violated: Not reported

Generators - General Area of violation:

Date violation determined: 06/10/2009 Date achieved compliance: 06/10/2009 Violation lead agency: State

WRITTEN INFORMAL Enforcement action:

Enforcement action date: 06/10/2009 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:

Map ID MAP FINDINGS
Direction

Distance Elevation

on Site Database(s) EPA ID Number

FXI INC (Continued) 1000158746

Regulation violated: Not reported
Area of violation: Generators - General

Date violation determined: 06/27/2006
Date achieved compliance: 08/31/2006
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 06/27/2006
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 - 262.10-12.A Area of violation: Generators - General

Date violation determined: 07/23/1992
Date achieved compliance: 05/16/1994
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported

Enf. disposition status:

Enf. disposition status:

Enf. disposition status:

Enf. disposition status:

Not reported

Regulation violated: F - 262.50-60
Area of violation: Generators - General

Date violation determined: 12/21/1988
Date achieved compliance: 10/10/1989
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 01/30/1989
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: F - 268.7
Area of violation: LDR - General
Date violation determined: 12/21/1988
Date achieved compliance: 10/10/1989
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 01/30/1989
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: F - 264.140-150.H

Direction Distance

Elevation Site Database(s) EPA ID Number

FXI INC (Continued) 1000158746

Area of violation: TSD - Financial Requirements

Date violation determined: 12/01/1988 12/21/1988 Date achieved compliance: Violation lead agency: State Enforcement action: Not reported Enforcement action date: Not reported Not reported Enf. disposition status: Enf. disp. status date: Not reported Not reported Enforcement lead agency: Proposed penalty amount: Not reported Not reported Final penalty amount: Paid penalty amount: Not reported

Regulation violated: F - 262.50-60
Area of violation: Generators - General

Date violation determined: 05/15/1987
Date achieved compliance: 10/10/1989
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 08/11/1987
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: 06/26/2012

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:

Date achieved compliance:

Evaluation lead agency:

Not reported

Not reported

State

Evaluation date: 08/06/2009

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:
Date achieved compliance:
Evaluation lead agency:

Not reported
Not reported
State

Evaluation date: 06/10/2009

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:

Date achieved compliance:

Evaluation lead agency:

Not reported

Not reported

State

Evaluation date: 06/10/2009

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: 06/10/2009 Evaluation lead agency: State

Evaluation date: 10/14/2008

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:

Date achieved compliance:

Evaluation lead agency:

Not reported

Not reported

State

Direction Distance

Elevation Site Database(s) EPA ID Number

FXI INC (Continued) 1000158746

Evaluation date: 06/27/2006

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: 08/31/2006 Evaluation lead agency: Local

Evaluation date: 06/28/2005

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported

Evaluation lead agency: State Contractor/Grantee

Evaluation date: 11/25/2003

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported

Evaluation lead agency: State Contractor/Grantee

Evaluation date: 05/16/1994

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported

Evaluation lead agency: State Contractor/Grantee

Evaluation date: 07/23/1992

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: 05/16/1994

Evaluation lead agency: State Contractor/Grantee

Evaluation date: 12/21/1988

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: LDR - General Date achieved compliance: 10/10/1989 Evaluation lead agency: State

Evaluation date: 12/21/1988

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: 10/10/1989 Evaluation lead agency: State

Evaluation date: 12/01/1988

Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements

Date achieved compliance: 12/21/1988 Evaluation lead agency: State

Evaluation date: 05/15/1987

Evaluation: NON-FINANCIAL RECORD REVIEW

Area of violation: Generators - General

Date achieved compliance: 10/10/1989 Evaluation lead agency: State

Evaluation date: 05/15/1987

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

FXI INC (Continued) 1000158746

Date achieved compliance: Not reported Evaluation lead agency: State

ENVIROSTOR:

Facility ID: 80001567
Status: * Inactive
Status Date: 01/01/2008
Site Code: Not reported
Site Type: Corrective Action
Site Type Detailed: Corrective Action

Acres:

NPL: NO

NONE SPECIFIED Regulatory Agencies: NONE SPECIFIED Lead Agency: Program Manager: Not reported Supervisor: * Unknown Division Branch: Cleanup Cypress Assembly: Not reported Senate: Not reported Special Program: Not reported

Restricted Use: NO

Site Mgmt Req: NONE SPECIFIED Funding: Not reported Latitude: 33.82112 Longitude: -117.8639

APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED

Alias Name: GENERAL TIRE & RUBBER COMPANY

Alias Type: Alternate Name Alias Name: CAD008352361

Alias Type: EPA Identification Number

Alias Name: 110000480122 Alias Type: EPA (FRS #) Alias Name: 30280027

Alias Type: Envirostor ID Number

Alias Name: 80001567

Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Preliminary Assessment Report

Completed Date: 10/04/1989 Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Preliminary Assessment Report

Completed Date: 06/01/1988
Comments: Not reported

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

Direction Distance

Elevation Site Database(s) EPA ID Number

FXI INC (Continued) 1000158746

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

SWEEPS UST:

Status: Active Comp Number: 9108 Number: 1

Board Of Equalization: 44-016895
Referral Date: 08-16-93
Action Date: 08-16-93
Created Date: 10-13-88
Owner Tank Id: Not reported

SWRCB Tank Id: 30-030-009108-000001

Tank Status: A
Capacity: 25000
Active Date: 08-16-93
Tank Use: M.V. FUEL

STG: P
Content: DIESEL
Number Of Tanks: 1

HIST UST:

File Number: 0002E99B

URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002E99B.pdf

Region: STATE
Facility ID: 0000009108
Facility Type: Other

Other Type: MANUFACTURER
Contact Name: Not reported
Telephone: 7146370110

Owner Name: GREAT WESTERN CARPET CHUSION C

Owner Address: 2060 N. BATAVIA ST. Owner City,St,Zip: ORANGE, CA 92665

Total Tanks: 0003

Tank Num: 001 Container Num: 1 Year Installed: 1976 Tank Capacity: 00025000 **PRODUCT** Tank Used for: DIESEL Type of Fuel: Container Construction Thickness: 1/4 Leak Detection: Visual

Tank Num: 002 Container Num: 2 Year Installed: 1973 Tank Capacity: 00012000 **PRODUCT** Tank Used for: Type of Fuel: **DIESEL** Container Construction Thickness: 1/4 Leak Detection: Visual

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

FXI INC (Continued) 1000158746

Tank Num: 003 Container Num: 3 Year Installed: 1968 Tank Capacity: 00010000 Tank Used for: **PRODUCT** REGULAR Type of Fuel: Container Construction Thickness: 1/4 Leak Detection: Visual

Click here for Geo Tracker PDF:

CA FID UST:

Facility ID: 30008333 Regulated By: UTNKA Regulated ID: 00009108 Cortese Code: Not reported SIC Code: Not reported Facility Phone: 7146370110 Mail To: Not reported Mailing Address: 2060 N BATAVIA Mailing Address 2: Not reported Mailing City, St, Zip: **ORANGE 92665** Contact: Not reported Not reported Contact Phone: Not reported **DUNs Number:** NPDES Number: Not reported Not reported EPA ID: Comments: Not reported Status: Active

TRIS:

Click this hyperlink while viewing on your computer to access 3 additional US_TRIS: record(s) in the EDR Site Report.

EMI:

Year: 1987 County Code: 30 Air Basin: SC Facility ID: 1615 Air District Name: SC SIC Code: 3069

SOUTH COAST AQMD Air District Name:

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 474 Reactive Organic Gases Tons/Yr: 474 Carbon Monoxide Emissions Tons/Yr: 0 NOX - Oxides of Nitrogen Tons/Yr: 1 SOX - Oxides of Sulphur Tons/Yr: 0 Particulate Matter Tons/Yr: Part. Matter 10 Micrometers and Smllr Tons/Yr:0

1990 Year: County Code: 30 Air Basin: SC Facility ID: 1615

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

FXI INC (Continued) 1000158746

Air District Name: SC 3069 SIC Code:

SOUTH COAST AQMD Air District Name:

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 868 Reactive Organic Gases Tons/Yr: 840 Carbon Monoxide Emissions Tons/Yr: 4 NOX - Oxides of Nitrogen Tons/Yr: 2 SOX - Oxides of Sulphur Tons/Yr: 0 Particulate Matter Tons/Yr: 0 Part. Matter 10 Micrometers and Smllr Tons/Yr:0

1993 Year: County Code: 30 Air Basin: SC Facility ID: 1615 Air District Name: SC SIC Code: 3069

SOUTH COAST AQMD Air District Name:

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 654 Reactive Organic Gases Tons/Yr: Carbon Monoxide Emissions Tons/Yr: 0 NOX - Oxides of Nitrogen Tons/Yr: SOX - Oxides of Sulphur Tons/Yr: 0 Particulate Matter Tons/Yr: Part. Matter 10 Micrometers and Smllr Tons/Yr:0

1995 Year: County Code: 30 Air Basin: SC Facility ID: 1615 Air District Name: SC 3069 SIC Code:

SOUTH COAST AQMD Air District Name:

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 654 Reactive Organic Gases Tons/Yr: 0 Carbon Monoxide Emissions Tons/Yr: 0 NOX - Oxides of Nitrogen Tons/Yr: SOX - Oxides of Sulphur Tons/Yr: 0 Particulate Matter Tons/Yr: n Part. Matter 10 Micrometers and Smllr Tons/Yr:0

2012 County Code: 30 Air Basin: SC Facility ID: 160916 Air District Name: 3086 SIC Code:

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: 0.3268026107

Direction Distance

Elevation Site Database(s) EPA ID Number

FXI INC (Continued) 1000158746

Reactive Organic Gases Tons/Yr: 0.28073
Carbon Monoxide Emissions Tons/Yr: 0.07842
NOX - Oxides of Nitrogen Tons/Yr: 0.13159
SOX - Oxides of Sulphur Tons/Yr: 0.0005
Particulate Matter Tons/Yr: 0.00976
Part. Matter 10 Micrometers and Smllr Tons/Yr:0.00967168

 Year:
 2013

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 160916

 Air District Name:
 SC

 SIC Code:
 3086

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System:
Consolidated Emission Reporting Rule:
Not reported
Not reported
Not reported
Not reported
0.00016607289894
Reactive Organic Gases Tons/Yr:
Carbon Monoxide Emissions Tons/Yr:
NOX - Oxides of Nitrogen Tons/Yr:
Not reported

SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

HWP:

EPA Id: CAD008352361
Cleanup Status: PROTECTIVE FILER

Latitude: 33.82112 Longitude: -117.8639

Facility Type: Historical - Non-Operating

Facility Size: Not reported Team: Not reported Supervisor: Not reported Site Code: Not reported Assembly District: Not reported Not reported Senate District: Public Information Officer: Not reported Public Information Officer: Not reported

Activities:

EPA ld: CAD008352361

Facility Type: Historical - Non-Operating

Unit Names: CONTAIN1

Event Description: Protective Filer Status - PROTECTIVE FILER (APPROVED)

Actual Date: 10/11/1988

EPA ld: CAD008352361

Facility Type: Historical - Non-Operating

Unit Names: CONTAIN1

Event Description: Protective Filer Status - PROTECTIVE FILER (RECEIVED)

Actual Date: 09/11/1987

Alias:

EPA ld: CAD008352361

Facility Type: Historical - Non-Operating

Alias Type: FRS

Alias: 110000480122

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

FXI INC (Continued) 1000158746

EPA Id: CAD008352361

Historical - Non-Operating Facility Type: **Envirostor ID Number** Alias Type:

30280027 Alias:

EPA Id: CAD008352361

Facility Type: Historical - Non-Operating

Alias Type: Alternate Name

GENERAL TIRE & RUBBER COMPANY Alias:

NPDES:

Facility Status: Active CAS000001 NPDES Number: Region: 8 Agency Number: 0 Regulatory Measure ID: 422714

Place ID: Not reported Order Number: 97-03-DWQ WDID: 8 301023446 Regulatory Measure Type: Enrollee Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 12/19/2011 Termination Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported

Discharge Address: 1400 N Providence Rd

Discharge Name: FXI Inc Discharge City: Media Discharge State: Pennsylvania Discharge Zip: 19063 Status: Not reported Status Date: Not reported Operator Name: Not reported Operator Address: Not reported Operator City: Not reported Operator State: Not reported Operator Zip: Not reported

NPDES as of 03/2018:

NPDES Number: CAS000001 Active Status: Agency Number: 0 Region: 8 Regulatory Measure ID: 422714 Order Number: 97-03-DWQ Regulatory Measure Type: Enrollee

Place ID: Not reported WDID: 8 301023446 Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 12/19/2011 Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Discharge Name: FXI Inc

Discharge Address: 1400 N Providence Rd

Discharge City: Media

Distance
Elevation Site Database(s)

FXI INC (Continued) 1000158746

Discharge State: Pennsylvania Discharge Zip: 19063 Received Date: Not reported Processed Date: Not reported Status: Not reported Status Date: Not reported Not reported Place Size: Place Size Unit: Not reported Not reported Contact: Contact Title: Not reported Contact Phone: Not reported Contact Phone Ext: Not reported Contact Email: Not reported Operator Name: Not reported Operator Address: Not reported Operator City: Not reported Not reported Operator State: Operator Zip: Not reported **Operator Contact:** Not reported Operator Contact Title: Not reported **Operator Contact Phone:** Not reported Operator Contact Phone Ext: Not reported Not reported Operator Contact Email: Operator Type: Not reported Developer: Not reported Developer Address: Not reported Developer City: Not reported **Developer State:** Not reported Developer Zip: Not reported **Developer Contact:** Not reported Developer Contact Title: Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** Not reported **Emergency Phone Ext:** Not reported Not reported Constype Above Ground Ind: Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Not reported Constype Industrial Ind: Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported Dir Discharge Uswater Ind: Not reported Receiving Water Name: Not reported Not reported Certifier: Certifier Title: Not reported Certification Date: Not reported Not reported Primary Sic: Secondary Sic: Not reported

EDR ID Number

EPA ID Number

Distance Elevation

ation Site Database(s) EPA ID Number

FXI INC (Continued) 1000158746

Tertiary Sic: Not reported

NPDES Number: Not reported Status: Not reported Agency Number: Not reported

Region: 422714 Regulatory Measure ID: Order Number: Not reported Regulatory Measure Type: Industrial Place ID: Not reported 8 301023446 WDID: Program Type: Not reported Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Discharge Name: Not reported Discharge Address: Not reported Discharge City: Not reported Discharge State: Not reported Discharge Zip: Not reported Received Date: 12/19/2011 Processed Date: 12/19/2011 Status: Active Status Date: 12/19/2011 Place Size: 27 Place Size Unit: Acres

Contact: Douglas Darling
Contact Title: Regional EHS Manager

Contact Phone: 714-685-7218
Contact Phone Ext: Not reported
Contact Email: ddarling@fxi.com

Operator Name: FXI Inc

Operator Address: 1400 N Providence Rd

Operator City: Media Operator State: Pennsylvania Operator Zip: 19063 **Operator Contact:** Luis Carbajal Operator Contact Title: Plant Manager 714-637-0110 **Operator Contact Phone:** Operator Contact Phone Ext: Not reported lcarbajal@fxi.com Operator Contact Email: Operator Type: **Private Business** Developer: Not reported Developer Address: Not reported Developer City: Not reported Developer State: California Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported **Emergency Phone:** Not reported **Emergency Phone Ext:** Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported

Direction Distance Elevation

n Site Database(s) EPA ID Number

FXI INC (Continued) 1000158746

Constype Commertial Ind: Not reported Not reported Constype Electrical Line Ind: Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported

Dir Discharge Uswater Ind: N

Receiving Water Name:

Certifier:

Certifier Title:

Santa Ana River

Douglas Darling

Regional EHS Manager

Certification Date: 09-FEB-15

Primary Sic: 3086-Plastics Foam Products

Secondary Sic: Not reported Tertiary Sic: Not reported

Not reported Facility Status: NPDES Number: Not reported Region: Not reported Agency Number: Not reported Regulatory Measure ID: Not reported Place ID: Not reported Order Number: Not reported 8 301023446 WDID: Industrial Regulatory Measure Type: Program Type: Not reported Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Discharge Address: Not reported Discharge Name: Not reported Discharge City: Not reported Discharge State: Not reported Discharge Zip: Not reported Status: Active Status Date: 12/19/2011 Operator Name: FXI Inc

Operator Address: 1400 N Providence Rd

Operator City: Media
Operator State: Pennsylvania
Operator Zip: 19063

NPDES as of 03/2018:

NPDES Number: CAS000001 Active Status: Agency Number: 0 Region: 8 422714 Regulatory Measure ID: Order Number: 97-03-DWQ Regulatory Measure Type: Enrollee Place ID: Not reported

MAP FINDINGS Map ID Direction

Distance Elevation Site

EDR ID Number Database(s) **EPA ID Number**

FXI INC (Continued) 1000158746

WDID: 8 301023446 Program Type: Industrial Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: 12/19/2011 **Expiration Date Of Regulatory Measure:** Not reported Termination Date Of Regulatory Measure: Not reported Discharge Name: FXI Inc

Discharge Address: 1400 N Providence Rd

Discharge City: Media Discharge State: Pennsylvania Discharge Zip: 19063 Received Date: Not reported Processed Date: Not reported Status: Not reported Status Date: Not reported Place Size: Not reported Place Size Unit: Not reported Contact: Not reported Contact Title: Not reported Contact Phone: Not reported Contact Phone Ext: Not reported Contact Email: Not reported Not reported Operator Name: Operator Address: Not reported Operator City: Not reported Operator State: Not reported Operator Zip: Not reported **Operator Contact:** Not reported Operator Contact Title: Not reported **Operator Contact Phone:** Not reported Operator Contact Phone Ext: Not reported Operator Contact Email: Not reported Operator Type: Not reported Developer: Not reported Developer Address: Not reported Developer City: Not reported Developer State: Not reported Developer Zip: Not reported **Developer Contact:** Not reported **Developer Contact Title:** Not reported Constype Linear Utility Ind: Not reported Not reported **Emergency Phone: Emergency Phone Ext:** Not reported Constype Above Ground Ind: Not reported Constype Below Ground Ind: Not reported Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Not reported Constype Transport Ind: Constype Utility Description: Not reported

MAP FINDINGS Map ID Direction

Distance Elevation Site

Database(s) **EPA ID Number**

FXI INC (Continued) 1000158746

Constype Utility Ind: Not reported Not reported Constype Water Sewer Ind: Dir Discharge Uswater Ind: Not reported Receiving Water Name: Not reported Certifier: Not reported Certifier Title: Not reported Certification Date: Not reported Primary Sic: Not reported Secondary Sic: Not reported **Tertiary Sic:** Not reported

NPDES Number: Not reported Status: Not reported Agency Number: Not reported

Region: Regulatory Measure ID: 422714 Not reported Order Number: Regulatory Measure Type: Industrial Place ID: Not reported WDID: 8 301023446 Program Type: Not reported Adoption Date Of Regulatory Measure: Not reported Effective Date Of Regulatory Measure: Not reported Expiration Date Of Regulatory Measure: Not reported Termination Date Of Regulatory Measure: Not reported Discharge Name: Not reported Discharge Address: Not reported Discharge City: Not reported Discharge State: Not reported Discharge Zip: Not reported Received Date: 12/19/2011 Processed Date: 12/19/2011 Status: Active Status Date: 12/19/2011 27 Place Size:

Acres **Douglas Darling** Contact: Contact Title: Regional EHS Manager

714-685-7218 Contact Phone: Contact Phone Ext: Not reported ddarling@fxi.com Contact Email:

FXI Inc Operator Name:

Place Size Unit:

Operator Address: 1400 N Providence Rd

Operator City: Media Operator State: Pennsylvania Operator Zip: 19063 **Operator Contact:** Luis Carbajal Operator Contact Title: Plant Manager Operator Contact Phone: 714-637-0110 Operator Contact Phone Ext: Not reported Operator Contact Email: lcarbajal@fxi.com Operator Type: **Private Business** Developer: Not reported Developer Address: Not reported Developer City: Not reported Developer State: California Developer Zip: Not reported

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

FXI INC (Continued) 1000158746

Developer Contact: Not reported **Developer Contact Title:** Not reported Not reported Constype Linear Utility Ind: **Emergency Phone:** Not reported **Emergency Phone Ext:** Not reported Constype Above Ground Ind: Not reported Not reported Constype Below Ground Ind: Constype Cable Line Ind: Not reported Constype Comm Line Ind: Not reported Constype Commertial Ind: Not reported Constype Electrical Line Ind: Not reported Constype Gas Line Ind: Not reported Constype Industrial Ind: Not reported Constype Other Description: Not reported Constype Other Ind: Not reported Constype Recons Ind: Not reported Constype Residential Ind: Not reported Constype Transport Ind: Not reported Constype Utility Description: Not reported Constype Utility Ind: Not reported Constype Water Sewer Ind: Not reported

Dir Discharge Uswater Ind: Ν

Receiving Water Name: Santa Ana River Certifier: **Douglas Darling** Certifier Title: Regional EHS Manager

Certification Date: 09-FEB-15

Primary Sic: 3086-Plastics Foam Products

Secondary Sic: Not reported **Tertiary Sic:** Not reported

WDS:

Facility ID: Santa Ana River 30I011543

Industrial - Facility that treats and/or disposes of liquid or Facility Type:

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

are assigned by the Regional Board

Subregion: 8

Facility Telephone: 7146370110 Facility Contact: FRED LELVIS

Agency Name: FOAMEX INTERNATIONAL INC

Agency Address: 2060 N BATAVIA ST Agency City, St, Zip: **ORANGE 92865** Agency Contact: FRED LELVIS 7146370110 Agency Telephone: Agency Type: Private SIC Code: 3086

SIC Code 2: Not reported Primary Waste Type: Not reported Primary Waste: Not reported Waste Type2: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

FXI INC (Continued) 1000158746

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 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.

CIWQS:

Agency: FXI Inc

Agency Address: 1400 N Providence Rd Ste 2000, Media, PA 19063

Place/Project Type: Industrial - Plastics Foam Products

SIC/NAICS: 3086
Region: 8
Program: INDSTW
Regulatory Measure Status: Active

Regulatory Measure Type:

Order Number:

WDID:

8 301023446

NPDES Number:

CAS000001

Adoption Date:

Not reported

Effective Date:

Storm water industrial

2014-0057-DWQ

8 301023446

NPDES Number:

CAS000001

Not reported

12/19/2011

Effective Date: 12/19/2011
Termination Date: Not reported
Expiration/Review Date: Not reported
Design Flow: Not reported
Major/Minor: Not reported
Complexity: Not reported
TTWQ: Not reported

Enforcement Actions within 5 years: 0
Violations within 5 years: 0
Latitude: 33.82116
Longitude: -117.8643

COMMUNITY COLLEGE CA ENVIROSTOR S103631176
1465 N. BATAVIA STREET CA SCH N/A

1/2-1 ORANGE, CA 92867 CA Orange Co. Industrial Site 0.888 mi.

4687 ft.

69 SW

Relative: ENVIROSTOR:

Lower Facility ID: 30000046

Actual: Status: Inactive - Withdrawn

171 ft. Status Date: 10/08/2004 Site Code: 404522

Direction Distance

Elevation Site Database(s) EPA ID Number

COMMUNITY COLLEGE (Continued)

S103631176

EDR ID Number

Site Type: School Investigation

Site Type Detailed: School
Acres: 6.2
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Not reported
Supervisor: Javier Hinojosa

Division Branch: Southern California Schools & Brownfields Outreach

Assembly: 68 Senate: 37

Special Program: Not reported

Restricted Use: NO

Site Mgmt Req: NONE SPECIFIED
Funding: School District
Latitude: 33.81165
Longitude: -117.8613
APN: NONE SPECIFIED

Past Use: * UNKNOWN
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED

Alias Name: RANCHO SANTIAGO CCD-COMMUNITY COLLEGE

Alias Type: Alternate Name

Alias Name: 404522

Alias Type: Project Code (Site Code)

Alias Name: 30000046

Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 02/04/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Cost Recovery Closeout Memo

Completed Date: 10/08/2004 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 Not reported Schedule Due Date: Schedule Revised Date: Not reported

SCH:

Facility ID: 30000046

Site Type: School Investigation

Site Type Detail: School

Direction Distance

Elevation Site Database(s) EPA ID Number

COMMUNITY COLLEGE (Continued)

S103631176

EDR ID Number

Site Mgmt. Req.: NONE SPECIFIED

Acres: 6.2
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP

Lead Agency Description: DTSC - Site Cleanup Program

Project Manager: Not reported Supervisor: Javier Hinojosa

Division Branch: Southern California Schools & Brownfields Outreach

 Site Code:
 404522

 Assembly:
 68

 Senate:
 37

Special Program Status: Not reported
Status: Inactive - Withdrawn

Status Date: 10/08/2004

Restricted Use: NO

Funding: School District
Latitude: 33.81165
Longitude: -117.8613

APN: NONE SPECIFIED
Past Use: * UNKNOWN
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED

Alias Name: RANCHO SANTIAGO CCD-COMMUNITY COLLEGE

Alias Type: Alternate Name

Alias Name: 404522

Alias Type: Project Code (Site Code)

Alias Name: 30000046

Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Phase 1
Completed Date: 02/04/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported

Completed Document Type: Cost Recovery Closeout Memo

Completed Date: 10/08/2004 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 Not reported Schedule Sub Area Name: Schedule Document Type: Not reported Not reported Schedule Due Date: Schedule Revised Date: Not reported

Orange Co. Industrial Site:

Case ID: 03IC010

Record ID: RO0003167

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

COMMUNITY COLLEGE (Continued)

S103631176

OPEN **Current Status:** Closure Type: Not reported

Released Chemical: PERCHLOROETHYLENE; TRICHLOROETHYLENE; LEAD COMPOUNDS

EMI:

1987 Year: County Code: 30 Air Basin: SC Facility ID: 8282 Air District Name: SC SIC Code: 5199

SOUTH COAST AQMD Air District Name:

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: 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 and Smllr Tons/Yr:0

Year: 1990 County Code: 30 Air Basin: SC Facility ID: 8282 Air District Name: SC SIC Code: 3559

SOUTH COAST AQMD Air District Name:

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: 0 Carbon Monoxide Emissions Tons/Yr: 0 NOX - Oxides of Nitrogen Tons/Yr: SOX - Oxides of Sulphur Tons/Yr: 0 Particulate Matter Tons/Yr: Part. Matter 10 Micrometers and Smllr Tons/Yr:0

1995 Year: County Code: 30 Air Basin: SC Facility ID: 8282 Air District Name: SC SIC Code: 3559

SOUTH COAST AQMD Air District Name:

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: SOX - Oxides of Sulphur Tons/Yr: 0 Particulate Matter Tons/Yr: Λ Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Year: 1996

Direction
Distance

Elevation Site Database(s) EPA ID Number

COMMUNITY COLLEGE (Continued)

S103631176

EDR ID Number

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 8282

 Air District Name:
 SC

 SIC Code:
 3559

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: 1
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

 Year:
 1997

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 8282

 Air District Name:
 SC

 SIC Code:
 3599

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 1
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

 Year:
 1998

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 8282

 Air District Name:
 SC

 SIC Code:
 3599

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 1
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

 Year:
 1999

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 8282

 Air District Name:
 SC

 SIC Code:
 3599

Air District Name: SOUTH COAST AQMD

Distance Elevation

vation Site Database(s) EPA ID Number

COMMUNITY COLLEGE (Continued)

S103631176

EDR ID Number

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:

Carbon Monoxide Emissions Tons/Yr:

0

NOX - Oxides of Nitrogen Tons/Yr:

1

SOX - Oxides of Sulphur Tons/Yr:

0

Particulate Matter Tons/Yr:

0

Part. Matter 10 Micrometers and Smllr Tons/Yr:0

 Year:
 2000

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 8282

 Air District Name:
 SC

 SIC Code:
 3599

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 1
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

 Year:
 2001

 County Code:
 30

 Air Basin:
 SC

 Facility ID:
 8282

 Air District Name:
 SC

 SIC Code:
 3599

Air District Name: SOUTH COAST AQMD

Community Health Air Pollution Info System: Not reported Consolidated Emission Reporting Rule: Not reported

Total Organic Hydrocarbon Gases Tons/Yr: 0
Reactive Organic Gases Tons/Yr: 0
Carbon Monoxide Emissions Tons/Yr: 0
NOX - Oxides of Nitrogen Tons/Yr: 1
SOX - Oxides of Sulphur Tons/Yr: 0
Particulate Matter Tons/Yr: 0
Part. Matter 10 Micrometers and Smllr Tons/Yr:0

Count: 1 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
ORANGE COUNTY	S107537591		AT DEAD END OF BLACK STAR CYN.		CA CDL

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: 11/14/2018 Source: EPA
Date Data Arrived at EDR: 11/27/2018 Telephone: N/A

Number of Days to Update: 10 Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

Telephone 617-918-1143 Telephone: 214-655-6659

EPA Region 3 EPA Region 7

Telephone 215-814-5418 Telephone: 913-551-7247

EPA Region 4 EPA Region 8

Telephone 404-562-8033 Telephone: 303-312-6774

EPA Region 5 EPA Region 9

Telephone 312-886-6686 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: 11/14/2018 Source: EPA
Date Data Arrived at EDR: 11/27/2018 Telephone: N/A
Date Made Active in Reports: 12/07/2018 Last EDR Contact: 11/27/2018

Date Made Active in Reports: 12/07/2018 Last EDR Contact: 11/27/2018

Number of Days to Update: 10 Next Scheduled EDR Contact: 01/14/2019

Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991 Date Data Arrived at EDR: 02/02/1994 Date Made Active in Reports: 03/30/1994

Number of Days to Update: 56

Source: EPA

Telephone: 202-564-4267 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

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: 11/14/2018 Date Data Arrived at EDR: 11/27/2018 Date Made Active in Reports: 12/07/2018

Number of Days to Update: 10

Source: EPA Telephone: N/A

Last EDR Contact: 11/27/2018

Next Scheduled EDR Contact: 01/14/2019 Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016 Date Data Arrived at EDR: 01/05/2017 Date Made Active in Reports: 04/07/2017

Number of Days to Update: 92

Source: Environmental Protection Agency Telephone: 703-603-8704

Last EDR Contact: 07/06/2018

Next Scheduled EDR Contact: 10/15/2018 Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 11/14/2018 Date Data Arrived at EDR: 11/27/2018 Date Made Active in Reports: 12/07/2018

Number of Days to Update: 10

Source: EPA Telephone: 800-424-9346

Last EDR Contact: 11/27/2018

Next Scheduled EDR Contact: 01/28/2019 Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 11/14/2018 Date Data Arrived at EDR: 11/28/2018 Date Made Active in Reports: 12/07/2018

Number of Days to Update: 9

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 11/28/2018

Next Scheduled EDR Contact: 01/28/2019 Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/01/2018 Date Data Arrived at EDR: 03/28/2018 Date Made Active in Reports: 06/22/2018

Number of Days to Update: 86

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 12/03/2018

Next Scheduled EDR Contact: 01/07/2019 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: 03/01/2018 Date Data Arrived at EDR: 03/28/2018 Date Made Active in Reports: 06/22/2018

Number of Days to Update: 86

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 12/03/2018

Next Scheduled EDR Contact: 01/07/2019 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: 03/01/2018 Date Data Arrived at EDR: 03/28/2018 Date Made Active in Reports: 06/22/2018

Number of Days to Update: 86

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 12/03/2018

Next Scheduled EDR Contact: 01/07/2019 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: 03/01/2018 Date Data Arrived at EDR: 03/28/2018 Date Made Active in Reports: 06/22/2018

Number of Days to Update: 86

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 12/03/2018

Next Scheduled EDR Contact: 01/07/2019
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: 03/01/2018 Date Data Arrived at EDR: 03/28/2018 Date Made Active in Reports: 06/22/2018

Number of Days to Update: 86

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 12/03/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 10/17/2018 Date Data Arrived at EDR: 10/25/2018 Date Made Active in Reports: 12/07/2018

Number of Days to Update: 43

Source: Department of the Navy Telephone: 843-820-7326 Last EDR Contact: 10/15/2018

Next Scheduled EDR Contact: 02/25/2019 Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 07/31/2018 Date Data Arrived at EDR: 08/28/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 17

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 11/28/2018

Next Scheduled EDR Contact: 03/11/2019 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: 07/31/2018 Date Data Arrived at EDR: 08/28/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 17

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 11/28/2018

Next Scheduled EDR Contact: 03/11/2019 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: 09/24/2018 Date Data Arrived at EDR: 09/25/2018 Date Made Active in Reports: 11/09/2018

Number of Days to Update: 45

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180 Last EDR Contact: 09/25/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

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: 07/30/2018
Date Data Arrived at EDR: 07/31/2018
Date Made Active in Reports: 09/07/2018

Number of Days to Update: 38

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 10/30/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

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

Date of Government Version: 07/30/2018 Date Data Arrived at EDR: 07/31/2018 Date Made Active in Reports: 09/07/2018

Number of Days to Update: 38

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 10/30/2018

Next Scheduled EDR Contact: 02/11/2019 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: 08/08/2018 Date Data Arrived at EDR: 08/10/2018 Date Made Active in Reports: 08/24/2018

Number of Days to Update: 14

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320 Last EDR Contact: 11/14/2018

Next Scheduled EDR Contact: 02/25/2019 Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001 Date Data Arrived at EDR: 02/28/2001 Date Made Active in Reports: 03/29/2001

Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)

Telephone: 707-570-3769 Last EDR Contact: 08/01/2011

Next Scheduled EDR Contact: 11/14/2011 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 Date Data Arrived at EDR: 02/26/2004 Date Made Active in Reports: 03/24/2004

Number of Days to Update: 27

Telephone: 760-776-8943 Last EDR Contact: 08/01/2011

Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/10/2018 Date Data Arrived at EDR: 09/12/2018 Date Made Active in Reports: 10/08/2018

Number of Days to Update: 26

Source: State Water Resources Control Board

Telephone: see region list Last EDR Contact: 09/12/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Quarterly

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources

Control Board's LUST database.

Date of Government Version: 03/01/2001 Date Data Arrived at EDR: 04/23/2001 Date Made Active in Reports: 05/21/2001

Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)

Telephone: 858-637-5595 Last EDR Contact: 09/26/2011

Next Scheduled EDR Contact: 01/09/2012 Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005 Date Data Arrived at EDR: 06/07/2005 Date Made Active in Reports: 06/29/2005

Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)

Telephone: 760-241-7365 Last EDR Contact: 09/12/2011

Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003 Date Data Arrived at EDR: 09/10/2003 Date Made Active in Reports: 10/07/2003

Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)

Telephone: 530-542-5572 Last EDR Contact: 09/12/2011

Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008 Date Data Arrived at EDR: 07/22/2008 Date Made Active in Reports: 07/31/2008

Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)

Telephone: 916-464-4834 Last EDR Contact: 07/01/2011

Next Scheduled EDR Contact: 10/17/2011 Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa

Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004 Date Data Arrived at EDR: 10/20/2004 Date Made Active in Reports: 11/19/2004

Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)

Telephone: 510-622-2433 Last EDR Contact: 09/19/2011

Next Scheduled EDR Contact: 01/02/2012 Data Release Frequency: Quarterly

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003 Date Data Arrived at EDR: 05/19/2003 Date Made Active in Reports: 06/02/2003

Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)

Telephone: 805-542-4786 Last EDR Contact: 07/18/2011

Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004 Date Data Arrived at EDR: 09/07/2004 Date Made Active in Reports: 10/12/2004

Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)

Telephone: 213-576-6710 Last EDR Contact: 09/06/2011

Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005 Date Data Arrived at EDR: 02/15/2005 Date Made Active in Reports: 03/28/2005

Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)

Telephone: 909-782-4496 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/12/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 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: 04/10/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: Environmental Protection Agency Telephone: 415-972-3372

Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/25/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/24/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 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: 04/01/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 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: 05/08/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

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: 04/13/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/12/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA, Region 5 Telephone: 312-886-7439 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/10/2018 Date Data Arrived at EDR: 09/12/2018 Date Made Active in Reports: 10/09/2018

Number of Days to Update: 27

Source: State Water Resources Control Board Telephone: 866-480-1028

Last EDR Contact: 12/12/2018

Next Scheduled EDR Contact: 12/24/2018

Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003 Date Data Arrived at EDR: 04/07/2003 Date Made Active in Reports: 04/25/2003

Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)

Telephone: 707-576-2220 Last EDR Contact: 08/01/2011

Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004 Date Data Arrived at EDR: 10/20/2004 Date Made Active in Reports: 11/19/2004

Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)

Telephone: 510-286-0457 Last EDR Contact: 09/19/2011

Next Scheduled EDR Contact: 01/02/2012 Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006 Date Data Arrived at EDR: 05/18/2006 Date Made Active in Reports: 06/15/2006

Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)

Telephone: 805-549-3147 Last EDR Contact: 07/18/2011

Next Scheduled EDR Contact: 10/31/2011 Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004 Date Data Arrived at EDR: 11/18/2004 Date Made Active in Reports: 01/04/2005

Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)

Telephone: 213-576-6600 Last EDR Contact: 07/01/2011

Next Scheduled EDR Contact: 10/17/2011

Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005 Date Data Arrived at EDR: 04/05/2005 Date Made Active in Reports: 04/21/2005

Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)

Telephone: 916-464-3291 Last EDR Contact: 09/12/2011

Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005 Date Data Arrived at EDR: 05/25/2005 Date Made Active in Reports: 06/16/2005

Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch

Telephone: 619-241-6583 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004 Date Data Arrived at EDR: 09/07/2004 Date Made Active in Reports: 10/12/2004

Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region

Telephone: 530-542-5574 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004 Date Data Arrived at EDR: 11/29/2004 Date Made Active in Reports: 01/04/2005

Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region

Telephone: 760-346-7491 Last EDR Contact: 08/01/2011

Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008 Date Data Arrived at EDR: 04/03/2008 Date Made Active in Reports: 04/14/2008

Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)

Telephone: 951-782-3298 Last EDR Contact: 09/12/2011

Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality

from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007 Date Data Arrived at EDR: 09/11/2007 Date Made Active in Reports: 09/28/2007

Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)

Telephone: 858-467-2980 Last EDR Contact: 08/08/2011

Next Scheduled EDR Contact: 11/21/2011 Data Release Frequency: Annually

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017 Date Data Arrived at EDR: 05/30/2017 Date Made Active in Reports: 10/13/2017

Number of Days to Update: 136

Source: FEMA

Telephone: 202-646-5797 Last EDR Contact: 10/10/2018

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 09/10/2018 Date Data Arrived at EDR: 09/12/2018 Date Made Active in Reports: 10/03/2018

Number of Days to Update: 21

Source: SWRCB Telephone: 916-341-5851 Last EDR Contact: 09/12/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Semi-Annually

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 09/10/2018 Date Data Arrived at EDR: 09/12/2018 Date Made Active in Reports: 10/03/2018

Number of Days to Update: 21

Source: State Water Resources Control Board

Telephone: 916-327-7844 Last EDR Contact: 09/12/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 09/10/2018 Date Data Arrived at EDR: 09/12/2018 Date Made Active in Reports: 10/09/2018

Number of Days to Update: 27

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/12/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016 Date Data Arrived at EDR: 07/12/2016 Date Made Active in Reports: 09/19/2016

Number of Days to Update: 69

Source: California Environmental Protection Agency

Telephone: 916-327-5092 Last EDR Contact: 09/17/2018

Next Scheduled EDR Contact: 12/31/2018 Data Release Frequency: Quarterly

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: 05/08/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/12/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

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: 04/10/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

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: 04/12/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

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: 04/13/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

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: 04/24/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 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: 04/01/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 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: 04/25/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008 Date Data Arrived at EDR: 04/22/2008 Date Made Active in Reports: 05/19/2008

Number of Days to Update: 27

Source: EPA, Region 7 Telephone: 913-551-7365 Last EDR Contact: 04/20/2009

Next Scheduled EDR Contact: 07/20/2009 Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

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

Date of Government Version: 07/30/2018 Date Data Arrived at EDR: 07/31/2018 Date Made Active in Reports: 09/07/2018

Number of Days to Update: 38

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 10/30/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015 Date Data Arrived at EDR: 09/29/2015 Date Made Active in Reports: 02/18/2016

Number of Days to Update: 142

Source: EPA, Region 1 Telephone: 617-918-1102 Last EDR Contact: 09/24/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process

Date of Government Version: 09/24/2018 Date Data Arrived at EDR: 09/25/2018 Date Made Active in Reports: 10/15/2018

Number of Days to Update: 20

Source: State Water Resources Control Board

Telephone: 916-323-7905 Last EDR Contact: 09/25/2018

Next Scheduled EDR Contact: 01/07/2019 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: 09/18/2018 Date Data Arrived at EDR: 09/18/2018 Date Made Active in Reports: 11/09/2018

Number of Days to Update: 52

Source: Environmental Protection Agency

Telephone: 202-566-2777 Last EDR Contact: 09/18/2018

Next Scheduled EDR Contact: 12/31/2018 Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000 Date Data Arrived at EDR: 04/10/2000 Date Made Active in Reports: 05/10/2000

Number of Days to Update: 30

Source: State Water Resources Control Board

Telephone: 916-227-4448 Last EDR Contact: 10/25/2018

Next Scheduled EDR Contact: 02/11/2019
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 09/10/2018 Date Data Arrived at EDR: 09/12/2018 Date Made Active in Reports: 10/15/2018

Number of Days to Update: 33

Source: Department of Conservation

Telephone: 916-323-3836 Last EDR Contact: 09/12/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing A listing of registered waste tire haulers.

Date of Government Version: 09/26/2018 Date Data Arrived at EDR: 09/28/2018 Date Made Active in Reports: 11/01/2018

Number of Days to Update: 34

Source: Integrated Waste Management Board

Telephone: 916-341-6422 Last EDR Contact: 08/07/2018

Next Scheduled EDR Contact: 02/25/2019 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: 10/25/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: Varies

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.

County and northern imperial County, Californi

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: 10/22/2018

Next Scheduled EDR Contact: 02/04/2019
Data Release Frequency: No Update Planned

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

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015

Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service

Telephone: 301-443-1452 Last EDR Contact: 11/02/2018

Next Scheduled EDR Contact: 02/11/2019

Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 09/21/2018 Date Data Arrived at EDR: 09/21/2018 Date Made Active in Reports: 11/09/2018

Number of Days to Update: 49

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 11/26/2018

Next Scheduled EDR Contact: 03/11/2019
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005 Date Data Arrived at EDR: 08/03/2006 Date Made Active in Reports: 08/24/2006

Number of Days to Update: 21

Source: Department of Toxic Substance Control

Telephone: 916-323-3400 Last EDR Contact: 02/23/2009

Next Scheduled EDR Contact: 05/25/2009 Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 07/30/2018 Date Data Arrived at EDR: 07/31/2018 Date Made Active in Reports: 09/07/2018

Number of Days to Update: 38

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 10/30/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 06/12/2018 Date Made Active in Reports: 08/06/2018

Number of Days to Update: 55

Source: Department of Toxic Substances Control

Telephone: 916-255-6504 Last EDR Contact: 11/01/2018

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995 Date Data Arrived at EDR: 08/30/1995 Date Made Active in Reports: 09/26/1995

Number of Days to Update: 27

Source: State Water Resources Control Board

Telephone: 916-227-4364 Last EDR Contact: 01/26/2009

Next Scheduled EDR Contact: 04/27/2009 Data Release Frequency: No Update Planned

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 10/22/2018 Date Data Arrived at EDR: 10/23/2018 Date Made Active in Reports: 11/30/2018

Number of Days to Update: 38

Source: CalEPA

Telephone: 916-323-2514 Last EDR Contact: 10/23/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Quarterly

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: 09/21/2018 Date Data Arrived at EDR: 09/21/2018 Date Made Active in Reports: 11/09/2018

Number of Days to Update: 49

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 11/26/2018

Next Scheduled EDR Contact: 03/11/2019 Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

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

Date of Government Version: 06/01/1994 Date Data Arrived at EDR: 07/07/2005 Date Made Active in Reports: 08/11/2005

Number of Days to Update: 35

Source: State Water Resources Control Board

Telephone: N/A

Last EDR Contact: 06/03/2005 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 03/28/2018 Date Data Arrived at EDR: 05/25/2018 Date Made Active in Reports: 07/10/2018

Number of Days to Update: 46

Source: Department of Public Health Telephone: 707-463-4466 Last EDR Contact: 11/26/2018

Next Scheduled EDR Contact: 03/11/2019 Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990 Date Data Arrived at EDR: 01/25/1991 Date Made Active in Reports: 02/12/1991

Number of Days to Update: 18

Source: State Water Resources Control Board

Telephone: 916-341-5851 Last EDR Contact: 07/26/2001 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 09/11/2018 Date Data Arrived at EDR: 09/12/2018 Date Made Active in Reports: 10/11/2018

Number of Days to Update: 29

Source: San Francisco County Department of Public Health

Telephone: 415-252-3896 Last EDR Contact: 11/01/2018

Next Scheduled EDR Contact: 02/18/2019

Data Release Frequency: Varies

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 10/22/2018 Date Data Arrived at EDR: 10/23/2018 Date Made Active in Reports: 11/30/2018

Number of Days to Update: 38

Source: California Environmental Protection Agency

Telephone: 916-323-2514 Last EDR Contact: 10/23/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Quarterly

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994 Date Data Arrived at EDR: 09/05/1995 Date Made Active in Reports: 09/29/1995

Number of Days to Update: 24

Source: California Environmental Protection Agency

Telephone: 916-341-5851 Last EDR Contact: 12/28/1998 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 08/29/2018 Date Data Arrived at EDR: 08/30/2018 Date Made Active in Reports: 10/01/2018

Number of Days to Update: 32

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 11/29/2018

Next Scheduled EDR Contact: 03/18/2019

Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 08/13/2018 Date Data Arrived at EDR: 10/04/2018 Date Made Active in Reports: 11/16/2018

Number of Days to Update: 43

Source: Environmental Protection Agency

Telephone: 202-564-6023 Last EDR Contact: 11/27/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Semi-Annually

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: 09/04/2018 Date Data Arrived at EDR: 09/05/2018 Date Made Active in Reports: 10/02/2018

Number of Days to Update: 27

Source: DTSC and SWRCB Telephone: 916-323-3400 Last EDR Contact: 12/05/2018

Next Scheduled EDR Contact: 03/18/2019 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: 03/26/2018 Date Data Arrived at EDR: 03/27/2018 Date Made Active in Reports: 06/08/2018

Number of Days to Update: 73

Source: U.S. Department of Transportation

Telephone: 202-366-4555 Last EDR Contact: 09/25/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material

incidents (accidental releases or spills).

Date of Government Version: 04/06/2018 Date Data Arrived at EDR: 04/24/2018 Date Made Active in Reports: 06/14/2018

Number of Days to Update: 51

Source: Office of Emergency Services

Telephone: 916-845-8400 Last EDR Contact: 07/27/2018

Next Scheduled EDR Contact: 11/05/2018 Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/10/2018 Date Data Arrived at EDR: 09/12/2018 Date Made Active in Reports: 10/08/2018

Number of Days to Update: 26

Source: State Water Quality Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/12/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/10/2018 Date Data Arrived at EDR: 09/12/2018 Date Made Active in Reports: 10/09/2018

Number of Days to Update: 27

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/12/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012 Date Data Arrived at EDR: 01/03/2013 Date Made Active in Reports: 02/22/2013 Number of Days to Update: 50

Source: FirstSearch Telephone: N/A

Last EDR Contact: 01/03/2013 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

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

Date of Government Version: 03/01/2018 Date Data Arrived at EDR: 03/28/2018 Date Made Active in Reports: 06/22/2018

Number of Days to Update: 86

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 12/03/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015 Date Data Arrived at EDR: 07/08/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 97

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285 Last EDR Contact: 11/19/2018

Next Scheduled EDR Contact: 03/04/2019

Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 11/10/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 62

Source: USGS

Telephone: 888-275-8747 Last EDR Contact: 10/12/2018

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 02/06/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 339

Source: U.S. Geological Survey Telephone: 888-275-8747 Last EDR Contact: 10/12/2018

Next Scheduled EDR Contact: 01/21/2019

Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017 Date Data Arrived at EDR: 02/03/2017 Date Made Active in Reports: 04/07/2017

Number of Days to Update: 63

Source: Environmental Protection Agency

Telephone: 615-532-8599 Last EDR Contact: 11/16/2018

Next Scheduled EDR Contact: 02/25/2019 Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 08/31/2018 Date Data Arrived at EDR: 09/25/2018 Date Made Active in Reports: 11/09/2018

Number of Days to Update: 45

Source: Environmental Protection Agency

Telephone: 202-566-1917 Last EDR Contact: 09/25/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013 Date Data Arrived at EDR: 03/21/2014 Date Made Active in Reports: 06/17/2014

Number of Days to Update: 88

Source: Environmental Protection Agency

Telephone: 617-520-3000 Last EDR Contact: 11/05/2018

Next Scheduled EDR Contact: 02/18/2019 Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017 Date Data Arrived at EDR: 05/08/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 73

Source: Environmental Protection Agency

Telephone: 703-308-4044 Last EDR Contact: 11/09/2018

Next Scheduled EDR Contact: 02/18/2019 Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018

Number of Days to Update: 198

Source: EPA

Telephone: 202-260-5521 Last EDR Contact: 09/21/2018

Next Scheduled EDR Contact: 12/31/2018 Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2016 Date Data Arrived at EDR: 01/10/2018 Date Made Active in Reports: 01/12/2018

Number of Days to Update: 2

Source: EPA

Telephone: 202-566-0250 Last EDR Contact: 11/16/2018

Next Scheduled EDR Contact: 03/04/2019 Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009 Date Data Arrived at EDR: 12/10/2010 Date Made Active in Reports: 02/25/2011

Number of Days to Update: 77

Source: EPA

Telephone: 202-564-4203 Last EDR Contact: 10/24/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 08/13/2018 Date Data Arrived at EDR: 10/04/2018 Date Made Active in Reports: 11/16/2018

Number of Days to Update: 43

Source: EPA

Telephone: 703-416-0223 Last EDR Contact: 11/27/2018

Next Scheduled EDR Contact: 03/18/2019 Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2018 Date Data Arrived at EDR: 08/22/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 44

Source: Environmental Protection Agency

Telephone: 202-564-8600 Last EDR Contact: 10/23/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995 Date Data Arrived at EDR: 07/03/1995 Date Made Active in Reports: 08/07/1995

Number of Days to Update: 35

Source: EPA

Telephone: 202-564-4104 Last EDR Contact: 06/02/2008

Next Scheduled EDR Contact: 09/01/2008 Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 08/13/2018 Date Data Arrived at EDR: 10/04/2018 Date Made Active in Reports: 11/09/2018

Number of Days to Update: 36

Source: EPA

Telephone: 202-564-6023 Last EDR Contact: 10/04/2018

Next Scheduled EDR Contact: 02/18/2019 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: 09/14/2018 Date Data Arrived at EDR: 10/11/2018 Date Made Active in Reports: 12/07/2018

Number of Days to Update: 57

Source: EPA

Telephone: 202-566-0500 Last EDR Contact: 10/11/2018

Next Scheduled EDR Contact: 01/21/2019 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: 11/18/2016 Date Data Arrived at EDR: 11/23/2016 Date Made Active in Reports: 02/10/2017

Number of Days to Update: 79

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 10/09/2018

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-566-1667 Last EDR Contact: 08/18/2017

Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA Telephone: 202-566-1667 Last EDR Contact: 08/18/2017

Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016 Date Data Arrived at EDR: 09/08/2016 Date Made Active in Reports: 10/21/2016

Number of Days to Update: 43

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169 Last EDR Contact: 10/11/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 08/07/2009 Date Made Active in Reports: 10/22/2009

Number of Days to Update: 76

Source: Department of Energy Telephone: 202-586-8719 Last EDR Contact: 12/05/2018

Next Scheduled EDR Contact: 03/18/2019 Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014 Date Data Arrived at EDR: 09/10/2014 Date Made Active in Reports: 10/20/2014

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: N/A

Last EDR Contact: 12/03/2018

Next Scheduled EDR Contact: 03/18/2019

Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017 Date Data Arrived at EDR: 11/30/2017 Date Made Active in Reports: 12/15/2017

Number of Days to Update: 15

Source: Environmental Protection Agency

Telephone: 202-566-0517 Last EDR Contact: 10/26/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S.

Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 10/02/2018 Date Data Arrived at EDR: 10/03/2018 Date Made Active in Reports: 11/09/2018

Number of Days to Update: 37

Source: Environmental Protection Agency

Telephone: 202-343-9775 Last EDR Contact: 10/03/2018

Next Scheduled EDR Contact: 01/14/2019 Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2007

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2008

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012 Date Data Arrived at EDR: 08/07/2012 Date Made Active in Reports: 09/18/2012

Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety

Telephone: 202-366-4595 Last EDR Contact: 10/30/2018

Next Scheduled EDR Contact: 02/11/2019 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: 09/30/2018 Date Data Arrived at EDR: 10/12/2018 Date Made Active in Reports: 12/07/2018

Number of Days to Update: 56

Source: Department of Justice, Consent Decree Library

Telephone: Varies

Last EDR Contact: 10/01/2018

Next Scheduled EDR Contact: 12/31/2018 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: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Lindsto: 318

Number of Days to Update: 218

Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 11/21/2018

Next Scheduled EDR Contact: 03/04/2019 Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017

Number of Days to Update: 546

Source: USGS Telephone: 202-208-3710

Last EDR Contact: 10/09/2018 Next Scheduled EDR Contact: 01/21/2019

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017 Date Data Arrived at EDR: 09/11/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 3

Source: Department of Energy Telephone: 202-586-3559 Last EDR Contact: 11/01/2018

Next Scheduled EDR Contact: 02/18/2019 Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 06/23/2017 Date Data Arrived at EDR: 10/11/2017 Date Made Active in Reports: 11/03/2017

Number of Days to Update: 23

Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 11/16/2018

Next Scheduled EDR Contact: 03/04/2019 Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 08/13/2018 Date Data Arrived at EDR: 10/04/2018 Date Made Active in Reports: 11/16/2018

Number of Days to Update: 43

Source: Environmental Protection Agency

Telephone: 703-603-8787 Last EDR Contact: 11/27/2018

Next Scheduled EDR Contact: 01/14/2019 Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001 Date Data Arrived at EDR: 10/27/2010 Date Made Active in Reports: 12/02/2010

Number of Days to Update: 36

Source: American Journal of Public Health

Telephone: 703-305-6451 Last EDR Contact: 12/02/2009 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016 Date Data Arrived at EDR: 10/26/2016 Date Made Active in Reports: 02/03/2017

Number of Days to Update: 100

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 09/26/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data A listing of minor source facilities.

Date of Government Version: 10/12/2016 Date Data Arrived at EDR: 10/26/2016 Date Made Active in Reports: 02/03/2017

Number of Days to Update: 100

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 09/26/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2018 Date Data Arrived at EDR: 08/29/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 37

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959 Last EDR Contact: 11/30/2018

Next Scheduled EDR Contact: 03/11/2019 Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005 Date Data Arrived at EDR: 02/29/2008 Date Made Active in Reports: 04/18/2008

Number of Days to Update: 49

Source: USGS

Telephone: 703-648-7709 Last EDR Contact: 11/30/2018

Next Scheduled EDR Contact: 03/11/2019 Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011 Date Data Arrived at EDR: 06/08/2011 Date Made Active in Reports: 09/13/2011

Number of Days to Update: 97

Source: USGS

Telephone: 703-648-7709 Last EDR Contact: 11/30/2018

Next Scheduled EDR Contact: 03/11/2019 Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/10/2018 Date Data Arrived at EDR: 09/11/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 3

Source: Department of Interior Telephone: 202-208-2609 Last EDR Contact: 12/06/2018

Next Scheduled EDR Contact: 03/25/2019 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: 08/07/2018 Date Data Arrived at EDR: 09/05/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 30

Source: EPA

Telephone: (415) 947-8000 Last EDR Contact: 12/05/2018

Next Scheduled EDR Contact: 03/18/2019 Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018 Date Data Arrived at EDR: 07/26/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 71

Source: Environmental Protection Agency

Telephone: 202-564-0527 Last EDR Contact: 11/30/2018

Next Scheduled EDR Contact: 03/11/2019 Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/30/2017 Date Data Arrived at EDR: 06/19/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 87

Source: Department of Defense Telephone: 703-704-1564 Last EDR Contact: 10/15/2018

Next Scheduled EDR Contact: 01/28/2019 Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/02/2018 Date Data Arrived at EDR: 09/05/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 9

Source: Environmental Protection Agency

Telephone: 202-564-2280 Last EDR Contact: 12/31/2018

Next Scheduled EDR Contact: 03/18/2019 Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels

Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/22/2018 Date Data Arrived at EDR: 08/22/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 44

Source: EPA

Telephone: 800-385-6164 Last EDR Contact: 11/19/2018

Next Scheduled EDR Contact: 03/04/2019 Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of

Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989 Date Data Arrived at EDR: 07/27/1994 Date Made Active in Reports: 08/02/1994

Number of Days to Update: 6

Source: Department of Health Services

Telephone: 916-255-2118 Last EDR Contact: 05/31/1994 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste

Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 09/24/2018 Date Data Arrived at EDR: 09/25/2018 Date Made Active in Reports: 10/16/2018

Number of Days to Update: 21

Source: CAL EPA/Office of Emergency Information

Telephone: 916-323-3400 Last EDR Contact: 09/25/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 09/11/2018 Date Data Arrived at EDR: 09/12/2018 Date Made Active in Reports: 09/19/2018

Number of Days to Update: 7

Source: San Francisco County Department of Environmental Health

Telephone: 415-252-3896 Last EDR Contact: 11/01/2018

Next Scheduled EDR Contact: 02/18/2019 Data Release Frequency: Varies

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 08/28/2018 Date Data Arrived at EDR: 08/30/2018 Date Made Active in Reports: 11/01/2018

Number of Days to Update: 63

Source: Livermore-Pleasanton Fire Department

Telephone: 925-454-2361 Last EDR Contact: 12/06/2018

Next Scheduled EDR Contact: 02/25/2019 Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 10/15/2018 Date Data Arrived at EDR: 10/16/2018 Date Made Active in Reports: 11/16/2018

Number of Days to Update: 31

Source: Antelope Valley Air Quality Management District

Telephone: 661-723-8070 Last EDR Contact: 11/29/2018

Next Scheduled EDR Contact: 03/18/2019

Data Release Frequency: Varies

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: 08/30/2018 Date Data Arrived at EDR: 09/27/2018 Date Made Active in Reports: 11/01/2018

Number of Days to Update: 35

Source: Department of Toxic Substance Control

Telephone: 916-327-4498 Last EDR Contact: 11/29/2018

Next Scheduled EDR Contact: 03/18/2019 Data Release Frequency: Annually

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 10/04/2018 Date Data Arrived at EDR: 10/05/2018 Date Made Active in Reports: 11/01/2018

Number of Days to Update: 27

Source: South Coast Air Quality Management District

Telephone: 909-396-3211 Last EDR Contact: 11/26/2018

Next Scheduled EDR Contact: 03/11/2019 Data Release Frequency: Varies

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 06/20/2018 Date Made Active in Reports: 08/06/2018

Number of Days to Update: 47

Source: California Air Resources Board

Telephone: 916-322-2990 Last EDR Contact: 09/21/2018

Next Scheduled EDR Contact: 12/31/2018 Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 08/01/2018 Date Data Arrived at EDR: 08/02/2018 Date Made Active in Reports: 09/07/2018

Number of Days to Update: 36

Source: State Water Resoruces Control Board

Telephone: 916-445-9379 Last EDR Contact: 11/01/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 10/19/2018 Date Data Arrived at EDR: 10/23/2018 Date Made Active in Reports: 11/30/2018

Number of Days to Update: 38

Source: Department of Toxic Substances Control

Telephone: 916-255-3628 Last EDR Contact: 10/22/2018

Next Scheduled EDR Contact: 02/04/2019 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: 08/14/2018 Date Data Arrived at EDR: 08/16/2018 Date Made Active in Reports: 09/10/2018

Number of Days to Update: 25

Source: California Integrated Waste Management Board

Telephone: 916-341-6066 Last EDR Contact: 11/07/2018

Next Scheduled EDR Contact: 02/25/2019 Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 10/10/2018 Date Made Active in Reports: 11/16/2018

Number of Days to Update: 37

Source: California Environmental Protection Agency

Telephone: 916-255-1136 Last EDR Contact: 10/10/2018

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 08/20/2018 Date Data Arrived at EDR: 08/21/2018 Date Made Active in Reports: 09/10/2018

Number of Days to Update: 20

Source: Department of Toxic Subsances Control

Telephone: 877-786-9427 Last EDR Contact: 11/19/2018

Next Scheduled EDR Contact: 03/04/2019 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 [CALSITES]. This listing is no longer updated by the

state agency.

Date of Government Version: 04/01/2001 Date Data Arrived at EDR: 01/22/2009 Date Made Active in Reports: 04/08/2009

Number of Days to Update: 76

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 01/22/2009 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

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

Date of Government Version: 08/20/2018 Date Data Arrived at EDR: 08/21/2018 Date Made Active in Reports: 09/10/2018

Number of Days to Update: 20

Source: Department of Toxic Substances Control

Telephone: 916-323-3400 Last EDR Contact: 11/19/2018

Next Scheduled EDR Contact: 03/04/2019 Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 10/09/2018 Date Data Arrived at EDR: 10/10/2018 Date Made Active in Reports: 11/16/2018

Number of Days to Update: 37

Source: Department of Toxic Substances Control

Telephone: 916-440-7145 Last EDR Contact: 10/10/2018

Next Scheduled EDR Contact: 01/21/2019
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing

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

Date of Government Version: 09/10/2018 Date Data Arrived at EDR: 09/12/2018 Date Made Active in Reports: 10/09/2018

Number of Days to Update: 27

Source: Department of Conservation

Telephone: 916-322-1080 Last EDR Contact: 09/12/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Quarterly

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: 08/28/2018 Date Data Arrived at EDR: 09/05/2018 Date Made Active in Reports: 10/03/2018

Number of Days to Update: 28

Source: Department of Public Health Telephone: 916-558-1784 Last EDR Contact: 12/05/2018

Next Scheduled EDR Contact: 03/18/2019 Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 08/09/2018 Date Data Arrived at EDR: 08/10/2018 Date Made Active in Reports: 09/10/2018

Number of Days to Update: 31

Source: State Water Resources Control Board

Telephone: 916-445-9379 Last EDR Contact: 11/14/2018

Next Scheduled EDR Contact: 02/25/2019 Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 09/04/2018 Date Data Arrived at EDR: 09/05/2018 Date Made Active in Reports: 10/03/2018

Number of Days to Update: 28

Source: Department of Pesticide Regulation

Telephone: 916-445-4038 Last EDR Contact: 12/05/2018

Next Scheduled EDR Contact: 03/18/2019 Data Release Frequency: Quarterly

PROC: Certified Processors Database A listing of certified processors.

> Date of Government Version: 09/10/2018 Date Data Arrived at EDR: 09/12/2018 Date Made Active in Reports: 10/15/2018

Number of Days to Update: 33

Source: Department of Conservation

Telephone: 916-323-3836 Last EDR Contact: 09/12/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

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

Date of Government Version: 09/19/2018 Date Data Arrived at EDR: 09/20/2018 Date Made Active in Reports: 10/19/2018

Number of Days to Update: 29

Source: State Water Resources Control Board

Telephone: 916-445-3846 Last EDR Contact: 09/17/2018

Next Scheduled EDR Contact: 12/31/2018 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: 04/27/2018 Date Data Arrived at EDR: 06/13/2018 Date Made Active in Reports: 07/17/2018

Number of Days to Update: 34

Source: Deaprtment of Conservation Telephone: 916-445-2408

Last EDR Contact: 09/13/2018 Next Scheduled EDR Contact: 12/24/2018

Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 05/08/2018 Date Data Arrived at EDR: 07/11/2018 Date Made Active in Reports: 09/13/2018

Number of Days to Update: 64

Source: RWQCB, Central Valley Region

Telephone: 559-445-5577 Last EDR Contact: 10/12/2018

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007 Date Data Arrived at EDR: 06/20/2007 Date Made Active in Reports: 06/29/2007

Number of Days to Update: 9

Source: State Water Resources Control Board

Telephone: 916-341-5227 Last EDR Contact: 11/14/2018

Next Scheduled EDR Contact: 03/04/2019 Data Release Frequency: Quarterly

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 10/22/2018 Date Data Arrived at EDR: 10/23/2018 Date Made Active in Reports: 11/30/2018

Number of Days to Update: 38

Source: California Environmental Protection Agency

Telephone: 916-323-2514 Last EDR Contact: 10/23/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009 Date Data Arrived at EDR: 07/21/2009 Date Made Active in Reports: 08/03/2009

Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board

Telephone: 213-576-6726 Last EDR Contact: 09/25/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 09/10/2018 Date Data Arrived at EDR: 09/12/2018 Date Made Active in Reports: 10/09/2018

Number of Days to Update: 27

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/12/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

Date of Government Version: 09/10/2018 Date Data Arrived at EDR: 09/12/2018 Date Made Active in Reports: 10/09/2018

Number of Days to Update: 27

Source: State Water Resource Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/12/2018

Next Scheduled EDR Contact: 12/24/2018

Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 09/10/2018 Date Data Arrived at EDR: 09/12/2018 Date Made Active in Reports: 10/09/2018

Number of Days to Update: 27

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/12/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Varies

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 09/04/2018 Date Data Arrived at EDR: 09/05/2018 Date Made Active in Reports: 10/02/2018

Number of Days to Update: 27

Source: State Water Resources Control Board

Telephone: 866-794-4977 Last EDR Contact: 12/04/2018

Next Scheduled EDR Contact: 03/18/2019 Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 09/10/2018 Date Data Arrived at EDR: 09/12/2018 Date Made Active in Reports: 10/09/2018

Number of Days to Update: 27

Source: State Water Resources Control Board

Telephone: 916-341-5810 Last EDR Contact: 09/12/2018

Next Scheduled EDR Contact: 12/24/2018
Data Release Frequency: Quarterly

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 09/10/2018 Date Data Arrived at EDR: 09/12/2018 Date Made Active in Reports: 10/09/2018

Number of Days to Update: 27

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/12/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)

Projects sites

Date of Government Version: 09/10/2018 Date Data Arrived at EDR: 09/12/2018 Date Made Active in Reports: 10/09/2018

Number of Days to Update: 27

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/12/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Varies

SAMPLING POINT: Sampling Point? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 09/10/2018 Date Data Arrived at EDR: 09/12/2018 Date Made Active in Reports: 10/09/2018

Number of Days to Update: 27

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/12/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 09/10/2018 Date Data Arrived at EDR: 09/12/2018 Date Made Active in Reports: 10/09/2018

Number of Days to Update: 27

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/12/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Varies

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 09/10/2018 Date Data Arrived at EDR: 09/12/2018 Date Made Active in Reports: 10/09/2018

Number of Days to Update: 27

Source: State Water Resources Control Board

Telephone: 866-480-1028 Last EDR Contact: 12/12/2018

Next Scheduled EDR Contact: 12/24/2018

Data Release Frequency: Varies

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

North Carbon 45 Page 45 Undertail N/A

North Carbon 45 Page 45 Undertail N/A

Number of Days to Update: N/A Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto 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 Source: EDR, Inc.
Date Data Arrived at EDR: N/A Telephone: N/A
Date Made Active in Reports: N/A Last EDR Contact: N/A

Number of Days to Update: N/A Next Scheduled EDR Contact: N/A

Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical 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 C

umber of Days to Update: N/A Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014

Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery

Telephone: N/A

Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013

Number of Days to Update: 182

Source: State Water Resources Control Board

Telephone: N/A

Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: 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: 10/05/2018 Date Data Arrived at EDR: 10/10/2018 Date Made Active in Reports: 11/01/2018

Number of Days to Update: 22

Source: Alameda County Environmental Health Services

Telephone: 510-567-6700 Last EDR Contact: 10/05/2018

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 10/05/2018 Date Data Arrived at EDR: 10/10/2018 Date Made Active in Reports: 11/02/2018

Number of Days to Update: 23

Source: Alameda County Environmental Health Services

Telephone: 510-567-6700 Last EDR Contact: 10/05/2018

Next Scheduled EDR Contact: 04/24/2047 Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List

Cupa Facility List

Date of Government Version: 07/01/2018 Date Data Arrived at EDR: 07/24/2018 Date Made Active in Reports: 08/20/2018

Number of Days to Update: 27

Source: Amador County Environmental Health

Telephone: 209-223-6439 Last EDR Contact: 11/29/2018

Next Scheduled EDR Contact: 03/18/2019

Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing

Cupa facility list.

Date of Government Version: 04/21/2017 Date Data Arrived at EDR: 04/25/2017 Date Made Active in Reports: 08/09/2017

Number of Days to Update: 106

Source: Public Health Department Telephone: 530-538-7149 Last EDR Contact: 10/05/2018

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing

Cupa Facility Listing

Date of Government Version: 08/02/2018 Date Data Arrived at EDR: 08/06/2018 Date Made Active in Reports: 08/20/2018

Number of Days to Update: 14

Source: Calveras County Environmental Health

Telephone: 209-754-6399 Last EDR Contact: 09/24/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List

Cupa facility list.

Date of Government Version: 05/23/2018 Date Data Arrived at EDR: 05/24/2018 Date Made Active in Reports: 07/13/2018

Number of Days to Update: 50

Source: Health & Human Services Telephone: 530-458-0396 Last EDR Contact: 11/14/2018

Next Scheduled EDR Contact: 02/18/2019 Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 08/20/2018 Date Data Arrived at EDR: 08/21/2018 Date Made Active in Reports: 09/11/2018

Number of Days to Update: 21

Source: Contra Costa Health Services Department

Telephone: 925-646-2286 Last EDR Contact: 10/29/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List

Cupa Facility list

Date of Government Version: 08/16/2018 Date Data Arrived at EDR: 11/06/2018 Date Made Active in Reports: 11/14/2018

Number of Days to Update: 8

Source: Del Norte County Environmental Health Division

Telephone: 707-465-0426 Last EDR Contact: 10/25/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: Varies

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EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List

CUPA facility list.

Date of Government Version: 09/04/2018 Date Data Arrived at EDR: 09/05/2018 Date Made Active in Reports: 09/18/2018

Number of Days to Update: 13

Source: El Dorado County Environmental Management Department

Telephone: 530-621-6623 Last EDR Contact: 11/16/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: 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: 10/16/2018 Date Data Arrived at EDR: 10/18/2018 Date Made Active in Reports: 11/14/2018

Number of Days to Update: 27

Source: Dept. of Community Health Telephone: 559-445-3271 Last EDR Contact: 10/15/2018

Next Scheduled EDR Contact: 01/14/2019 Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List

Cupa facility list

Date of Government Version: 01/22/2018 Date Data Arrived at EDR: 01/24/2018 Date Made Active in Reports: 03/14/2018

Number of Days to Update: 49

Source: Glenn County Air Pollution Control District

Telephone: 830-934-6500 Last EDR Contact: 10/22/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List

CUPA facility list.

Date of Government Version: 07/11/2018 Date Data Arrived at EDR: 07/13/2018 Date Made Active in Reports: 08/22/2018

Number of Days to Update: 40

Source: Humboldt County Environmental Health

Telephone: N/A

Last EDR Contact: 11/19/2018

Next Scheduled EDR Contact: 03/04/2019 Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List

Cupa facility list.

Date of Government Version: 10/22/2018 Date Data Arrived at EDR: 10/25/2018 Date Made Active in Reports: 11/14/2018

Number of Days to Update: 20

Source: San Diego Border Field Office

Telephone: 760-339-2777 Last EDR Contact: 10/22/2018

Next Scheduled EDR Contact: 02/04/2019

Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List

Cupa facility list.

Date of Government Version: 04/02/2018 Date Data Arrived at EDR: 04/03/2018 Date Made Active in Reports: 06/14/2018

Number of Days to Update: 72

Source: Inyo County Environmental Health Services

Telephone: 760-878-0238 Last EDR Contact: 11/14/2018

Next Scheduled EDR Contact: 03/04/2019 Data Release Frequency: Varies

KERN COUNTY:

UST KERN: Underground Storage Tank Sites & Tank Listing

Kern County Sites and Tanks Listing.

Date of Government Version: 07/20/2018 Date Data Arrived at EDR: 07/25/2018 Date Made Active in Reports: 09/12/2018

Number of Days to Update: 49

Source: Kern County Environment Health Services Department

Telephone: 661-862-8700 Last EDR Contact: 11/01/2018

Next Scheduled EDR Contact: 02/18/2019 Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: 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: 08/23/2018 Date Data Arrived at EDR: 08/24/2018 Date Made Active in Reports: 09/18/2018

Number of Days to Update: 25

Source: Kings County Department of Public Health

Telephone: 559-584-1411 Last EDR Contact: 11/14/2018

Next Scheduled EDR Contact: 03/04/2019 Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List

Cupa facility list

Date of Government Version: 11/07/2018 Date Data Arrived at EDR: 11/08/2018 Date Made Active in Reports: 11/14/2018

Number of Days to Update: 6

Source: Lake County Environmental Health

Telephone: 707-263-1164 Last EDR Contact: 10/15/2018

Next Scheduled EDR Contact: 01/28/2019 Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List

Cupa facility list

Date of Government Version: 10/15/2018 Date Data Arrived at EDR: 10/23/2018 Date Made Active in Reports: 11/14/2018

Number of Days to Update: 22

Source: Lassen County Environmental Health

Telephone: 530-251-8528 Last EDR Contact: 10/22/2018

Next Scheduled EDR Contact: 02/04/2019

Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: 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: 09/17/2018

Next Scheduled EDR Contact: 12/31/2018
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 09/20/2018 Date Data Arrived at EDR: 10/12/2018 Date Made Active in Reports: 11/16/2018

Number of Days to Update: 35

Source: Department of Public Works

Telephone: 626-458-3517 Last EDR Contact: 10/05/2018

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities Solid Waste Facilities in Los Angeles County.

> Date of Government Version: 10/15/2018 Date Data Arrived at EDR: 10/16/2018 Date Made Active in Reports: 11/16/2018

Number of Days to Update: 31

Source: La County Department of Public Works

Telephone: 818-458-5185 Last EDR Contact: 10/16/2018

Next Scheduled EDR Contact: 01/28/2019

Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2018 Date Data Arrived at EDR: 05/01/2018 Date Made Active in Reports: 05/14/2018

Number of Days to Update: 13

Source: Engineering & Construction Division

Telephone: 213-473-7869 Last EDR Contact: 10/15/2018

Next Scheduled EDR Contact: 01/28/2019 Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 07/01/2018 Date Data Arrived at EDR: 10/16/2018 Date Made Active in Reports: 11/16/2018

Number of Days to Update: 31

Source: Community Health Services Telephone: 323-890-7806 Last EDR Contact: 10/16/2018

Next Scheduled EDR Contact: 01/28/2019 Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017 Date Data Arrived at EDR: 04/19/2017 Date Made Active in Reports: 05/10/2017

Number of Days to Update: 21

Source: City of El Segundo Fire Department

Telephone: 310-524-2236 Last EDR Contact: 10/15/2018

Next Scheduled EDR Contact: 01/28/2019 Data Release Frequency: Semi-Annually

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/09/2017 Date Data Arrived at EDR: 03/10/2017 Date Made Active in Reports: 05/03/2017

Number of Days to Update: 54

Source: City of Long Beach Fire Department

Telephone: 562-570-2563 Last EDR Contact: 10/22/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Annually

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 10/02/2018 Date Data Arrived at EDR: 10/05/2018 Date Made Active in Reports: 11/02/2018

Number of Days to Update: 28

Source: City of Torrance Fire Department

Telephone: 310-618-2973 Last EDR Contact: 10/05/2018

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: 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: 08/30/2018 Date Data Arrived at EDR: 09/04/2018 Date Made Active in Reports: 09/19/2018

Number of Days to Update: 15

Source: Madera County Environmental Health

Telephone: 559-675-7823 Last EDR Contact: 11/14/2018

Next Scheduled EDR Contact: 03/04/2019 Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites Currently permitted USTs in Marin County.

> Date of Government Version: 09/26/2018 Date Data Arrived at EDR: 10/04/2018 Date Made Active in Reports: 11/02/2018

Number of Days to Update: 29

Source: Public Works Department Waste Management

Telephone: 415-473-6647 Last EDR Contact: 10/01/2018

Next Scheduled EDR Contact: 01/14/2019 Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List CUPA facility list.

Date of Government Version: 08/29/2018 Date Data Arrived at EDR: 08/31/2018 Date Made Active in Reports: 09/19/2018

Number of Days to Update: 19

Source: Merced County Environmental Health

Telephone: 209-381-1094 Last EDR Contact: 11/14/2018

Next Scheduled EDR Contact: 03/04/2019 Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List CUPA Facility List

> Date of Government Version: 07/18/2018 Date Data Arrived at EDR: 09/04/2018 Date Made Active in Reports: 09/19/2018

Number of Days to Update: 15

Source: Mono County Health Department

Telephone: 760-932-5580 Last EDR Contact: 12/06/2018

Next Scheduled EDR Contact: 03/11/2019 Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 10/29/2018 Date Data Arrived at EDR: 11/01/2018 Date Made Active in Reports: 11/16/2018

Number of Days to Update: 15

Source: Monterey County Health Department

Telephone: 831-796-1297 Last EDR Contact: 10/01/2018

Next Scheduled EDR Contact: 01/14/2019 Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017 Date Data Arrived at EDR: 01/11/2017 Date Made Active in Reports: 03/02/2017

Number of Days to Update: 50

Source: Napa County Department of Environmental Management

Telephone: 707-253-4269 Last EDR Contact: 11/21/2018

Next Scheduled EDR Contact: 03/11/2019 Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites Underground storage tank sites located in Napa county.

Date of Government Version: 08/27/2018 Date Data Arrived at EDR: 08/28/2018 Date Made Active in Reports: 10/03/2018

Number of Days to Update: 36

Source: Napa County Department of Environmental Management

Telephone: 707-253-4269 Last EDR Contact: 11/26/2018

Next Scheduled EDR Contact: 03/11/2019
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List

CUPA facility list.

Date of Government Version: 11/06/2018 Date Data Arrived at EDR: 11/08/2018 Date Made Active in Reports: 11/14/2018

Number of Days to Update: 6

Source: Community Development Agency

Telephone: 530-265-1467 Last EDR Contact: 10/25/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 07/13/2018 Date Data Arrived at EDR: 08/08/2018 Date Made Active in Reports: 09/10/2018

Number of Days to Update: 33

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 11/05/2018

Next Scheduled EDR Contact: 02/18/2019 Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 07/13/2018 Date Data Arrived at EDR: 08/08/2018 Date Made Active in Reports: 09/10/2018

Number of Days to Update: 33

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 11/05/2018

Next Scheduled EDR Contact: 02/18/2019 Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 07/13/2018 Date Data Arrived at EDR: 08/06/2018 Date Made Active in Reports: 09/12/2018

Number of Days to Update: 37

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 11/06/2018

Next Scheduled EDR Contact: 02/18/2019 Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 09/04/2018 Date Data Arrived at EDR: 09/06/2018 Date Made Active in Reports: 10/03/2018

Number of Days to Update: 27

Source: Placer County Health and Human Services

Telephone: 530-745-2363 Last EDR Contact: 11/29/2018

Next Scheduled EDR Contact: 03/18/2019 Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List

Plumas County CUPA Program facilities.

Date of Government Version: 07/19/2018 Date Data Arrived at EDR: 07/25/2018 Date Made Active in Reports: 09/05/2018

Number of Days to Update: 42

Source: Plumas County Environmental Health

Telephone: 530-283-6355 Last EDR Contact: 10/22/2018

Next Scheduled EDR Contact: 02/04/2019

Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 10/10/2018 Date Data Arrived at EDR: 10/12/2018 Date Made Active in Reports: 10/16/2018

Number of Days to Update: 4

Source: Department of Environmental Health

Telephone: 951-358-5055 Last EDR Contact: 09/17/2018

Next Scheduled EDR Contact: 12/31/2018 Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 10/10/2018 Date Data Arrived at EDR: 10/12/2018 Date Made Active in Reports: 11/05/2018

Number of Days to Update: 24

Source: Department of Environmental Health

Telephone: 951-358-5055 Last EDR Contact: 09/17/2018

Next Scheduled EDR Contact: 12/31/2018 Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 08/03/2018 Date Data Arrived at EDR: 10/02/2018 Date Made Active in Reports: 11/01/2018

Number of Days to Update: 30

Source: Sacramento County Environmental Management

Telephone: 916-875-8406 Last EDR Contact: 10/02/2018

Next Scheduled EDR Contact: 01/14/2019 Data Release Frequency: Quarterly

ML SACRAMENTO: 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: 08/23/2018 Date Data Arrived at EDR: 10/02/2018 Date Made Active in Reports: 11/02/2018

Number of Days to Update: 31

Source: Sacramento County Environmental Management

Telephone: 916-875-8406 Last EDR Contact: 10/02/2018

Next Scheduled EDR Contact: 01/14/2019 Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 08/07/2018 Date Data Arrived at EDR: 08/09/2018 Date Made Active in Reports: 09/05/2018

Number of Days to Update: 27

Source: San Benito County Environmental Health

Telephone: N/A

Last EDR Contact: 11/14/2018

Next Scheduled EDR Contact: 02/18/2019

Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 07/27/2018
Date Data Arrived at EDR: 07/31/2018
Date Made Active in Reports: 09/10/2018

Number of Days to Update: 41

Source: San Bernardino County Fire Department Hazardous Materials Division

Telephone: 909-387-3041 Last EDR Contact: 11/05/2018

Next Scheduled EDR Contact: 02/18/2019 Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: 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: 06/04/2018 Date Data Arrived at EDR: 06/06/2018 Date Made Active in Reports: 07/17/2018

Number of Days to Update: 41

Source: Hazardous Materials Management Division

Telephone: 619-338-2268 Last EDR Contact: 12/05/2018

Next Scheduled EDR Contact: 03/18/2019 Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/18/2018 Date Data Arrived at EDR: 04/24/2018 Date Made Active in Reports: 06/19/2018

Number of Days to Update: 56

Source: Department of Health Services

Telephone: 619-338-2209 Last EDR Contact: 10/22/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 10/22/2018 Date Data Arrived at EDR: 10/23/2018 Date Made Active in Reports: 11/30/2018

Number of Days to Update: 38

Source: Department of Environmental Health

Telephone: 858-505-6874 Last EDR Contact: 10/22/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Varies

SAN DIEGO CO. SAM: 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: 11/29/2018

Next Scheduled EDR Contact: 03/18/2019 Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

LUST SAN FRANCISCO: Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008 Date Data Arrived at EDR: 09/19/2008 Date Made Active in Reports: 09/29/2008

Number of Days to Update: 10

Source: Department Of Public Health San Francisco County

Telephone: 415-252-3920 Last EDR Contact: 11/01/2018

Next Scheduled EDR Contact: 02/18/2019 Data Release Frequency: Quarterly

UST SAN FRANCISCO: Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 09/17/2018 Date Data Arrived at EDR: 09/18/2018 Date Made Active in Reports: 10/03/2018

Number of Days to Update: 15

Source: Department of Public Health

Telephone: 415-252-3920 Last EDR Contact: 11/01/2018

Next Scheduled EDR Contact: 02/18/2019 Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018 Date Data Arrived at EDR: 06/26/2018 Date Made Active in Reports: 07/11/2018

Number of Days to Update: 15

Source: Environmental Health Department

Telephone: N/A

Last EDR Contact: 09/17/2018

Next Scheduled EDR Contact: 12/31/2018 Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List

Cupa Facility List.

Date of Government Version: 08/20/2018 Date Data Arrived at EDR: 08/21/2018 Date Made Active in Reports: 09/07/2018

Number of Days to Update: 17

Source: San Luis Obispo County Public Health Department

Telephone: 805-781-5596 Last EDR Contact: 11/14/2018

Next Scheduled EDR Contact: 03/04/2019 Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 09/18/2018 Date Data Arrived at EDR: 09/20/2018 Date Made Active in Reports: 11/01/2018

Number of Days to Update: 42

Source: San Mateo County Environmental Health Services Division

Telephone: 650-363-1921 Last EDR Contact: 09/10/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 09/18/2018 Date Data Arrived at EDR: 09/20/2018 Date Made Active in Reports: 10/17/2018

Number of Days to Update: 27

Source: San Mateo County Environmental Health Services Division

Telephone: 650-363-1921 Last EDR Contact: 09/10/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: 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: 11/14/2018

Next Scheduled EDR Contact: 03/04/2019

Data Release Frequency: Varies

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List

Cupa facility list

Date of Government Version: 08/17/2018 Date Data Arrived at EDR: 08/22/2018 Date Made Active in Reports: 09/07/2018

Number of Days to Update: 16

Source: Department of Environmental Health

Telephone: 408-918-1973 Last EDR Contact: 11/14/2018

Next Scheduled EDR Contact: 03/04/2019 Data Release Frequency: Varies

HIST LUST SANTA CLARA: 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

LUST SANTA CLARA: 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: 11/21/2018

Next Scheduled EDR Contact: 03/11/2019 Data Release Frequency: Annually

SAN JOSE HAZMAT: Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 08/01/2018 Date Data Arrived at EDR: 08/06/2018 Date Made Active in Reports: 09/11/2018

Number of Days to Update: 36

Source: City of San Jose Fire Department

Telephone: 408-535-7694 Last EDR Contact: 11/01/2018

Next Scheduled EDR Contact: 02/18/2019 Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List

CUPA facility listing.

Date of Government Version: 01/21/2017 Date Data Arrived at EDR: 02/22/2017 Date Made Active in Reports: 05/23/2017

Number of Days to Update: 90

Source: Santa Cruz County Environmental Health

Telephone: 831-464-2761 Last EDR Contact: 11/14/2018

Next Scheduled EDR Contact: 03/04/2019

Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List

Cupa Facility List.

Date of Government Version: 06/15/2017 Date Data Arrived at EDR: 06/19/2017 Date Made Active in Reports: 08/09/2017

Number of Days to Update: 51

Source: Shasta County Department of Resource Management

Telephone: 530-225-5789 Last EDR Contact: 11/14/2018

Next Scheduled EDR Contact: 03/04/2019 Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 08/29/2018 Date Data Arrived at EDR: 09/04/2018 Date Made Active in Reports: 10/17/2018

Number of Days to Update: 43

Source: Solano County Department of Environmental Management

Telephone: 707-784-6770 Last EDR Contact: 11/29/2018

Next Scheduled EDR Contact: 03/18/2019 Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 08/29/2018 Date Data Arrived at EDR: 09/04/2018 Date Made Active in Reports: 10/18/2018

Number of Days to Update: 44

Source: Solano County Department of Environmental Management

Telephone: 707-784-6770 Last EDR Contact: 11/29/2018

Next Scheduled EDR Contact: 03/18/2019 Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List

Cupa Facility list

Date of Government Version: 09/24/2018 Date Data Arrived at EDR: 09/25/2018 Date Made Active in Reports: 10/16/2018

Number of Days to Update: 21

Source: County of Sonoma Fire & Emergency Services Department

Telephone: 707-565-1174 Last EDR Contact: 09/24/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 10/02/2018 Date Data Arrived at EDR: 10/04/2018 Date Made Active in Reports: 10/25/2018

Number of Days to Update: 21

Source: Department of Health Services

Telephone: 707-565-6565 Last EDR Contact: 09/24/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List

Cupa facility list

Date of Government Version: 08/14/2018 Date Data Arrived at EDR: 08/16/2018 Date Made Active in Reports: 08/24/2018

Number of Days to Update: 8

Source: Stanislaus County Department of Ennvironmental Protection

Telephone: 209-525-6751 Last EDR Contact: 10/15/2018

Next Scheduled EDR Contact: 01/28/2019 Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 09/18/2018 Date Data Arrived at EDR: 09/20/2018 Date Made Active in Reports: 10/25/2018

Number of Days to Update: 35

Source: Sutter County Department of Agriculture

Telephone: 530-822-7500 Last EDR Contact: 11/29/2018

Next Scheduled EDR Contact: 03/18/2019 Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List

Cupa facilities

Date of Government Version: 07/17/2018 Date Data Arrived at EDR: 08/02/2018 Date Made Active in Reports: 09/07/2018

Number of Days to Update: 36

Source: Tehama County Department of Environmental Health

Telephone: 530-527-8020 Last EDR Contact: 11/29/2018

Next Scheduled EDR Contact: 02/18/2019 Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List

Cupa facility list

Date of Government Version: 10/22/2018 Date Data Arrived at EDR: 10/25/2018 Date Made Active in Reports: 11/14/2018

Number of Days to Update: 20

Source: Department of Toxic Substances Control

Telephone: 760-352-0381 Last EDR Contact: 10/22/2018

Next Scheduled EDR Contact: 02/04/2019

Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List Cupa program facilities

Date of Government Version: 09/13/2018 Date Data Arrived at EDR: 09/14/2018 Date Made Active in Reports: 09/19/2018

Number of Days to Update: 5

Source: Tulare County Environmental Health Services Division

Telephone: 559-624-7400 Last EDR Contact: 11/29/2018

Next Scheduled EDR Contact: 02/18/2019

Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List

Cupa facility list

Date of Government Version: 04/23/2018 Date Data Arrived at EDR: 04/25/2018 Date Made Active in Reports: 06/25/2018

Number of Days to Update: 61

Source: Divison of Environmental Health

Telephone: 209-533-5633 Last EDR Contact: 10/22/2018

Next Scheduled EDR Contact: 02/04/2019

Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: 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: 09/26/2018

Date Data Arrived at EDR: 10/25/2018
Date Made Active in Reports: 11/30/2018

Number of Days to Update: 36

Source: Ventura County Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 10/22/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011 Date Data Arrived at EDR: 12/01/2011 Date Made Active in Reports: 01/19/2012

Number of Days to Update: 49

Source: Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 10/01/2018

Next Scheduled EDR Contact: 01/14/2019 Data Release Frequency: Annually

LUST VENTURA: Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008 Date Data Arrived at EDR: 06/24/2008 Date Made Active in Reports: 07/31/2008

Number of Days to Update: 37

Source: Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 11/07/2018

Next Scheduled EDR Contact: 02/25/2019 Data Release Frequency: Quarterly

MED WASTE VENTURA: 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: 09/25/2018 Date Data Arrived at EDR: 10/25/2018 Date Made Active in Reports: 11/30/2018

Number of Days to Update: 36

Source: Ventura County Resource Management Agency

Telephone: 805-654-2813 Last EDR Contact: 10/22/2018

Next Scheduled EDR Contact: 02/04/2019 Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 09/04/2018 Date Data Arrived at EDR: 09/12/2018 Date Made Active in Reports: 10/04/2018

Number of Days to Update: 22

Source: Environmental Health Division

Telephone: 805-654-2813 Last EDR Contact: 09/12/2018

Next Scheduled EDR Contact: 12/24/2018 Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report Underground storage tank sites located in Yolo county.

Date of Government Version: 10/15/2018 Date Data Arrived at EDR: 10/19/2018 Date Made Active in Reports: 11/05/2018

Number of Days to Update: 17

Source: Yolo County Department of Health

Telephone: 530-666-8646 Last EDR Contact: 10/15/2018

Next Scheduled EDR Contact: 01/14/2019 Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 11/05/2018 Date Data Arrived at EDR: 11/07/2018 Date Made Active in Reports: 11/14/2018

Number of Days to Update: 7

Source: Yuba County Environmental Health Department

Telephone: 530-749-7523 Last EDR Contact: 10/25/2018

Next Scheduled EDR Contact: 02/11/2019 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: 11/12/2018 Date Data Arrived at EDR: 11/14/2018 Date Made Active in Reports: 12/04/2018

Number of Days to Update: 20

Source: Department of Energy & Environmental Protection

Telephone: 860-424-3375 Last EDR Contact: 11/14/2018

Next Scheduled EDR Contact: 02/25/2019
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 07/13/2018 Date Made Active in Reports: 08/01/2018

Number of Days to Update: 19

Source: Department of Environmental Protection

Telephone: N/A

Last EDR Contact: 10/09/2018

Next Scheduled EDR Contact: 01/21/2019 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: 07/01/2018 Date Data Arrived at EDR: 08/01/2018 Date Made Active in Reports: 08/31/2018

Number of Days to Update: 30

Source: Department of Environmental Conservation

Telephone: 518-402-8651 Last EDR Contact: 10/31/2018

Next Scheduled EDR Contact: 02/11/2019 Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 10/23/2018 Date Made Active in Reports: 11/27/2018

Number of Days to Update: 35

Source: Department of Environmental Protection

Telephone: 717-783-8990 Last EDR Contact: 10/15/2018

Next Scheduled EDR Contact: 01/28/2019 Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 02/23/2018 Date Made Active in Reports: 04/09/2018

Number of Days to Update: 45

Source: Department of Environmental Management

Telephone: 401-222-2797 Last EDR Contact: 11/16/2018

Next Scheduled EDR Contact: 03/04/2019 Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 06/15/2018 Date Made Active in Reports: 07/09/2018

Number of Days to Update: 24

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 12/07/2018

Next Scheduled EDR Contact: 03/25/2019 Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services,

a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary

and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities Source: Department of Social Services

Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

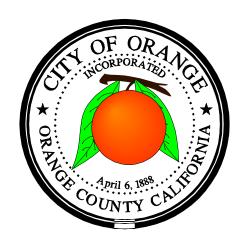
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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APPENDIX E PRELIMINARY WATER QUALITY MANAGEMENT PLAN



PRELIMINARY PRIORITY WATER QUALITY MANAGEMENT PLAN (WQMP)

For:

Cohen Property 305 Grove Ave, Orange, CA 92865

Prepared for:
David Cohen
Cohen Living Trust
4922 E. Somerton Avenue
Orange, CA 92867
(714) 401-8200

Prepared by:
DRC Engineering Inc.
Cory Mack, P.E.
160 S. Old Springs Road Suite 210
Anaheim, CA 92808
(714) 685-6860

Date Prepared 5/12/19 Revised 11/20/19

Public Works Director	Date
City Engineer	 Date

OWNER'S CERTIFICATION

WATER QUALITY MANAGEMENT PLAN

FOR

Cohen Property

This Water Quality Management Plan (WQMP) for Orange-Cohen Property has been prepared for the Cohen Living Trust. This WQMP is intended to comply with the requirements of the City of Orange's Zone Change No. 1297-19, Tentative Parcel Map 2019-100, Major Site Plan Review No. 0969-19, Design Review No. 4969-19, and Environmental Review No. 1865-19 requiring the preparation of a Water Quality Management Plan.

The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan and will ensure that this plan is amended as appropriate to reflect up-to-date conditions on the site consistent with the City of Orange Local Implementation Plan (LIP), and the intent of NPDES Permit and Waste Discharge Requirements for the City of Orange, County of Orange, Orange County Flood Control District and the incorporated Cities of Orange County within the Santa Ana Region.

This WQMP will be reviewed with the facility operator, facility supervisors, employees, tenants, maintenance and service contractors, or any other party having responsibility for implementing portions of this WQMP. Maintenance requirements within Section V and Appendix D will be adhered to with particular emphasis on maintaining the BMPs described within Sections IV and V. The Owner's Annual Self Certification Statement along with a BMP maintenance implementation table will be submitted by June 30th every year following project completion. At least one copy of the approved WQMP shall be available on the subject property in perpetuity.

Once the undersigned transfers its interest in the property, its successors-in-interest shall bear the aforementioned responsibility to implement and amend the WQMP. The City of Orange will be notified of the change of ownership and the new owner will submit a new certification.

Signatu	re:	Date:
Name:	David Cohen	
Title:	Trustee	<u></u>
Compar	ny: <u>Cohen Living Trust</u>	
Address	s: 4922 E. Somerton Avenue, Orange, CA 9	92867
Telepho	one Number: <u>(714) 401-8200</u>	

Notice of Transfer of Responsibility

Water Quality Management Plan (WQMP)

WQMP Number – As assigned by the City of Orange:_____

Submission of this Notice of Transfer of Responsibility constitutes notice to the City that responsibility for the Water Quality Management Plan (WQMP) for the subject property identified below, and implementation of that plan, is being transferred from the Previous Owner (and his/her agent) of the cite (or portion thereof) to the New Owner, as further described below.				
l.	Owner/ Responsible Party Information			
	Company/ Individual: Cohen Living Trust	Contact Person: <u>David Cohen</u>		
	Street Address: 4922 E. Somerton Ave.	Title: Trustee		
	City: Orange State: CA Zip: 92867	Phone: (714) 401-8200		
II.	Information about Site Relevant to WQMP Name of Project: Cohen Property			
	Title of WQMP applicable to site: Cohen Property WQM			
	Street Address of the site: 305 Grove Ave, Orange, CA			
	Date of Transfer of Responsibility:	· · · · · · · · · · · · · · · · · · ·		
III.	New Owner (Upon Transfer)/ Responsible Party Inform	<u>mation</u>		
	Company/ Individual:	Contact Person:		
	Street Address:	Title:		
	City State Zip	Phone:		

i

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B. C. D. E.	Conditions of Approval, Resolution Number dated Educational Material BMP Details BMP Maintenance Information Geotechnical Infiltration Testing (for reference only) Hydrology Information (Q ₂ – Two-year frequency storm evaluation)	

I. Discretionary Permit Number(s), Water Quality Condition Number(s) and Conditions of Approval

Tract No	Lot No
GPS Coordinates: <u>33.82114N</u>	<u>117.85034W</u>
Water Quality Conditions (WQMP cond	itions listed below)
A complete copy of the signed Conditio	ns of Approval, Resolution Number
dated are included as Appe	ndix A
Conditions of Approval:	
Pending	

II. Project Description

Planning Area (Location): Orange Olive Specific Plan

Project Site Area (ac): <u>2.91 (±126,697 SF)</u>

Project Disturbed Area (ac): _2.91 (±126,697 SF)

Percent Change in Impermeable Surfaces: -11%

SIC Code (not applicable)

Project Description

This project consists of the removal of a multi-use business building and developing the site to a residential neighborhood. Currently the site is 94% impervious. After the site is developed it will be 83% impervious. This is an 11% decrease in impervious area. The site is in an area of soil type "D" and is not a candidate for infiltration. Pervious pavement was not considered as it would not contribute very much to infiltration. New impervious areas will consist of walkways, driveways, drive aisles, sidewalks. There will be no material or waste storage on site. During the post-construction condition, the site will have been regraded for drainage to flow to different specified catch basins and drop inlets. Once this discharge is captured then it will be treated through a Modular Wetlands biofiltration unit on site before the discharge reaches the existing public storm drain line located in Grove Avenue. Please refer to the site map for a comprehensive list of pervious/impervious areas along with the flow path and corresponding square footage.

Project Purpose and Activities

The purpose of this project is to construct a group of houses that will also contain common use areas to be used for recreation and contain guest parking. There will be a pet waste area for the enjoyment of the residents.

Potential Storm Water Pollutants

The activities on site include the proposed use as a detached residential development. Pollutants typically generated by this activity include: suspended solid/sediments, nutrients, pathogens (bacteria/virus), pesticides, oil & grease, trash and debris.

Hydrologic Conditions of Concern

	2 Year Peak Flow Q ₂ (CFS)	2 Year Volume V ₂ (CF)	Time of Concentration Tc (Min)
Existing	4.27	0.44	10.36
Proposed	4.79	0.44	10.06

While the peak flow increases with this development, the volume of the 2 year storm remains the same. The post development time of concentration is slightly less than the pre development by 3%.

Post Development Drainage Characteristics

After the redevelopment of this property, the site will continue to drain to the same city storm drain line as before. On the site the stormwater will drain to catch basins and flow to one of two Modular Wetlands units. These units will filter pollutants from the storm water. Infiltration on site is infeasible. The geotechnical testing shows percolation rates of almost 0. See appendix E for the test results. The units contain overflow weirs to bypass in the case of larger peak flows. The clean storm water then flows to the storm drain in the Grove Avenue.

Commercial Projects

No commercial/communal food preparation is expected to take place on this site.

Residential Projects

The approximate home size for each of these condominium units are approximately ±2,000 SF containing a total of 32 units that are detached. Approximately 8,500 SF of the project site is dedicated to open space for neighborhood recreation.

Site Ownership and any Easements

The property is owned by David Cohen with Cohen Living Trust at (714) 401-8200 in its entirety and there are two easements located to the Northern part of the site. One

easement belongs to Southern California Edison, and the other belongs to Pacific Telephone and Telegraph.

III. Site Description



Site Address: NEC Orange-Olive Rd & Grove Ave

Zoning: R3 District

Predominant Soil type: D (OC TGD Figure XVI-2b)

Pre-project percent pervious: 6% Post-project percent pervious: 17%

Pre-project percent impervious: 94% Post-project percent impervious: 83%

Site Characteristics

The existing site contains a multi-use business building along with another small single business building with approximately 39,900 square feet total. The landscape around the street sides of the site and a few planter islands in the parking area contains approximately 8,200 square feet. There is approximately 79,000 square feet of parking area. Current drainage conditions include that the back side of the site drains towards a drop inlet near the driveway entrance located on Orange-Olive. The rest of the site drains South towards Grove Ave where it goes into those corresponding drop inlets and then discharges off the site draining through curb drains. The soil is highly impermeable.

Watershed Characteristics

Watershed: Lower Santa Ana River Watershed

Downstream Receiving Waters: Bitterbush Channel - Santa Ana River Reach 2 – Reach 1 – Pacific Ocean

Water Quality Impairments: Santa Ana River reach 2 is listed on the 2010 303(d) list for indicator bacteria and was delisted in 2016.

Identify hydromodification susceptibility:

The volume of the 2 year storm remains the same after development. The post development time of concentration is slightly less than the pre development by 3%. Therefore this project does not have a hydraulic condition of concern. The stormwater drains to the Bitterbush channel to the Santa Ana River and to the Pacific Ocean.

Identify watershed management priorities: No identified management priorities aside from trash and debris and bacteria reduction.

IV. Best Management Practices

IV.1 Site Design and Drainage Characteristics

Table 1

Site Design BMPs

Tochnique		uded?	Té no obobo instification	
Technique	Yes	No	If no, state justification.	
Minimize Directly Connected Impervious Areas (DCIAs) (C-Factor Reduction)	X			
Create Reduced or "Zero Discharge" Areas (Runoff Volume Reduction) ¹		x	The soil on this site is highly impermeable.	
Minimize Impervious Area/Maximize Permeability (C-Factor Reduction) ²	x			
Conserve Natural Areas (C-Factor Reduction)		x	This is a developed area with no natural areas to protect in place.	

- Detention and retention areas incorporated into landscape design provide areas for retaining and detaining stormwater flows, resulting in lower runoff rates and reductions in volume due to limited infiltration and evaporation. Such Site Design BMPs may reduce the size of Treatment Control BMPs.
- The "C Factor" is a representation of the ability of a surface to produce runoff. Surfaces that produce higher volumes of runoff are represented by higher C Factors. By incorporating more pervious, lower C Factor surfaces into a development, lower volumes of runoff will be produced. Lower volumes and rates of runoff translate directly to lowering treatment requirements.

Minimize Directly Connected Impervious Areas (DCIAs) (C-Factor Reduction):

Inclusion of landscaped areas in the site design is used to minimize directly connected impervious areas. This will reduce runoff, as some of the flows will have the potential to infiltrate into the soil within the existing landscaped area. Infiltration of some of the flows will also help to remove sediment/turbidity, nutrients, oxygen demanding substances, and bacteria/viruses from stormwater.

Minimize Impervious Area/Maximize Permeability (C-Factor Reduction)

Site has been designed with the most landscape and pervious areas possible while still maintaining the actual purpose of the construction. The proposed site percentage pervious areas increase from 6% to 17%. The outdoor areas are designed with some concrete areas for aesthetic and accessible purposes, but large landscaping areas are included between the hardscape.

IV.2 Source Control BMPs

IV.2.1 Routine Non-Structural BMPs

Table 2

Routine Non-Structural BMPs

DIAD		Check One		If not applicable	
BMP No.	Name	Included	Not Applicable	If not applicable, state brief reason.	
N1	Education for Property Owners, Tenants and Occupants	x			
N2	Activity Restriction	х			
N3	Common Area Landscape Management	x			
N4	BMP Maintenance	X			
N5	Title 22 CCR Compliance		X		
N6	Local Water Quality Permit Compliance		X	This BMP is not applicable. The City of Orange does not issue water quality permits.	
N7	Spill Contingency Plan		x	No hazardous chemicals to be present on this site	
N8	Underground Storage Tank Compliance		X	No underground storage	
N9	Hazardous Materials Disclosure Compliance	x		No hazardous chemicals to be present on this site	
N10	Uniform Fire Code Implementation	х			
N11	Common Area Litter Control	X			
N12	Employee Training	X			
N13	Housekeeping of Loading Docks		X	No loading docks on site	
N14	Common Area Catch Basin Inspection	X			
N15	Street Sweeping Private Streets and Parking Lots	X			

N1. Education for Property Owners, Tenants and Occupants

Proper education of onsite occupants will help to reduce all potential and anticipated pollutants from the site. Practical information shall be provided by the property owner to the employees on general good housekeeping BMPs and other practices that contribute to protection of storm water quality. Prior to sell of land, the current property owner will provide a copy of the WQMP to the future property owner. This WQMP shall be provided with emphasis placed on the materials included in, but not limited to, Sections IV, V VI and VII of this report. For additional information, see BMP SC-10, Non-Stormwater Discharges, included in appendix B and the BMP Maintenance Responsibility/Frequency

Matrix in Section V. Education Materials to be used include, but are not limited to, SC-10, Non-Stormwater Discharges and City of Orange LIP Section A-5.

N2. Activity Restrictions

Onsite activities shall be in compliance with city of Orange Municipal Code at all times. The CC&R's may include additional restrictions. Some general activity restrictions that shall be adhered to are:

- o No discharges of fertilizer, pesticides and wastes to streets or storm drains
- o No blowing or sweeping of debris into streets or storm drains.
- o No hosing down of paved surfaces
- o No vehicle fueling, washing, or maintenance.

N3. Common Area Landscape Management.

All maintenance shall be consistent with the City of Orange Water Quality Ordinance. Proper landscape maintenance practices will help to reduce or eliminate pollution from pesticides, nutrients, trash/debris, and sediments. General guidelines include the following: Plant vegetation that reduces water, fertilizer, herbicide, and pesticide use. Waste shall be disposed of by composting or at a permitted landfill and shall not be raked or blown into the street, gutter, or storm drains. Irrigation systems shall be inspected monthly for poorly aligned sprinkler heads, broken sprinkler heads, and leaks. Detected problems shall be repaired as soon as they are observed. Avoid overwatering of vegetation. If excessive runoff is observed, automatic timers shall be adjusted. For approximate irrigation levels and scheduling, refer to the Irrigation Scheduling Data in Appendix D. Note that the actual irrigation schedule and levels may vary based on soil type, maturity of vegetation, exposure, and seasonal conditions. If fertilizer is spilled on a paved surface it should be swept up immediately and placed in its container. Water shall not be used to clean fertilizer spills unless necessary and only after the area has been thoroughly cleaned using dry cleaning methods. Pesticides, herbicides, and fertilizers shall not be applied within 48 hours prior to rain or if wind speeds exceed 5 mph. Pesticides shall be applied only as a last resort and after other pest mitigation efforts have been attempted. Non-pesticide mitigation measures include cultural tactics (modifying routine landscape activities, adjusting the amount of irrigation applied to the area, etc.), mechanical tactics (mulching and manual removal of weeds and larger pests such as snails), environmental/physical tactics (netting, etc.), and biological tactics (using living organisms such as lady bugs and herbivores to control pests). Storage of pesticides shall be away from living areas and in a covered area that is not subject to temperature extremes. For additional information, see BMP SC-41, Building & Grounds Maintenance, SC-73, Landscape Maintenance, and BMP SD-10, Site Design and Landscape Planning, included in Section VII and the BMP Maintenance Responsibility/Frequency Matrix in Section V. Also refer to Water Quality Guidelines for Landscaping and Gardening included in Section VII and the City of Orange LIP section A-5, a copy of which is included in Section VII.

N4. BMP Maintenance

Selected BMPs will be maintained to ensure proper operation and daily function as applicable. See the BMP Maintenance Responsibility/Frequency Matrix in Section V and Appendix D for details. Appropriate BMP Maintenance practices will help to reduce all pollutants from the site.

N10. Uniform Fire Code Implementation

The owner is responsible to ensure that all hazardous waste material storage is in conformance with the local fire authority's implementation of Article 80 of the Uniform Fire Code.

N11. Common Area Litter Control

The owner shall implement trash management and litter control procedures aimed at reducing pollution of storm water runoff due to trash and debris. The owner will contract with a maintenance firm to provide regularly scheduled landscape maintenance and parking lot maintenance that will include litter removal, emptying of trash receptacles, and picking up of grass and plant clippings. All trash containers must be covered to prevent storm water from entering. For additional information, see BMP SC-41, Building & Grounds Maintenance, and SC-43, Parking Storage Area Maintenance, included in Appendix B. Also see the BMP Maintenance Responsibility/Frequency Matrix in Appendix B.

N12. Employee Training

Ensuring that employees are properly trained will help to reduce all anticipated and potential pollutants from the site. All new employees will be trained upon hire and annually thereafter on how to minimize impacts to water quality. The educational materials provided in Appendix B will be reviewed. For additional information, see the BMP Maintenance Responsibility/Frequency Matrix in Appendix B.

N14. Common Area Catch Basin Inspection

Proper maintenance of the onsite catch basins will help to reduce the amount of trash/debris and silt/sediment in runoff. The onsite catch basins shall be inspected and cleared of any trash or debris in or around the opening prior to the rainy season (by October 1st). Thereafter, inspections will be conducted every four months. All on-site catch basins shall be stenciled with "No Dumping Drains to Ocean". Also see the Maintenance Responsibility/ Frequency Matrix in Section V.

N15. Street Sweeping Private Streets and Parking Lots

The private streets and parking areas shall be swept twice a month or more often as needed using mechanical sweepers and/or vacuum sweepers to remove debris. For additional information, see BMP SC-43, Parking/Storage Area Maintenance included in Appendix B. Also see the Maintenance Responsibility/ Frequency Matrix in Section V.

IV.2.2 Routine Structural BMPs

Table 3

Routine Structural BMPs

	Check One		The standing bloom to be standing of	
Name	Included	Not Applicable	If not applicable, state brief reason	
Provide storm drain system stenciling and signage- "No Dumping – Drains to Ocean"	X			
Design and construct outdoor material storage areas to reduce pollution introduction		x	No material storage on site	
Design and construct trash and waste storage areas to reduce pollution introduction		x	No trash and waste storage areas on site. All trash and waste is individual carts at each house. The common areas also have individual carts.	
Use efficient irrigation systems & landscape design	X			
Protect slopes and channels and provide energy dissipation		x	No slopes or channels on site.	
Incorporate requirements applicable to individual project features		x	None of the items on this list exist on the site.	
a. Dock areas				
b. Maintenance bays				
c. Vehicle or community wash areas				
d. Outdoor processing areas				
e. Equipment wash areas				
f. Fueling areas				
g. Hillside landscaping				
h. Wash water control for food preparation areas				

Provide Storm Drain Stenciling and Signage

The existing catch basin will be stenciled with the phrase "No Dumping – Drains to Ocean". Storm drain signage will help to reduce all pollution. The storm drain signage shall be inspected once per year for legibility and re-stenciled as necessary. See BMP SD-13, Storm Drain Signage, in Appendix B and the BMP Maintenance Responsibility/Frequency Matrix in Section V.

Use efficient irrigation systems & landscape design, water conservation, smart controllers, and source control.

All landscape maintenance shall be consistent with the City of Orange Water Quality Ordinance. Efficient irrigation practices will help to reduce pollution due to pesticides, nutrients, and sediments. General guidelines include the following: Plant vegetation that reduces water, fertilizer, herbicide, and pesticide use. Group plants with similar water requirements in order to reduce excess irrigation runoff and promote surface filtration. See BMP SC-41, Building and Grounds Maintenance, in Section VII and the BMP Maintenance Responsibility/Frequency Matrix in Section V. Also refer to the City of Orange LIP Section A-5.

IV.3 Low Impact Development BMP Selection

Refer to Section 2.4.2.3 and 4.1 in the TGD for selecting LID BMPs.

IV.3.1 Hydrologic Source Controls

Select from the following table all hydrologic source control BMPs that are used by the project and identify in Site Plan. See Section 4.2 of Technical Guidance Document for additional information.

Table 4
Hydrologic Source Control BMPs

Name	Check If Used
Localized on-lot infiltration	
Impervious area dispersion (e.g. roof top disconnection)	
Street trees (canopy interception)	
Residential rain barrels (not actively managed)	
Green roofs/Brown roofs	
Blue roofs	
Other:	

IV.3.2 Infiltration BMPs

Identify infiltration BMPs to be used in project. See Section 2.4.2.4 of the Technical Guidance Document for infiltration infeasibility criteria and 4.3 for information of BMP selection.

Table 5
Infiltration BMPs

Name	Check If Used
Bioretention without underdrains	
Rain gardens	
Porous landscaping	
Infiltration planters	
Retention swales	
Infiltration trenches	
Infiltration basins	
Drywells	
Subsurface infiltration galleries	
French drains	
Permeable asphalt	
Permeable concrete	
Permeable concrete pavers	
Other:	
Other:	

^{*}Infiltration BMP(s), i.e. infiltration trenches and basins, etc., require pre-treatment prior to infiltration

Infiltration on this site is not feasible as the infiltration rate is almost 0 and the soil type is D.

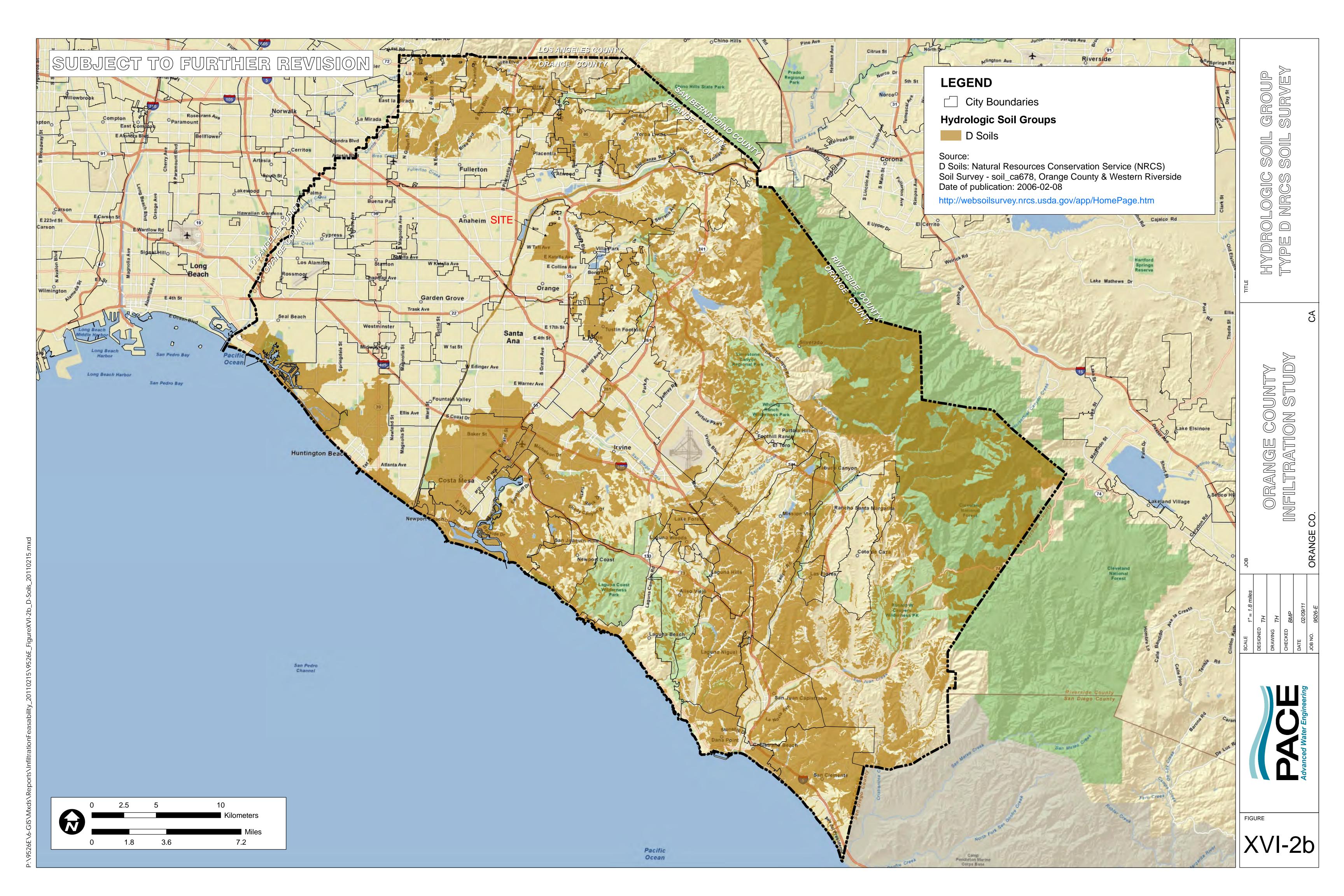


Table 2.7: Infiltration BMP Feasibility Worksheet

	Infeasibility Criteria	Yes	No
1	Would Infiltration BMPs pose significant risk for groundwater related concerns? Refer to Appendix VII (Worksheet I) for guidance on groundwater-related infiltration feasibility criteria.		Х
Provide	basis:		
	rize findings of studies provide reference to studies, calcula vide narrative discussion of study/data source applicability.	tions, maps, da	ta sources,
2	 Would Infiltration BMPs pose significant risk of increasing risk of geotechnical hazards that cannot be mitigated to an acceptable level? (Yes if the answer to any of the following questions is yes, as established by a geotechnical expert): The BMP can only be located less than 50 feet away from slopes steeper than 15 percent The BMP can only be located less than eight feet from building foundations or an alternative setback. A study prepared by a geotechnical professional or an available watershed study substantiates that stormwater infiltration would potentially result in significantly increased risks of geotechnical hazards that cannot be mitigated to an acceptable level. 		X
Provide	basis:		
	rize findings of studies provide reference to studies, calcula vide narrative discussion of study/data source applicability.	tions, maps, da	ta sources,
3	Would infiltration of the DCV from drainage area violate downstream water rights?		Х
Provide basis:			
	rize findings of studies provide reference to studies, calcula vide narrative discussion of study/data source applicability.	tions, maps, da	ta sources,

Table 2.7: Infiltration BMP Feasibility Worksheet (continued)

	Partial Infeasibility Criteria	Yes	No
4	Is proposed infiltration facility located on HSG D soils or the site geotechnical investigation identifies presence of soil characteristics which support categorization as D soils?	X	
Provid	e basis: See attached Soils Map XVI-2b		
5	Is measured infiltration rate below proposed facility less than 0.3 inches per hour? This calculation shall be based on the methods described in Appendix VII.	х	
Provid	e basis: See attached percolation tests in soils report Appendix	Ε	
6	Would reduction of over predeveloped conditions cause impairments to downstream beneficial uses, such as change of seasonality of ephemeral washes or increased discharge of contaminated groundwater to surface waters?		X
7	Would an increase in infiltration over predeveloped conditions cause impairments to downstream beneficial uses, such as change of seasonality of ephemeral washes or increased discharge of contaminated groundwater to surface waters?		X
			•

Table 2.7: Infiltration BMP Feasibility Worksheet (continued)

Infiltration Screening Results (check box corresponding to result):				
	Is there substantial evidence that infiltration from the project would result in a significant increase in I&I to the sanitary sewer that cannot be sufficiently mitigated? (See Appendix XVII)			
8	Provide narrative discussion and supporting evidence:			
	Summarize findings of studies provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
	If any answer from row 1-3 is yes: infiltration of any volume is not feasible within the DMA or equivalent.			
9	Provide basis:			
	Summarize findings of infeasibility screening			
10	If any answer from row 4-7 is yes, infiltration is permissible but is not presumed to be feasible for the entire DCV. Criteria for designing biotreatment BMPs to achieve the maximum feasible infiltration and ET shall apply. Provide basis: Items 4 and 5 are "yes". The site is located in soils area D per the Soils Map XVI-2b. The testing done by the soils engineer shows the infiltration rate to be almost 0. Because of this the soils engineer has recommended against infiltration. See attached percolation tests in soils report Appendix E.	X		
11	If all answers to rows 1 through 11 are no, infiltration of the full DCV is potentially feasible, BMPs must be designed to infiltrate the full DCV to the maximum extent practicable.			

IV.3.3 Evapotranspiration, Rainwater Harvesting BMPs

Identify any evapotranspiration and/or, rainwater harvesting BMPs used by the project See Section 4.4 and 4.4 of the Technical Guidance Document for additional information. (Delete if not used).

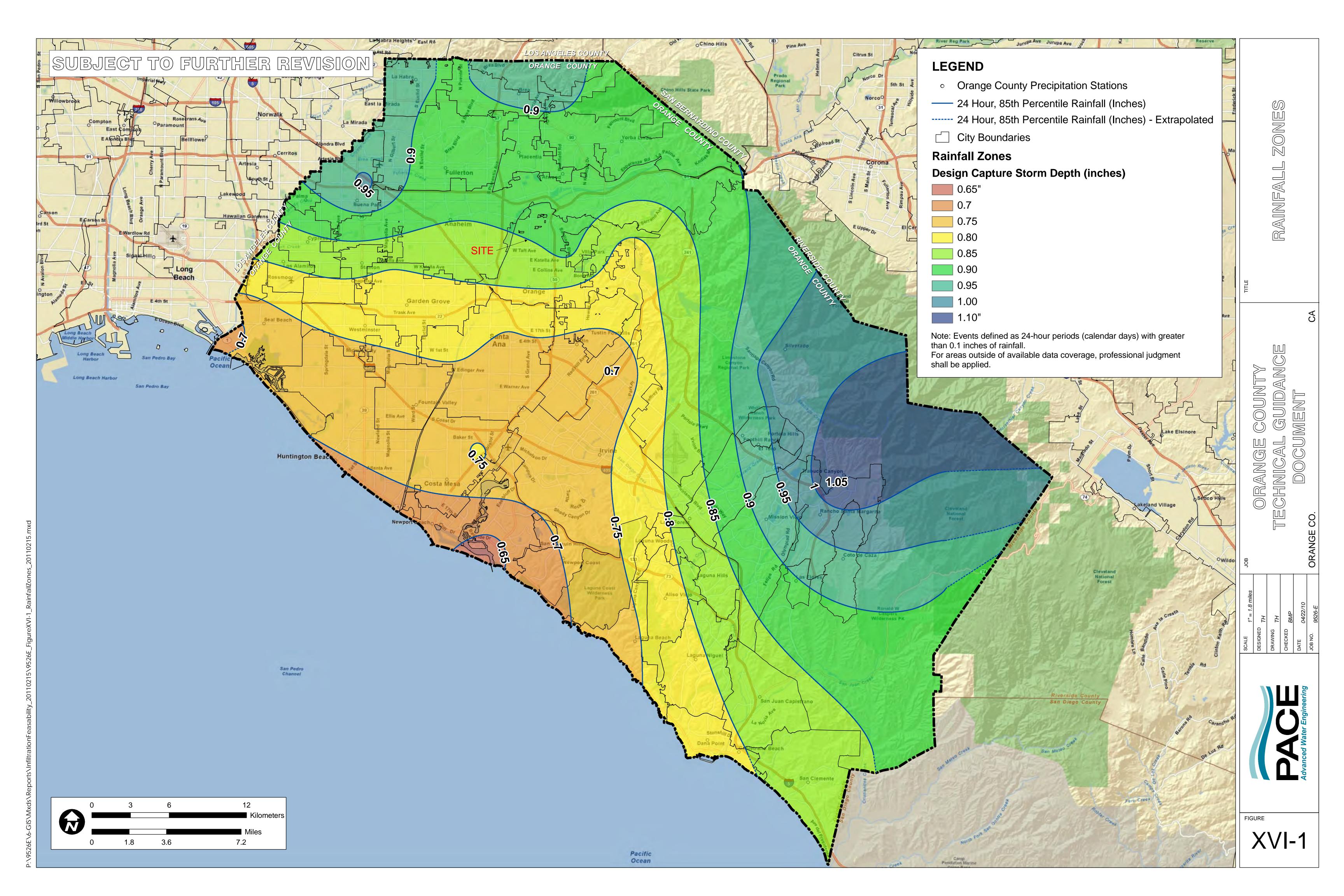
Table 6
Evapotranspiration, Rainwater Harvesting BMP

Name	Check If Used
All HSCs; See Section IV.3.1	
Surface-based infiltration BMPs	
Biotreatment BMPs	
Above-ground cisterns and basins	
Underground detention	
Other:	
Other:	
Other:	

Harvesting of rain water is not practical since the landscape area and the demand for toilet flushing is not enough.

Worksheet J: Summary of Harvested Water Demand and Feasibility

1	What demands for harvested water exist in the tributary area (check all that apply):				
2	Toilet and urinal flushing		✓		
3	Landscape irrigation		V		
4	Other:	Other:		П	
5	What is the design capture storm depth? (Figure III.1)	d	0.85	inches	
6	What is the project size?	А	2.91	ac	
7	What is the acreage of impervious area?	IA	0.49	ac	
	For projects with multiple types of demand (toilet flushing, irrigat	ion demand,	and/or oth	er demand)	
8	What is the minimum use required for partial capture? (Table X.6)	69	690		
9	What is the project estimated wet season total daily use (Section X.2)?	65	51	gpd	
10	Is partial capture potentially feasible? (Line 9 > Line 8?)	N	No		
	For projects with only toilet flushing demand				
11	What is the minimum TUTIA for partial capture? (Table X.7)				
12	What is the project estimated TUTIA?				
13	Is partial capture potentially feasible? (Line 12 > Line 11?)		1 0		
	For projects with only irrigation demand				
14	What is the minimum irrigation area required based on conservation landscape design? (Table X.8)			ac	
15	What is the proposed project irrigated area? (multiply conservation landscaping by 1; multiply active turf by 2)		-	ac	
16	Is partial capture potentially feasible? (Line 15 > Line 14?)				
Provide supporting assumptions and citations for controlling demand calculation:					



Worksheet D: Capture Efficiency Method for Flow-Based BMPs

St	Step 1: Determine the design capture storm depth used for calculating volume			
1	Enter the time of concentration, T _c (min) (See Appendix IV.2)	T _c =	5	
2	Using Figure III.4, determine the design intensity at which the estimated time of concentration (T_c) achieves 80% capture efficiency, I_1	I ₁ =	.26	in/hr
3	Enter the effect depth of provided HSCs upstream, d_{HSC} (inches) (Worksheet A)	d _{HSC} =		inches
4	Enter capture efficiency corresponding to d _{HSC} , Y ₂ (Worksheet A)	Y ₂ =		%
5	Using Figure III.4, determine the design intensity at which the time of concentration (T_c) achieves the upstream capture efficiency(Y_2), I_2	I ₂ =		
6	Determine the design intensity that must be provided by BMP, $I_{design} = I_1 - I_2$	I _{design} =	.26	
St	ep 2: Calculate the design flowrate	Ţ		<u>'</u>
1	Enter Project area tributary to BMP (s), A (acres)	A=	1.83	acres
2	Enter Project Imperviousness, imp (unitless)	imp=	0.9	
3	Calculate runoff coefficient, C= (0.75 x imp) + 0.15	C=	0.83	
4	Calculate design flowrate, $Q_{design} = (C \times i_{design} \times A)$	Q _{design} =	0.40	cfs
Su	pporting Calculations			
Describe system: DMA-1 Provide time of concentration assumptions:				

Worksheet D: Capture Efficiency Method for Flow-Based BMPs

St	Step 1: Determine the design capture storm depth used for calculating volume			
1	Enter the time of concentration, T _c (min) (See Appendix IV.2)	T _c =	5	
2	Using Figure III.4, determine the design intensity at which the estimated time of concentration (T_c) achieves 80% capture efficiency, I_1	I ₁ =	.26	in/hr
3	Enter the effect depth of provided HSCs upstream, d_{HSC} (inches) (Worksheet A)	d _{HSC} =		inches
4	Enter capture efficiency corresponding to d _{HSC} , Y ₂ (Worksheet A)	Y ₂ =		%
5	Using Figure III.4, determine the design intensity at which the time of concentration (T_c) achieves the upstream capture efficiency(Y_2), I_2	I ₂ =		
6	Determine the design intensity that must be provided by BMP, $I_{design} = I_1 - I_2$	I _{design} =	.26	
St	ep 2: Calculate the design flowrate	Ţ		<u>, </u>
1	Enter Project area tributary to BMP (s), A (acres)	A=	1.08	acres
2	Enter Project Imperviousness, imp (unitless)	imp=	0.9	
3	Calculate runoff coefficient, C= (0.75 x imp) + 0.15	C=	0.83	
4	Calculate design flowrate, $Q_{design} = (C \times i_{design} \times A)$	Q _{design} =	0.23	cfs
Su	pporting Calculations			
Describe system: DMA-2 Provide time of concentration assumptions:				

IV.3.4 Biotreatment BMPs

Table 7
Biotreatment BMPs

Bioretention with underdrains	
Storm water planter boxes with underdrains	
Rain gardens with underdrains	
Constructed wetlands	
Vegetated swales	
Vegetated filter strips	
Proprietary vegetated biotreatment systems	
Wet extended detention basin	
Dry extended detention basins	
Other:	
Other:	

The Modular Wetlands System incorporates an advanced pretreatment chamber that includes separation and pre-filter cartridges. In this chamber, sediment and hydrocarbons are removed from runoff before entering the biofiltration chamber, reducing maintenance costs and improving performance. Horizontal flow also gives the system the unique ability to adapt to the environment through a variety of configurations, bypass orientations, and diversion applications. The Modular Wetlands System includes a high flow bypass

IV.3.5 Hydromodification Control BMPs

Not used on this project.

IV.3.6 Regional/Sub-Regional LID BMPs

Not used on this project.

IV.3.7 Treatment Control BMPs

Not used on this project.

IV. 4 Water Quality Credits

Not used on this project.

IV.5 Alternative Compliance Plan

Not used on this project.

IV.6 Vector Control

The modular wetlands contain drains at the bottom of the units and should not have standing water. This will eliminate the opportunity for vectors to thrive.

IV.7 Drainage Management Area (DMA)

Describe each DMA used in project, the BMPs in each DMA and the area treated.

DMA Number	BMPs	Area Treated
1 Area 100	Modular Wetlands	1.83 Acres
	MWS-L-8-16	
2 Area 110	Modular Wetlands	1.08 Acres
	MWS-L-4-19	
3		
Total Project Area		2.91 Acres

IV.8 Calculations

Provide calculations for all LID, Structural and Treatment BMPs selected. All calculations must be signed by a registered civil engineer. Individual or worksheets provided in Technical Guidance Document (if applicable) may be used.

V. Implementation, Maintenance and Inspection Responsibility for BMPs (O&M Plan)

Responsible Party Information (Local Contact Information)

Name: <u>David Cohen</u> Title: <u>Trustee</u>

Company: Cohen Trust Phone Number: (714) 401-8200

Table 8 - Frequency Inspection Matrix

ВМР	Responsible Party	Maintenance Activity	Inspection/Maintenance. Frequency				
Source Control BMPs (Structural and Non-Structural)							
S1 Provide Storm Drain System Stenciling and Signage	Cohen Living Trust 4922 E. Somerton Ave. Orange, CA 92867 Contact: David Cohen	Employees shall periodically check stencils located adjacent to storm drain inlets. The owner shall maintain the stencils to ensure they are legible.	Every 6 months				
S3 Obtain trash Enclosures that reduce pollutant introduction	Cohen Living Trust 4922 E. Somerton Ave. Orange, CA 92867 Contact: David Cohen	Owners shall maintain all trash receptacles to ensure they are lined to reduce leaking of liquid waste. All trash receptacles located outside shall have lids to prevent rainfall from entering.	Ongoing				
N1 Education of Property Owners, Tenants and Occupants	Cohen Living Trust 4922 E. Somerton Ave. Orange, CA 92867 Contact: David Cohen	Education of current employees/owner(s) shall be done within 4 weeks of startup with each new onsite employee/owner(s) being given a water quality orientation using this WQMP as reference within two weeks of hire date.	Ongoing with refresh instruction given on an annual basis.				

N2 Activity Restrictions	Cohen Living Trust 4922 E. Somerton Ave. Orange, CA 92867 (714)-401-8200 Contact: David Cohen	There shall be no discharges of fertilizer, pesticides, or wastes to streets or storm drains. There shall be no blowing or sweeping of debris into storm drain. All activities shall remain in compliance with OMC and any CC&R's, at all times.	Ongoing.
N3 Common Area Landscape Management	Cohen Living Trust 4922 E. Somerton Ave. Orange, CA 92867 (714)-401-8200 Contact: David Cohen	Landscape maintenance will consist of trimming and replanting of vegetation, repair and maintenance of irrigation systems, and appropriate use of fertilizers and pesticides.	Landscape maintenance shall be performed on a weekly basis. Irrigation systems shall be inspected monthly for leaks. Leaks shall be repaired as soon as they are observed.
N4 BMP Maintenance	Cohen Living Trust 4922 E. Somerton Ave. Orange, CA 92867 (714)-401-8200 Contact: David Cohen	The proposed treatment BMPs will be maintained as outlined in Appendix D of this report.	As outlined in Appendix D of this report.
N10 Uniform Fire Code Implementation	Cohen Living Trust 4922 E. Somerton Ave. Orange, CA 92867 (714)-401-8200 Contact: David Cohen	The owner and tenant are to keep records of all steps taken to meet local fire department requirements for hazardous material storage and records of hazardous material disposal.	As necessary to meet local fire department requirements.
N11 Common Area Litter Control	Cohen Living Trust 4922 E. Somerton Ave. Orange, CA 92867 Contact: David Cohen	The owner will contract with a maintenance firm to provide weekly landscape maintenance and parking lot maintenance that will include litter removal and picking up grass and plant clippings. During routine maintenance all trash and debris will be picked up and placed in waste receptacle.	Weekly
N12 Employee Training	Cohen Living Trust 4922 E. Somerton Ave. Orange, CA 92867 Contact: David Cohen	Education of current employees shall be done within 4 weeks of startup with each new onsite employee being	Ongoing with refresh instruction given on an annual basis.

		given a water quality orientation using this WQMP as reference within two weeks of hire date.	
Low Impact Develo	opment and Treatment E	BMPs	
Modular Wetlands	Cohen Living Trust 4922 E. Somerton Ave. Orange, CA 92867 Contact: David Cohen		Ongoing

Regulatory Permits

Because this project is larger than one acre the site shall be in compliance with the State of California Construction General Permit (CGP) and the WDID that will be obtained before construction begins.

Funding

The Cohen Living Trust will be responsible for the funding of all onsite BMPs through it's operating budget.

OWNER SELF CERTIFICATION STATEMENT

As the owner representative of Orange-Olive and Grove for which a Water Quality Management Plan (WQMP) was approved by the City, I hereby certify under penalty of law that all Best Management Practices contained within the approved Project WQMP have been maintained and inspected in accordance with the schedule and frequency outlined in the approved WQMP Maintenance Table.

The maintenance activities and inspections conducted are shown in the attached table and have been performed by qualified and knowledgeable individuals. Structural Treatment BMPs have been inspected and certified by a licensed professional engineer.

To the best of my knowledge, the information submitted is true and accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and citations for violating water quality regulations.

Signed:
Name: <u>David Cohen</u>
Title: <u>Trustee</u>
Company: <u>Cohen Living Trust</u>
Address: 4922 E. Somerton Avenue, Orange, CA 92867
Telephone Number: <u>(714) 401-8200</u>
Date:

BMP Implementation Tracking Table

ВМР	Activity	Completion Dates or Frequency	Initial			
Source Control BMPs (Structural and Nonstructural)						
Low Impact Development and Treatment BMPs						

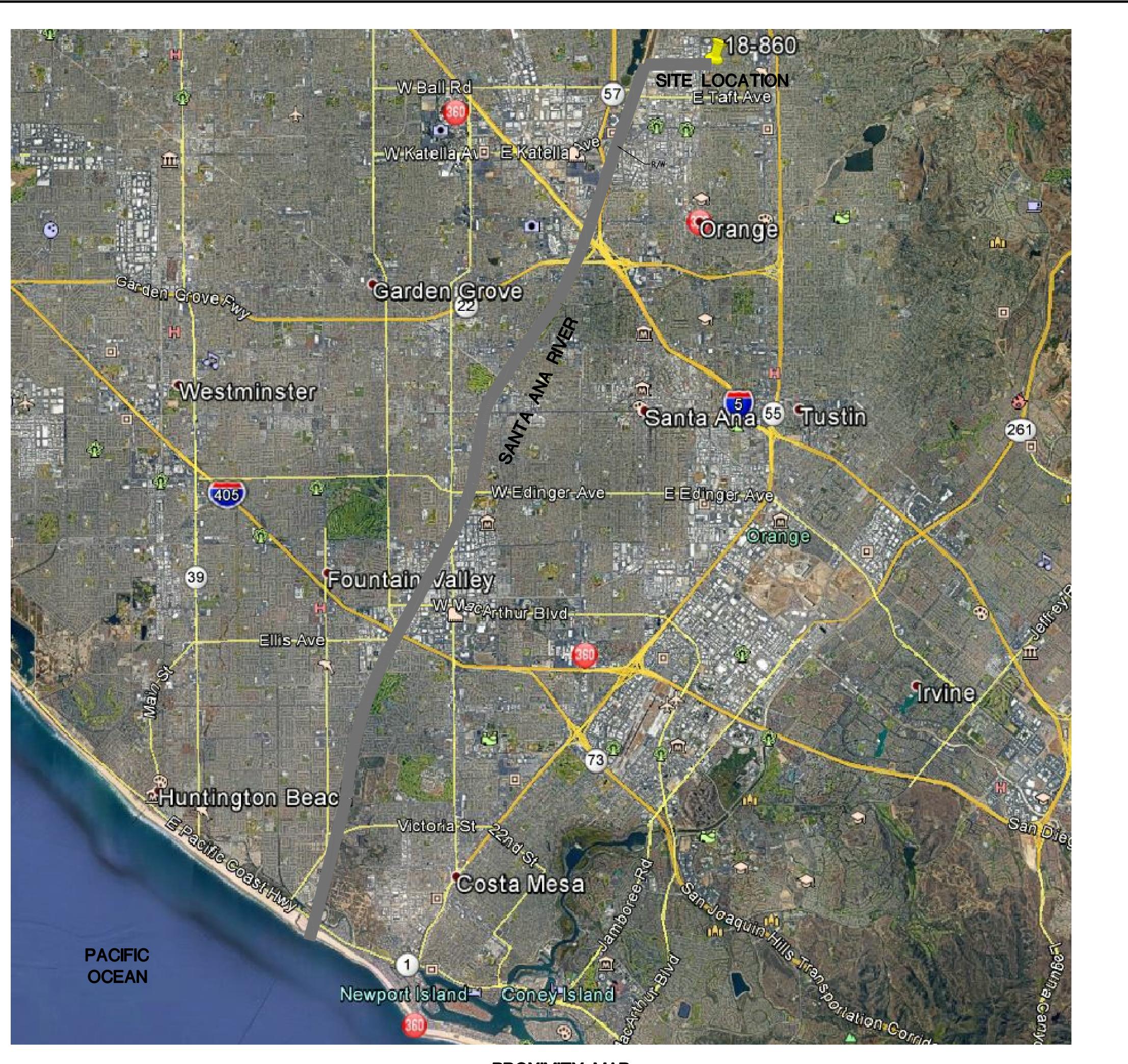
^{*} This sheet is to be submitted annually with the Owner Self Certification Statement.

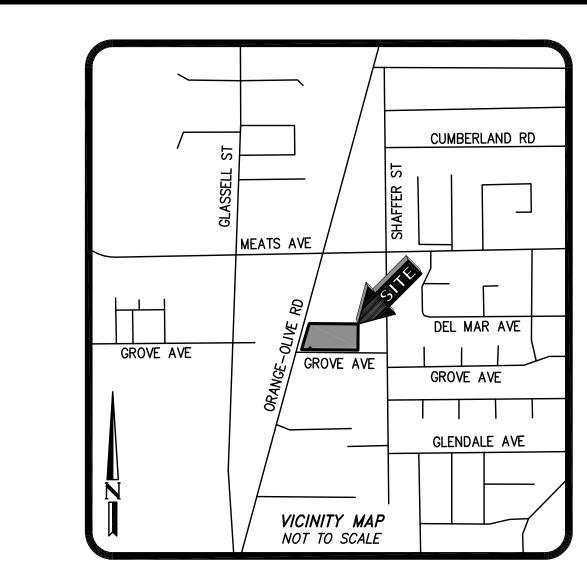
^{**} Structural Treatment BMPs should be certified by a Licensed Professional Engineer.

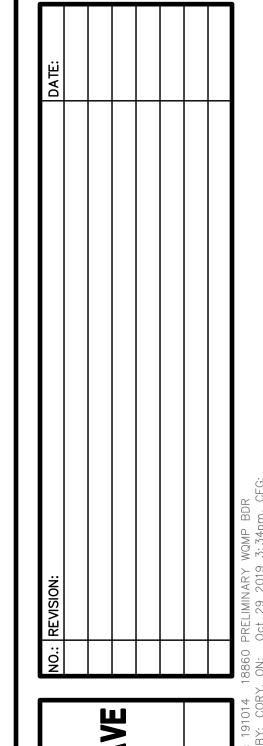
VI. Location Map, Site Plan, and BMP Details



LOCATION MAP



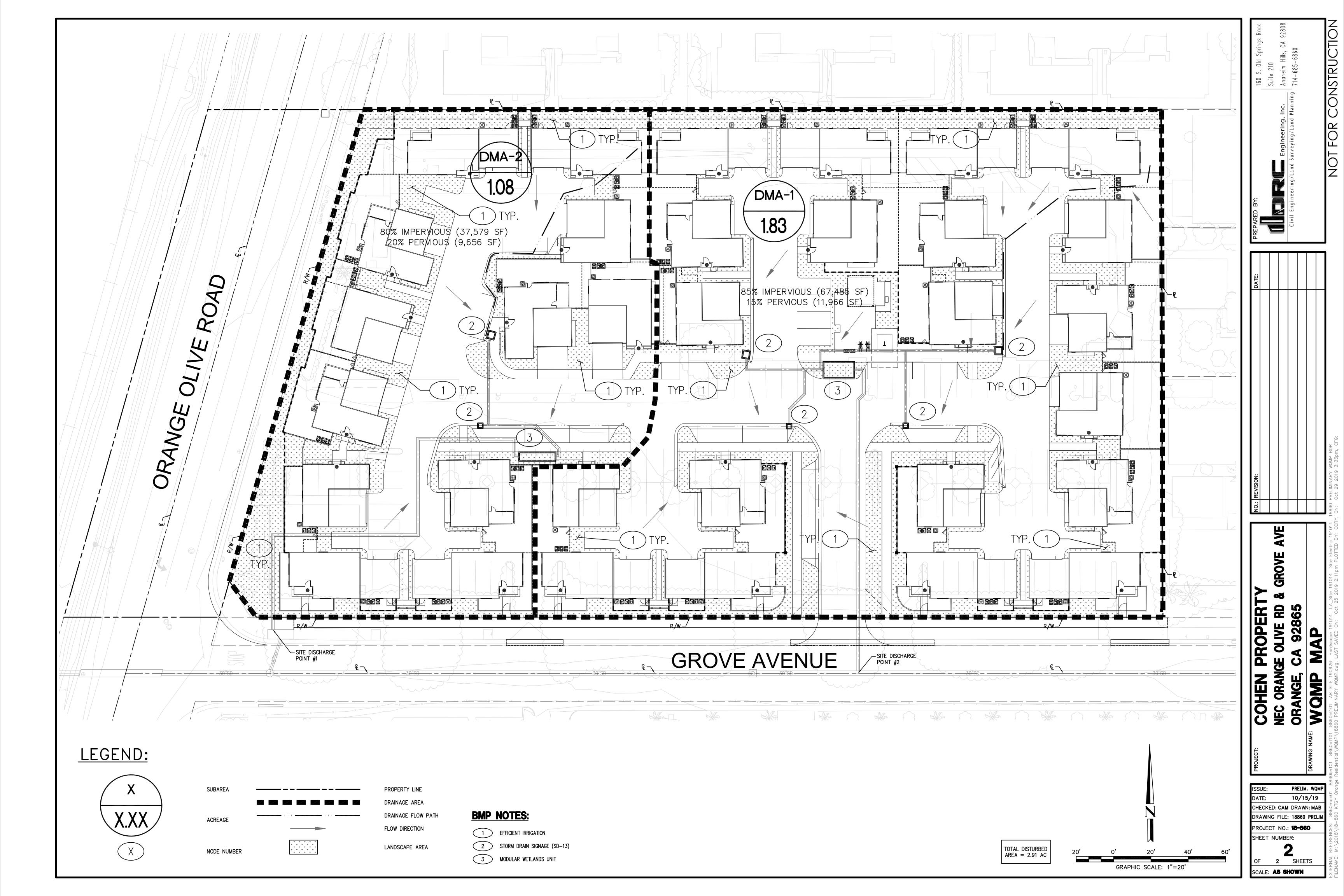




10/15/19

OF 2 SHEETS

PROXIMITY MAP
N.T.S.



VII. Educational Materials

Refer to the City's website www.cityoforange.org or the Orange County Stormwater Program (ocwatersheds.com) for a library of materials available. Attach *only* the educational materials specifically applicable to the project.

Education Materials						
Residential Material (http://www.ocwatersheds.com)	Check If Applicable	Business Material (http://www.ocwatersheds.com)	Check If Applicable			
The Ocean Begins at Your Front Door		Tips for the Automotive Industry				
Tips for Car Wash Fund-raisers		Tips for Using Concrete and Mortar				
Tips for the Home Mechanic		Tips for the Food Service Industry				
Homeowners Guide for Sustainable Water Use	\boxtimes	Proper Maintenance Practices for Your Business				
Household Tips	\boxtimes		Check If			
Proper Disposal of Household Hazardous Waste		Other Material	Attached			
Recycle at Your Local Used Oil Collection Center (North County)	\boxtimes					
Recycle at Your Local Used Oil Collection Center (Central County)	\boxtimes					
Recycle at Your Local Used Oil Collection Center (South County)						
Tips for Maintaining a Septic Tank System						
Responsible Pest Control	\boxtimes					
Sewer Spill Response	\boxtimes					
Tips for the Home Improvement Projects	\boxtimes					
Tips for Horse Care						
Tips for Landscaping and Gardening						
Tips for Pet Care	\boxtimes					
Tips for Pool Maintenance						
Tips for Residential Pool, Landscape and Hardscape Drains						
Tips for Projects Using Paint						

Appendix A:

Conditions of Approval

Resolution Number_____ dated_____

Appendix B:

Educational Material

Appendix C:

BMP Details



Modular Wetlands® System Linear

A Stormwater Biofiltration Solution



OVERVIEW

The Bio Clean Modular Wetlands® System Linear represents a pioneering breakthrough in stormwater technology as the only biofiltration system to utilize patented horizontal flow, allowing for a smaller footprint, higher treatment capacity, and a wide range of versatility. While most biofilters use little or no pretreatment, the Modular Wetlands® incorporates an advanced pretreatment chamber that includes separation and pre-filter cartridges. In this chamber, sediment and hydrocarbons are removed from runoff before entering the biofiltration chamber, reducing maintenance costs and improving performance.

Horizontal flow also gives the system the unique ability to adapt to the environment through a variety of configurations, bypass orientations, and diversion applications.

The Urban Impact

For hundreds of years, natural wetlands surrounding our shores have played an integral role as nature's stormwater treatment system. But as cities grow and develop, our environment's natural filtration systems are blanketed with impervious roads, rooftops, and parking lots.

Bio Clean understands this loss and has spent years re-establishing nature's presence in urban areas, and rejuvenating waterways with the Modular Wetlands® System Linear.



The Modular Wetlands® continues to outperform other treatment methods with superior pollutant removal for TSS, heavy metals, nutrients, hydrocarbons, and bacteria. Since 2007 the Modular Wetlands® has been field tested on numerous sites across the country and is proven to effectively remove pollutants through a combination of physical, chemical, and biological filtration processes. In fact, the Modular Wetlands® harnesses some of the same biological processes found in natural wetlands in order to collect, transform, and remove even the most harmful pollutants.



APPROVALS

The Modular Wetlands® System Linear has successfully met years of challenging technical reviews and testing from some of the most prestigious and demanding agencies in the nation and perhaps the world. Here is a list of some of the most high-profile approvals, certifications, and verifications from around the country.



Washington State Department of Ecology TAPE Approved

The MWS Linear is approved for General Use Level Designation (GULD) for Basic, Enhanced, and Phosphorus treatment at 1 gpm/ft² loading rate. The highest performing BMP on the market for all main pollutant categories.



California Water Resources Control Board, Full Capture Certification

The Modular Wetlands® System is the first biofiltration system to receive certification as a full capture trash treatment control device.



Virginia Department of Environmental Quality, Assignment

The Virginia Department of Environmental Quality assigned the MWS Linear the highest phosphorus removal rating for manufactured treatment devices to meet the new Virginia Stormwater Management Program (VSMP) regulation technical criteria.



Maryland Department of the Environment, Approved ESD

Granted Environmental Site Design (ESD) status for new construction, redevelopment, and retrofitting when designed in accordance with the design manual.



MASTEP Evaluation

The University of Massachusetts at Amherst – Water Resources Research Center issued a technical evaluation report noting removal rates up to 84% TSS, 70% total phosphorus, 68.5% total zinc, and more.



Rhode Island Department of Environmental Management, Approved BMP

Approved as an authorized BMP and noted to achieve the following minimum removal efficiencies: 85% TSS, 60% pathogens, 30% total phosphorus, and 30% total nitrogen.

ADVANTAGES

- HORIZONTAL FLOW BIOFILTRATION
- GREATER FILTER SURFACE AREA
- PRETREATMENT CHAMBER
- PATENTED PERIMETER VOID AREA

- FLOW CONTROL
- NO DEPRESSED PLANTER AREA
- AUTO DRAINDOWN MEANS NO MOSQUITO VECTOR

OPERATION

The Modular Wetlands® System Linear is the most efficient and versatile biofiltration system on the market, and it is the only system with horizontal flow which:

- Improves performance
- Reduces footprint

Individual Media Filters

Cartridge Housing

Minimizes maintenance

Figure 1 & Figure 2 illustrate the invaluable benefits of horizontal flow and the multiple treatment stages.

1

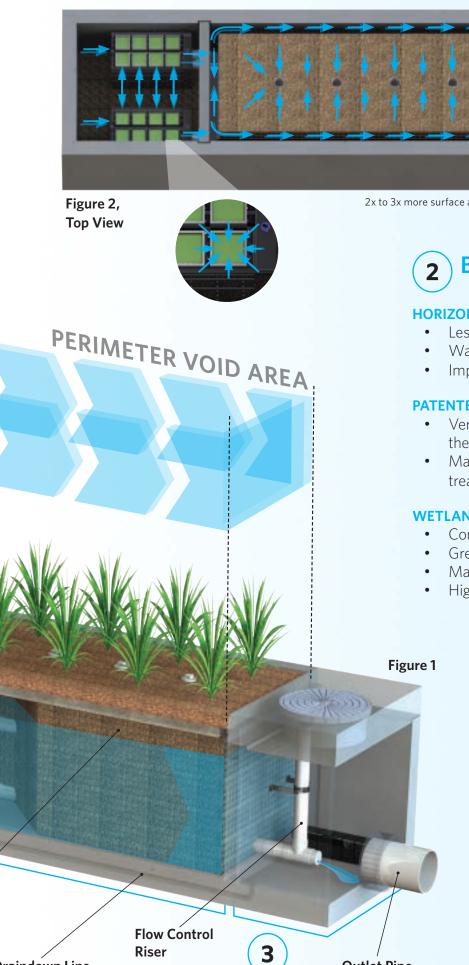
Vertical Underdrain

Manifold

2

WetlandMEDIA

Draindown Line



2x to 3x more surface area than traditional downward flow bioretention systems.

2 BIOFILTRATION

HORIZONTAL FLOW

- Less clogging than downward flow biofilters
- Water flow is subsurface
- Improves biological filtration

PATENTED PERIMETER VOID AREA

- Vertically extends void area between the walls and the WetlandMEDIA™ on all four sides
- Maximizes surface area of the media for higher treatment capacity

WETLANDMEDIA

Outlet Pipe

- Contains no organics and removes phosphorus
- Greater surface area and 48% void space
- Maximum evapotranspiration
- High ion exchange capacity and lightweight

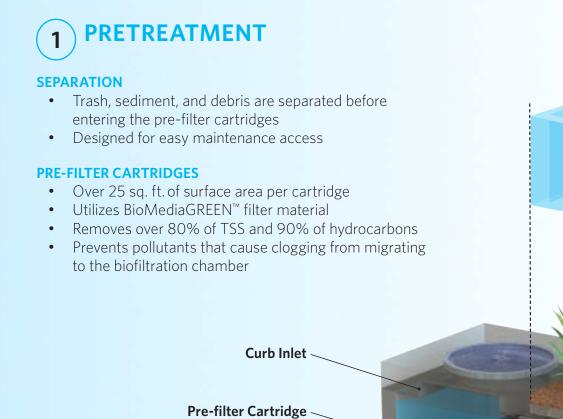
3 DISCHARGE

FLOW CONTROL

- Orifice plate controls flow of water through WetlandMEDIA™ to a level lower than the media's capacity
- Extends the life of the media and improves performance

DRAINDOWN FILTER

- The draindown is an optional feature that completely drains the pretreatment chamber
- Water that drains from the pretreatment chamber between storm events will be treated



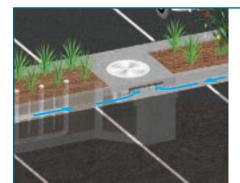
BioMediaGREEN[™]





CONFIGURATIONS

The Modular Wetlands® System Linear is the preferred biofiltration system of civil engineers across the country due to its versatile design. This highly versatile system has available "pipe-in" options on most models, along with built-in curb or grated inlets for simple integration into your storm drain design.



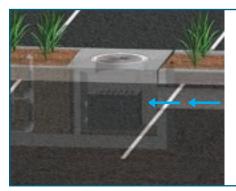
CURB TYPE

The Curb Type configuration accepts sheet flow through a curb opening and is commonly used along roadways and parking lots. It can be used in sump or flow-by conditions. Length of curb opening varies based on model and size.



GRATE TYPE

The Grate Type configuration offers the same features and benefits as the Curb Type but with a grated/drop inlet above the systems pretreatment chamber. It has the added benefit of allowing pedestrian access over the inlet. ADA-compliant grates are available to assure easy and safe access. The Grate Type can also be used in scenarios where runoff needs to be intercepted on both sides of landscape islands.



VAULT TYPE

The system's patented horizontal flow biofilter is able to accept inflow pipes directly into the pretreatment chamber, meaning the Modular Wetlands® can be used in end-of-the-line installations. This greatly improves feasibility over typical decentralized designs that are required with other biofiltration/bioretention systems. Another benefit of the "pipe-in" design is the ability to install the system downstream of underground detention systems to meet water quality volume requirements.



DOWNSPOUT TYPE

The Downspout Type is a variation of the Vault Type and is designed to accept a vertical downspout pipe from rooftop and podium areas. Some models have the option of utilizing an internal bypass, simplifying the overall design. The system can be installed as a raised planter, and the exterior can be stuccoed or covered with other finishes to match the look of adjacent buildings.

ORIENTATIONS

SIDE-BY-SIDE

The Side-By-Side orientation places the pretreatment and discharge chamber adjacent to one another with the biofiltration chamber running parallel on either side. This minimizes the system length, providing a highly compact footprint. It has been proven useful in situations such as streets with directly adjacent

sidewalks, as half of the system can be placed

under that sidewalk. This orientation also offers

internal bypass options as discussed below.

END-TO-END

The End-To-End orientation places the pretreatment and discharge chambers on opposite ends of the biofiltration chamber, therefore minimizing the width of the system to 5 ft. (outside dimension). This orientation is perfect for linear projects and street retrofits where existing utilities and sidewalks limit the amount of space available for installation. One limitation of this orientation is that bypass must be external.

BYPASS

INTERNAL BYPASS WEIR (SIDE-BY-SIDE ONLY)

The Side-By-Side orientation places the pretreatment and discharge chambers adjacent to one another allowing for integration of internal bypass. The wall between these chambers can act as a bypass weir when flows exceed the system's treatment capacity, thus allowing bypass from the pretreatment chamber directly to the discharge chamber.

EXTERNAL DIVERSION WEIR STRUCTURE

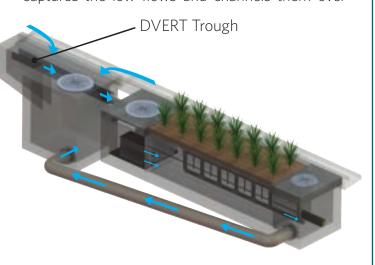
This traditional offline diversion method can be used with the Modular Wetlands® in scenarios where runoff is being piped to the system. These simple and effective structures are generally configured with two outflow pipes. The first is a smaller pipe on the upstream side of the diversion weir - to divert low flows over to the Modular Wetlands® for treatment. The second is the main pipe that receives water once the system has exceeded treatment capacity and water flows over the weir.

FLOW-BY-DESIGN

This method is one in which the system is placed just upstream of a standard curb or grate inlet to intercept the first flush. Higher flows simply pass by the Modular Wetlands® and into the standard inlet downstream.

DVERT LOW FLOW DIVERSION

This simple yet innovative diversion trough can be installed in existing or new curb and grate inlets to divert the first flush to the Modular Wetlands® via pipe. It works similar to a rain gutter and is installed just below the opening into the inlet. It captures the low flows and channels them over



to a connecting pipe exiting out the wall of the inlet and leading to the MWS Linear. The DVERT is perfect for retrofit and green street applications that allow the Modular Wetlands® to be installed anywhere space is available.

SPECIFICATIONS

FLOW-BASED DESIGNS

The Modular Wetlands® System Linear can be used in stand-alone applications to meet treatment flow requirements. Since the Modular Wetlands® is the only biofiltration system that can accept inflow pipes several feet below the surface, it can be used not only in decentralized design applications but also as a large central end-of-the-line application for maximum feasibility.

MODEL#	DIMENSIONS	WETLANDMEDIA SURFACE AREA (sq. ft.)	TREATMENT FLOW RATE (cfs)		
MWS-L-4-4	4' x 4'	23	0.052		
MWS-L-4-6	4' x 6'	32	0.073		
MWS-L-4-8	4' x 8'	50	0.115		
MWS-L-4-13	4' x 13'	63	0.144		
MWS-L-4-15	4' x 15'	76	0.175		
MWS-L-4-17	4' x 17'	90	0.206		
MWS-L-4-19	4' x 19'	103	0.237		
MWS-L-4-21	4' x 21'	117	0.268		
MWS-L-6-8	7' x 9'	64	0.147		
MWS-L-8-8	8' x 8'	100	0.230		
MWS-L-8-12	8' x 12'	151	0.346		
MWS-L-8-16	8' x 16'	201	0.462		
MWS-L-8-20	9' x 21'	252	0.577		
MWS-L-8-24	9′ x 25′	302	0.693		
MWS-L-10-20	10' x 20'	302	0.693		

VOLUME-BASED DESIGNS

HORIZONTAL FLOW BIOFILTRATION ADVANTAGE



The Modular Wetlands® System Linear offers a unique advantage in the world of biofiltration due to its exclusive horizontal flow design: Volume-Based Design. No other biofilter has the ability to be placed downstream of detention ponds, extended dry detention basins, underground storage systems and permeable paver reservoirs. The systems horizontal flow configuration and built-in orifice control allows it to be installed with just 6" of fall between inlet and outlet pipe for a simple connection to projects with shallow downstream tie-in points. In the example above, the Modular Wetlands® is installed downstream of underground box culvert storage. Designed for the water quality volume, the Modular Wetlands® will treat and discharge the required volume within local draindown time requirements.



DESIGN SUPPORT

Bio Clean engineers are trained to provide you with superior support for all volume sizing configurations throughout the country. Our vast knowledge of state and local regulations allow us to quickly and efficiently size a system to maximize feasibility. Volume control and hydromodification regulations are expanding the need to decrease the cost and size of your biofiltration system. Bio Clean will help you realize these cost savings with the Modular Wetlands®, the only biofilter than can be used downstream of storage BMPs.

ADVANTAGES

- LOWER COST THAN FLOW-BASED DESIGN
- BUILT-IN ORIFICE CONTROL STRUCTURE

MEETS LID REQUIREMENTS

WORKS WITH DEEP INSTALLATIONS

APPLICATIONS

The Modular Wetlands® System Linear has been successfully used on numerous new construction and retrofit projects. The system's superior versatility makes it beneficial for a wide range of stormwater and waste water applications - treating rooftops, streetscapes, parking lots, and industrial sites.



INDUSTRIAL

Many states enforce strict regulations for discharges from industrial sites. The Modular Wetlands® has helped various sites meet difficult EPA-mandated effluent limits for dissolved metals and other pollutants.



STREETS

Street applications can be challenging due to limited space. The Modular Wetlands® is very adaptable, and it offers the smallest footprint to work around the constraints of existing utilities on retrofit projects.



COMMERCIAL

Compared to bioretention systems, the Modular Wetlands® can treat far more area in less space, meeting treatment and volume control requirements.



RESIDENTIAL

Low to high density developments can benefit from the versatile design of the Modular Wetlands®. The system can be used in both decentralized LID design and cost-effective end-of-the-line configurations.



PARKING LOTS

Parking lots are designed to maximize space and the Modular Wetlands'® 4 ft. standard planter width allows for easy integration into parking lot islands and other landscape medians.



MIXED USE

The Modular Wetlands® can be installed as a raised planter to treat runoff from rooftops or patios, making it perfect for sustainable "live-work" spaces.

More applications include:

Agriculture
 Reuse
 Low Impact Development
 Waste Water

PLANT SELECTION

Abundant plants, trees, and grasses bring value and an aesthetic benefit to any urban setting, but those in the Modular Wetlands® System Linear do even more - they increase pollutant removal. What's not seen, but very important, is that below grade, the stormwater runoff/flow is being subjected to nature's secret weapon: a dynamic physical, chemical, and



biological process working to break down and remove non-point source pollutants. The flow rate is controlled in the Modular Wetlands®, giving the plants more contact time so that pollutants are more successfully decomposed, volatilized, and incorporated into the biomass of the Modular Wetlands'® micro/macro flora and fauna.

A wide range of plants are suitable for use in the Modular Wetlands®, but selections vary by location and climate. View suitable plants by visiting biocleanenvironmental.com/plants.

INSTALLATION



The Modular Wetlands® is simple, easy to install, and has a space-efficient design that offers lower excavation and installation costs compared to traditional tree-box type systems. The structure of the system resembles precast catch basin or utility vaults and is installed in a similar fashion.

The system is delivered fully assembled for quick installation. Generally, the structure can be unloaded and set in place in 15 minutes. Our experienced team of field technicians is available to supervise installations and provide technical support.

MAINTENANCE



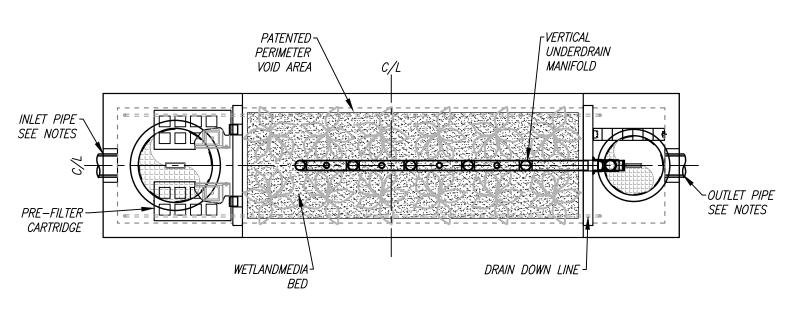
Reduce your maintenance costs, man hours, and materials with the Modular Wetlands®. Unlike other biofiltration systems that provide no pretreatment, the Modular Wetlands® is a self-contained treatment train which incorporates simple and effective pretreatment.

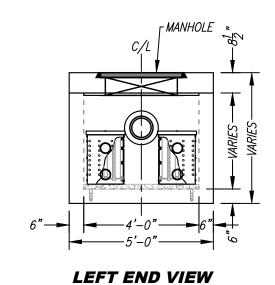
Maintenance requirements for the biofilter itself are almost completely eliminated, as the pretreatment chamber removes and isolates trash, sediments, and hydrocarbons. What's left is the simple maintenance of an easily accessible pretreatment chamber that can be cleaned by hand or with a standard vac truck. Only periodic replacement of low-cost media in the pre-filter cartridges is required for long-term operation, and there is absolutely no need to replace expensive biofiltration media.

A Forterra Company 5796 Armada Drive Suite 250 Carlsbad, CA 92008 855.566.3938 stormwater@forterrabp.com biocleanenvironmental.com

122018R1A

	SITE SPEC	IFIC DATA	
PROJECT NUMBE	īR		
PROJECT NAME			
PROJECT LOCATI	ON		
STRUCTURE ID			
	TREATMENT	REQUIRED	
VOLUME BA	ASED (CF)	FLOW BAS	ED (CFS)
N,	/A		
PEAK BYPASS R	EQUIRED (CFS) -	IF APPLICABLE	
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2			
OUTLET PIPE			
	PRETREATMENT	BIOFILTRATION	DISCHARGE
RIM ELEVATION			
SURFACE LOAD			
FRAME & COVER	ø30"		ø24"





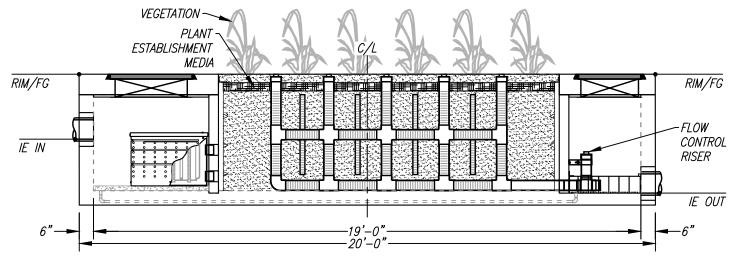
PLAN VIEW

INSTALLATION NOTES

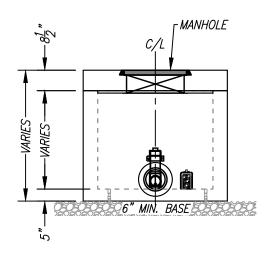
- 1. CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURERS SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURERS CONTRACT.
- 2. UNIT MUST BE INSTALLED ON LEVEL BASE. MANUFACTURER
 RECOMMENDS A MINIMUM 6" LEVEL ROCK BASE UNLESS SPECIFIED BY
 THE PROJECT ENGINEER. CONTRACTOR IS RESPONSIBLE TO VERIFY
 PROJECT ENGINEERS RECOMMENDED BASE SPECIFICATIONS.
- 4. CONTRACTOR TO SUPPLY AND INSTALL ALL EXTERNAL CONNECTING PIPES. ALL PIPES MUST BE FLUSH WITH INSIDE SURFACE OF CONCRETE. (PIPES CANNOT INTRUDE BEYOND FLUSH). INVERT OF OUTFLOW PIPE MUST BE FLUSH WITH DISCHARGE CHAMBER FLOOR. ALL PIPES SHALL BE SEALED WATER TIGHT PER MANUFACTURERS STANDARD CONNECTION DETAIL.
- 5. CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL RISERS, MANHOLES, AND HATCHES. CONTRACTOR TO GROUT ALL MANHOLES AND HATCHES TO MATCH FINISHED SURFACE UNLESS SPECIFIED OTHERWISE.
- 6. VEGETATION SUPPLIED AND INSTALLED BY OTHERS. ALL UNITS WITH VEGETATION MUST HAVE DRIP OR SPRAY IRRIGATION SUPPLIED AND INSTALLED BY OTHERS.
- 7. CONTRACTOR RESPONSIBLE FOR CONTACTING BIO CLEAN FOR ACTIVATION OF UNIT. MANUFACTURERS WARRANTY IS VOID WITH OUT PROPER ACTIVATION BY A BIO CLEAN REPRESENTATIVE.

GENERAL NOTES

- 1. MANUFACTURER TO PROVIDE ALL MATERIALS UNLESS OTHERWISE NOTED.
- P. ALL DIMENSIONS, ELEVATIONS, SPECIFICATIONS AND CAPACITIES ARE SUBJECT TO CHANGE. FOR PROJECT SPECIFIC DRAWINGS DETAILING EXACT DIMENSIONS, WEIGHTS AND ACCESSORIES PLEASE CONTACT BIO CLEAN.



ELEVATION VIEW



RIGHT END VIEW

TREATMENT FLOW (CFS)	
OPERATING HEAD (FT)	
PRETREATMENT LOADING RATE (GPM/SF)	
WETLAND MEDIA LOADING RATE (GPM/SF)	



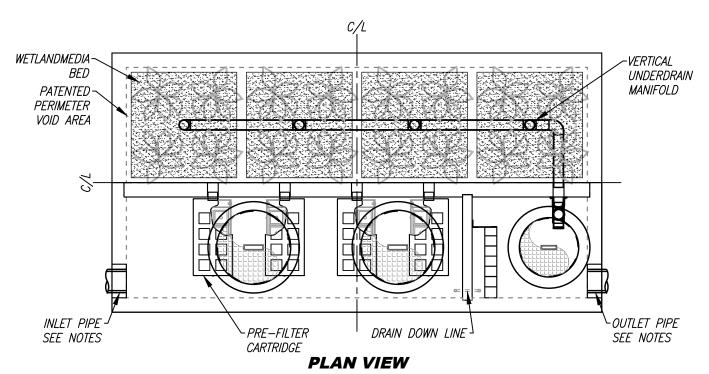
PROPRIETARY AND CONFIDENTIAL:

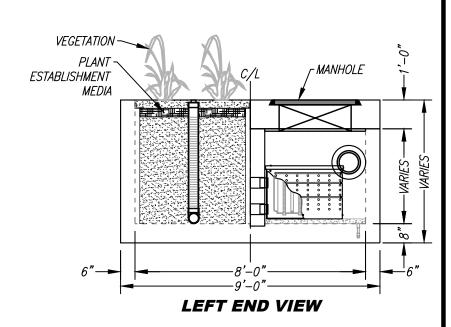
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF MODULAR WETLANDS SYSTEMS. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF MODULAR WETLANDS SYSTEMS IS PROHIBITED.



MWS-L-4-19-V STORMWATER BIOFILTRATION SYSTEM STANDARD DETAIL

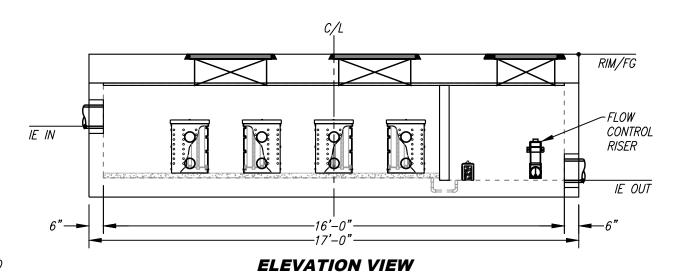
	SITE SPEC	IFIC DATA	
PROJECT NUMBE	T.R		
PROJECT NAME			
PROJECT LOCATI	ON		
STRUCTURE ID			
	TREATMENT	REQUIRED	
VOLUME B	ASED (CF)	FLOW BAS	ED (CFS)
N,	/A		
PEAK BYPASS R	EQUIRED (CFS) -	IF APPLICABLE	
PIPE DATA	I.E.	MATERIAL	DIAMETER
INLET PIPE 1			
INLET PIPE 2			
OUTLET PIPE			
	PRETREATMENT	BIOFILTRATION	DISCHARGE
RIM ELEVATION			
SURFACE LOAD			
FRAME & COVER	2EA Ø30"		ø24"

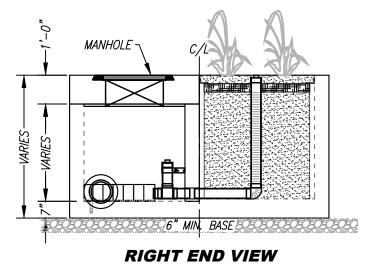




INSTALLATION NOTES

- 1. CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND APPURTENANCES IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURERS SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURERS CONTRACT.
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WETLAND MEDIA LOADING RATE (GPM/SF)	
PRETREATMENT LOADING RATE (GPM/SF)	
OPERATING HEAD (FT)	
TREATMENT FLOW (CFS)	

GENERAL NOTES

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- ALL DIMENSIONS, ELEVATIONS, SPECIFICATIONS AND CAPACITIES ARE SUBJECT TO CHANGE. FOR PROJECT SPECIFIC DRAWINGS DETAILING EXACT DIMENSIONS, WEIGHTS AND ACCESSORIES PLEASE CONTACT BIO CLEAN.



PROPRIETARY AND CONFIDENTIAL:

THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE SOLE PROPERTY OF FORTERRA AND ITS COMPANIES. THIS DOCUMENT, FOR ANY PART THEREOF, MAY BE USED, REPRODUCED OR MODIFIED IN ANY MANNER WITH OUT THE WRITTEN CONSENT OF FORTERRA.



MWS-L-8-16-V STORMWATER BIOFILTRATION SYSTEM STANDARD DETAIL

Appendix D:

BMP Maintenance Information

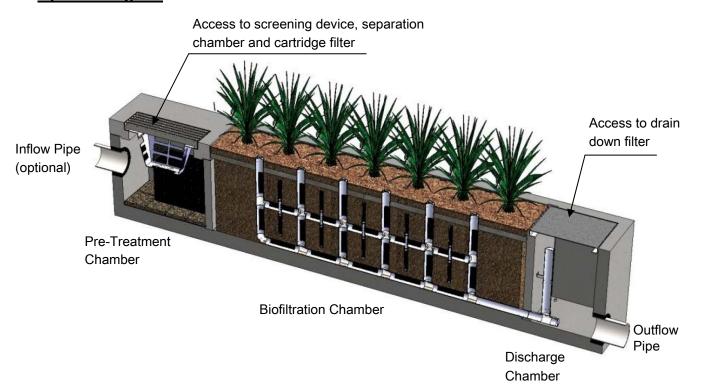


Maintenance Guidelines for Modular Wetland System - Linear

Maintenance Summary

- Remove Trash from Screening Device average maintenance interval is 6 to 12 months.
 - (5 minute average service time).
- Remove Sediment from Separation Chamber average maintenance interval is 12 to 24 months.
 - (10 minute average service time).
- Replace Cartridge Filter Media average maintenance interval 12 to 24 months.
 - (10-15 minute per cartridge average service time).
- Replace Drain Down Filter Media average maintenance interval is 12 to 24 months.
 - (5 minute average service time).
- Trim Vegetation average maintenance interval is 6 to 12 months.
 - (Service time varies).

System Diagram



www.modularwetlands.com



Maintenance Procedures

Screening Device

- 1. Remove grate or manhole cover to gain access to the screening device in the Pre-Treatment Chamber. Vault type units do not have screening device. Maintenance can be performed without entry.
- Remove all pollutants collected by the screening device. Removal can be done manually or with the use of a vacuum truck. The hose of the vacuum truck will not damage the screening device.
- 3. Screening device can easily be removed from the Pre-Treatment Chamber to gain access to separation chamber and media filters below. Replace grate or manhole cover when completed.

Separation Chamber

- 1. Perform maintenance procedures of screening device listed above before maintaining the separation chamber.
- 2. With a pressure washer spray down pollutants accumulated on walls and cartridge filters.
- 3. Vacuum out Separation Chamber and remove all accumulated pollutants. Replace screening device, grate or manhole cover when completed.

Cartridge Filters

- 1. Perform maintenance procedures on screening device and separation chamber before maintaining cartridge filters.
- 2. Enter separation chamber.
- 3. Unscrew the two bolts holding the lid on each cartridge filter and remove lid.
- 4. Remove each of 4 to 8 media cages holding the media in place.
- 5. Spray down the cartridge filter to remove any accumulated pollutants.
- 6. Vacuum out old media and accumulated pollutants.
- 7. Reinstall media cages and fill with new media from manufacturer or outside supplier. Manufacturer will provide specification of media and sources to purchase.
- 8. Replace the lid and tighten down bolts. Replace screening device, grate or manhole cover when completed.

Drain Down Filter

- 1. Remove hatch or manhole cover over discharge chamber and enter chamber.
- 2. Unlock and lift drain down filter housing and remove old media block. Replace with new media block. Lower drain down filter housing and lock into place.
- 3. Exit chamber and replace hatch or manhole cover.



Maintenance Notes

- 1. Following maintenance and/or inspection, it is recommended the maintenance operator prepare a maintenance/inspection record. The record should include any maintenance activities performed, amount and description of debris collected, and condition of the system and its various filter mechanisms.
- 2. The owner should keep maintenance/inspection record(s) for a minimum of five years from the date of maintenance. These records should be made available to the governing municipality for inspection upon request at any time.
- 3. Transport all debris, trash, organics and sediments to approved facility for disposal in accordance with local and state requirements.
- 4. Entry into chambers may require confined space training based on state and local regulations.
- 5. No fertilizer shall be used in the Biofiltration Chamber.
- 6. Irrigation should be provided as recommended by manufacturer and/or landscape architect. Amount of irrigation required is dependent on plant species. Some plants may require irrigation.



Maintenance Procedure Illustration

Screening Device

The screening device is located directly under the manhole or grate over the Pre-Treatment Chamber. It's mounted directly underneath for easy access and cleaning. Device can be cleaned by hand or with a vacuum truck.

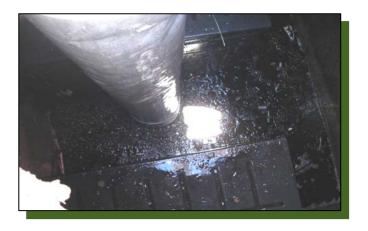


Separation Chamber

The separation chamber is located directly beneath the screening device. It can be quickly cleaned using a vacuum truck or by hand. A pressure washer is useful to assist in the cleaning process.









Cartridge Filters

The cartridge filters are located in the Pre-Treatment chamber connected to the wall adjacent to the biofiltration chamber. The cartridges have removable tops to access the individual media filters. Once the cartridge is open media can be easily removed and replaced by hand or a vacuum truck.







Drain Down Filter

The drain down filter is located in the Discharge Chamber. The drain filter unlocks from the wall mount and hinges up. Remove filter block and replace with new block.





Trim Vegetation

Vegetation should be maintained in the same manner as surrounding vegetation and trimmed as needed. No fertilizer shall be used on the plants. Irrigation per the recommendation of the manufacturer and or landscape architect. Different types of vegetation requires different amounts of irrigation.











Inspection Form



Modular Wetland System, Inc.

P. 760.433-7640

F. 760-433-3176

E. Info@modularwetlands.com

www.modularwetlands.com



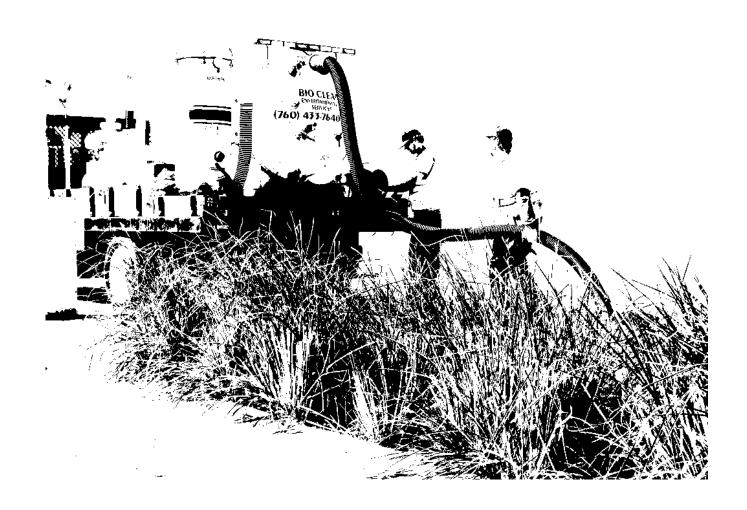
Inspection Report Modular Wetlands System



Project Name								For Office Use Onl	у
Project Address						(71.0.1)		(Davison I Da)	
Owner / Management Company					(city)	(Zip Code)		(Reviewed By)	
Contact				Phone () –			(Date) Office personnel to cor the left	
Inspector Name				Date	/		Time		AM / PM
Type of Inspection Routin	e 🗌 Fo	ollow Up	☐ Compla	nint	S	Storm Event	in Last 72-ho	urs? 🗌 No 🗌 Y	'es
Weather Condition				Additional N	lotes				
			lr	nspection Chec	klist				
Modular Wetland System T	ype (Curb,	Grate or L	JG Vault):		Size (2	2', 14' or 6	etc.):		
Structural Integrity:						Yes	No	Comme	nts
Damage to pre-treatment access pressure?	cover (manh	ole cover/gr	ate) or cannot	be opened using norn	nal lifting				
Damage to discharge chamber a pressure?	ccess cover (manhole co	ver/grate) or c	annot be opened using	normal lifting				
Does the MWS unit show signs o	f structural d	eterioration	(cracks in the	wall, damage to frame)?				
Is the inlet/outlet pipe or drain do	wn pipe dama	aged or othe	erwise not func	tioning properly?					
Working Condition:									
Is there evidence of illicit dischare unit?	ge or excessi	ve oil, greas	e, or other aut	omobile fluids entering	and clogging the	€			
Is there standing water in inappro	priate areas	after a dry p	eriod?						
Is the filter insert (if applicable) at	capacity and	d/or is there	an accumulation	on of debris/trash on tl	ne shelf system?				
Does the depth of sediment/trash specify which one in the commer						3 ,			Depth:
Does the cartridge filter media ne	ed replaceme	ent in pre-tre	eatment chamb	per and/or discharge o	namber?			Chamber:	
Any signs of improper functioning	in the discha	arge chambe	er? Note issue	es in comments section	1.				
Other Inspection Items:									
Is there an accumulation of sedin	nent/trash/del	bris in the w	etland media (if applicable)?					
Is it evident that the plants are ali	ve and health	ny (if applica	ıble)? Please r	note Plant Information	pelow.				
Is there a septic or foul odor com	ing from insid	le the syster	m?						
Waste:	Yes	No		Recommen	ded Maintena	ince		Plant Inforn	nation
Sediment / Silt / Clay			1	No Cleaning Needed				Damage to Plants	
Trash / Bags / Bottles				Schedule Maintenance	as Planned			Plant Replacement	
Green Waste / Leaves / Foliage			1	Needs Immediate Mair	ntenance			Plant Trimming	
Additional Notes:									



Maintenance Report



Modular Wetland System, Inc.

P. 760.433-7640

F. 760-433-3176

E. Info@modularwetlands.com

www.modularwetlands.com



Cleaning and Maintenance Report Modular Wetlands System



Project Name								or Office Use Only
Project Address (city) (Zip Code)								eviewed By)
Owner / Management Company							(D:	ate)
Contact				Phone ()	_	O	office personnel to complete section to the left.
Inspector Name				Date	/		Time	AM / PM
Type of Inspection				☐ Storm		Storm Event in	Last 72-hours?	☐ No ☐ Yes
Weather	Condition		Additional Notes					
Site Map #	GPS Coordinates of Insert	Manufacturer / Description / Sizing	Trash Accumulation	Foliage Accumulation	Sediment Accumulation	Total Debris Accumulation	Condition of Me 25/50/75/100 (will be change @ 75%)) Manufactures'
	Lat:	MWS Catch Basins						
		MWS Sedimentation Basin						
		Media Filter Condition						
		- Plant Condition						
		Drain Down Media Condition						
		Discharge Chamber Condition						
		Drain Down Pipe Condition						
		Inlet and Outlet Pipe Condition						
Commen	ts:							

Appendix E:

Geotechnical Information

(Storm water infiltration BMP evaluation)

18011 Sky Park Circle Suite J Irvine CA 92614 Tel 949.553.0370 Fax 949.553.0371

October 22, 2019 Project No. 181055.1



Mr. David Cohen Cohen Living Trust 4922 E. Somerton Avenue Orange, CA 92867

Subject: Feasibility of Site Infiltration

Proposed North Orange Olive Development

Northeast Corner of N. Orange Olive Road & E. Grove Avenue

Orange, California

Reference: Twining, Inc., 2019, "Geotechnical Engineering Evaluation Report,"

Proposed North Orange Olive Development, Northeast Corner of N. Orange Olive Road & E. Grove Avenue, Orange, California, Twining

Consulting Project No. 181055.1, dated January 7.

Dear Mr. Cohen,

Twining, Inc. (Twining) has performed a geotechnical engineering evaluation for the development of the subject project. Geotechnical recommendations for the project were provided for the design and construction of the project and are presented in the referenced report. The results of our geotechnical engineering evaluation indicate that stormwater infiltration at the site is infeasible.

A field exploration was performed at the site consisting of 5 soil borings advanced to depths up to 51.5 feet below the existing ground surface (bgs), and 3 percolation test borings advanced to depths of 5, 5, and 25 feet bgs. In general, the 5 borings exposed a soil profile consisting of low permeability silt and clay with gravel in the upper 10 feet of excavations, and very dense sand and silt with gravel from 10 feet to the bottom of excavations at 51.5 feet. Our boring logs and a boring location map are attached to the end of this letter.

Percolation testing was performed according to the County of Orange Technical Guidance Document for the evaluation of feasibility of site stormwater infiltration. Percolation tests P-1 and P-2 were performed at a depth of 5 feet bgs. Results of testing indicate that the highest infiltration rate for the soil layer at 5 feet is 0.05 inches per hour. Percolation test P-3 was performed at a depth of 25 feet bgs. Results of testing indicate that the infiltration rate for the soil layer at 25 feet is 0.04 inches per hour. The test data for the percolation tests is attached to the end of this letter.

The design infiltration rates were evaluated using a factor of safety of 2.5, considering the variability of the site soil profile, soil type, amount of testing performed relative to the project site, and the depth to groundwater. Please refer to the attached Factor of Safety and Design Infiltration Rate Worksheet for calculation of the factor of safety used in our analyses.

The infiltration rates determined at P-1 and P-2 are consistent with the soil encountered in the upper 10 feet. The silt and clay layer encountered has a very low infiltration rate and is not appropriate for infiltration of stormwater at the site. It is our opinion that the infiltration rate determined for P-3 is also consistent with the materials conditions observed in our borings at 25 feet bgs. Based on the blow counts for the material at depths greater than 10 feet in boring P-3 (and all other borings), the soils are very dense. The measured infiltration rate at P-3 is therefore consistent with the soil conditions.

18011 Sky Park Circle Suite J Irvine CA 92614 Tel 949.553.0370 Fax 949.553.0371

Based on the results of percolation testing at the site and our data collected of the of the subgrade soils, we recommend that the site is infeasible for stormwater infiltration.



In lieu of infiltration facilities to manage stormwater, we recommend "filtration" facilities, such as bio-planters and/or bioswales with liner, be used for the on-site storm water treatment prior to discharge to public storm drains.

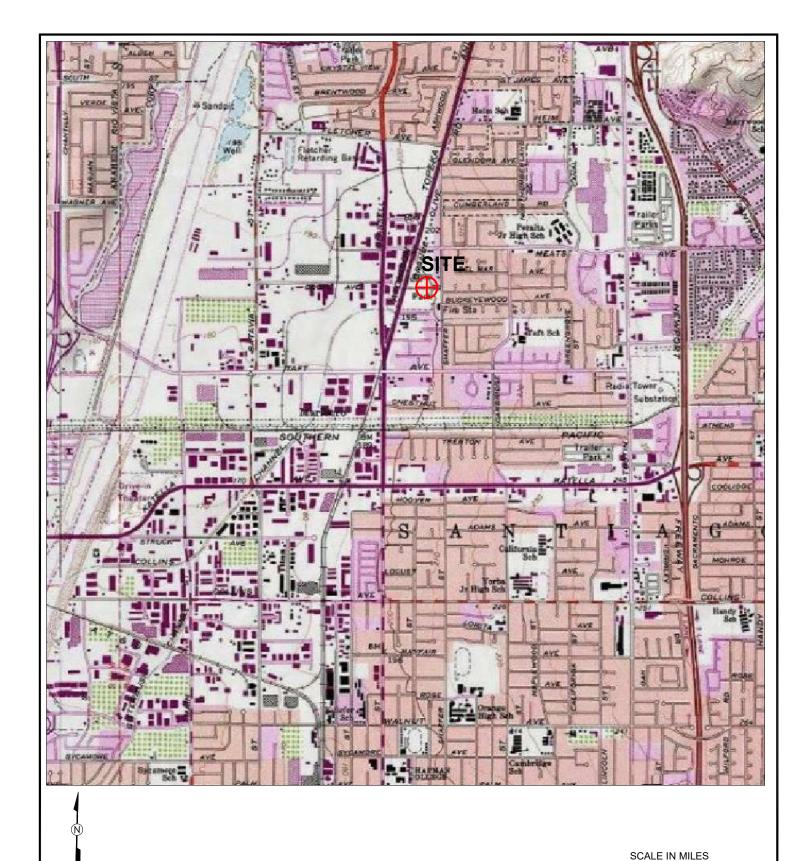
We appreciate the opportunity to be of service on this project. Should you have any questions regarding this report or if we can be of further service, please do not hesitate to contact the undersigned.

Respectfully submitted,

TWINING CONSULTING, INC.

Paul Soltis, GE 2606

Vice President, Geotechnical Engineering



REFERENCE: USGS (2018)



0.5

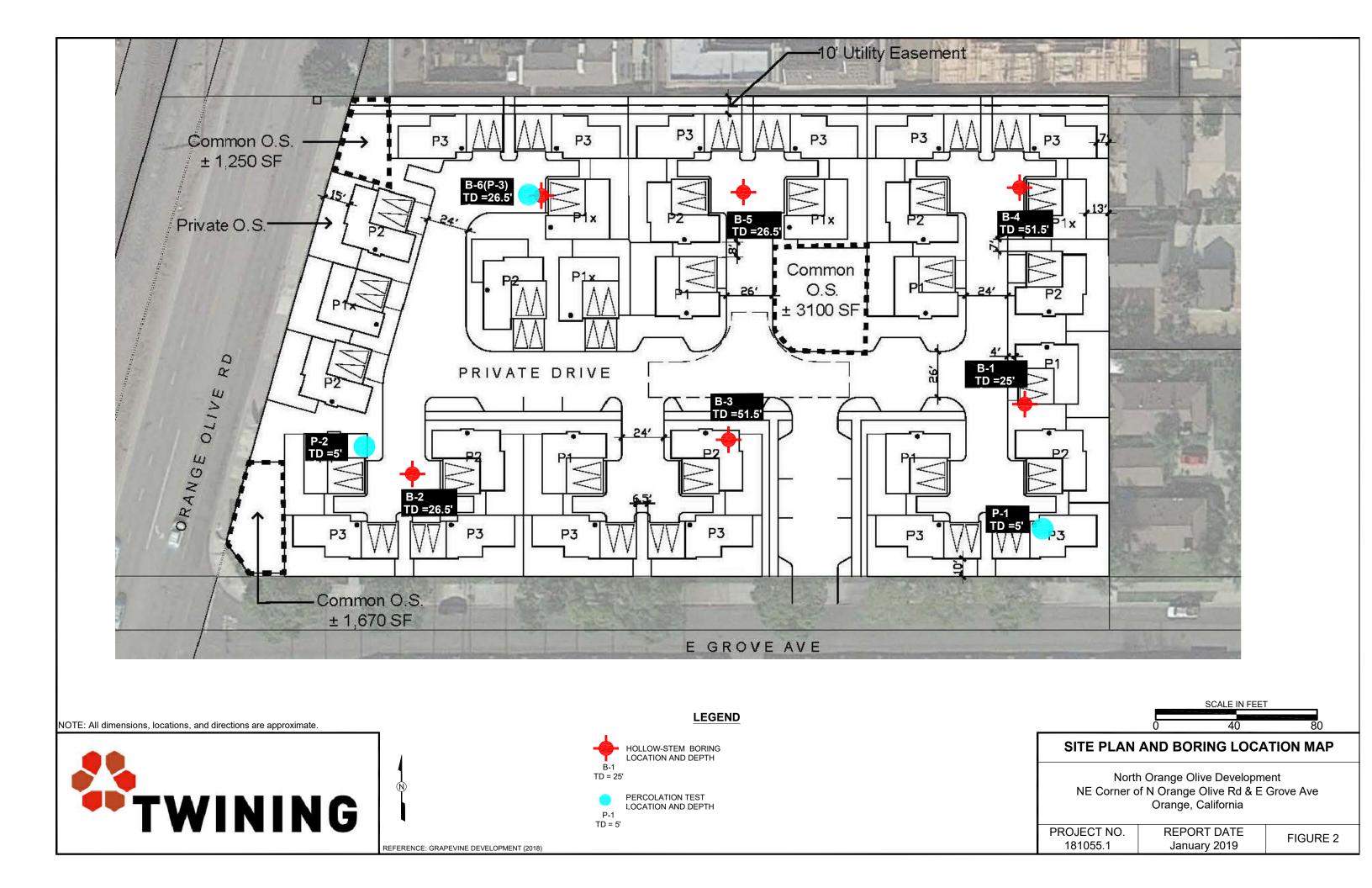
SITE LOCATION MAP

North Orange Olive Development NE Corner of N Orange Olive Rd & E Grove Ave Orange, California

PROJECT NO.
181055.1

REPORT DATE January 2019

FIGURE 1



		UNIFIED SOIL CLA	ASSIFICATI	ON CHAR	Т
	MAJOR DIVISION	s	SYME	BOLS	TYPICAL
	WAOON DIVIDION		GRAPH	LETTER	DESCRIPTIONS
	GRAVEL AND GRAVELLY	CLEAN GRAVELS		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
COARSE	SOILS	(LITTLE OR NO FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
GRAINED SOILS	MORE THAN 50% OF COARSE FRACTION	GRAVELS WITH FINES		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
	RETAINED ON NO. 4 SIEVE	(APPRECIABLE AMOUNT OF FINES)		GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
MORE THAN 50% OF	SAND AND SANDY	CLEAN SANDS		sw	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	SOILS	(LITTLE OR NO FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION	SANDS WITH FINES		SM	SILTY SANDS, SAND - SILT MIXTURES
	PASSING ON NO. 4 SIEVE	(APPRECIABLE AMOUNT OF FINES)		sc	CLAYEY SANDS, SAND - CLAY MIXTURES
				ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
FINE GRAINED	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
SOILS				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE				МН	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		СН	INORGANIC CLAYS OF HIGH PLASTICITY
				ОН	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
	HIGHLY ORGANIC S	OILS	7 77 77 77 77 77 77 77	PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

COARSE-GRAINED SOILS FINE-GRAINED SOILS

Relative Density	SPT (blows/ft)	Relative Density (%)	Consistency	SPT (blows/ft)
Very Loose	<4	0 - 15	Very Soft	<2
Loose	4 - 10	15 - 35	Soft	2 - 4
Medium Dense	10 - 30	35 - 65	Medium Stiff	4 - 8
Dense	30 - 50	65 - 85	Stiff	8 - 15
Very Dense	>50	85 - 100	Very Stiff	15 - 30
			Hard	>30

NOTE: SPT blow counts based on 140 lb. hammer falling 30 inches

Sample Symbol	Sample Type	Description					
	SPT	1.4 in I.D., 2.0 in. O.D. driven sampler					
	California Modified	2.4 in. I.D., 3.0 in. O.D. driven sampl					
	Bulk	Retrieved from soil cuttings					
	Thin-Walled Tube	Pitcher or Shelby Tube					

LABORATORY TESTING ABBREVIATIONS

ATT

С	Consolidation
CORR	Corrosivity Series
DS	Direct Shear
EI	Expansion Index
GS	Grain Size Distribution
K	Permeability
MAX	Moisture/Density
	(Modified Proctor)
0	Organic Content
RV	Resistance Value
SE	Sand Equivalent
SG	Specific Gravity
TX	Triaxial Compression
UC	Unconfined Compression

Atterberg Limits



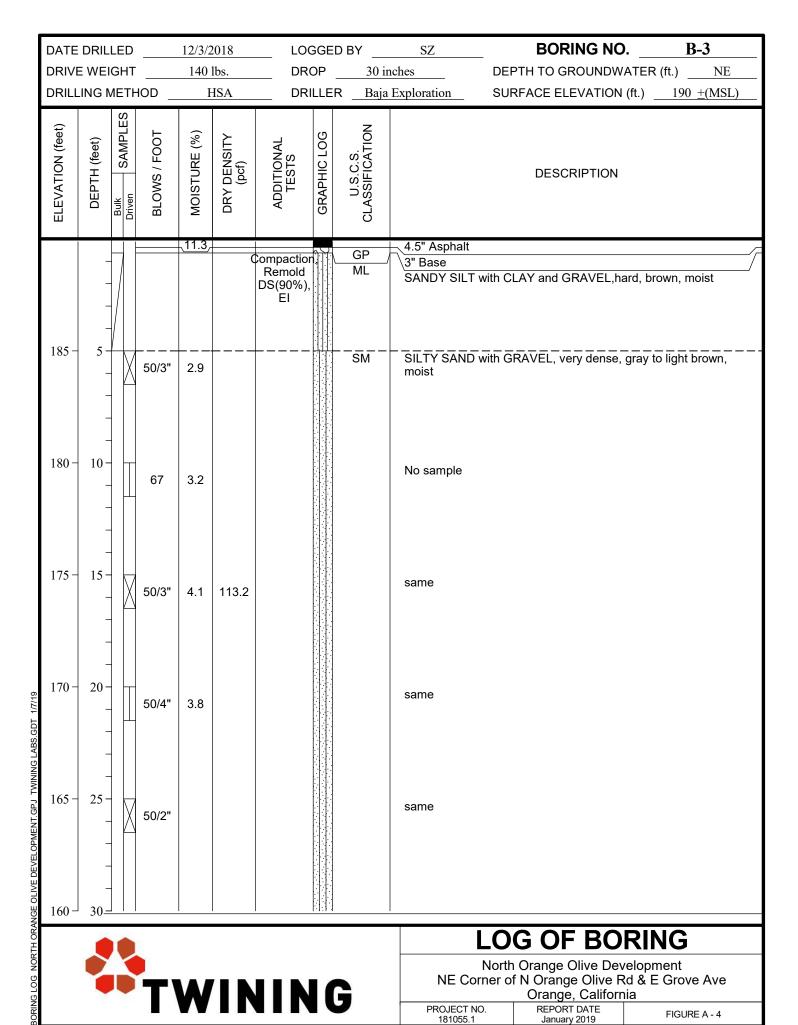
EXPLANATION FOR LOG OF BORINGS

North Orange Olive Development NE Corner of N Orange Olive Rd & E Grove Ave Orange, California

	Orange, California	
PROJECT NO. 181055.1	REPORT DATE January 2018	FIGURE A-1

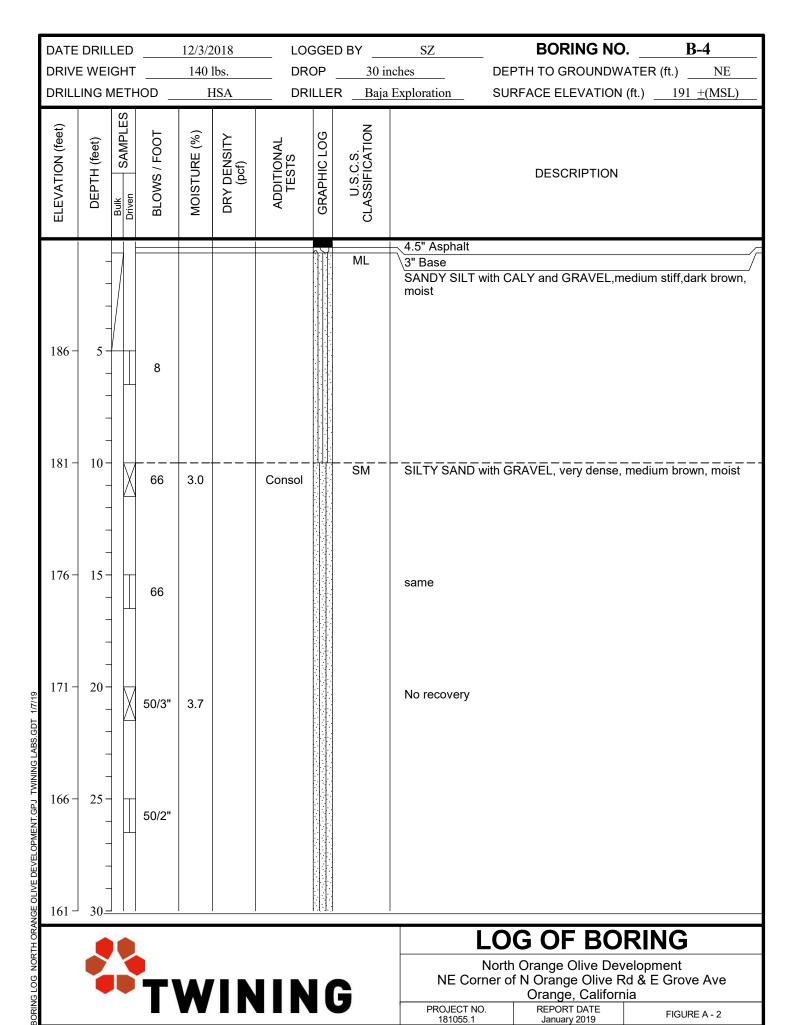
DATE	DRIL	LED		11/26/	2018	LO	GGE	D BY	SZ	BORING NO	O. <u>B-1</u>
									Exploration	DEPTH TO GROUNDY	` '
DRIL	LING	_	HOD _	<u> </u>	HSA	DR	ILLE	R <u>Baja</u>	Exploration	SURFACE ELEVATION	N (ft.) <u>191 ±(MSL)</u>
ELEVATION (feet)	DEPTH (feet)	Bulk SAMPLES	BLOWS / FOOT	MOISTURE (%)	DRY DENSITY (pcf)	ADDITIONAL TESTS	GRAPHIC LOG	U.S.C.S. CLASSIFICATION		DESCRIPTION	
	_							GP	4.5" Asphalt		
186 -	- - - 5- -		18	9.6	117.2	Consol		SM		with GRAVEL, medium de	nse, dark brown, moist
181 -	- 10 -		50/2"						very dense		
176 -	- 15 -		50/4"	3.7					same		
171 -	-		50/3"						same		
166 -	25 -						-1.1		Borehole bac	= 25.0 feet	testing with cuttings.
			r							LOG OF BO	RING
		K	T	W		IIN	I 1	2		North Orange Olive De orner of N Orange Olive I Orange, Califor	velopment Rd & E Grove Ave
				VV			1	J	PROJECT N 181055.1	NO. REPORT DATE	FIGURE A - 5

	DATE DRILLED11/26/2018 LOGGED BY									SZ	BORING NO.	B-2
							DR			Explanation	DEPTH TO GROUNDWA	• • —
	DRILL	ING N		10D _	1	ISA	DRI	LLE	R <u>Ваја</u>	Exploration	SURFACE ELEVATION (π.) <u>190 ±(MSL)</u>
	ELEVATION (feet)	DEPTH (feet)	Bulk SAMPLES	BLOWS / FOOT	MOISTURE (%)	DRY DENSITY (pcf)	ADDITIONAL TESTS	GRAPHIC LOG	U.S.C.S. CLASSIFICATION		DESCRIPTION	
		_							ML	4.5" Asphalt		
	185 –	- - - 5 -		29	13.0	126.5	DS		IVIL		with CLAY,stiff, reddish brow	vn, moist
	180 –	10-		37					SM	SILTY SAND moist) with some gravel, dense, da	rk brown to gray,
	175 –	- 15		50/3"	6.8	111.4	Consol			very dense		
TWINING LABS.GDT 1/7/19	170 -	20 -		45					SP-SM	Poorly grade to dark gray,	d SAND with SILT and GRAV moist	EL, very dense,brown
NT.GPJ	165 -	25 -		50/5"	3.0					No recover		
BORING LOG NORTH ORANGE OLIVE DEVELOPMENT.GPJ TWINING LABS.GDT	160 –	30=						<u>, 11-11</u>		Borehole bad	11/26/2018 was not encountered ckfilled at the completion of te hed with cold patch asphalt	
TH OR				ı,							LOG OF BOP	RING
G LOG NOF				T	W	'I N	IIN		3	NE Co	North Orange Olive Deve orner of N Orange Olive Ro Orange, Californi	d & E Grove Ave
30RIN					VV					PROJECT 181055.	NO. REPORT DATE January 2019	FIGURE A - 3



	DATE DRILLED 12/3/2018 LOGGED BY						LO	GGEI	D BY	SZ	BORING NO.	•	B-3
	DRIVE	E WEI	IGHT		140	lbs.	DR	OP .	30 ir	iches	DEPTH TO GROUNDWA	ATER (ft.)	NE
	DRILL	ING N	ИΕΤΙ	HOD _	I	HSA	DRI	LLEF	R <u>Baj</u> a	Exploration	SURFACE ELEVATION	(ft.) <u>19</u>	0 <u>+</u> (MSL)
	ELEVATION (feet)	DEPTH (feet)	Bulk SAMPLES	BLOWS / FOOT	MOISTURE (%)	DRY DENSITY (pcf)	ADDITIONAL TESTS	GRAPHIC LOG	U.S.C.S. CLASSIFICATION		DESCRIPTION		
		- - -	-	50/2"					SM	SILTY SAND moist (continu same	with GRAVEL, very dense, (ued)	gray to ligh	t brown,
	155 -	35 -		50/4"						same			
	150 -	40 -		50/2"						same			
	145 -	45 - - - -		50/3"						same			
TWINING LABS.GDT 1/7/19	140 -	50 -		50/5"						Borehole bac		esting with	cuttings.
BORING LOG NORTH ORANGE OLIVE DEVELOPMENT.GPJ TWINING LABS.GDT 1/7/19	135 -	55 -	-						222				
'H ORA										LOG OF BORING			
GLOG NORT		?	K	T	W		IIN		2		North Orange Olive Develorner of N Orange Olive Ro Orange, Californ	elopment d & E Gro	
BORIN					VV			1		PROJECT N 181055.1	NO. REPORT DATE		JRE A - 4





DATE DRILLED 12/3/2018 LOGGED BY							GGE	D BY	SZ BORING NO. B-4				
DRIV	E WEI	GHT	<u> </u>	140	lbs.	DR	OP	30 ir	nches	DEPTH TO GROUNDWATER (ft.) NE			
DRILI	LING N	ИΕΤΙ	HOD _	I	HSA	DR	ILLE	R <u>Baj</u> a	Exploration	Exploration SURFACE ELEVATION (ft.) 191 ±(MSL)			
ELEVATION (feet)	ELEVATION (feet) DEPTH (feet) Bulk SAMPLES BLOWS / FOOT MOISTURE (%) DRY DENSITY (pcf)					ADDITIONAL TESTS	GRAPHIC LOG	U.S.C.S. CLASSIFICATION		DESCRIPTION			
	-		50/3"	3.5				SM	SILTY SAND (continued) dark brown	with GRAVEL, very dense, med	dium brown, moist		
156 -	35 -		50/4"						light brown to	gray			
151 -	- 40 - - - -		50/3"						No recovery				
146 -	- 45 - - - -		50/2"						No recovery				
NG LABS.GDT 1/7/19	50 -		50/4"						Borehole back	12/3/2018 was not encountered kfilled at the completion of testir			
BORING LOG NORTH ORANGE OLIVE DEVELOPMENT.GPJ TWINING LABS.GDT 1/7/19	- 55 - 	-							Surface patch	ed with cold patch asphalt	· · · · · ·		
≥ 0 121													
31 - 131 -	60=			1			, 1		·	10005	INIO		
RTH C									LOG OF BORING				
3 LOG NC			T	W			1	2	North Orange Olive Development NE Corner of N Orange Olive Rd & E Grove Ave Orange, California				
BORIN	TWINING								PROJECT No. 181055.1		FIGURE A - 2		

)					D BY		BORING NO.	
				T HOD		lbs. HSA			30 ir R Baja	Exploration	DEPTH TO GROUNDWAT SURFACE ELEVATION (ft	
	ELEVATION (feet)	DEPTH (feet)	Bulk SAMPLES	NS N	MOISTURE (%)	DRY DENSITY (pcf)	ADDITIONAL TESTS	GRAPHIC LOG	U.S.C.S. CLASSIFICATION		DESCRIPTION	
ı		_							GP ,	4.5" Asphalt 3" Base		
	185 –	- - - 5 - - -		15	12.7	121.2	DS		ML	\	with CLAY, stiff, reddish brow	n, moist
	180 -	- 10 - - - -		15	14.4	111.8				same		
	175 –	15 - - - -		50/3"	2.7				SM	SILTY SAND	with GRAVEL, very dense, da	rk gray, moist
VINING LABS.GDT 1/7/19	170 -	20 -		50/5"								
NT.GPJ T	165 -	25 -		50/3"								
BORING LOG NORTH ORANGE OLIVE DEVELOPMENT.GPJ TWINING LABS.GDT 1/7/19										Borehole bacl	26.5 feet 11/26/2018 was not encountered kfilled at the completion of test ned with cold patch asphalt	ting with cuttings.
TH ORA											LOG OF BOR	RING
GLOG NOR				T	W		IIN	1	2	NE Co	North Orange Olive Develorner of N Orange Olive Rd Orange, California	opment & E Grove Ave
BORIN					VV			1		PROJECT N 181055.1	O. REPORT DATE January 2019	FIGURE A - 6

DATE DRILLED 11/26/2018 DRIVE WEIGHT 140 lbs.					GGED		SZ	BORING NO.	· ,		
							OP _		Explanation	DEPTH TO GROUNDWATE	` '
DRILL	ING N		10D _	I	HSA	DRI	LLEF	Ваја	Exploration	SURFACE ELEVATION (ft.)	190 <u>+(MSL)</u>
ELEVATION (feet)	DEPTH (feet)	Bulk SAMPLES	BLOWS / FOOT	MOISTURE (%)	DRY DENSITY (pcf)	ADDITIONAL TESTS	GRAPHIC LOG	U.S.C.S. CLASSIFICATION		DESCRIPTION	
		\mathbb{H}				Corrosivity		GP	4.5" Asphalt		
185 -	- - 5 - - -		13	13.3	119.9	RV		ML	\3" Base SANDY SILT same	with CLAY , hard, reddish brow	n, moist
180 -	10-	Т	 7	13.3		Wash		CL	SANDY lean	CLAY, medium stiff, reddishbro	wn, moist
	_	1 ∐	,	10.0		#200, ATT					
175 -	- 15 - - - -		50/2"	2.3				SM	SILTY SAND	with GRAVEL, very dense, redi	sh brown, moist
170 -	20		86					SP-SM	Poorly-graded	d SAND with SILT and GRAVEL	., dark gray, moist
160 –	30=								Borehole bac	= 26.5 feet 11/26/2018 was not encountered kfilled at the completion of testir ned with cold patch asphalt	ng with cuttings.
5			el							LOG OF BOR	ING
		K			/ B B					North Orange Olive Develorner of N Orange Olive Rd &	pment
				W		IIN		Ī	PROJECT N 181055.1	Orange, California IO. REPORT DATE January 2019	FIGURE A - 7

ı	DATE DRILLED 11/26/2018							LOGGE	D BY	SZ	BORING NO.	P-1
	DRIVE	E WEI	GHT		140	lbs.		DROP	30 inc	hes	DEPTH TO GROUNDWA	ΓER (ft.) <u>NE</u>
	DRILL	ING N	ЛΕΤΗ	HOD _	ŀ	ISA		DRILLE	R <u>Baja</u> E	Exploration	SURFACE ELEVATION (f	t.) <u>190 ±(MSL)</u>
	ELEVATION (feet)	DEPTH (feet)	Bulk SAMPLES	BLOWS / FOOT	MOISTURE (%)	DRY DENSITY (pcf)	GRAPHIC LOG	U.S.C.S. CLASSIFICATION			DESCRIPTION	
		- - -						ML	4.5" Asph 3" Base SANDY S		and GRAVEL,medium stiff,d	ark brown, moist
	185 –	5							Backfilled Groundwa Borehole	oth = 5.0 feet l on 11/26/2018 ater was not end backfilled at the atched with cold		uttings.
	180 -	10-										
	175 -	15 -										
ING LABS.GDT 1/7/19	170 -	20 -										
BORING LOG NORTH ORANGE OLIVE DEVELOPMENT.GPJ TWINING LABS.GDT 1/7/19	165 -	25 -										
E OLIV	160	20										
RANG	160	30=		•		•	. 1					
JRTH C			0								LOG OF BOF	
3 LOG NO				T	W			N	2	NE Cor	North Orange Olive Deve ner of N Orange Olive Rd Orange, California	& E Grove Ave
30RIN					VV					PROJECT NO 181055.1		FIGURE A - 8

	DATE	DRIL	LED		11/26/	2018		LOGGE	D BY	SZ	BORING NO.	P-2		
	DRIVE	E WEI	GHT		140	lbs.		DROP	30 inc	hes	DEPTH TO GROUNDWA	ΓER (ft.) <u>NE</u>		
	DRILL	ING N	ИΕΤΗ	HOD _	ŀ	ISA		DRILLE	R <u>Baja</u> I	Exploration	SURFACE ELEVATION (f	t.) <u>190 ±(MSL)</u>		
	ELEVATION (feet)	DEPTH (feet)	Bulk SAMPLES	BLOWS / FOOT	MOISTURE (%)	DRY DENSITY (pdf)	GRAPHIC LOG	U.S.C.S. CLASSIFICATION			DESCRIPTION			
		- - -	-					ML	4.5" Asph 3" Base SANDY S		and GRAVEL,medium stiff,da	ark brown, moist		
	185 –	5	-				1.1.1.1		Backfilled Groundw Borehole	oth = 5.0 feet I on 11/26/2018 ater was not end backfilled at the batched with cold	countered e completion of testing with co	uttings.		
	180 -	10 -												
	175 -	15 -	-											
JING LABS.GDT 1/7/19	170 -	20 -	-											
BORING LOG NORTH ORANGE OLIVE DEVELOPMENT.GPJ TWINING LABS.GDT 1/7/19	165 –	25 -												
E OLI	160	30=												
RANG	100	30=				-	. '	'				NNC		
JRTH C									LOG OF BOF					
S LOG NO	TWINING					N	2	North Orange Olive Development NE Corner of N Orange Olive Rd & E Grove Ave Orange, California						
30RINC					VV				9	PROJECT NO 181055.1		FIGURE A - 9		

Worksheet H: Factor of Safety and Design Infiltration Rate and Worksheet

Fact	or Category	Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = w x v			
		Soil assessment methods	0.25	1	.25			
		Predominant soil texture	0.25	1	.25			
Α	Suitability	Site soil variability	0.25	2	. 50			
	Assessment	Assessment Depth to groundwater / impervious layer 0.25		1	.75			
		Suitability Assessment Safety Facto	or, $S_A = \Sigma p$		1.25			
		Tributary area size	2	.50				
		Level of pretreatment/ expected sediment loads	0.25	2	.50			
В	Design	Redundancy	0.25	2	.50			
		Compaction during construction	0.25	Z	,56			
	·	Design Safety Factor, $S_B = \Sigma p$			2			
Combined Safety Factor, S _{Total} = S _A x S _B								
	erved Infiltration ected for test-sp	Rate, inch/hr, K _{observed}	2/2-3	0/0	.14/0.09			
Desi	gn Infiltration Ra	te, in/hr, K _{DESIGN} = K _{Observed} / S _{Total}		0/0	105/0.04			

Supporting Data

Briefly describe infiltration test and provide reference to test forms:

Borehole percolation test - Porchet Method to calculate It based on water level measurements attached to this letter.

Note: The minimum combined adjustment factor shall not be less than 2.0 and the maximum combined adjustment factor shall not exceed 9.0.

PERCOLATION TEST DATA

Project No.: 181055.1

Project Name: N. Orange Olive Development

Test Date: November 27, 2018

 Test Boring No.:
 P-1

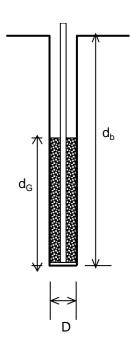
 Diameter of Boring (D):
 0.67
 feet

 Depth of Boring (d_b):
 5.0
 feet

 Test Performer:
 SZ

Sandy Soil Criteria Test

Sandy Soil Cri	teria Test									
Time of	Testing (November 20	6, 2018)	Water	Water Level Measurements						
Start Time	Start Time Stop Time		Initial depth to water	Final depth to water	Initial depth to water	Greater than or Equal to 6"?				
T _i	T _f	ΔΤ	d_1	d_2	d_1	(Yes/No)				
		(min)	(feet)	(feet)	(inch)					
9:00:00 AM	9:25:00 AM	25.00	0.29	0.38	1.00	No				
9:35:00 AM	10:00:00 AM	25.00	0.25	0.33	1.00	No				



	Time of Test	ing	Water Level N	Measurements	Wate	er Level Calcula	tions	Infiltration Rate Calculations			
Start Time	Stop Time	Time Interval	Initial depth to water	Final depth to water	Initial height of water column	Final height of water column	Drop of water column	Tested Infiltration Rate	Infiltration Rate w/ Factor of Safety of 2.5		
T _i	T_f	ΔΤ	d ₁	d_2	d _i	d _f	$\Delta d = d_i - d_f$	l t	It/2.5		
		(min)	(feet)	(feet)	(feet)	(feet)	(inch)	(inch/hr)	(inch/hr)		
Percolation Te	est										
9:12:00 AM	9:42:00 AM	30.00	2.00	2.00	3.00	3.00	0.00	0.00	0.00		
9:45:00 AM	10:15:00 AM	30.00	2.10	2.10	2.90	2.90	0.00	0.00	0.00		
10:25:00 AM	10:55:00 AM	30.00	2.10	2.10	2.90	2.90	0.00	0.00	0.00		
11:00:00 AM	11:30:00 AM	30.00	2.10	2.10	2.90	2.90	0.00	0.00	0.00		
11:45:00 AM	12:15:00 PM	30.00	2.10	2.10	2.90	2.90	0.00	0.00	0.00		
12:20:00 PM	12:50:00 PM	30.00	2.10	2.10	2.90	2.90	0.00	0.00	0.00		
1:00:00 PM	1:30:00 PM	30.00	2.10	2.10	2.90	2.90	0.00	0.00	0.00		
1:30:00 PM	2:00:00 PM	30.00	2.10	2.10	2.90	2.90	0.00	0.00	0.00		

*Infiltration Rate: 0.00 (inch/hr)

Reference: County of Orange Technical Guidance Document, dated December 20, 2013

^{*}Based on the last dropped obtained in the final 30 minutes

PERCOLATION TEST DATA

Project No.: 181055.1

Project Name: N. Orange Olive Development

Test Date: November 27, 2018

 Test Boring No.:
 P-2

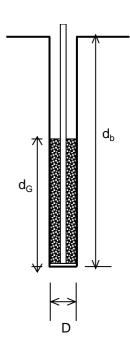
 Diameter of Boring (D):
 0.67
 feet

 Depth of Boring (d_b):
 5.0
 feet

 Test Performer:
 SZ

Sandy Soil Criteria Test

Sandy Soil Cri	teria Test					
Time of	Testing (November 20	6, 2018)	Water			
Start Time	Stop Time	Time Interval	Initial depth to water	Final depth to water	Initial depth to water	Greater than or Equal to 6"?
T _i	T_f	ΔΤ	d_1	d_2	d₁	(Yes/No)
		(min)	(feet)	(feet)	(inch)	
9:53:00 AM	10:18:00 AM	25.00	1.70	2.00	3.60	No
10:20:00 AM	10:45:00 AM	25.00	1.60	1.90	3.60	No



	Time of Test	ing	Water Level N	Measurements	Wate	er Level Calcula	tions	Infiltration Rate Calculations			
Start Time	Stop Time	Time Interval	Initial depth to water	Final depth to water	Initial height of water column	Final height of water column	Drop of water column	Tested Infiltration Rate	Infiltration Rate w/ Factor of Safety of 2.5		
T _i	T _f	ΔΤ	d_1	d_2	d _i	d _f	$\Delta d = d_i - d_f$	l t	It/2.5		
		(min)	(feet)	(feet)	(feet)	(feet)	(inch)	(inch/hr)	(inch/hr)		
Percolation Te	est										
9:15:00 AM	9:45:00 AM	30.00	3.10	3.20	1.90	1.80	1.20	0.20	0.08		
9:50:00 AM	10:20:00 AM	30.00	3.00	3.10	2.00	1.90	1.20	0.19	0.08		
10:25:00 AM	10:55:00 AM	30.00	2.90	3.00	2.10	2.00	1.20	0.18	0.07		
11:00:00 AM	11:30:00 AM	30.00	2.70	2.80	2.30	2.20	1.20	0.17	0.07		
11:35:00 AM	12:05:00 PM	30.00	2.50	2.60	2.50	2.40	1.20	0.15	0.06		
12:10:00 PM	12:40:00 PM	30.00	2.20	2.30	2.80	2.70	1.20	0.14	0.05		
12:50:00 PM	1:20:00 PM	30.00	2.20	2.30	2.80	2.70	1.20	0.14	0.05		
1:25:00 PM	1:55:00 PM	30.00	2.20	2.30	2.80	2.70	1.20	0.14	0.05		

*Infiltration Rate: 0.05 (inch/hr)

Reference: County of Orange Technical Guidance Document, dated December 20, 2013

^{*}Based on the last dropped obtained in the final 30 minutes

PERCOLATION TEST DATA

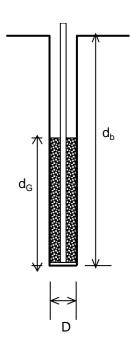
Project No.: 181055.1

Project Name: N. Orange Olive Development

Test Date: November 27, 2018

Test Boring No.: Diameter of Boring (D): 0.67 feet Depth of Boring (d_b): 25.0 feet Test Performer: SZ

Sandy Soil Cri	iteria Test					
Time of	Testing (November 26	6, 2018)	Water	r Level Measure	ments	
Start Time	art Time Stop Time		Initial depth to water	Final depth to water	Initial depth to water	Greater than or Equal to 6"?
T _i	T _f	ΔΤ	d_1	d_2	d₁	(Yes/No)
		(min)	(feet)	(feet)	(inch)	
2:12:00 PM	2:37:00 PM	25.00	14.75	15.02	3.24	No
2:45:00 PM	3:10:00 PM	25.00	14.00	14.27	3.24	No



	Time of Test	ing	Water Level N	Measurements	Wat	er Level Calcula	tions	Infiltration Rate Calculations			
Start Time	Stop Time	Time Interval	Initial depth to water	Final depth to water	Initial height of water column	Final height of water column	Drop of water column	Tested Infiltration Rate	Infiltration Rate w/ Factor of Safety of 2.5		
T _i	T _f	ΔΤ	d_1	d_2	d _i	d _f	$\Delta d = d_i - d_f$	l t	It/2.5		
		(min)	(feet)	(feet)	(feet)	(feet)	(inch)	(inch/hr)	(inch/hr)		
Percolation Te	est										
9:15:00 AM	9:45:00 AM	30.00	13.90	14.40	11.10	10.60	6.00	0.18	0.07		
10:00:00 AM	10:30:00 AM	30.00	6.40	6.90	18.60	18.10	6.00	0.11	0.04		
10:35:00 AM	11:05:00 AM	30.00	5.50	6.00 5.40	19.50 20.10	19.00 19.60	6.00	0.10 0.10	0.04		
11:10:00 AM	11:40:00 AM	30.00	4.90				6.00		0.04		
11:45:00 AM	12:15:00 PM	30.00	4.30	4.80	20.70	20.20	6.00	0.10	0.04		
12:25:00 PM	12:55:00 PM	30.00	3.60	4.10	21.40	20.90	6.00	0.09	0.04		
1:00:00 PM	1:30:00 PM	30.00	3.60	4.10	21.40	20.90	6.00	0.09	0.04		
1:35:00 PM	2:05:00 PM	30.00	3.50	4.00	21.50	21.00	6.00	0.09	0.04		

*Infiltration Rate: 0.04 (inch/hr)

Reference: County of Orange Technical Guidance Document, dated December 20, 2013

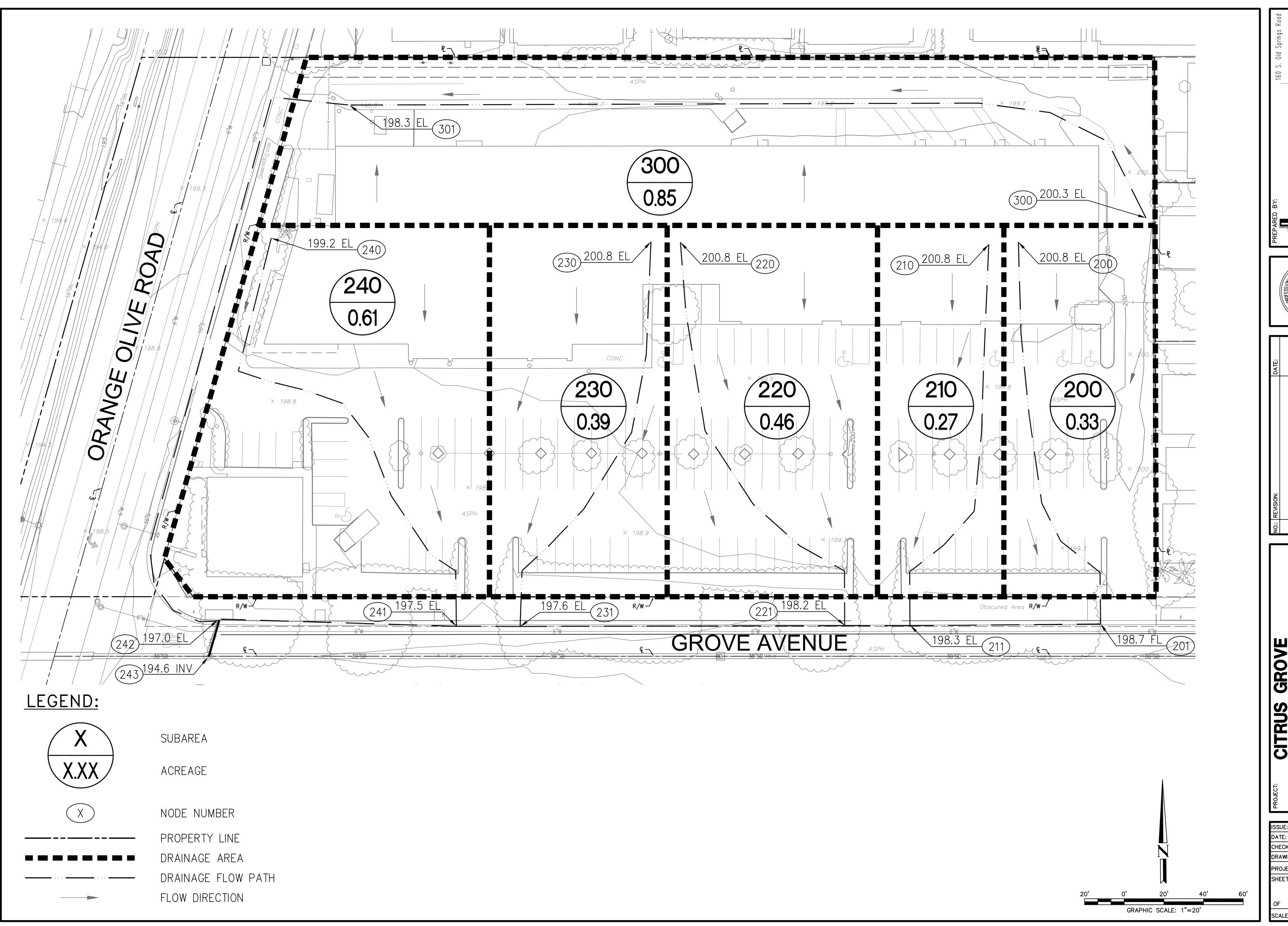
^{*}Based on the last dropped obtained in the final 30 minutes

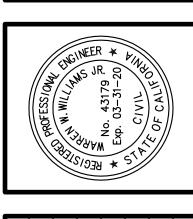
Appendix F:

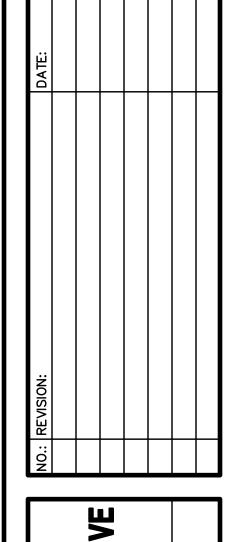
Hydrology Information

(Q2 – Two-year frequency storm evaluation)

WQMP Prepared 11/20/19 32







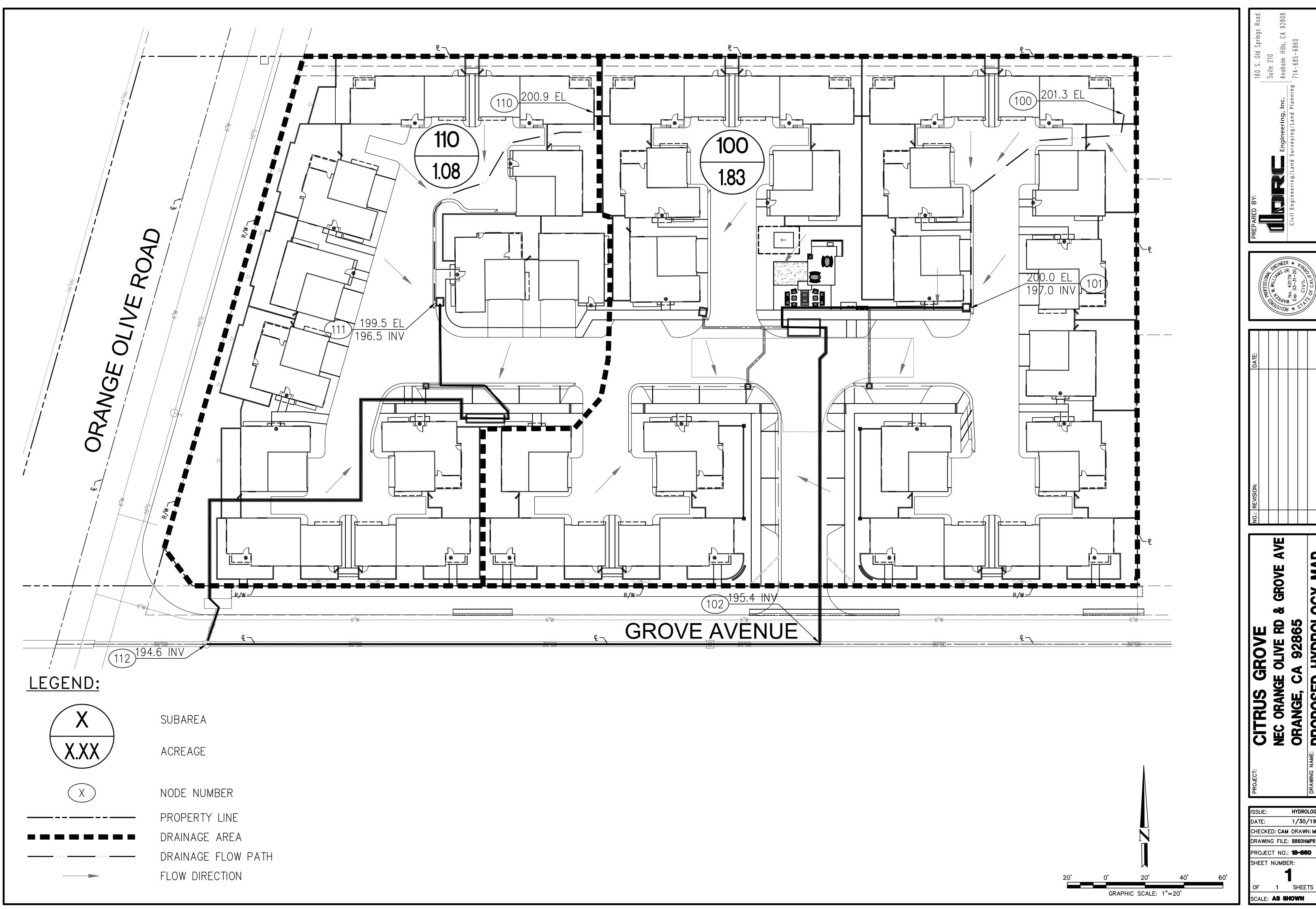
CITRUS GROVE

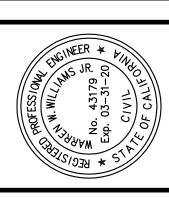
NEC ORANGE OLIVE RD & GROVE A
ORANGE, CA 92865

EXISTING HYDROLOGY MAP

ISSUE: HYDROLOGY
DATE: 1/19/19
CHECKED: CAM DRAWN: MAB
DRAWING FILE: 8860HMEX
PROJECT NO.: 18-860
SHEET NUMBER:

OF 1 SHEETS
SCALE: AS SHOWN





1/30/19 CHECKED: CAM DRAWN: MAB DRAWING FILE: 8860HMPR PROJECT NO.: **18-860** SHEET NUMBER:

RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE (Reference: 1986 ORANGE COUNTY HYDROLOGY CRITERION)

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Analysis prepared by:

DRC Engineering, Inc. 160 South Old Springs Road, Suite 210 Anaheim Hills, CA 92808 714-685-6860

```
* 18-860 Orange Residential
* Existing Hydrology Study
* 2 Year Storm Event
*****************
 FILE NAME: 8860EX02.DAT
 TIME/DATE OF STUDY: 11:09 01/31/2019
______
 USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
_____
               --*TIME-OF-CONCENTRATION MODEL*--
 USER SPECIFIED STORM EVENT (YEAR) =
                              2.00
 SPECIFIED MINIMUM PIPE SIZE(INCH) = 12.00
 SPECIFIED PERCENT OF GRADIENTS (DECIMAL) TO USE FOR FRICTION SLOPE = 0.01
 *DATA BANK RAINFALL USED*
 *ANTECEDENT MOISTURE CONDITION (AMC) I ASSUMED FOR RATIONAL METHOD*
 *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
   HALF- CROWN TO STREET-CROSSFALL: CURB GUTTER-GEOMETRIES: MANNING
   WIDTH CROSSFALL IN- / OUT-/PARK- HEIGHT WIDTH LIP HIKE FACTOR
NO. (FT) (FT) SIDE / SIDE / WAY (FT) (FT) (FT) (n)
   30.0
          20.0 0.018/0.018/0.020
                                0.67 2.00 0.0313 0.167 0.0150
 GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
  1. Relative Flow-Depth = 0.00 FEET
     as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
   2. (Depth) * (Velocity) Constraint = 6.0 (FT*FT/S)
 *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
  OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
 *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED
**************
 FLOW PROCESS FROM NODE 200.00 TO NODE 201.00 IS CODE = 21
 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<
 >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
______
 INITIAL SUBAREA FLOW-LENGTH (FEET) = 205.00
 ELEVATION DATA: UPSTREAM(FEET) = 200.80 DOWNSTREAM(FEET) = 198.70
 Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
 SUBAREA ANALYSIS USED MINIMUM Tc (MIN.) = 6.390
    2 YEAR RAINFALL INTENSITY (INCH/HR) = 1.966
 SUBAREA To AND LOSS RATE DATA(AMC I ):
  DEVELOPMENT TYPE/ SCS SOIL AREA
                                   Fp
                                           Ap SCS Tc
                    GROUP (ACRES) (INCH/HR) (DECIMAL) CN (MIN.)
     LAND USE
```

```
0.33 0.20 0.100 57 6.39
 COMMERCIAL
                       D
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) = 0.20
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap = 0.100
 SUBAREA RUNOFF (CFS) = 0.58
 TOTAL AREA (ACRES) =
                    0.33 PEAK FLOW RATE(CFS) =
                                                  0.58
********************
 FLOW PROCESS FROM NODE 201.00 TO NODE 211.00 IS CODE = 91
._____
 >>>>COMPUTE "V" GUTTER FLOW TRAVEL TIME THRU SUBAREA<
______
 UPSTREAM NODE ELEVATION (FEET) = 198.70
 DOWNSTREAM NODE ELEVATION(FEET) = 198.30
 CHANNEL LENGTH THRU SUBAREA (FEET) = 95.00
 "V" GUTTER WIDTH(FEET) = 2.00 GUTTER HIKE(FEET) = 0.200
 PAVEMENT LIP(FEET) = 0.010 MANNING'S N = .0150
 PAVEMENT CROSSFALL (DECIMAL NOTATION) = 0.02000
 MAXIMUM DEPTH(FEET) = 0.50
 * 2 YEAR RAINFALL INTENSITY (INCH/HR) = 1.802
 SUBAREA LOSS RATE DATA (AMC I ):
                                     Fp Ap SCS
  DEVELOPMENT TYPE/ SCS SOIL AREA
 LAND USE GROUP (ACRES) (INCH/HR) (DECIMAL) CN COMMERCIAL D 0.01 0.20 0.100 57 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) = 0.20
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap = 0.100
 TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =
 TRAVEL TIME THRU SUBAREA BASED ON VELOCITY (FEET/SEC.) = 1.51
 AVERAGE FLOW DEPTH(FEET) = 0.25 FLOOD WIDTH(FEET) =
 "V" GUTTER FLOW TRAVEL TIME (MIN.) = 1.05 Tc (MIN.) = 7.44
 SUBAREA AREA(ACRES) = 0.01 SUBAREA RUNOFF(CFS) = 0.02
EFFECTIVE AREA(ACRES) = 0.34 AREA-AVERAGED Fm(INCH/HR) = 0.02
 AREA-AVERAGED Fp(INCH/HR) = 0.20 AREA-AVERAGED Ap = 0.10
 TOTAL AREA(ACRES) = 0.3 PEAK FLOW RATE(CFS) =
 NOTE: PEAK FLOW RATE DEFAULTED TO UPSTREAM VALUE
 END OF SUBAREA "V" GUTTER HYDRAULICS:
 DEPTH (FEET) = 0.25 FLOOD WIDTH (FEET) = 6.02
 FLOW VELOCITY(FEET/SEC.) = 1.52 DEPTH*VELOCITY(FT*FT/SEC) = 0.38 LONGEST FLOWPATH FROM NODE 200.00 TO NODE 211.00 = 300.00 FEET.
**************
 FLOW PROCESS FROM NODE 211.00 TO NODE 211.00 IS CODE = 1
 >>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE <<<
______
 TOTAL NUMBER OF STREAMS = 2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:
 TIME OF CONCENTRATION(MIN.) = 7.44
 RAINFALL INTENSITY (INCH/HR) = 1.80
 AREA-AVERAGED Fm(INCH/HR) = 0.02
 AREA-AVERAGED Fp(INCH/HR) = 0.20
 AREA-AVERAGED Ap = 0.10
 EFFECTIVE STREAM AREA(ACRES) =
 TOTAL STREAM AREA (ACRES) = 0.34
 PEAK FLOW RATE (CFS) AT CONFLUENCE =
                                    0.58
******************
 FLOW PROCESS FROM NODE 210.00 TO NODE 211.00 IS CODE = 21
 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<
 >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
_____
 INITIAL SUBAREA FLOW-LENGTH (FEET) = 205.00
```

```
ELEVATION DATA: UPSTREAM(FEET) = 200.80 DOWNSTREAM(FEET) = 198.30
 Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
 SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) = 6.171
 * 2 YEAR RAINFALL INTENSITY(INCH/HR) = 2.006
 SUBAREA To AND LOSS RATE DATA(AMC I ):
  DEVELOPMENT TYPE/ SCS SOIL AREA
                                           Fр
                                                     Ap SCS
                        GROUP (ACRES) (INCH/HR) (DECIMAL) CN (MIN.)
     LAND USE
 COMMERCIAL
                         D
                                0.27 0.20 0.100 57
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) = 0.20
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap = 0.100
 SUBAREA RUNOFF (CFS) = 0.48
 TOTAL AREA(ACRES) = 0.27 PEAK FLOW RATE(CFS) =
******************
 FLOW PROCESS FROM NODE 211.00 TO NODE 211.00 IS CODE = 1
_____
 >>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE <<<
 >>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES <<< <
______
 TOTAL NUMBER OF STREAMS = 2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE:
 TIME OF CONCENTRATION(MIN.) = 6.17 RAINFALL INTENSITY(INCH/HR) = 2.01
 AREA-AVERAGED Fm(INCH/HR) = 0.02
 AREA-AVERAGED Fp(INCH/HR) = 0.20
 AREA-AVERAGED Ap = 0.10
 EFFECTIVE STREAM AREA(ACRES) = 0.27
TOTAL STREAM AREA(ACRES) = 0.27
 PEAK FLOW RATE (CFS) AT CONFLUENCE =
 ** CONFLUENCE DATA **
  STREAM Q Tc Intensity Fp(Fm)
                                                     Ae HEADWATER
  NUMBER
            (CFS) (MIN.) (INCH/HR) (INCH/HR)
                                              (ACRES) NODE
    1

      0.58
      7.44
      1.802
      0.20(0.02)
      0.10
      0.3
      200.00

      0.48
      6.17
      2.006
      0.20(0.02)
      0.10
      0.3
      210.00

 RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
 CONFLUENCE FORMULA USED FOR 2 STREAMS.
 ** PEAK FLOW RATE TABLE **
  STREAM Q Tc Intensity Fp(Fm) Ap Ae HEADWATER NUMBER (CFS) (MIN.) (INCH/HR) (INCH/HR) (ACRES) NODE

    1.02
    6.17
    2.006
    0.20(0.02)
    0.10
    0.6
    210.00

    1.01
    7.44
    1.802
    0.20(0.02)
    0.10
    0.6
    200.00

    1
 COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
 PEAK FLOW RATE (CFS) = 1.02 Tc (MIN.) = 6.17
EFFECTIVE AREA (ACRES) = 0.55 AREA-AVERAGED Fm (IN
 EFFECTIVE AREA(ACRES) = 0.55 AREA-AVERAGED Fm(INCH/HR) = 0.02 AREA-AVERAGED Fp(INCH/HR) = 0.20 AREA-AVERAGED Ap = 0.10
 TOTAL AREA (ACRES) = 0.6
 LONGEST FLOWPATH FROM NODE 200.00 TO NODE 211.00 = 300.00 FEET.
**************
 FLOW PROCESS FROM NODE 211.00 TO NODE 221.00 IS CODE = 91
______
 >>>>COMPUTE "V" GUTTER FLOW TRAVEL TIME THRU SUBAREA<
______
 UPSTREAM NODE ELEVATION (FEET) = 198.30
 DOWNSTREAM NODE ELEVATION(FEET) = 198.20
CHANNEL LENGTH THRU SUBAREA(FEET) = 35.00
 "V" GUTTER WIDTH (FEET) = 2.00 GUTTER HIKE (FEET) = 0.200
 PAVEMENT LIP(FEET) = 0.010 MANNING'S N = .0150
```

```
PAVEMENT CROSSFALL (DECIMAL NOTATION) = 0.02000
 MAXIMUM DEPTH (FEET) = 0.50
 * 2 YEAR RAINFALL INTENSITY(INCH/HR) = 1.922
 SUBAREA LOSS RATE DATA (AMC I ):
  DEVELOPMENT TYPE/ SCS SOIL AREA
                                       Fр
     LAND USE
                     GROUP (ACRES) (INCH/HR) (DECIMAL) CN
 COMMERCIAL
                       D 0.01 0.20 0.100 57
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) = 0.20
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap = 0.100
 TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =
 TRAVEL TIME THRU SUBAREA BASED ON VELOCITY (FEET/SEC.) = 1.22
 AVERAGE FLOW DEPTH(FEET) = 0.30 FLOOD WIDTH(FEET) = 11.35
 "V" GUTTER FLOW TRAVEL TIME (MIN.) = 0.48 Tc (MIN.) =
 SUBAREA AREA(ACRES) = 0.01 SUBAREA RUNOFF(CFS) = 0.02
EFFECTIVE AREA(ACRES) = 0.56 AREA-AVERAGED Fm(INCH/HR) = 0.02
 AREA-AVERAGED Fp(INCH/HR) = 0.20 AREA-AVERAGED Ap = 0.10
 TOTAL AREA(ACRES) = 0.6 PEAK FLOW RATE(CFS) =
 NOTE: PEAK FLOW RATE DEFAULTED TO UPSTREAM VALUE
 END OF SUBAREA "V" GUTTER HYDRAULICS:
 DEPTH (FEET) = 0.30 FLOOD WIDTH (FEET) = 11.23
 FLOW VELOCITY (FEET/SEC.) = 1.22 DEPTH*VELOCITY (FT*FT/SEC) = 0.37 LONGEST FLOWPATH FROM NODE 200.00 TO NODE 221.00 = 335.00 FEET.
*****************
 FLOW PROCESS FROM NODE 221.00 TO NODE 221.00 IS CODE = 1
______
 >>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE <<-
______
 TOTAL NUMBER OF STREAMS = 2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:
 TIME OF CONCENTRATION (MIN.) = 6.65
 RAINFALL INTENSITY (INCH/HR) = 1.92
 AREA-AVERAGED Fm(INCH/HR) = 0.02
 AREA-AVERAGED Fp(INCH/HR) = 0.20
 AREA-AVERAGED Ap = 0.10
 EFFECTIVE STREAM AREA(ACRES) = 0 TOTAL STREAM AREA(ACRES) = 0.62
                              0.56
 PEAK FLOW RATE (CFS) AT CONFLUENCE =
******************
 FLOW PROCESS FROM NODE 220.00 TO NODE 221.00 IS CODE = 21
 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<
 >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
______
 INITIAL SUBAREA FLOW-LENGTH (FEET) = 225.00
 ELEVATION DATA: UPSTREAM(FEET) = 200.80 DOWNSTREAM(FEET) = 198.20
 Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
 SUBAREA ANALYSIS USED MINIMUM Tc (MIN.) = 6.474
    2 YEAR RAINFALL INTENSITY (INCH/HR) = 1.952
 SUBAREA To AND LOSS RATE DATA (AMC I ):
  DEVELOPMENT TYPE/ SCS SOIL AREA
                                      Fp Ap SCS Tc
                GROUP (ACRES) (INCH/HR) (DECIMAL) CN (MIN.)
D 0.46 0.20 0.100 57 6.47
     LAND USE
 COMMERCIAL
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) = 0.20
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap = 0.100
 SUBAREA RUNOFF (CFS) = 0.80
 TOTAL AREA(ACRES) = 0.46 PEAK FLOW RATE(CFS) =
*********************
 FLOW PROCESS FROM NODE 221.00 TO NODE 221.00 IS CODE = 1
```

```
>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE <<<
 >>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<
______
 TOTAL NUMBER OF STREAMS = 2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE:
 TIME OF CONCENTRATION (MIN.) = 6.47
 RAINFALL INTENSITY (INCH/HR) =
 AREA-AVERAGED Fm(INCH/HR) = 0.02
 AREA-AVERAGED Fp(INCH/HR) = 0.20
 AREA-AVERAGED Ap = 0.10
 EFFECTIVE STREAM AREA(ACRES) =
 TOTAL STREAM AREA(ACRES) = 0.46
 PEAK FLOW RATE (CFS) AT CONFLUENCE =
 ** CONFLUENCE DATA **
  STREAM Q Tc Intensity Fp(Fm)
                                                        Ae HEADWATER
  NUMBER
             (CFS) (MIN.) (INCH/HR) (INCH/HR)
                                                  (ACRES) NODE

      1.02
      6.65
      1.922
      0.20(0.02)
      0.10
      0.6
      210.00

      1.01
      7.91
      1.739
      0.20(0.02)
      0.10
      0.6
      200.00

      0.80
      6.47
      1.952
      0.20(0.02)
      0.10
      0.5
      220.00

    1
     1
 RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
 CONFLUENCE FORMULA USED FOR 2 STREAMS.
  ** PEAK FLOW RATE TABLE **
  STREAM Q Tc Intensity Fp(Fm)
             Q Tc Intensity Fp(Fm) Ap Ae HEADWATER (CFS) (MIN.) (INCH/HR) (INCH/HR) (ACRES) NODE
  NUMBER

      1.81
      6.47
      1.952
      0.20((0.02))
      0.10
      1.0
      220.00

      1.80
      6.65
      1.922
      0.20((0.02))
      0.10
      1.0
      210.00

      1.72
      7.91
      1.739
      0.20((0.02))
      0.10
      1.1
      200.00

     1
 COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
 PEAK FLOW RATE(CFS) = 1.81 Tc(MIN.) =
                                                 6.47
 EFFECTIVE AREA(ACRES) = 1.01 AREA-AVERAGED Fm(INCH/HR) = 0.02
 AREA-AVERAGED Fp(INCH/HR) = 0.20 AREA-AVERAGED Ap = 0.10
 TOTAL AREA(ACRES) = 1.1
 LONGEST FLOWPATH FROM NODE 200.00 TO NODE
*********************
 FLOW PROCESS FROM NODE 221.00 TO NODE 231.00 IS CODE = 91
 _____
 >>>>COMPUTE "V" GUTTER FLOW TRAVEL TIME THRU SUBAREA<
_____
 UPSTREAM NODE ELEVATION (FEET) = 198.20
 DOWNSTREAM NODE ELEVATION(FEET) = 197.60
 CHANNEL LENGTH THRU SUBAREA (FEET) = 165.00
 "V" GUTTER WIDTH (FEET) = 2.00 GUTTER HIKE (FEET) = 0.200
 PAVEMENT LIP(FEET) = 0.010 MANNING'S N = .0150
 PAVEMENT CROSSFALL (DECIMAL NOTATION) = 0.02000
 MAXIMUM DEPTH(FEET) = 0.50
 * 2 YEAR RAINFALL INTENSITY (INCH/HR) = 1.681
 SUBAREA LOSS RATE DATA (AMC I ):
  DEVELOPMENT TYPE/ SCS SOIL AREA Fp Ap
                          GROUP (ACRES) (INCH/HR) (DECIMAL) CN
      LAND USE
                          D 0.01 0.20
 COMMERCIAL
                                                      0.100
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) = 0.20
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap = 0.100
 TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) = 1.81
 TRAVEL TIME THRU SUBAREA BASED ON VELOCITY (FEET/SEC.) = 1.43
 AVERAGE FLOW DEPTH(FEET) = 0.34 FLOOD WIDTH(FEET) = 14.63
 "V" GUTTER FLOW TRAVEL TIME (MIN.) = 1.93 Tc (MIN.) = 8.40
 SUBAREA AREA (ACRES) = 0.01 SUBAREA RUNOFF (CFS) = 0.01
```

```
EFFECTIVE AREA(ACRES) = 1.02 AREA-AVERAGED Fm(INCH/HR) = 0.02
 AREA-AVERAGED Fp(INCH/HR) = 0.20 AREA-AVERAGED Ap = 0.10
 TOTAL AREA (ACRES) = 1.1 PEAK FLOW RATE (CFS) =
 NOTE: PEAK FLOW RATE DEFAULTED TO UPSTREAM VALUE
 END OF SUBAREA "V" GUTTER HYDRAULICS:
 DEPTH (FEET) = 0.34 FLOOD WIDTH (FEET) = 14.63
 FLOW VELOCITY (FEET/SEC.) = 1.42 DEPTH*VELOCITY (FT*FT/SEC) = 0.48 LONGEST FLOWPATH FROM NODE 200.00 TO NODE 231.00 = 500.00 FEET.
*****************
 FLOW PROCESS FROM NODE 231.00 TO NODE 231.00 IS CODE =
______
 >>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE <<<
______
 TOTAL NUMBER OF STREAMS = 2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:
 TIME OF CONCENTRATION (MIN.) = 8.40
 RAINFALL INTENSITY (INCH/HR) = 1.68
 AREA-AVERAGED Fm(INCH/HR) = 0.02
 AREA-AVERAGED Fp(INCH/HR) = 0.20
 AREA-AVERAGED Ap = 0.10
 EFFECTIVE STREAM AREA(ACRES) = 1
TOTAL STREAM AREA(ACRES) = 1.09
                          1.02
 PEAK FLOW RATE (CFS) AT CONFLUENCE =
*****************
 FLOW PROCESS FROM NODE 230.00 TO NODE 231.00 IS CODE = 21
 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS
 >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
______
 INITIAL SUBAREA FLOW-LENGTH (FEET) = 215.00
 ELEVATION DATA: UPSTREAM(FEET) = 200.80 DOWNSTREAM(FEET) = 197.60
 Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
 SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) = 6.044
 * 2 YEAR RAINFALL INTENSITY(INCH/HR) =
 SUBAREA To AND LOSS RATE DATA (AMC I ):
 DEVELOPMENT TYPE/ SCS SOIL AREA
                                             Ap
                                    Fp
                                                  SCS Tc
    LAND USE
                    GROUP (ACRES) (INCH/HR) (DECIMAL) CN (MIN.)
                     D 0.39 0.20 0.100 57 6.04
 COMMERCIAL
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) = 0.20
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap = 0.100
 SUBAREA RUNOFF (CFS) = 0.71
 TOTAL AREA(ACRES) = 0.39 PEAK FLOW RATE(CFS) =
                                               0.71
*********************
 FLOW PROCESS FROM NODE 231.00 TO NODE 231.00 IS CODE =
 ______
 >>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE <<<
 >>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<
______
 TOTAL NUMBER OF STREAMS = 2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE:
 TIME OF CONCENTRATION (MIN.) = 6.04
 RAINFALL INTENSITY (INCH/HR) = 2.03
 AREA-AVERAGED Fm(INCH/HR) = 0.02
 AREA-AVERAGED Fp(INCH/HR) = 0.20
 AREA-AVERAGED Ap = 0.10
 EFFECTIVE STREAM AREA(ACRES) = 0.39
TOTAL STREAM AREA(ACRES) = 0.39
 PEAK FLOW RATE (CFS) AT CONFLUENCE =
```

```
** CONFLUENCE DATA **
   STREAM Q Tc Intensity Fp(Fm) Ap Ae HEADWATER NUMBER (CFS) (MIN.) (INCH/HR) (INCH/HR) (ACRES) NODE

    1.81
    8.40
    1.681
    0.20(0.02)
    0.10
    1.0
    220.00

    1.80
    8.58
    1.661
    0.20(0.02)
    0.10
    1.0
    210.00

    1.72
    9.86
    1.533
    0.20(0.02)
    0.10
    1.1
    200.00

    0.71
    6.04
    2.030
    0.20(0.02)
    0.10
    0.4
    230.00

     1
      1
       1
  RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
  CONFLUENCE FORMULA USED FOR 2 STREAMS.
  ** PEAK FLOW RATE TABLE **
   STREAM Q Tc Intensity Fp(Fm) Ap Ae HEADWATER NUMBER (CFS) (MIN.) (INCH/HR) (INCH/HR) (ACRES) NODE
               2.28 6.04 2.030 0.20(0.02) 0.10 1.1 230.00
                2.39 8.40 1.681 0.20(0.02) 0.10
                                                                       1.4

    2.39
    8.40
    1.661
    0.20 ( 0.02)
    0.10
    1.4
    220.00

    2.38
    8.58
    1.661
    0.20 ( 0.02)
    0.10
    1.4
    210.00

    2.25
    9.86
    1.533
    0.20 ( 0.02)
    0.10
    1.5
    200.00

       3
       4
  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
 PEAK FLOW RATE(CFS) = 2.39 Tc(MIN.) = 8.40

EFFECTIVE AREA(ACRES) = 1.41 AREA-AVERAGED Fm(INCH/HR) = 0.02

AREA-AVERAGED Fp(INCH/HR) = 0.20 AREA-AVERAGED Ap = 0.10
  TOTAL AREA(ACRES) = 1.5
  LONGEST FLOWPATH FROM NODE 200.00 TO NODE
                                                          231.00 = 500.00 FEET.
  FLOW PROCESS FROM NODE 231.00 TO NODE 241.00 IS CODE = 91
  >>>>COMPUTE "V" GUTTER FLOW TRAVEL TIME THRU SUBAREA<
______
  UPSTREAM NODE ELEVATION (FEET) = 197.60
  DOWNSTREAM NODE ELEVATION(FEET) = 197.50
  CHANNEL LENGTH THRU SUBAREA (FEET) = 35.00
  "V" GUTTER WIDTH(FEET) = 2.00 GUTTER HIKE(FEET) = 0.200
  PAVEMENT LIP(FEET) = 0.010 MANNING'S N = .0150
  PAVEMENT CROSSFALL (DECIMAL NOTATION) = 0.02000
  MAXIMUM DEPTH(FEET) = 0.50
  * 2 YEAR RAINFALL INTENSITY(INCH/HR) = 1.632
  SUBAREA LOSS RATE DATA(AMC I ):
  DEVELOPMENT TYPE/ SCS SOIL AREA
                                                      Fp
      LAND USE GROUP (ACRES) (INCH/HR) (DECIMAL) CN
                               D 0.01 0.20 0.100 57
  COMMERCIAL
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) = 0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap = 0.100
  TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =
  TRAVEL TIME THRU SUBAREA BASED ON VELOCITY (FEET/SEC.) = 1.33
  AVERAGE FLOW DEPTH (FEET) = 0.37 FLOOD WIDTH (FEET) = 17.92
 "V" GUTTER FLOW TRAVEL TIME (MIN.) = 0.44 Tc (MIN.) = 8.84

SUBAREA AREA (ACRES) = 0.01 SUBAREA RUNOFF (CFS) = 0.01

EFFECTIVE AREA (ACRES) = 1.42 AREA-AVERAGED Fm (INCH/HR) = 0.02

AREA-AVERAGED Fp (INCH/HR) = 0.20 AREA-AVERAGED AP = 0.10

TOTAL AREA (ACRES) = 1.5 PEAK FLOW RATE (CFS) = 2.39
  NOTE: PEAK FLOW RATE DEFAULTED TO UPSTREAM VALUE
  END OF SUBAREA "V" GUTTER HYDRAULICS:
  DEPTH (FEET) = 0.37 FLOOD WIDTH (FEET) = 17.80
  FLOW VELOCITY(FEET/SEC.) = 1.34 DEPTH*VELOCITY(FT*FT/SEC) = 0.49
  LONGEST FLOWPATH FROM NODE 200.00 TO NODE 241.00 = 535.00 FEET.
*****************
  FLOW PROCESS FROM NODE 241.00 TO NODE 241.00 IS CODE = 1
```

```
>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE <<<
_____
 TOTAL NUMBER OF STREAMS = 2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:
 TIME OF CONCENTRATION(MIN.) = 8.84
 RAINFALL INTENSITY (INCH/HR) = 1.63
 AREA-AVERAGED Fm(INCH/HR) = 0.02
 AREA-AVERAGED Fp(INCH/HR) = 0.20
 AREA-AVERAGED Ap = 0.10
 EFFECTIVE STREAM AREA(ACRES) =
 TOTAL STREAM AREA(ACRES) = 1.49
 PEAK FLOW RATE (CFS) AT CONFLUENCE =
*****************
 FLOW PROCESS FROM NODE 240.00 TO NODE 241.00 IS CODE = 21
______
 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS
 >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
______
 INITIAL SUBAREA FLOW-LENGTH (FEET) = 255.00
 ELEVATION DATA: UPSTREAM(FEET) = 199.20 DOWNSTREAM(FEET) = 197.50
 Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
 SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) = 7.598
 * 2 YEAR RAINFALL INTENSITY(INCH/HR) = 1.780
 SUBAREA To AND LOSS RATE DATA(AMC I ):
 DEVELOPMENT TYPE/ SCS SOIL AREA
                                                Ap SCS Tc
                                       Fp
                              (ACRES) (INCH/HR) (DECIMAL) CN (MIN.)
     LAND USE
                      GROUP
 COMMERCIAL
                       D
                             0.61 0.20 0.100 57 7.60
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) = 0.20
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap = 0.100
 SUBAREA RUNOFF (CFS) = 0.97
                     0.61 PEAK FLOW RATE(CFS) =
 TOTAL AREA(ACRES) =
                                                   0.97
**********************
 FLOW PROCESS FROM NODE 241.00 TO NODE 241.00 IS CODE = 1
_____
 >>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE <<<
 >>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<
______
 TOTAL NUMBER OF STREAMS = 2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE:
 TIME OF CONCENTRATION (MIN.) = 7.60
 RAINFALL INTENSITY (INCH/HR) = 1.78
 AREA-AVERAGED Fm(INCH/HR) = 0.02
 AREA-AVERAGED Fp(INCH/HR) = 0.20
 AREA-AVERAGED Ap = 0.10
 EFFECTIVE STREAM AREA(ACRES) = 0.61
 PEAK FLOW RATE (CFS) AT CONFLUENCE =
 ** CONFLUENCE DATA **
  STREAM Q Tc Intensity Fp(Fm)
                                                Ae HEADWATER
           (CFS) (MIN.) (INCH/HR) (INCH/HR)
                                                (ACRES)
  NUMBER
                                                       NODE
           2.28 6.48 1.950 0.20(0.02) 0.10 1.1
2.39 8.84 1.632 0.20(0.02) 0.10 1.4
    1
                                                         230.00
                                                   1.4

    2.39
    8.84
    1.632
    0.20 ( 0.02)
    0.10
    1.4
    220.00

    2.38
    9.01
    1.614
    0.20 ( 0.02)
    0.10
    1.4
    210.00

    2.25
    10.30
    1.495
    0.20 ( 0.02)
    0.10
    1.5
    200.00

    0.97
    7.60
    1.780
    0.20 ( 0.02)
    0.10
    0.6
    240.00
```

RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO CONFLUENCE FORMULA USED FOR $\,$ 2 STREAMS.

```
** PEAK FLOW RATE TABLE **
  STREAM Q Tc Intensity Fp(Fm) Ap Ae HEADWAT
NUMBER (CFS) (MIN.) (INCH/HR) (INCH/HR) (ACRES) NODE
                                                           HEADWATER
                                                              230.00
     1
            3.18 6.48 1.950 0.20(0.02) 0.10 1.7

    3.30
    7.60
    1.780
    0.20((0.02))
    0.10
    1.9
    240.00

    3.27
    8.84
    1.632
    0.20((0.02))
    0.10
    2.0
    220.00

    3.26
    9.01
    1.614
    0.20((0.02))
    0.10
    2.0
    210.00

    3.06
    10.30
    1.495
    0.20((0.02))
    0.10
    2.1
    200.00

     2
     3
     4
     5
 COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
 PEAK FLOW RATE(CFS) = 3.30 Tc(MIN.) = 7.60
EFFECTIVE AREA(ACRES) = 1.88 AREA-AVERAGED Fm(INCH/HR) = 0.02
 AREA-AVERAGED Fp(INCH/HR) = 0.20 AREA-AVERAGED Ap = 0.10
 TOTAL AREA (ACRES) = 2.1
                             200.00 TO NODE
 LONGEST FLOWPATH FROM NODE
                                              241.00 =
******************
 FLOW PROCESS FROM NODE 241.00 TO NODE 242.00 IS CODE = 91
 _____
 >>>>COMPUTE "V" GUTTER FLOW TRAVEL TIME THRU SUBAREA
______
 UPSTREAM NODE ELEVATION(FEET) = 197.50
 DOWNSTREAM NODE ELEVATION(FEET) = 197.00
CHANNEL LENGTH THRU SUBAREA(FEET) = 120.00
 "V" GUTTER WIDTH (FEET) = 2.00 GUTTER HIKE (FEET) = 0.200
 PAVEMENT LIP(FEET) = 0.010 MANNING'S N = .0150
 PAVEMENT CROSSFALL (DECIMAL NOTATION) = 0.02000
 MAXIMUM DEPTH(FEET) = 0.50
 * 2 YEAR RAINFALL INTENSITY (INCH/HR) = 1.635
 SUBAREA LOSS RATE DATA (AMC I ):
  DEVELOPMENT TYPE/
                      SCS SOIL AREA
                                          Fρ
                         GROUP (ACRES) (INCH/HR) (DECIMAL) CN
     LAND USE
 COMMERCIAL
                         D 0.01 0.20 0.100 57
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) = 0.20
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap = 0.100
 TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =
 TRAVEL TIME THRU SUBAREA BASED ON VELOCITY (FEET/SEC.) = 1.64
 AVERAGE FLOW DEPTH(FEET) = 0.38 FLOOD WIDTH(FEET) =
 "V" GUTTER FLOW TRAVEL TIME (MIN.) = 1.22 Tc (MIN.) =
 SUBAREA AREA(ACRES) = 0.01 SUBAREA RUNOFF(CFS) = 0.01
EFFECTIVE AREA(ACRES) = 1.89 AREA-AVERAGED Fm(INCH/HR) = 0.02
 AREA-AVERAGED Fp(INCH/HR) = 0.20 AREA-AVERAGED Ap = 0.10
 TOTAL AREA (ACRES) = 2.1 PEAK FLOW RATE (CFS) =
                                                                3.30
 NOTE: PEAK FLOW RATE DEFAULTED TO UPSTREAM VALUE
 END OF SUBAREA "V" GUTTER HYDRAULICS:
 DEPTH(FEET) = 0.38 FLOOD WIDTH(FEET) = 19.05
 FLOW VELOCITY (FEET/SEC.) = 1.64 DEPTH*VELOCITY (FT*FT/SEC) = 0.62
 LONGEST FLOWPATH FROM NODE 200.00 TO NODE 242.00 = 655.00 FEET.
*******************
 FLOW PROCESS FROM NODE 242.00 TO NODE 242.00 IS CODE = 1
 ______
 >>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE <<-<
______
 TOTAL NUMBER OF STREAMS = 2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:
 TIME OF CONCENTRATION (MIN.) = 8.82
 RAINFALL INTENSITY (INCH/HR) = 1.63
 AREA-AVERAGED Fm(INCH/HR) = 0.02
 AREA-AVERAGED Fp(INCH/HR) = 0.20
 AREA-AVERAGED Ap = 0.10
```

```
EFFECTIVE STREAM AREA(ACRES) = 1.89
TOTAL STREAM AREA(ACRES) = 2.11
 PEAK FLOW RATE (CFS) AT CONFLUENCE =
********************
 FLOW PROCESS FROM NODE 300.00 TO NODE 301.00 IS CODE = 21
_____
 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<
 >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
______
 INITIAL SUBAREA FLOW-LENGTH (FEET) = 430.00
 ELEVATION DATA: UPSTREAM(FEET) = 200.30 DOWNSTREAM(FEET) = 198.30
 Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
 SUBAREA ANALYSIS USED MINIMUM Tc (MIN.) = 10.063
 * 2 YEAR RAINFALL INTENSITY (INCH/HR) = 1.515
 SUBAREA To AND LOSS RATE DATA (AMC I ):
  DEVELOPMENT TYPE/ SCS SOIL AREA
                                      Fр
                                               Ap SCS Tc
    LAND USE
                    GROUP (ACRES) (INCH/HR) (DECIMAL) CN (MIN.)
D 0.85 0.20 0.100 57 10.06
 COMMERCIAL
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) = 0.20
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap = 0.100
 SUBAREA RUNOFF(CFS) = 1.14
TOTAL AREA(ACRES) = 0.85 PEAK FLOW RATE(CFS) =
*******************
 FLOW PROCESS FROM NODE 301.00 TO NODE 242.00 IS CODE = 91
 >>>>COMPUTE "V" GUTTER FLOW TRAVEL TIME THRU SUBAREA<
______
 UPSTREAM NODE ELEVATION (FEET) = 198.30
 DOWNSTREAM NODE ELEVATION(FEET) = 197.00
CHANNEL LENGTH THRU SUBAREA(FEET) = 330.00
 "V" GUTTER WIDTH (FEET) = 2.00 GUTTER HIKE (FEET) = 0.200
 PAVEMENT LIP(FEET) = 0.010 MANNING'S N = .0150
 PAVEMENT CROSSFALL (DECIMAL NOTATION) = 0.02000
 MAXIMUM DEPTH(FEET) = 0.50
 * 2 YEAR RAINFALL INTENSITY (INCH/HR) = 1.258
 SUBAREA LOSS RATE DATA (AMC I ):
  DEVELOPMENT TYPE/ SCS SOIL AREA
                                      Fр
                     GROUP (ACRES) (INCH/HR) (DECIMAL) CN
    LAND USE
                      D 0.01 0.20 0.100 57
 COMMERCIAL
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) = 0.20
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap = 0.100
 TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =
 TRAVEL TIME THRU SUBAREA BASED ON VELOCITY (FEET/SEC.) = 1.43
 AVERAGE FLOW DEPTH(FEET) = 0.30 FLOOD WIDTH(FEET) = 11.01
 "V" GUTTER FLOW TRAVEL TIME (MIN.) = 3.86 Tc (MIN.) = 13.92
 SUBAREA AREA(ACRES) = 0.01 SUBAREA RUNOFF(CFS) = 0.01 EFFECTIVE AREA(ACRES) = 0.86 AREA-AVERAGED Fm(INCH/HR) = 0.02
 AREA-AVERAGED Fp(INCH/HR) = 0.20 AREA-AVERAGED Ap = 0.10 TOTAL AREA(ACRES) = 0.9 PEAK FLOW RATE(CFS) =
 NOTE: PEAK FLOW RATE DEFAULTED TO UPSTREAM VALUE
 END OF SUBAREA "V" GUTTER HYDRAULICS:
 DEPTH(FEET) = 0.30 FLOOD WIDTH(FEET) = 10.89
 FLOW VELOCITY (FEET/SEC.) = 1.44 DEPTH*VELOCITY (FT*FT/SEC) = 0.43
 LONGEST FLOWPATH FROM NODE 300.00 TO NODE 242.00 = 760.00 FEET.
*******************
 FLOW PROCESS FROM NODE 242.00 TO NODE 242.00 IS CODE = 1
______
```

>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE <<-<-

>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES< TOTAL NUMBER OF STREAMS = 2 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE: TIME OF CONCENTRATION(MIN.) = 13.92 RAINFALL INTENSITY (INCH/HR) = 1.26AREA-AVERAGED Fm(INCH/HR) = 0.02AREA-AVERAGED Fp(INCH/HR) = 0.20 AREA-AVERAGED Ap = 0.10EFFECTIVE STREAM AREA(ACRES) = TOTAL STREAM AREA(ACRES) = 0.86 PEAK FLOW RATE (CFS) AT CONFLUENCE = ** CONFLUENCE DATA ** STREAM Q Tc Intensity Fp(Fm) Ap Ae HEADWATER (CFS) (MIN.) (INCH/HR) (INCH/HR) (ACRES) NODE 230.00 3.18 7.71 1.766 0.20(0.02) 0.10 1.7 3.30 8.82 1.635 0.20(0.02) 0.10 1.9 240.00
 3.30
 8.82
 1.635
 0.20(0.02)
 0.10
 1.9
 240.00

 3.27
 10.06
 1.516
 0.20(0.02)
 0.10
 2.0
 220.00

 3.26
 10.24
 1.500
 0.20(0.02)
 0.10
 2.1
 210.00

 3.06
 11.52
 1.402
 0.20(0.02)
 0.10
 2.1
 200.00

 1.14
 13.92
 1.258
 0.20(0.02)
 0.10
 0.9
 300.00
 1 1 1 RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO CONFLUENCE FORMULA USED FOR 2 STREAMS. ** PEAK FLOW RATE TABLE ** STREAM Q Tc Intensity Fp(Fm) Ap Ae HEADWATER (CFS) (MIN.) (INCH/HR) (INCH/HR) (ACRES) NODE NUMBER 4.08 7.71 1.766 0.20(0.02) 0.10 2.1 230.00

 4.24
 8.82
 1.635
 0.20(0.02)
 0.10
 2.4
 240.00

 4.27
 10.06
 1.516
 0.20(0.02)
 0.10
 2.7
 220.00

 4.26
 10.24
 1.500
 0.20(0.02)
 0.10
 2.7
 210.00

 4.12
 11.52
 1.402
 0.20(0.02)
 0.10
 2.8
 200.00

 3.89
 13.92
 1.258
 0.20(0.02)
 0.10
 3.0
 300.00

 3 4 5 COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS: PEAK FLOW RATE (CFS) = 4.27 Tc (MIN.) = 10.06 EFFECTIVE AREA (ACRES) = 2.66 AREA-AVERAGED Fm (INCH/HR) = 0.02 AREA-AVERAGED Fp(INCH/HR) = 0.20 AREA-AVERAGED Ap = 0.10 TOTAL AREA (ACRES) = 3.0LONGEST FLOWPATH FROM NODE 300.00 TO NODE 242.00 =760.00 FEET. ******************* FLOW PROCESS FROM NODE 242.00 TO NODE 243.00 IS CODE = 41 ______ >>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA< >>>>USING USER-SPECIFIED PIPESIZE (EXISTING ELEMENT) <>>> _____ ELEVATION DATA: UPSTREAM(FEET) = 195.00 DOWNSTREAM(FEET) = 194.60 FLOW LENGTH (FEET) = 20.00 MANNING'S N = 0.013ASSUME FULL-FLOWING PIPELINE PIPE-FLOW VELOCITY (FEET/SEC.) = 1.09 (PIPE FLOW VELOCITY CORRESPONDING TO NORMAL-DEPTH FLOW AT DEPTH = 0.82 * DIAMETER) GIVEN PIPE DIAMETER (INCH) = 18.00 NUMBER OF PIPES = 1 PIPE-FLOW(CFS) = 4.27PIPE TRAVEL TIME (MIN.) = 0.31 Tc (MIN.) = 10.36LONGEST FLOWPATH FROM NODE 300.00 TO NODE 243.00 = 780.00 FEET. ______

END OF STUDY SUMMARY:

TOTAL AREA(ACRES) = 3.0 TC(MIN.) = 10.36 EFFECTIVE AREA(ACRES) = 2.66 AREA-AVERAGED Fm(INCH/HR) = 0.02

AREA-AVERAGED Fp(INCH/HR) = 0.20 AREA-AVERAGED Ap = 0.100 PEAK FLOW RATE(CFS) = 4.27

** PEAK FLOW RATE TABLE **

STREAM Q NUMBER (CFS	Tc (MIN.)	Intensity (INCH/HR)	Fp(Fm) (INCH/HR)	Ap	Ae (ACRES)	HEADWATER NODE
1 4.0	8 8.01	1.727	0.20(0.02)	0.10	2.1	230.00
2 4.2	4 9.12	1.603	0.20(0.02)	0.10	2.4	240.00
3 4.2	7 10.36	1.490	0.20(0.02)	0.10	2.7	220.00
4 4.2	6 10.54	1.475	0.20(0.02)	0.10	2.7	210.00
5 4.1	2 11.83	1.381	0.20(0.02)	0.10	2.8	200.00
6 3.8	9 14.22	1.242	0.20(0.02)	0.10	3.0	300.00

END OF RATIONAL METHOD ANALYSIS

RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE (Reference: 1986 ORANGE COUNTY HYDROLOGY CRITERION)

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Analysis prepared by:

DRC Engineering, Inc. 160 South Old Springs Road, Suite 210 Anaheim Hills, CA 92808 714-685-6860

```
* 18-860 Orange Residential
* Proposed Hydrology Study
* 2 Year Storm Event
*****************
 FILE NAME: 8860PR02.DAT
 TIME/DATE OF STUDY: 13:27 01/31/2019
______
 USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
_____
               --*TIME-OF-CONCENTRATION MODEL*--
 USER SPECIFIED STORM EVENT (YEAR) =
                              2.00
 SPECIFIED MINIMUM PIPE SIZE(INCH) = 12.00
 SPECIFIED PERCENT OF GRADIENTS (DECIMAL) TO USE FOR FRICTION SLOPE = 0.90
 *DATA BANK RAINFALL USED*
 *ANTECEDENT MOISTURE CONDITION (AMC) I ASSUMED FOR RATIONAL METHOD*
 *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
   HALF- CROWN TO STREET-CROSSFALL: CURB GUTTER-GEOMETRIES: MANNING
   WIDTH CROSSFALL IN- / OUT-/PARK- HEIGHT WIDTH LIP HIKE FACTOR
NO. (FT) (FT) SIDE / SIDE / WAY (FT) (FT) (FT) (n)
   30.0
          20.0 0.018/0.018/0.020
                                0.67 2.00 0.0313 0.167 0.0150
 GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
  1. Relative Flow-Depth = 0.00 FEET
     as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
   2. (Depth) * (Velocity) Constraint = 6.0 (FT*FT/S)
 *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
  OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
 *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED
****************
 FLOW PROCESS FROM NODE 100.00 TO NODE 101.00 IS CODE = 21
 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<
 >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
______
 INITIAL SUBAREA FLOW-LENGTH (FEET) = 155.00
 ELEVATION DATA: UPSTREAM(FEET) = 201.30 DOWNSTREAM(FEET) = 200.00
 Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
 SUBAREA ANALYSIS USED MINIMUM Tc (MIN.) = 6.338
    2 YEAR RAINFALL INTENSITY (INCH/HR) = 1.976
 SUBAREA To AND LOSS RATE DATA(AMC I ):
  DEVELOPMENT TYPE/ SCS SOIL AREA
                                   Fp
                                           Ap SCS Tc
                    GROUP (ACRES) (INCH/HR) (DECIMAL) CN (MIN.)
     LAND USE
```

```
RESIDENTIAL
 "11+ DWELLINGS/ACRE" D
                           1.83 0.20 0.200 57 6.34
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) = 0.20
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap = 0.200
 SUBAREA RUNOFF (CFS) = 3.19
 TOTAL AREA (ACRES) =
                  1.83 PEAK FLOW RATE(CFS) =
                                            3.19
******************
 FLOW PROCESS FROM NODE 101.00 TO NODE 112.00 IS CODE = 41
______
 >>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<
 >>>>USING USER-SPECIFIED PIPESIZE (EXISTING ELEMENT) <
______
 ELEVATION DATA: UPSTREAM(FEET) = 197.00 DOWNSTREAM(FEET) = 194.60
 FLOW LENGTH (FEET) = 605.00 MANNING'S N = 0.013
 ASSUME FULL-FLOWING PIPELINE
 PIPE-FLOW VELOCITY (FEET/SEC.) = 2.71
 (PIPE FLOW VELOCITY CORRESPONDING TO FULL PIPE CAPACITY FLOW)
 GIVEN PIPE DIAMETER(INCH) = 12.00 NUMBER OF PIPES = 1
 PIPE-FLOW(CFS) = 3.19
 PIPE TRAVEL TIME (MIN.) = 3.72 Tc (MIN.) = 10.06
 LONGEST FLOWPATH FROM NODE 100.00 TO NODE 112.00 = 760.00 FEET.
******************
 FLOW PROCESS FROM NODE 112.00 TO NODE 112.00 IS CODE = 1
______
 >>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE <<<<
______
 TOTAL NUMBER OF STREAMS = 2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 1 ARE:
 TIME OF CONCENTRATION (MIN.) = 10.06
 RAINFALL INTENSITY (INCH/HR) = 1.52
 AREA-AVERAGED Fm(INCH/HR) = 0.04
 AREA-AVERAGED Fp(INCH/HR) = 0.20
 AREA-AVERAGED Ap = 0.20
 EFFECTIVE STREAM AREA(ACRES) = 1.83
TOTAL STREAM AREA(ACRES) = 1.83
 PEAK FLOW RATE (CFS) AT CONFLUENCE =
**********************
 FLOW PROCESS FROM NODE 110.00 TO NODE 111.00 IS CODE = 21
_____
 >>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS
 >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
______
 INITIAL SUBAREA FLOW-LENGTH (FEET) = 160.00
 ELEVATION DATA: UPSTREAM(FEET) = 200.90 DOWNSTREAM(FEET) = 199.50
 Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
 SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) = 6.365
    2 YEAR RAINFALL INTENSITY (INCH/HR) = 1.971
 SUBAREA To AND LOSS RATE DATA(AMC I ):
 DEVELOPMENT TYPE/ SCS SOIL AREA
                                 Fρ
                                         Ap SCS Tc
                   GROUP (ACRES) (INCH/HR) (DECIMAL) CN (MIN.)
    LAND USE
 RESIDENTIAL
 "11+ DWELLINGS/ACRE" D 1.08 0.20
                                         0.200 57 6.36
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) = 0.20
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap = 0.200
 SUBAREA RUNOFF (CFS) = 1.88
 TOTAL AREA(ACRES) = 1.08 PEAK FLOW RATE(CFS) =
**********************
 FLOW PROCESS FROM NODE 111.00 TO NODE 112.00 IS CODE = 41
```

```
>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<
 >>>>USING USER-SPECIFIED PIPESIZE (EXISTING ELEMENT) <><<
______
 ELEVATION DATA: UPSTREAM(FEET) = 196.50 DOWNSTREAM(FEET) = 194.60
 FLOW LENGTH (FEET) = 295.00 MANNING'S N = 0.013
 DEPTH OF FLOW IN 12.0 INCH PIPE IS 7.3 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) = 3.73
 GIVEN PIPE DIAMETER (INCH) = 12.00 NUMBER OF PIPES = 1
 PIPE-FLOW(CFS) = 1.88
 PIPE TRAVEL TIME (MIN.) = 1.32 Tc (MIN.) = 7.68
 LONGEST FLOWPATH FROM NODE 110.00 TO NODE 112.00 =
                                                           455.00 FEET.
****************
 FLOW PROCESS FROM NODE 112.00 TO NODE 112.00 IS CODE = 1
______
 >>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE <<<
 >>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<
_____
 TOTAL NUMBER OF STREAMS = 2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM 2 ARE:
 TIME OF CONCENTRATION(MIN.) = 7.68
RAINFALL INTENSITY(INCH/HR) = 1.77
 AREA-AVERAGED Fm(INCH/HR) = 0.04
 AREA-AVERAGED Fp(INCH/HR) = 0.20
 AREA-AVERAGED Ap = 0.20
 EFFECTIVE STREAM AREA(ACRES) = 1.08
TOTAL STREAM AREA(ACRES) = 1.08
 PEAK FLOW RATE (CFS) AT CONFLUENCE =
 ** CONFLUENCE DATA **
  STREAM Q Tc Intensity Fp(Fm) Ap
                                                      Ae HEADWATER
             (CFS) (MIN.) (INCH/HR) (INCH/HR) (ACRES) NODE
  NUMBER

    3.19
    10.06
    1.515
    0.20(0.04)
    0.20
    1.8
    100.00

    1.88
    7.68
    1.769
    0.20(0.04)
    0.20
    1.1
    110.00

    1
 RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
 CONFLUENCE FORMULA USED FOR 2 STREAMS.
  ** PEAK FLOW RATE TABLE **
  STREAM Q Tc Intensity Fp(Fm) Ap Ae HEADWATER
             (CFS) (MIN.) (INCH/HR) (INCH/HR)
  NUMBER
                                                     (ACRES) NODE
    1

      4.73
      7.68
      1.769
      0.20(0.04)
      0.20
      2.5
      110.00

      4.79
      10.06
      1.515
      0.20(0.04)
      0.20
      2.9
      100.00

 COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
 PEAK FLOW RATE(CFS) = 4.79 Tc(MIN.) = 10.06
EFFECTIVE AREA(ACRES) = 2.91 AREA-AVERAGED Fm(INCH/HR) = 0.04
 AREA-AVERAGED Fp(INCH/HR) = 0.20 AREA-AVERAGED Ap = 0.20
 TOTAL AREA (ACRES) = 2.9
 LONGEST FLOWPATH FROM NODE 100.00 TO NODE 112.00 =
                                                          760.00 FEET.
______
 END OF STUDY SUMMARY:
 TOTAL AREA(ACRES) = 2.9 TC(MIN.) = 10.06
EFFECTIVE AREA(ACRES) = 2.91 AREA-AVERAGED Fm(INCH/HR) = 0.04
 AREA-AVERAGED Fp(INCH/HR) = 0.20 AREA-AVERAGED Ap = 0.200
 PEAK FLOW RATE (CFS) =
                             4.79
  ** PEAK FLOW RATE TABLE **
  STREAM Q Tc Intensity Fp(Fm)
                                                      Ae HEADWATER
  NUMBER
            (CFS) (MIN.) (INCH/HR) (INCH/HR) (ACRES) NODE

      4.73
      7.68
      1.769
      0.20(0.04)
      0.20
      2.5
      110.00

      4.79
      10.06
      1.515
      0.20(0.04)
      0.20
      2.9
      100.00

    1
```

===	===		===	-==	===	===	===	===	-==	===	-==	===	 	 	===	 ===	===	 	===	 	===	===	===
		-==	===		===			===		===	-==	===	 	 	===	 	===	 		 		===	

END OF RATIONAL METHOD ANALYSIS

NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm) AND LOW LOSS FRACTION ESTIMATIONS

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Analysis prepared by:

DRC Engineering, Inc. 160 South Old Springs Road, Suite 210 Anaheim Hills, CA 92808 714-685-6860

Problem Descriptions: 18-860 Cohen Property 2 Year Existing 10/24/19

*** NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm) AND LOW LOSS FRACTION ESTIMATIONS FOR AMC I:

TOTAL 24-HOUR DURATION RAINFALL DEPTH = 2.05 (inches)

SOIL-COVER AREA PERCENT OF SCS CURVE LOSS RATE
TYPE (Acres) PERVIOUS AREA NUMBER Fp(in./hr.) YIELD
1 0.17 100.00 75.(AMC II) 0.000 0.018

TOTAL AREA (Acres) = 0.17

AREA-AVERAGED LOSS RATE, Fm (in./hr.) = 0.000

AREA-AVERAGED LOW LOSS FRACTION, Y = 0.982

SMALL AREA UNIT HYDROGRAPH MODEL

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Analysis prepared by:

DRC Engineering, Inc. 160 South Old Springs Road, Suite 210 Anaheim Hills, CA 92808 714-685-6860

Problem Descriptions: 18-860 Cohen Property Existing 2 year Hydrograph 10/24/19

RATIONAL METHOD CALIBRATION COEFFICIENT = 0.90
TOTAL CATCHMENT AREA(ACRES) = 2.91
SOIL-LOSS RATE, Fm, (INCH/HR) = 0.000
LOW LOSS FRACTION = 0.982
TIME OF CONCENTRATION(MIN.) = 10.36
SMALL AREA PEAK Q COMPUTED USING PEAK FLOW RATE FORMULA
ORANGE COUNTY "VALLEY" RAINFALL VALUES ARE USED
RETURN FREQUENCY(YEARS) = 2
5-MINUTE POINT RAINFALL VALUE(INCHES) = 0.19
30-MINUTE POINT RAINFALL VALUE(INCHES) = 0.40
1-HOUR POINT RAINFALL VALUE(INCHES) = 0.53
3-HOUR POINT RAINFALL VALUE(INCHES) = 0.89
6-HOUR POINT RAINFALL VALUE(INCHES) = 1.22
24-HOUR POINT RAINFALL VALUE(INCHES) = 2.05

TOTAL CATCHMENT RUNOFF VOLUME (ACRE-FEET) = 0.44
TOTAL CATCHMENT SOIL-LOSS VOLUME (ACRE-FEET) = 0.05

***************** TIME VOLUME Q 0. 2.5 5.0 7.5 10.0 (HOURS) (AF) (CFS) 0.11 0.0000 0.00 Q 0.29 0.0006 0.08 Q 0.46 0.0018 0.08 Q 0.0030 0.09 \tilde{Q} 0.63 0.0042 0.0055 0.09 Q 0.09 Q 0.81 0.98 0.09 Q 0.0067 1.15 1.32 0.0080 0.09 Q 0.0092 0.09 Q 1.50 0.0105 0.09 Q 1.67 1.84 0.0118 0.09 Q 0.09 Q 0.0131 2.01 0.09 0 2.19 0.0144 0.09 Q 2.36 0.0157 2.53 0.0170 0.09 Q 2.70 0.0183 0.09 Q 2.88 0.0196 0.09 Q

3.05	0.0210	0.10	\circ				
			Q	•	•	•	•
3.22	0.0224	0.10	Q	•	•	•	•
3.40	0.0237	0.10	Q				
3.57	0.0251	0.10	Q				
				•	•	•	•
3.74	0.0265	0.10	Q	•	•	•	•
3.91	0.0279	0.10	Q	•		•	
4.09	0.0293	0.10	Q	_	_	_	_
4.26	0.0308	0.10		•	•	•	•
			Q	•	•	•	•
4.43	0.0322	0.10	Q	•	•	•	•
4.60	0.0337	0.10	Q				
4.78	0.0351	0.10	Q				
				•	•	•	•
4.95	0.0366	0.10	Q	•	•	•	•
5.12	0.0381	0.11	Q	•		•	
5.29	0.0396	0.11	Q			_	_
5.47	0.0412	0.11		•	•	•	•
			Q	•	•	•	•
5.64	0.0427	0.11	Q	•	•	•	•
5.81	0.0443	0.11	Q			•	
5.99	0.0459	0.11	Q				
				•	•	•	•
6.16	0.0475	0.11	Q	•	•	•	•
6.33	0.0491	0.11	Q	•		•	
6.50	0.0507	0.12	Q	_	_	_	_
6.68	0.0524	0.12		•	•	•	•
			Q	•	•	•	•
6.85	0.0540	0.12	Q	•	•	•	•
7.02	0.0557	0.12	Q				
7.19	0.0574	0.12	Q				
				•	•	•	•
7.37	0.0592	0.12	Q	•	•	•	•
7.54	0.0609	0.12	Q		•	•	
7.71	0.0627	0.12	Q			_	_
7.88	0.0645	0.13					
			Q	•	•	•	•
8.06	0.0663	0.13	Q	•	•	•	•
8.23	0.0681	0.13	Q			•	
8.40	0.0700	0.13	Q				
				•	•	•	•
8.58	0.0719	0.13	Q	•	•	•	•
8.75	0.0738	0.14	Q	•		•	
8.92	0.0758	0.14	Q				
9.09	0.0778	0.14	Q				
				•	•	•	•
9.27	0.0798	0.14	Q	•	•	•	•
9.44	0.0818	0.14	Q	•		•	
9.61	0.0839	0.15	Q			_	
9.78	0.0860	0.15	Q	•	•	•	•
				•	•	•	•
9.96	0.0881	0.15	Q	•	•	•	•
10.13	0.0903	0.15	Q	•		•	
10.30	0.0926	0.16	Q			_	_
10.47	0.0948	0.16	Q				
				•	•	•	•
10.65	0.0971	0.16	Q	•	•	•	•
10.82	0.0995	0.17	Q	•		•	
10.99	0.1019	0.17	Q			_	_
11.17	0.1043	0.17					
			Q	•	•	•	•
11.34	0.1069	0.18	Q	•	•	•	•
11.51	0.1094	0.18	Q			•	
11.68	0.1120	0.19	Q				
				•	•	•	•
11.86	0.1147	0.19	Q	•	•	•	•
12.03	0.1175	0.20	Q		•	•	
12.20	0.1206	0.23	Q	_		_	_
12.37	0.1240	0.25		•	•	•	•
			. Q	•	•	•	•
12.55	0.1276	0.26	•Q	•	•	•	•
12.72	0.1313	0.26	.Q	•	•	•	•
12.89	0.1352	0.27	.Q	_	_	_	
				•	•	•	•
13.06	0.1391	0.28	·Q	•	•	•	•
13.24	0.1431	0.29	•Q	•	•	•	•
13.41	0.1473	0.30	.Q	•		•	
13.58	0.1517	0.31	.Q	_	_	_	-
				•	•	•	•
13.76	0.1562	0.32	. Q	•	•	•	•
13.93	0.1608	0.33	.Q	•	•	•	•
14.10	0.1657	0.36	. Q	•		•	
-			~				

14.27	0.1710	0.38	. Q					
				•		•	•	•
14.45	0.1765	0.40	• Q	•		•	•	•
14.62	0.1824	0.42	. Q	•		•	•	•
14.79	0.1887	0.46	.Q	•		•	•	•
14.96	0.1953	0.48	• Q				_	_
15.14	0.2026	0.54		•		•	•	•
			. Q	•		•	•	•
15.31	0.2105	0.57	. Q	•		•	•	•
15.48	0.2188	0.60	. Q	•		•	•	
15.65	0.2278	0.66	. Q					
15.83	0.2393	0.95	. Q	_		_	_	_
16.00	0.2553	1.30		•		•	•	•
			. Q	•		•	•	•
16.17	0.2925	3.90	•	•	Q	•	•	•
16.35	0.3257	0.76	. Q	•		•	•	•
16.52	0.3356	0.62	. Q				•	
16.69	0.3436	0.50	. Q	_		_	_	_
16.86	0.3503	0.44		•		•	•	•
			. Q	•		•	•	•
17.04	0.3562	0.39	• Q	•		•	•	•
17.21	0.3614	0.34	. Q	•		•	•	•
17.38	0.3661	0.31	• Q					
17.55	0.3704	0.29	.Q					
17.73	0.3745	0.28		•		•	•	•
			. Q	•		•	•	•
17.90	0.3783	0.26	• Q	•		•	•	•
18.07	0.3819	0.25	Q			•	•	
18.24	0.3851	0.19	Q			•	•	
18.42	0.3878	0.18	Q				_	
18.59	0.3903	0.18	Q					
				•		•	•	•
18.76	0.3928	0.17	Q	•		•	•	•
18.94	0.3951	0.16	Q	•		•	•	•
19.11	0.3974	0.16	Q	•		•	•	•
19.28	0.3996	0.15	Q					
19.45	0.4017	0.15	Q					
				•		•	•	•
19.63	0.4037	0.14	Q	•		•	•	•
19.80	0.4057	0.14	Q	•		•	•	•
19.97	0.4076	0.13	Q	•		•	•	•
20.14	0.4095	0.13	Q			•	•	
20.32	0.4113	0.13	Q				_	
20.49	0.4131	0.12	Q	•		•	•	•
				•		•	•	•
20.66	0.4148	0.12	Q	•		•	•	•
20.83	0.4165	0.12	Q	•		•	•	•
21.01	0.4182	0.11	Q	•		•	•	
21.18	0.4198	0.11	Q			•	•	
21.35	0.4214	0.11	Q				_	
21.53	0.4229	0.11	Q					
				•		•	•	•
21.70	0.4244	0.11	Q	•		•	•	•
21.87	0.4259	0.10	Q	•		•	•	•
22.04	0.4274	0.10	Q	•		•	•	•
22.22	0.4288	0.10	Q			•	•	
22.39	0.4302	0.10	Q	_		_	_	_
22.56	0.4316	0.10		•		•	•	•
			Q	•		•	•	•
22.73	0.4330	0.09	Q	•		•	•	•
22.91	0.4343	0.09	Q			•	•	
23.08	0.4356	0.09	Q				•	
23.25	0.4369	0.09	Q					
23.42	0.4382	0.09	Q	-		-	-	-
				•		•	•	•
23.60	0.4395	0.09	Q	•		•	•	•
23.77	0.4407	0.09	Q	•		•	•	•
23.94	0.4419	0.09	Q	•			•	
24.12	0.4431	0.08	Q	•			•	
24.29	0.4437	0.00	Q				•	
				· 		· 	· 	

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE: (Note: 100% of Peak Flow Rate estimate assumed to have an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
=======================================	=======
0%	1440.0
10%	155.4
20%	31.1
30%	20.7
40%	10.4
50%	10.4
60%	10.4
70%	10.4
80%	10.4
90%	10.4

NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm) AND LOW LOSS FRACTION ESTIMATIONS

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Analysis prepared by:

DRC Engineering, Inc. 160 South Old Springs Road, Suite 210 Anaheim Hills, CA 92808 714-685-6860

Problem Descriptions: 18-860 Cohen Property Proposed 2 year 10/24/19

*** NON-HOMOGENEOUS WATERSHED AREA-AVERAGED LOSS RATE (Fm) AND LOW LOSS FRACTION ESTIMATIONS FOR AMC I:

TOTAL 24-HOUR DURATION RAINFALL DEPTH = 2.05 (inches)

SOIL-COVER AREA PERCENT OF SCS CURVE LOSS RATE
TYPE (Acres) PERVIOUS AREA NUMBER Fp(in./hr.) YIELD
1 0.50 100.00 75.(AMC II) 0.000 0.018

TOTAL AREA (Acres) = 0.50

AREA-AVERAGED LOSS RATE, Fm (in./hr.) = 0.000

AREA-AVERAGED LOW LOSS FRACTION, Y = 0.982

SMALL AREA UNIT HYDROGRAPH MODEL

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Analysis prepared by:

DRC Engineering, Inc. 160 South Old Springs Road, Suite 210 Anaheim Hills, CA 92808 714-685-6860

Problem Descriptions: 18-860 Cohen Property Proposed 2 year Hydrograph 10/24/19

RATIONAL METHOD CALIBRATION COEFFICIENT = 0.90
TOTAL CATCHMENT AREA(ACRES) = 2.91
SOIL-LOSS RATE, Fm, (INCH/HR) = 0.000
LOW LOSS FRACTION = 0.982
TIME OF CONCENTRATION(MIN.) = 10.06
SMALL AREA PEAK Q COMPUTED USING PEAK FLOW RATE FORMULA
ORANGE COUNTY "VALLEY" RAINFALL VALUES ARE USED
RETURN FREQUENCY(YEARS) = 2
5-MINUTE POINT RAINFALL VALUE(INCHES) = 0.19
30-MINUTE POINT RAINFALL VALUE(INCHES) = 0.40
1-HOUR POINT RAINFALL VALUE(INCHES) = 0.53
3-HOUR POINT RAINFALL VALUE(INCHES) = 0.89
6-HOUR POINT RAINFALL VALUE(INCHES) = 1.22

6-HOUR POINT RAINFALL VALUE(INCHES) = 1.22 24-HOUR POINT RAINFALL VALUE(INCHES) = 2.05

TOTAL CATCHMENT RUNOFF VOLUME (ACRE-FEET) = 0.44
TOTAL CATCHMENT SOIL-LOSS VOLUME (ACRE-FEET) = 0.05

***************** TIME VOLUME Q 0. 2.5 5.0 7.5 10.0 (HOURS) (AF) (CFS) 0.0002 0.08 Q 0.0014 0.08 Q 0.07 0.24 0.41 0.0026 0.08 Q 0.0038 0.09 \tilde{Q} 0.57 0.0049 0.0061 0.09 Q 0.09 Q 0.74 0.91 0.09 Q 0.0073 1.08 1.25 0.0085 0.09 Q 0.0098 0.09 Q 1.41 0.0110 0.09 Q 1.58 1.75 0.0122 0.09 Q 0.0135 0.09 Q 1.92 0.09 0 2.08 0.0147 0.09 Q 2.25 0.0160 2.42 0.0173 0.09 Q 2.59 0.0185 0.09 Q 2.75 0.0198 0.09 Q

2.92	0.0211	0.09	Q				
				•	•	•	•
3.09	0.0224	0.10	Q	•	•	•	•
3.26	0.0238	0.10	Q	•		•	
3.42	0.0251	0.10	Q				
3.59				•	•	•	•
	0.0265	0.10	Q	•	•	•	•
3.76	0.0278	0.10	Q	•		•	
3.93	0.0292	0.10	Q	ā.			
4.10	0.0306	0.10					
			Q	•	•	•	•
4.26	0.0320	0.10	Q	•	•	•	•
4.43	0.0334	0.10	Q	•		•	
4.60	0.0348	0.10	Q				
				•	•	•	•
4.77	0.0362	0.10	Q	•	•	•	•
4.93	0.0376	0.10	Q	•	•	•	
5.10	0.0391	0.11	Q	ā.			
5.27	0.0406	0.11	Q				
				•	•	•	•
5.44	0.0421	0.11	Q	•	•	•	•
5.60	0.0436	0.11	Q	•		•	
5.77	0.0451	0.11	Q				
				•	•	•	•
5.94	0.0466	0.11	Q	•	•	•	•
6.11	0.0482	0.11	Q	•	•	•	
6.28	0.0497	0.11	Q			•	
6.44	0.0513	0.11	Q				
				•	•	•	•
6.61	0.0529	0.12	Q	•	•	•	•
6.78	0.0545	0.12	Q	•		•	
6.95	0.0561	0.12	Q	_	_	_	_
7.11				•	•	•	•
	0.0578	0.12	Q	•	•	•	•
7.28	0.0595	0.12	Q	•	•	•	•
7.45	0.0611	0.12	Q			•	
7.62	0.0629	0.12	Q				
				•	•	•	•
7.78	0.0646	0.13	Q	•	•	•	•
7.95	0.0663	0.13	Q	•	•	•	
8.12	0.0681	0.13	Q	ā.			
8.29	0.0699	0.13					
			Q	•	•	•	•
8.45	0.0717	0.13	Q	•	•	•	•
8.62	0.0736	0.13	Q	•		•	
8.79	0.0755	0.14	Q				
				•	•	•	•
8.96	0.0774	0.14	Q	•	•	•	•
9.13	0.0793	0.14	Q	•	•	•	
9.29	0.0813	0.14	Q			•	
9.46	0.0832	0.15	Q				
				•	•	•	•
9.63	0.0853	0.15	Q	•	•	•	•
9.80	0.0873	0.15	Q	•	•	•	
9.96	0.0894	0.15	Q			•	
10.13	0.0915	0.16	Q				
				•	•	•	•
10.30	0.0937	0.16	Q	•	•	•	•
10.47	0.0959	0.16	Q	•	•	•	•
10.63	0.0981	0.16	Q				
10.80	0.1004	0.17	Q				
				•	•	•	•
10.97	0.1027	0.17	Q	•	•	•	•
11.14	0.1051	0.17	Q				•
11.31	0.1076	0.18	Q				
11.47	0.1100	0.18		•	•	•	•
			Q	•	•	•	•
11.64	0.1126	0.18	Q	•	•	•	•
11.81	0.1152	0.19	Q				
11.98	0.1178	0.19	Q	_	_		_
				•	•	•	•
12.14	0.1208	0.23	Q	•	•	•	•
12.31	0.1241	0.25	Q	•	•	•	
12.48	0.1276	0.26	• Q				
12.65	0.1312	0.26					-
			•Q	•	•	•	•
12.81	0.1348	0.27	• Q	•	•	•	•
12.98	0.1386	0.27	·Q	•	•		•
13.15	0.1425	0.29	• Q		•		
13.32	0.1465	0.29			-	-	-
			.Q	•	•	•	•
13.48	0.1506	0.30	. Q	•	•	•	•
13.65	0.1549	0.31	.Q	•	•		

$\begin{array}{cccccccccccccccccccccccccccccccccccc$	21 53	21.70	21.70 0.4256 0.11 Q	21.37	0.4226	0.11			Q						
20.19 0.4112 0.13 Q	20.19 0.4112 0.13 Q .	20.19 0.4112 0.13 Q . <	20.19 0.4112 0.13 Q . <	20.19 0.4112 0.13 Q . <	20.19 0.4112 0.13 Q . <	20.19 0.4112 0.13 Q . <	19.86	0.4075	0.14	Q	•		•	•	•
20.69	20.69 0.4163 0.12 Q 20.86 0.4179 0.12 Q 21.03 0.4195 0.11 Q 21.20 0.4211 0.11 Q 21.37 0.4226 0.11 Q 	20.69 0.4163 0.12 Q 20.86 0.4179 0.12 Q 21.03 0.4195 0.11 Q 21.20 0.4211 0.11 Q 21.37 0.4226 0.11 Q 21.53 0.4241 0.11 Q 21.70 0.4256 0.11 Q	20.69 0.4163 0.12 Q 20.86 0.4179 0.12 Q 21.03 0.4195 0.11 Q 21.20 0.4211 0.11 Q 21.37 0.4226 0.11 Q 21.53 0.4241 0.11 Q 21.70 0.4256 0.11 Q	20.69 0.4163 0.12 Q	20.69 0.4163 0.12 Q	20.69 0.4163 0.12 Q .	20.19 20.36	0.4112 0.4129	0.13 0.12	Q Q					•
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	21.20 0.4211 0.11 Q .	21.20 0.4211 0.11 Q .	21.20 0.4211 0.11 Q 21.37 0.4226 0.11 Q 21.53 0.4241 0.11 Q 21.70 0.4256 0.11 Q 21.87 0.4270 0.10 Q 22.04 0.4285 0.10 Q 22.20 0.4299 0.10 Q	21.20 0.4211 0.11 Q	21.20 0.4211 0.11 Q	20.69 20.86	0.4163 0.4179	0.12 0.12	Q Q					· ·

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE: (Note: 100% of Peak Flow Rate estimate assumed to have an instantaneous time duration)

Percentile of E Peak Flow R	 Duration (minutes)
0.8	 1440 6
0%	1448.6
10%	150.9
20%	30.2
30%	20.1
40%	10.1
50%	10.1
60%	10.1
70%	10.1
80%	10.1
90%	10.1

APPENDIX F NOISE MONITORING RESULTS

North Boundary Measurement

 Record #
 Date
 Time
 Run Duration
 Run Time
 Pause
 LAeq
 LAE
 LASmin
 LASmin Time
 LASmax
 LASmax Time

 1
 2019-01-08
 19:33:45
 00:20:13.2
 00:20:13.2
 00:00:00.0
 55.7
 86.5
 48.5
 19:41:18
 74.8
 19:33:57

East Boundary Measurement

Record #	Date	Time	Run Duration	Run Time	Pause	LAeq	LAE	LASmin	LASmin Time	LASmax	LASmax Time	LApeak (max)	
1	2019-01-08	19:08:36	00:22:05.6	00:22:05.6	0.00:00.0	52.5	83.7	47.8	19:20:20	65.1	19:27:28		79.1

South Boundary Measurement

Record #	Date	Time	Run Duration	Run Time	Pause	LAeq	LAE	LASmin	LASmin Time	LASmax	LASmax Time
1	2019-01-07	18:27:18	00:32:41.6	00:32:41.6	0.00:00.0	69.8	102.7	47.1	18:27:40	94.1	18:36:27
2	2019-01-07	19:00:00	01:00:00.0	01:00:00.0	0.00:00.0	58.0	93.6	48.0	19:32:37	77.4	19:39:51
3	2019-01-07	20:00:00	01:00:00.0	01:00:00.0	0.00:00.0	55.7	91.3	48.4	20:01:52	71.7	20:55:04
4	2019-01-07	21:00:00	01:00:00.0	01:00:00.0	0.00:00.0	60.9	96.4	48.4	21:59:55	85.3	21:32:22
5	2019-01-07	22:00:00	01:00:00.0	01:00:00.0	0.00:00.0	52.8	88.4	45.8	22:41:06	69.4	22:22:42
6	2019-01-07	23:00:00	01:00:00.0	01:00:00.0	0.00:00.0	57.5	93.1	45.7	23:58:20	80.9	23:07:48
7	2019-01-08	00:00:00	01:00:00.0	01:00:00.0	0.00:00.0	50.1	85.7	42.6	00:46:14	73.7	00:12:51
8	2019-01-08	01:00:00	01:00:00.0	01:00:00.0	0.00:00.0	47.6	83.2	42.2	01:11:45	71.7	01:05:46
9	2019-01-08	02:00:00	01:00:00.0	01:00:00.0	0.00:00.0	49.0	84.6	43.9	02:05:00	61.8	02:13:09
10	2019-01-08	03:00:00	01:00:00.0	01:00:00.0	0.00:00.0	53.8	89.4	47.6	03:28:57	73.9	03:34:06
11	2019-01-08	04:00:00	01:00:00.0	01:00:00.0	0.00:00.0	55.6	91.1	48.6	04:07:20	70.0	04:56:37
12	2019-01-08	05:00:00	01:00:00.0	01:00:00.0	0.00:00.0	58.9	94.5	53.4	05:03:40	77.1	05:56:38
13	2019-01-08	06:00:00	01:00:00.0	01:00:00.0	0.00:00.0	60.0	95.6	55.2	06:29:42	78.0	06:05:08
14	2019-01-08	07:00:00	01:00:00.0	01:00:00.0	0.00:00.0	62.5	98.0	55.2	07:06:19	77.4	07:21:39
15	2019-01-08	08:00:00	01:00:00.0	01:00:00.0	0.00:00.0	63.0	98.6	53.1	08:44:03	84.6	08:50:37
16	2019-01-08	09:00:00	01:00:00.0	01:00:00.0	0.00:00.0	60.0	95.5	48.4	09:55:31	82.2	09:15:57
17	2019-01-08	10:00:00	01:00:00.0	01:00:00.0	0.00:00.0	59.3	94.8	47.9	10:23:58	80.1	10:34:26
18	2019-01-08	11:00:00	01:00:00.0	01:00:00.0	0.00:00.0	58.8	94.3	45.8	11:27:24	81.0	11:58:37
19	2019-01-08	12:00:00	01:00:00.0	01:00:00.0	0.00:00.0	63.6	99.2	44.4	12:22:16	90.1	12:44:57
20	2019-01-08	13:00:00	01:00:00.0	01:00:00.0	0.00:00.0	59.6	95.2	47.0	13:02:13	81.5	13:53:36
21	2019-01-08	14:00:00	01:00:00.0	01:00:00.0	0.00:00.0	59.5	95.1	46.7	14:18:20	77.2	14:26:24
22	2019-01-08	15:00:00	01:00:00.0	01:00:00.0	0.00:00.0	60.3	95.8	48.8	15:02:39	74.0	15:15:58
23	2019-01-08	16:00:00	01:00:00.0	01:00:00.0	0.00:00.0	61.3	96.9	50.4	16:57:10	81.0	16:15:18
24	2019-01-08	17:00:00	01:00:00.0	01:00:00.0	0.00:00.0	61.8	97.3	47.6	17:12:05	88.2	17:32:07
25	2019-01-08	18:00:00	00:57:45.9	00:57:45.9	0.00:00.0	62.2	97.6	48.3	18:19:29	89.3	18:57:24

Western Boundary Measurements

	oundary Mea				
Record #	Time	Run Duration	LAeq	LASmin	LASmax
49	19:00:00	00:01:00.0	69.2	53.2	81.5
50	19:01:00	00:01:00.0	72.5	60.4	81.0
51	19:02:00	00:01:00.0	66.2	51.8	74.0
52	19:03:00	00:01:00.0	69.8	53.6	78.5
53	19:04:00	00:01:00.0	65.5	52.1	76.9
54	19:05:00	00:01:00.0	78.0	55.2	87.7
55	19:06:00	00:01:00.0	70.1	52.8	79.6
56	19:07:00	00:01:00.0	71.9	58.5	80.3
57	19:08:00	00:01:00.0	71.8	56.5	81.5
58	19:09:00	00:01:00.0	73.9	54.6	82.2
59	19:10:00	00:01:00.0	71.7	55.0	80.0
60	19:11:00	00:01:00.0	64.6	50.8	72.8
61	19:12:00	00:01:00.0	72.7	57.8	81.0
62	19:13:00	00:01:00.0	68.3	49.6	77.6
63	19:14:00	00:01:00.0	70.0	51.2	79.6
64	19:15:00	00:01:00.0	67.5	50.9	76.5
65	19:16:00	00:01:00.0	73.2	54.1	79.8
66	19:17:00	00:01:00.0	73.8	55.6	81.4
67	19:18:00	00:01:00.0	68.5	51.2	75.8
68	19:19:00	00:01:00.0	71.0	56.7	81.6
69	19:20:00	00:01:00.0	66.9	52.4	75.8
70	19:21:00	00:01:00.0	68.5	49.5	79.0
71	19:22:00	00:01:00.0	70.2	52.0	79.9
72	19:23:00	00:01:00.0	68.2	52.7	79.6
73	19:24:00	00:01:00.0	73.4	56.4	81.4
74	19:25:00	00:01:00.0	71.9	54.0	82.2
75	19:26:00	00:01:00.0	70.2	52.1	80.6
76	19:27:00	00:01:00.0	74.3	57.3	85.3
77	19:28:00	00:01:00.0	67.3	51.8	76.4
78	19:29:00	00:01:00.0	71.0	52.7	80.5
79	19:30:00	00:01:00.0	72.9	56.4	80.5
80	19:31:00	00:01:00.0	71.4	50.0	79.4
81	19:32:00	00:01:00.0	71.2	52.5	79.4
82	19:33:00	00:01:00.0	71.6	50.5	81.5
83	19:34:00	00:01:00.0	69.1	52.9	77.6
84	19:35:00	00:01:00.0	66.6	53.2	74.7
85	19:36:00	00:01:00.0	77.2	53.8	84.2
86	19:37:00	00:01:00.0	78.9	61.7	84.7
87	19:38:00	00:01:00.0	65.1	54.7	74.4
88	19:39:00	00:01:00.0	76.9	56.7	87.0
89	19:40:00	00:01:00.0	72.2	54.4	82.4
90	19:41:00	00:01:00.0	67.6	54.5	74.7
91	19:42:00	00:01:00.0	67.3	52.8	75.9
92	19:43:00	00:01:00.0	68.5	51.7	81.0
93	19:44:00	00:01:00.0	72.7	54.9	80.7

94		ı				
96 19:47:00 00:01:00.0 70.7 53.8 80.8 97 19:48:00 00:01:00.0 60.8 50.9 69.5 98 19:49:00 00:01:00.0 69.9 49.7 79.7 99 19:50:00 00:01:00.0 67.0 50.7 77.8 101 19:52:00 00:01:00.0 67.0 50.7 77.8 101 19:52:00 00:01:00.0 70.8 51.4 82.2 102 19:53:00 00:01:00.0 70.0 54.9 79.5 104 19:55:00 00:01:00.0 73.9 61.0 82.5 105 19:56:00 00:01:00.0 68.8 54.0 79.4 106 19:57:00 00:01:00.0 67.6 51.9 79.4 107 19:58:00 00:01:00.0 67.6 51.9 79.4 108 19:59:00 00:01:00.0 67.6 51.9 79.4 108 19:59:00 00:01:00.0 69.1 57.4						,
97 19:48:00 00:01:00.0 60.8 50.9 69.5 98 19:49:00 00:01:00.0 69.9 49.7 79.7 99 19:50:00 00:01:00.0 68.7 52.3 80.2 100 19:51:00 00:01:00.0 68.7 52.3 80.2 101 19:52:00 00:01:00.0 70.8 51.4 82.2 102 19:53:00 00:01:00.0 70.0 54.9 79.5 104 19:55:00 00:01:00.0 73.9 61.0 82.5 105 19:56:00 00:01:00.0 73.9 61.0 82.5 106 19:57:00 00:01:00.0 70.3 54.0 79.4 107 19:58:00 00:01:00.0 67.6 51.9 79.4 108 19:59:00 00:01:00.0 67.6 51.9 79.4 109 20:00:00 00:01:00.0 69.1 57.4 78.5 110 20:01:00 00:01:00.0 68.8 51.1				_		
98 19:49:00 00:01:00.0 69.9 49.7 79.7 99 19:50:00 00:01:00.0 68.7 52.3 80.2 100 19:51:00 00:01:00.0 67.0 50.7 77.8 101 19:52:00 00:01:00.0 70.8 51.4 82.2 102 19:53:00 00:01:00.0 70.0 54.9 79.5 104 19:55:00 00:01:00.0 73.9 61.0 82.5 105 19:56:00 00:01:00.0 68.8 54.0 79.4 106 19:57:00 00:01:00.0 67.6 51.9 79.4 107 19:58:00 00:01:00.0 67.6 51.9 79.4 108 19:59:00 00:01:00.0 67.6 51.9 79.4 108 19:59:00 00:01:00.0 67.6 51.9 79.4 109 20:00:00 00:01:00.0 63.8 49.4 77.5 110 20:01:00 00:01:00.0 68.8 51.1 <th></th> <th></th> <th></th> <th>_</th> <th></th> <th></th>				_		
99 19:50:00 00:01:00.0 68.7 52.3 80.2 100 19:51:00 00:01:00.0 67.0 50.7 77.8 101 19:52:00 00:01:00.0 70.8 51.4 82.2 102 19:53:00 00:01:00.0 68.3 50.6 81.2 103 19:54:00 00:01:00.0 70.0 54.9 79.5 104 19:55:00 00:01:00.0 73.9 61.0 82.5 105 19:56:00 00:01:00.0 68.8 54.0 79.4 106 19:57:00 00:01:00.0 67.6 51.9 79.4 107 19:58:00 00:01:00.0 67.6 51.9 79.4 108 19:59:00 00:01:00.0 67.6 51.9 79.4 108 19:59:00 00:01:00.0 67.6 51.9 79.4 109 20:00:00 00:01:00.0 68.8 51.1 77.5 110 20:01:00 00:01:00.0 68.7 51.8 <th></th> <th></th> <th></th> <th></th> <th>55.5</th> <th></th>					55.5	
100 19:51:00 00:01:00.0 67.0 50.7 77.8 101 19:52:00 00:01:00.0 70.8 51.4 82.2 102 19:53:00 00:01:00.0 68.3 50.6 81.2 103 19:54:00 00:01:00.0 70.0 54.9 79.5 104 19:55:00 00:01:00.0 70.3 61.0 82.5 105 19:56:00 00:01:00.0 68.8 54.0 79.4 106 19:57:00 00:01:00.0 67.6 51.9 79.4 108 19:59:00 00:01:00.0 67.6 51.9 79.4 108 19:59:00 00:01:00.0 67.6 51.9 79.4 109 20:00:00 00:01:00.0 69.1 57.4 78.5 110 20:01:00 00:01:00.0 63.8 49.4 77.5 111 20:02:00 00:01:00.0 66.8 51.1 75.7 111 20:02:00 00:01:00.0 66.0 49.1 </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>						
101 19:52:00 00:01:00.0 70.8 51.4 82.2 102 19:53:00 00:01:00.0 68.3 50.6 81.2 103 19:54:00 00:01:00.0 70.0 54.9 79.5 104 19:55:00 00:01:00.0 73.9 61.0 82.5 105 19:56:00 00:01:00.0 68.8 54.0 79.4 106 19:57:00 00:01:00.0 67.6 51.9 79.4 107 19:58:00 00:01:00.0 67.6 51.9 79.4 108 19:59:00 00:01:00.0 67.6 51.9 79.4 108 19:59:00 00:01:00.0 69.1 57.4 78.5 110 20:01:00 00:01:00.0 68.8 49.4 77.5 111 20:02:00 00:01:00.0 66.8 51.1 75.7 111 20:03:00 00:01:00.0 66.8 51.1 75.7 112 20:03:00 00:01:00.0 66.0 49.1 </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>						
102 19:53:00 00:01:00.0 68.3 50.6 81.2 103 19:54:00 00:01:00.0 70.0 54.9 79.5 104 19:55:00 00:01:00.0 73.9 61.0 82.5 105 19:56:00 00:01:00.0 68.8 54.0 79.4 106 19:57:00 00:01:00.0 70.3 54.0 79.4 107 19:58:00 00:01:00.0 67.6 51.9 79.4 108 19:59:00 00:01:00.0 67.6 51.9 79.4 108 19:59:00 00:01:00.0 69.1 57.4 78.5 110 20:01:00 00:01:00.0 68.1 75.4 78.5 110 20:01:00 00:01:00.0 68.8 51.1 75.7 111 20:02:00 00:01:00.0 68.8 51.1 75.7 112 20:02:00 00:01:00.0 72.7 51.0 82.3 113 20:04:00 00:01:00.0 72.6 54.5 </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>						
103 19:54:00 00:01:00.0 70.0 54.9 79.5 104 19:55:00 00:01:00.0 73.9 61.0 82.5 105 19:56:00 00:01:00.0 68.8 54.0 79.4 106 19:57:00 00:01:00.0 70.3 54.0 79.4 107 19:58:00 00:01:00.0 67.6 51.9 79.4 108 19:59:00 00:01:00.0 67.6 51.9 79.4 108 19:59:00 00:01:00.0 69.1 57.4 78.5 110 20:01:00 00:01:00.0 63.8 49.4 77.5 111 20:02:00 00:01:00.0 68.8 51.1 75.7 112 20:03:00 00:01:00.0 68.8 51.1 75.7 112 20:03:00 00:01:00.0 66.0 49.1 78.1 114 20:05:00 00:01:00.0 72.6 54.5 80.5 115 20:06:00 00:01:00.0 71.8 53.4 </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>						
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130 20:21:00 00:01:00.0 70.7 54.3 82.0 131 20:22:00 00:01:00.0 67.8 53.1 80.3 132 20:23:00 00:01:00.0 63.6 51.7 77.8 133 20:24:00 00:01:00.0 72.6 53.0 80.8 134 20:25:00 00:01:00.0 70.4 53.0 78.7 135 20:26:00 00:01:00.0 67.2 57.1 73.9 136 20:27:00 00:01:00.0 70.1 53.6 81.6 137 20:28:00 00:01:00.0 70.1 52.7 81.4 138 20:29:00 00:01:00.0 68.2 52.8 77.4 139 20:30:00 00:01:00.0 69.2 55.4 79.8						
131 20:22:00 00:01:00.0 67.8 53.1 80.3 132 20:23:00 00:01:00.0 63.6 51.7 77.8 133 20:24:00 00:01:00.0 72.6 53.0 80.8 134 20:25:00 00:01:00.0 70.4 53.0 78.7 135 20:26:00 00:01:00.0 67.2 57.1 73.9 136 20:27:00 00:01:00.0 70.1 53.6 81.6 137 20:28:00 00:01:00.0 70.1 52.7 81.4 138 20:29:00 00:01:00.0 68.2 52.8 77.4 139 20:30:00 00:01:00.0 69.2 55.4 79.8						
133 20:24:00 00:01:00.0 72.6 53.0 80.8 134 20:25:00 00:01:00.0 70.4 53.0 78.7 135 20:26:00 00:01:00.0 67.2 57.1 73.9 136 20:27:00 00:01:00.0 70.1 53.6 81.6 137 20:28:00 00:01:00.0 70.1 52.7 81.4 138 20:29:00 00:01:00.0 68.2 52.8 77.4 139 20:30:00 00:01:00.0 69.2 55.4 79.8	131	20:22:00	00:01:00.0	67.8	53.1	80.3
134 20:25:00 00:01:00.0 70.4 53.0 78.7 135 20:26:00 00:01:00.0 67.2 57.1 73.9 136 20:27:00 00:01:00.0 70.1 53.6 81.6 137 20:28:00 00:01:00.0 70.1 52.7 81.4 138 20:29:00 00:01:00.0 68.2 52.8 77.4 139 20:30:00 00:01:00.0 69.2 55.4 79.8	132	20:23:00	00:01:00.0	63.6	51.7	77.8
135 20:26:00 00:01:00.0 67.2 57.1 73.9 136 20:27:00 00:01:00.0 70.1 53.6 81.6 137 20:28:00 00:01:00.0 70.1 52.7 81.4 138 20:29:00 00:01:00.0 68.2 52.8 77.4 139 20:30:00 00:01:00.0 69.2 55.4 79.8	133	20:24:00	00:01:00.0	72.6	53.0	80.8
136 20:27:00 00:01:00.0 70.1 53.6 81.6 137 20:28:00 00:01:00.0 70.1 52.7 81.4 138 20:29:00 00:01:00.0 68.2 52.8 77.4 139 20:30:00 00:01:00.0 69.2 55.4 79.8	134	20:25:00	00:01:00.0	70.4	53.0	78.7
137 20:28:00 00:01:00.0 70.1 52.7 81.4 138 20:29:00 00:01:00.0 68.2 52.8 77.4 139 20:30:00 00:01:00.0 69.2 55.4 79.8	135	20:26:00	00:01:00.0	67.2	57.1	73.9
138 20:29:00 00:01:00.0 68.2 52.8 77.4 139 20:30:00 00:01:00.0 69.2 55.4 79.8	136	20:27:00	00:01:00.0	70.1	53.6	81.6
139 20:30:00 00:01:00.0 69.2 55.4 79.8	137	20:28:00	00:01:00.0	70.1	52.7	81.4
	138	20:29:00	00:01:00.0	68.2	52.8	77.4
140 20:31:00 00:01:00.0 67.5 55.5 74.1	139	20:30:00	00:01:00.0	69.2	55.4	79.8
	140	20:31:00	00:01:00.0	67.5	55.5	74.1

			c= =		
141	20:32:00	00:01:00.0	67.7	53.5	77.5
142	20:33:00	00:01:00.0	64.7	53.4	76.1
143	20:34:00	00:01:00.0	71.6	55.0	81.1
144	20:35:00	00:01:00.0	71.0	57.2	79.3
145	20:36:00	00:01:00.0	55.2	52.8	63.0
146	20:37:00	00:01:00.0	67.1	54.7	77.7
147	20:38:00	00:01:00.0	69.2	54.3	80.0
148	20:39:00	00:01:00.0	72.7	55.1	80.8
149	20:40:00	00:01:00.0	71.0	55.1	80.0
150	20:41:00	00:01:00.0	68.0	54.4	79.5
151	20:42:00	00:01:00.0	67.5	53.0	73.2
152	20:43:00	00:01:00.0	71.4	54.9	79.5
153	20:44:00	00:01:00.0	65.1	51.6	75.8
154	20:45:00	00:01:00.0	68.5	51.2	79.4
155	20:46:00	00:01:00.0	68.6	56.9	78.8
156	20:47:00	00:01:00.0	69.8	54.6	81.4
157	20:48:00	00:01:00.0	68.0	53.6	79.8
158	20:49:00	00:01:00.0	69.3	56.4	78.6
159	20:50:00	00:01:00.0	69.4	54.7	80.5
160	20:51:00	00:01:00.0	70.4	54.7	78.8
161	20:52:00	00:01:00.0	70.8	56.7	76.8
162	20:53:00	00:01:00.0	72.5	58.2	80.2
163	20:54:00	00:01:00.0	70.5	55.0	79.7
164	20:55:00	00:01:00.0	67.2	54.5	76.7
165	20:56:00	00:01:00.0	67.6	54.1	75.4
166	20:57:00	00:01:00.0	67.4	56.0	75.1
167	20:58:00	00:01:00.0	69.0	55.6	80.6
168	20:59:00	00:01:00.0	70.0	57.2	79.3
169 170	21:00:00 21:01:00	00:01:00.0 00:01:00.0	70.8 64.6	54.9 54.8	84.0 77.4
		00:01:00.0	69.1		
171 172	21:02:00 21:03:00	00:01:00.0	67.1	57.0 56.4	79.3 78.5
172	21:03:00	00:01:00.0	68.3	55.3	76.5
174	21:04:00	00:01:00.0	69.1	55.2	77.4
175	21:06:00	00:01:00.0	64.5	54.9	74.7
176	21:07:00	00:01:00.0	68.7	55.5	77.7
177	21:07:00	00:01:00.0	69.0	55.4	79.9
178	21:09:00	00:01:00.0	70.3	57.3	79.9
179	21:10:00	00:01:00.0	70.2	55.4	80.9
180	21:11:00	00:01:00.0	66.0	55.6	81.2
181	21:12:00	00:01:00.0	72.2	56.2	80.9
182	21:13:00	00:01:00.0	71.3	57.4	80.8
183	21:14:00	00:01:00.0	68.1	56.0	77.7
184	21:15:00	00:01:00.0	70.4	56.4	80.1
185	21:16:00	00:01:00.0	71.3	57.1	80.4
186	21:17:00	00:01:00.0	69.1	56.9	77.9
187	21:18:00	00:01:00.0	71.0	58.2	79.2
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188	21:19:00	00:01:00.0	69.2	56.1	78.0
189	21:20:00	00:01:00.0	70.2	58.2	80.2
190	21:21:00	00:01:00.0	70.7	56.5	79.8
191	21:22:00	00:01:00.0	70.1	57.2	79.6
192	21:23:00	00:01:00.0	69.2	56.1	79.6
193	21:24:00	00:01:00.0	69.2	55.5	82.1
194	21:25:00	00:01:00.0	71.1	55.8	79.9
195	21:26:00	00:01:00.0	67.2	55.0	75.4
196	21:27:00	00:01:00.0	60.5	55.9	68.7
197	21:28:00	00:01:00.0	67.8	55.3	80.9
198	21:29:00	00:01:00.0	70.6	55.3	80.7
199	21:30:00	00:01:00.0	70.0	55.4	79.9
200	21:31:00	00:01:00.0	90.3	59.2	101.8
201	21:32:00	00:01:00.0	73.7	60.6	80.2
202	21:33:00	00:01:00.0	60.7	55.2	73.6
203	21:34:00	00:01:00.0	69.8	55.4	78.6
204	21:35:00	00:01:00.0	61.9	55.6 56.9	73.5
205 206	21:36:00 21:37:00	00:01:00.0 00:01:00.0	66.0 69.1	56.9 56.9	74.4 79.3
207	21:37:00	00:01:00.0	70.5	55.6	79.3 79.4
207	21:39:00	00:01:00.0	68.7	55.5	79.4 78.3
208	21:39:00	00:01:00.0	66.7	56.4	78.3 77.4
210	21:40:00	00:01:00.0	69.6	56.0	77.4
211	21:42:00	00:01:00.0	69.5	56.3	82.5
212	21:42:00	00:01:00.0	68.5	55.1	80.4
213	21:44:00	00:01:00.0	63.1	54.8	74.7
214	21:45:00	00:01:00.0	68.1	54.5	80.0
215	21:46:00	00:01:00.0	64.3	54.0	75.9
216	21:47:00	00:01:00.0	63.2	54.1	75.1
217	21:48:00	00:01:00.0	64.6	54.6	76.2
218	21:49:00	00:01:00.0	66.4	56.1	72.5
219	21:50:00	00:01:00.0	69.3	55.3	80.8
220	21:51:00	00:01:00.0	71.8	56.5	82.0
221	21:52:00	00:01:00.0	54.6	53.4	57.4
222	21:53:00	00:01:00.0	54.1	53.4	55.0
223	21:54:00	00:01:00.0	61.8	52.8	72.7
224	21:55:00	00:01:00.0	65.4	52.3	78.0
225	21:56:00	00:01:00.0	63.5	53.0	75.1
226	21:57:00	00:01:00.0	65.1	54.4	71.6
227	21:58:00	00:01:00.0	65.8	54.8	73.0
228	21:59:00	00:01:00.0	64.9	48.6	77.6
229	22:00:00	00:01:00.0	64.9	48.6	73.2
230	22:01:00	00:01:00.0	63.7	48.8	75.6
231	22:02:00	00:01:00.0	68.7	50.4	80.9
232	22:03:00	00:01:00.0	67.1	56.1	77.3
233	22:04:00	00:01:00.0	68.8	54.5	77.7
234	22:05:00	00:01:00.0	70.1	52.5	81.2

20.5		00.04.00.0	60.0	50.4	00.0
235	22:06:00	00:01:00.0	68.2	52.4	80.9
236	22:07:00	00:01:00.0	57.8	51.5	67.1
237	22:08:00	00:01:00.0	68.4	52.4	78.4
238	22:09:00	00:01:00.0	60.3	52.1	69.5
239	22:10:00	00:01:00.0	64.8	51.8	74.0
240	22:11:00	00:01:00.0	58.7	51.2	72.9
241	22:12:00	00:01:00.0	68.2	54.3	78.4
242	22:13:00	00:01:00.0	65.6	52.3	75.6
243	22:14:00	00:01:00.0	66.4	51.8	78.3
244	22:15:00	00:01:00.0	66.4	52.5	76.4
245	22:16:00	00:01:00.0	66.9	54.7	75.1
246	22:17:00	00:01:00.0	63.3	52.5	73.0
247	22:18:00	00:01:00.0	57.2	51.2	67.7
248	22:19:00	00:01:00.0	66.4	51.8	74.8
249	22:20:00	00:01:00.0	67.9	52.4	79.7
250	22:21:00	00:01:00.0	65.8	50.2	78.0
251	22:22:00	00:01:00.0	64.7 66.6	51.5	78.8 75.1
252	22:23:00	00:01:00.0	00.0	51.8	,
253 254	22:24:00 22:25:00	00:01:00.0 00:01:00.0	62.9 67.8	49.4 49.4	70.6 78.8
254 255	22:25:00	00:01:00.0	62.5	49.4 50.9	76.6 74.7
255 256	22:27:00	00:01:00.0	50.9	50.3	51.7
250 257	22:27:00	00:01:00.0	67.4	50.5 50.1	77.6
258	22:29:00	00:01:00.0	60.4	50.5	70.5
259	22:30:00	00:01:00.0	66.2	48.7	70.5
260	22:30:00	00:01:00.0	60.8	51.4	70.4
261	22:32:00	00:01:00.0	51.9	49.0	60.7
262	22:33:00	00:01:00.0	66.4	49.2	78.2
263	22:34:00	00:01:00.0	67.2	49.1	80.3
264	22:35:00	00:01:00.0	66.0	48.5	77.4
265	22:36:00	00:01:00.0	58.4	49.3	69.3
266	22:37:00	00:01:00.0	63.8	49.8	73.4
267	22:38:00	00:01:00.0	67.7	51.0	76.0
268	22:39:00	00:01:00.0	65.8	50.2	74.7
269	22:40:00	00:01:00.0	65.7	48.2	77.1
270	22:41:00	00:01:00.0	61.9	50.3	74.9
271	22:42:00	00:01:00.0	71.2	53.8	79.4
272	22:43:00	00:01:00.0	66.1	51.3	79.0
273	22:44:00	00:01:00.0	60.6	50.1	71.5
274	22:45:00	00:01:00.0	65.2	50.7	75.8
275	22:46:00	00:01:00.0	66.3	54.3	76.7
276	22:47:00	00:01:00.0	68.0	52.7	80.2
277	22:48:00	00:01:00.0	69.0	53.1	79.8
278	22:49:00	00:01:00.0	66.3	52.9	76.8
279	22:50:00	00:01:00.0	62.2	52.6	72.6
280	22:51:00	00:01:00.0	60.3	52.8	70.6
281	22:52:00	00:01:00.0	61.6	53.0	74.2

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282	22:53:00	00:01:00.0	66.1	52.8	73.7
283	22:54:00	00:01:00.0	66.0	52.8	76.2
284	22:55:00	00:01:00.0	67.8	53.6	77.8
285	22:56:00	00:01:00.0	65.7	52.6	77.7
286	22:57:00	00:01:00.0	69.6	53.9	81.3
287	22:58:00	00:01:00.0	65.5	53.4	78.3
288	22:59:00	00:01:00.0	65.2	54.2	74.2
289	23:00:00	00:01:00.0	53.6	52.9	54.8
290	23:01:00	00:01:00.0	60.7	53.2	71.0
291	23:02:00	00:01:00.0	53.9	52.9	55.5
292	23:03:00	00:01:00.0	62.8	53.1	70.3
293	23:04:00	00:01:00.0	67.3	53.5	75.3
294	23:05:00	00:01:00.0	64.6	55.6	73.2
295	23:06:00	00:01:00.0	63.9	54.7	72.7
296	23:07:00	00:01:00.0	83.9	64.8	93.0
297	23:08:00	00:01:00.0	64.2	55.5	74.2
298	23:09:00	00:01:00.0	67.4	52.8	79.8
299	23:10:00	00:01:00.0	60.2	52.1	70.5
300	23:11:00	00:01:00.0	54.6	52.4	62.1
301	23:12:00	00:01:00.0	67.3	52.1	78.8
302	23:13:00	00:01:00.0	68.7	54.1	79.5
303	23:14:00	00:01:00.0	60.6	52.5	70.4
304	23:15:00	00:01:00.0	67.5	52.8	78.2
305	23:16:00	00:01:00.0	67.2	53.4	75.5
306	23:17:00	00:01:00.0	65.0	51.1	78.9
307	23:18:00	00:01:00.0	55.3	51.0	66.3
308	23:19:00	00:01:00.0	61.3	50.2	67.9
309	23:20:00	00:01:00.0	67.1	60.3	76.5
310	23:21:00	00:01:00.0	66.3	60.7	77.4
311	23:22:00	00:01:00.0	64.7	60.0	77.1
312	23:23:00	00:01:00.0	67.8 63.1	53.2	79.0
313	23:24:00 23:25:00	00:01:00.0 00:01:00.0		51.7	75.3
314 315	23:25:00	00:01:00.0	61.6	53.4 52.7	71.0 54.7
316	23:27:00	00:01:00.0	53.7 54.0	53.0	55.4
317	23:27:00	00:01:00.0	64.5	52.3	74.3
317	23:29:00	00:01:00.0	64.1	51.7	77.0
319	23:30:00	00:01:00.0	67.2	54.1	75.2
320	23:30:00	00:01:00.0	57.3	52.6	64.8
321	23:32:00	00:01:00.0	65.4	53.0	76.1
322	23:32:00	00:01:00.0	64.5	53.6	76.4
323	23:34:00	00:01:00.0	67.4	52.7	78.7
324	23:35:00	00:01:00.0	63.5	52.6	74.9
325	23:36:00	00:01:00.0	56.8	52.8	70.2
326	23:37:00	00:01:00.0	68.6	52.9	80.5
327	23:38:00	00:01:00.0	64.1	52.8	76.5
328	23:39:00	00:01:00.0	64.8	52.0	77.0
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329	23:40:00	00:01:00.0	61.3	52.0	72.2
330	23:41:00	00:01:00.0	58.9	52.1	68.3
331	23:42:00	00:01:00.0	62.4	51.7	74.5
332	23:43:00	00:01:00.0	66.2	50.8	80.8
333	23:44:00	00:01:00.0	51.5	50.5	55.9
334	23:45:00	00:01:00.0	65.7	52.6	76.7
335	23:46:00	00:01:00.0	62.3	51.3	73.0
336	23:47:00	00:01:00.0	52.0	51.2	53.1
337	23:48:00	00:01:00.0	52.2	51.1	54.1
338	23:49:00	00:01:00.0	59.8	51.2	70.4
339	23:50:00	00:01:00.0	51.7	51.1	52.4
340	23:51:00	00:01:00.0	65.8	50.9	75.3
341	23:52:00	00:01:00.0	63.3	51.4	74.3
342	23:53:00	00:01:00.0	68.3	52.1	81.2
343	23:54:00	00:01:00.0	52.6	51.2	55.2
344	23:55:00	00:01:00.0	66.8	51.0	77.7
345	23:56:00	00:01:00.0	52.8	51.3	57.1
346	23:57:00	00:01:00.0	50.7	50.1	51.7
347	23:58:00	00:01:00.0	60.7	50.2	70.1
348	23:59:00	00:01:00.0	69.3	53.9	79.3
349	00:00:00	00:01:00.0	52.5	50.3	58.5
350	00:01:00	00:01:00.0	51.3	50.6	52.4
351	00:02:00	00:01:00.0	50.9	50.3	51.6
352	00:03:00	00:01:00.0	51.3	50.6	52.5
353	00:04:00	00:01:00.0	60.3	51.4	70.4
354	00:05:00	00:01:00.0	65.4	51.4	79.4
355	00:06:00	00:01:00.0	55.1	51.4	65.0
356	00:07:00	00:01:00.0	56.7	51.4	67.7
357	00:08:00	00:01:00.0	63.1	52.0	76.6
358	00:09:00	00:01:00.0	68.1	52.1	78.3
359	00:10:00	00:01:00.0	53.0	51.7	54.3
360 361	00:11:00 00:12:00	00:01:00.0 00:01:00.0	64.9 72.5	52.8 50.2	76.6 85.7
362	00:12:00	00:01:00.0	68.5	49.6	81.8
363	00:13:00	00:01:00.0	61.2	50.0	73.0
364	00:14:00	00:01:00.0	66.4	50.4	77.7
365	00:15:00	00:01:00.0	64.3	51.5	75.4
366	00:17:00	00:01:00.0	53.4	51.4	61.2
367	00:17:00	00:01:00.0	63.1	51.1	73.8
368	00:19:00	00:01:00.0	50.8	49.8	52.3
369	00:20:00	00:01:00.0	62.0	50.3	75.3
370	00:21:00	00:01:00.0	60.8	49.8	76.5
371	00:22:00	00:01:00.0	64.0	49.7	77.6
372	00:23:00	00:01:00.0	62.9	51.2	72.3
373	00:24:00	00:01:00.0	60.0	51.1	71.7
374	00:25:00	00:01:00.0	55.9	49.8	71.1
375	00:26:00	00:01:00.0	50.7	49.0	52.1

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376	00:27:00	00:01:00.0	63.1	48.5	74.4
377	00:28:00	00:01:00.0	51.0	48.9	58.2
378	00:29:00	00:01:00.0	56.9	47.4	67.7
379	00:30:00	00:01:00.0	48.5	46.0	51.7
380	00:31:00	00:01:00.0	47.2	46.0	49.3
381	00:32:00	00:01:00.0	57.2	46.7	66.5
382	00:33:00	00:01:00.0	62.3	49.8	72.1
383	00:34:00	00:01:00.0	49.8	47.7	52.9
384	00:35:00	00:01:00.0	49.7	47.0	51.5
385	00:36:00	00:01:00.0	49.8	48.8	51.3
386	00:37:00	00:01:00.0	50.3	48.1	54.8
387	00:38:00	00:01:00.0	69.1	49.5	82.6
388	00:39:00	00:01:00.0	61.0	49.7	72.9
389	00:40:00	00:01:00.0	63.2	49.0	77.1
390	00:41:00	00:01:00.0	49.3	48.6	49.9
391	00:42:00	00:01:00.0	61.2	48.9	73.6
392	00:43:00	00:01:00.0	67.9	46.7	81.7
393	00:44:00	00:01:00.0	45.3	44.3	46.9
394	00:45:00	00:01:00.0	45.1	44.5	46.1
395	00:46:00	00:01:00.0	45.7	44.7	47.1
396	00:47:00	00:01:00.0	49.1	46.1	50.2
397	00:48:00	00:01:00.0	63.4	48.2	73.3
398	00:49:00	00:01:00.0	56.6	47.4	66.4
399	00:50:00	00:01:00.0	49.1	48.2	49.9
400 401	00:51:00 00:52:00	00:01:00.0 00:01:00.0	49.3 59.9	48.1 48.3	49.9 70.4
401	00:52:00	00:01:00.0	49.6	46.3 47.3	54.9
403	00:54:00	00:01:00.0	60.9	45.3	72.8
404	00:54:00	00:01:00.0	45.7	44.6	48.7
405	00:56:00	00:01:00.0	45.8	44.8	48.4
406	00:57:00	00:01:00.0	48.0	45.5	51.7
407	00:58:00	00:01:00.0	49.0	48.2	51.3
408	00:59:00	00:01:00.0	49.4	48.7	52.9
409	01:00:00	00:01:00.0	64.4	48.5	77.3
410	01:01:00	00:01:00.0	48.5	45.4	49.7
411	01:02:00	00:01:00.0	64.0	44.4	78.9
412	01:03:00	00:01:00.0	45.7	44.6	46.9
413	01:04:00	00:01:00.0	64.3	45.1	75.8
414	01:05:00	00:01:00.0	56.3	46.8	69.1
415	01:06:00	00:01:00.0	65.0	47.0	75.3
416	01:07:00	00:01:00.0	46.8	44.9	49.8
417	01:08:00	00:01:00.0	62.8	45.4	75.4
418	01:09:00	00:01:00.0	46.1	44.5	49.3
419	01:10:00	00:01:00.0	45.6	44.8	47.5
420	01:11:00	00:01:00.0	55.8	45.2	69.8
421	01:12:00	00:01:00.0	65.9	44.3	80.0
422	01:13:00	00:01:00.0	62.6	44.9	73.6

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423	01:14:00	00:01:00.0	62.8	45.4	72.9
424	01:15:00	00:01:00.0	52.7	45.3	61.9
425	01:16:00	00:01:00.0	66.5	46.5	77.0
426	01:17:00	00:01:00.0	50.3	45.1	62.7
427	01:18:00	00:01:00.0	64.5	45.0	77.5
428	01:19:00	00:01:00.0	46.1	43.3	49.7
429	01:20:00	00:01:00.0	44.9	43.5	46.2
430	01:21:00	00:01:00.0	56.2	45.6	66.2
431	01:22:00	00:01:00.0	61.0	45.4	72.9
432	01:23:00	00:01:00.0	46.5	45.7	47.6
433	01:24:00	00:01:00.0	46.5	45.4	49.1
434	01:25:00	00:01:00.0	45.5	44.3	47.2
435	01:26:00	00:01:00.0	47.5	44.6	50.4
436	01:27:00	00:01:00.0	47.7	46.1	49.7
437	01:28:00	00:01:00.0	46.1	45.0	48.8
438	01:29:00	00:01:00.0	46.5	45.0	48.0
439	01:30:00	00:01:00.0	46.5	45.2	48.5
440	01:31:00	00:01:00.0	46.5	45.4	48.3
441	01:32:00	00:01:00.0	47.4	45.5	49.2
442	01:33:00	00:01:00.0	47.1	45.9	50.6
443	01:34:00	00:01:00.0	65.2	46.3	78.3
444	01:35:00	00:01:00.0	53.3	45.2	64.8
445	01:36:00	00:01:00.0	63.5	46.2	74.7
446	01:37:00	00:01:00.0	45.6	44.8	46.5
447	01:38:00	00:01:00.0	44.9	44.0	46.2
448	01:39:00	00:01:00.0	46.5	43.7	55.9
449	01:40:00	00:01:00.0	45.6	44.5	48.1
450	01:41:00 01:42:00	00:01:00.0	64.6	46.2	77.8
451		00:01:00.0	47.3	46.5	48.2
452 453	01:43:00	00:01:00.0	65.3	47.1	77.4
453 454	01:44:00 01:45:00	00:01:00.0 00:01:00.0	47.2 54.2	46.4 45.8	48.7 63.3
454 455	01:45:00	00:01:00.0	59.9	45.8 45.3	74.0
456	01:47:00	00:01:00.0	45.8	44.9	48.9
457	01:47:00	00:01:00.0	47.1	45.0	52.0
458	01:49:00	00:01:00.0	46.5	45.6	48.7
459	01:50:00	00:01:00.0	45.8	44.9	47.5
460	01:51:00	00:01:00.0	45.7	44.5	48.6
461	01:52:00	00:01:00.0	54.4	44.2	68.1
462	01:53:00	00:01:00.0	60.3	44.4	71.1
463	01:54:00	00:01:00.0	44.9	44.1	45.6
464	01:55:00	00:01:00.0	45.2	44.6	46.2
465	01:56:00	00:01:00.0	45.2	44.2	46.7
466	01:57:00	00:01:00.0	45.6	44.6	46.7
467	01:58:00	00:01:00.0	46.3	45.4	47.0
468	01:59:00	00:01:00.0	46.5	44.8	51.1
469	02:00:00	00:01:00.0	66.6	45.5	78.4

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470	02:01:00	00:01:00.0	65.4	46.7	78.0
471	02:02:00	00:01:00.0	46.6	45.3	48.8
472	02:03:00	00:01:00.0	46.7	44.8	49.7
473	02:04:00	00:01:00.0	45.0	44.4	45.8
474	02:05:00	00:01:00.0	45.4	44.5	46.3
475	02:06:00	00:01:00.0	64.2	45.0	78.0
476	02:07:00	00:01:00.0	63.9	45.9	76.4
477	02:08:00	00:01:00.0	46.1	45.2	48.2
478	02:09:00	00:01:00.0	47.2	45.5	49.9
479	02:10:00	00:01:00.0	63.1	46.0	75.0
480	02:11:00	00:01:00.0	48.5	47.6	49.5
481	02:12:00	00:01:00.0	69.3	48.7	81.3
482	02:13:00	00:01:00.0	48.8	47.4	53.4
483	02:14:00	00:01:00.0	49.0	48.1	50.4
484	02:15:00	00:01:00.0	48.9	48.1	50.0
485	02:16:00	00:01:00.0	48.3	47.5	49.1
486	02:17:00	00:01:00.0	48.6	48.0	49.2
487	02:18:00	00:01:00.0	49.5	48.2	51.6
488	02:19:00	00:01:00.0	50.2	49.1	52.3
489	02:20:00	00:01:00.0	64.4	49.1	76.1
490	02:21:00	00:01:00.0	61.6	54.0	72.4
491	02:22:00	00:01:00.0	53.0	52.0	55.2
492	02:23:00	00:01:00.0	52.3	51.9	52.8
493	02:24:00	00:01:00.0	52.7	52.4	53.0
494	02:25:00	00:01:00.0	53.1	52.5	55.7
495	02:26:00	00:01:00.0	67.0	52.6	76.4
496	02:27:00	00:01:00.0	52.8	52.5	53.3
497	02:28:00	00:01:00.0	51.7	48.8	53.1
498	02:29:00	00:01:00.0	48.1	47.4	49.4
499	02:30:00	00:01:00.0	48.4	47.6	50.0
500	02:31:00	00:01:00.0	49.9	48.0	52.5
501	02:32:00	00:01:00.0	54.2	47.6	66.2
502	02:33:00	00:01:00.0	60.3	47.7	72.0
503	02:34:00	00:01:00.0	47.4	46.2	48.8
504	02:35:00	00:01:00.0	47.7	46.5	49.7
505	02:36:00	00:01:00.0	46.9	46.1	48.0
506	02:37:00	00:01:00.0	46.7	45.6	49.4
507	02:38:00	00:01:00.0	46.6	45.4	48.2
508	02:39:00	00:01:00.0	48.6	46.7	52.9
509	02:40:00	00:01:00.0	61.0	46.2	72.9
510	02:41:00	00:01:00.0	47.4	46.2	49.2
511	02:42:00	00:01:00.0	47.9	45.8	50.2
512	02:43:00	00:01:00.0	48.6	46.8	52.1
513	02:44:00	00:01:00.0	50.8	47.1	57.6
514	02:45:00	00:01:00.0	58.6	47.2	69.5
515	02:46:00	00:01:00.0	47.2	46.2	50.3
516	02:47:00	00:01:00.0	52.2	46.7	64.7

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517	02:48:00	00:01:00.0	57.5	48.4	69.1
518	02:49:00	00:01:00.0	59.5	49.0	70.7
519	02:50:00	00:01:00.0	50.8	49.1	52.2
520	02:51:00	00:01:00.0	52.1	50.7	55.1
521	02:52:00	00:01:00.0	51.2	50.2	53.8
522	02:53:00	00:01:00.0	50.8	49.9	52.8
523	02:54:00	00:01:00.0	52.3	50.9	54.9
524	02:55:00	00:01:00.0	53.3	52.1	55.7
525	02:56:00	00:01:00.0	52.8	51.8	55.0
526	02:57:00	00:01:00.0	52.2	51.2	54.5
527	02:58:00	00:01:00.0	54.2	52.1	56.2
528	02:59:00	00:01:00.0	53.6	52.4	54.6
529	03:00:00	00:01:00.0	51.8	50.5	53.8
530	03:01:00	00:01:00.0	50.7	49.6	52.5
531	03:02:00	00:01:00.0	50.8	49.6	53.1
532	03:03:00	00:01:00.0	51.6	50.0	54.3
533	03:04:00	00:01:00.0	50.5	49.4	52.1
534	03:05:00	00:01:00.0	50.4	49.5	51.6
535	03:06:00	00:01:00.0	53.8	50.9	57.7
536	03:07:00	00:01:00.0	53.1	52.3	53.9
537	03:08:00	00:01:00.0	54.1	53.0	56.1
538	03:09:00	00:01:00.0	53.6	51.6	55.3
539	03:10:00	00:01:00.0	51.9	51.2	52.8
540	03:11:00	00:01:00.0	51.4	50.7	52.3
541	03:12:00	00:01:00.0	52.5	51.0	53.4
542	03:13:00	00:01:00.0	51.8	50.9	52.7
543	03:14:00	00:01:00.0	53.3	51.8	54.3
544	03:15:00	00:01:00.0	57.0	52.7	62.6
545	03:16:00	00:01:00.0	54.9	53.8	56.2
546	03:17:00	00:01:00.0	61.4	51.8	72.5
547	03:18:00	00:01:00.0	52.5	51.8	53.6
548	03:19:00	00:01:00.0	52.9	52.2	53.9
549	03:20:00	00:01:00.0	58.7	51.7	68.6
550	03:21:00	00:01:00.0	53.6	52.2	54.5
551	03:22:00	00:01:00.0	54.7	53.0	56.7
552	03:23:00	00:01:00.0	55.6	53.1	58.1
553	03:24:00	00:01:00.0	59.4	51.7	70.2
554	03:25:00	00:01:00.0	61.7	52.4	72.9
555	03:26:00	00:01:00.0	65.4	51.3	74.7
556	03:27:00	00:01:00.0	69.6	50.7	82.0
557	03:28:00	00:01:00.0	49.9	49.3	51.6
558	03:29:00	00:01:00.0	49.4	49.0	50.0
559	03:30:00	00:01:00.0	50.3	49.1	52.8
560	03:31:00	00:01:00.0	50.2	49.3	51.7
561	03:32:00	00:01:00.0	52.5	50.0	56.1
562	03:33:00	00:01:00.0	75.2	51.9	86.0
563	03:34:00	00:01:00.0	55.8	49.8	65.7

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564	03:35:00	00:01:00.0	52.3	49.2	64.6
565	03:36:00	00:01:00.0	68.9	49.9	79.5
566	03:37:00	00:01:00.0	59.9	48.6	69.2
567	03:38:00	00:01:00.0	65.1	48.8	79.3
568	03:39:00	00:01:00.0	49.8	48.5	53.5
569	03:40:00	00:01:00.0	50.7	48.8	53.9
570	03:41:00	00:01:00.0	49.4	48.2	52.3
571	03:42:00	00:01:00.0	51.1	49.5	54.1
572	03:43:00	00:01:00.0	51.1	49.9	55.2
573	03:44:00	00:01:00.0	61.7	49.9	73.5
574	03:45:00	00:01:00.0	53.2	50.3	68.1
575	03:46:00	00:01:00.0	71.6	52.2	82.7
576	03:47:00	00:01:00.0	52.5	51.1	62.6
577	03:48:00	00:01:00.0	51.9	51.3	53.1
578	03:49:00	00:01:00.0	52.6	51.5	54.9
579	03:50:00	00:01:00.0	52.3	50.8	55.9
580	03:51:00	00:01:00.0	51.4	49.8	54.3
581	03:52:00	00:01:00.0	61.2	49.9	71.3
582	03:53:00	00:01:00.0	64.1	50.6	77.3
583	03:54:00	00:01:00.0	62.4	51.3	76.5
584	03:55:00	00:01:00.0	55.4	50.1	69.4
585	03:56:00	00:01:00.0	51.8	50.1	58.2
586	03:57:00	00:01:00.0	51.9	50.1	57.4
587	03:58:00	00:01:00.0	52.2 63.0	51.3 51.7	54.3
588 589	03:59:00 04:00:00	00:01:00.0 00:01:00.0	51.7	50.4	70.9 56.8
590	04:00:00	00:01:00.0	61.6	50.4	70.3
591	04:01:00	00:01:00.0	55.9	49.8	68.4
592	04:02:00	00:01:00.0	51.4	49.9	52.6
593	04:04:00	00:01:00.0	51.3	50.6	52.5
594	04:05:00	00:01:00.0	51.4	50.7	52.2
595	04:06:00	00:01:00.0	60.0	50.5	70.2
596	04:07:00	00:01:00.0	62.7	51.6	73.5
597	04:08:00	00:01:00.0	52.6	51.4	56.8
598	04:09:00	00:01:00.0	52.7	51.6	54.1
599	04:10:00	00:01:00.0	52.6	51.3	54.2
600	04:11:00	00:01:00.0	53.4	51.7	55.5
601	04:12:00	00:01:00.0	72.6	54.8	80.4
602	04:13:00	00:01:00.0	72.5	56.3	82.5
603	04:14:00	00:01:00.0	54.6	53.4	56.4
604	04:15:00	00:01:00.0	62.5	53.6	71.8
605	04:16:00	00:01:00.0	63.3	53.6	74.0
606	04:17:00	00:01:00.0	56.9	54.2	71.3
607	04:18:00	00:01:00.0	61.7	53.2	73.1
608	04:19:00	00:01:00.0	54.2	53.6	54.9
609	04:20:00	00:01:00.0	55.1	53.8	60.2
610	04:21:00	00:01:00.0	68.1	54.8	78.2

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611	04:22:00	00:01:00.0	54.8	54.1	55.5
612	04:23:00	00:01:00.0	55.5	54.7	56.9
613	04:24:00	00:01:00.0	68.6	55.3	77.8
614	04:25:00	00:01:00.0	56.0	54.9	57.9
615	04:26:00	00:01:00.0	61.4	54.9	71.5
616	04:27:00	00:01:00.0	59.8	54.9	68.6
617	04:28:00	00:01:00.0	56.8	55.2	58.5
618	04:29:00	00:01:00.0	61.1	55.1	71.1
619	04:30:00	00:01:00.0	69.3	56.2	79.1
620	04:31:00	00:01:00.0	69.1	56.0	79.5
621	04:32:00	00:01:00.0	62.6	55.1	72.0
622	04:33:00	00:01:00.0	61.5	55.2	70.5
623	04:34:00	00:01:00.0	62.5	54.9	73.8
624	04:35:00	00:01:00.0	55.7	54.7	57.6
625	04:36:00	00:01:00.0	56.5	55.4	57.8
626	04:37:00	00:01:00.0	66.2	55.4	73.9
627	04:38:00	00:01:00.0	67.2	54.9	79.1
628	04:39:00	00:01:00.0	64.2	55.6	75.9
629	04:40:00	00:01:00.0	65.5	55.7	73.8
630	04:41:00	00:01:00.0	64.0	56.7	73.7
631	04:42:00	00:01:00.0	63.0	55.0	73.3
632	04:43:00	00:01:00.0	62.8	55.6	70.4
633	04:44:00	00:01:00.0	59.2	53.0	67.7
634	04:45:00	00:01:00.0	65.4	55.6	75.8
635	04:46:00	00:01:00.0	68.4	54.8	81.8
636	04:47:00	00:01:00.0	55.6	54.5	57.1
637	04:48:00	00:01:00.0	68.0	55.5	76.1
638	04:49:00	00:01:00.0	67.0	55.2	74.8
639	04:50:00	00:01:00.0	67.3	54.9	74.9
640	04:51:00	00:01:00.0	68.5	55.6	80.3
641	04:52:00	00:01:00.0	70.2	55.6	80.6
642	04:53:00 04:54:00	00:01:00.0 00:01:00.0	62.1	54.7	73.1
643 644	04.54.00	00:01:00.0	69.4 56.2	55.3 54.6	82.2 59.8
645	04.55.00	00:01:00.0	59.5	55.2	67.2
646	04:57:00	00:01:00.0	56.0	55.2 55.1	57.9
647	04:57:00	00:01:00.0	64.8	54.9	75.1
648	04:58:00	00:01:00.0	55.3	54.2	56.8
649	05:00:00	00:01:00.0	65.3	55.4	74.6
650	05:00:00	00:01:00.0	63.1	56.4	73.7
651	05:02:00	00:01:00.0	65.8	56.2	77.5
652	05:02:00	00:01:00.0	60.3	55.2	70.5
653	05:04:00	00:01:00.0	59.4	56.1	68.7
654	05:05:00	00:01:00.0	67.4	56.1	78.2
655	05:06:00	00:01:00.0	65.9	56.7	75.4
656	05:07:00	00:01:00.0	63.8	56.0	74.1
657	05:07:00	00:01:00.0	61.0	55.4	70.7
	55.55.55	22.02.00.0	52.0	55.1	, 5.,

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658	05:09:00	00:01:00.0	60.9	56.0	71.3
659	05:10:00	00:01:00.0	60.8	56.5	71.9
660	05:11:00	00:01:00.0	69.0	57.4	79.4
661	05:12:00	00:01:00.0	65.8	57.9	75.4
662	05:13:00	00:01:00.0	62.4	57.1	72.7
663	05:14:00	00:01:00.0	63.6	55.8	74.2
664	05:15:00	00:01:00.0	66.1	57.1	77.0
665	05:16:00	00:01:00.0	66.4	56.5	77.2
666	05:17:00	00:01:00.0	67.7	57.4	80.1
667	05:18:00	00:01:00.0	57.5	56.7	58.6
668	05:19:00	00:01:00.0	69.8	57.7	79.8
669	05:20:00	00:01:00.0	66.7	57.8	79.1
670	05:21:00	00:01:00.0	67.5	56.8	75.1
671	05:22:00	00:01:00.0	58.4	57.0	62.1
672	05:23:00	00:01:00.0	58.4	56.8	62.7
673	05:24:00	00:01:00.0	65.8	57.6	76.9
674	05:25:00	00:01:00.0	66.2	58.2	72.8
675	05:26:00	00:01:00.0	60.1	57.7	66.4
676	05:27:00	00:01:00.0	60.0	58.4	64.3
677	05:28:00	00:01:00.0	65.3	59.0	73.1
678	05:29:00	00:01:00.0	64.5	60.2	73.9
679	05:30:00	00:01:00.0	63.7	59.3	73.3
680	05:31:00	00:01:00.0	67.7	60.3	72.8
681	05:32:00	00:01:00.0	70.7	61.7	78.2
682	05:33:00	00:01:00.0	67.9	59.6	76.2
683	05:34:00	00:01:00.0	66.7	59.5	80.6
684	05:35:00	00:01:00.0	66.9	59.5	76.0
685	05:36:00	00:01:00.0	67.4	58.5	76.6
686	05:37:00	00:01:00.0	69.1	58.8	77.3
687	05:38:00	00:01:00.0	69.7	59.4	76.4
688	05:39:00	00:01:00.0	65.5	58.6	73.3
689	05:40:00 05:41:00	00:01:00.0 00:01:00.0	67.4	58.3	81.0 70.7
690 691	05:42:00	00:01:00.0	63.3 69.8	57.5 59.1	78.0
692	05:42:00	00:01:00.0	72.4	59.1 57.1	84.3
693	05:44:00	00:01:00.0	72.4 72.0	57.1 57.0	84.0
694	05:45:00	00:01:00.0	68.5	59.3	75.7
695	05:46:00	00:01:00.0	66.5	58.2	75.7
696	05:47:00	00:01:00.0	65.2	58.6	74.4
697	05:48:00	00:01:00.0	68.4	58.6	76.0
698	05:49:00	00:01:00.0	71.6	58.3	84.1
699	05:50:00	00:01:00.0	70.7	57.7	79.6
700	05:50:00	00:01:00.0	70.1	57.0	82.4
701	05:52:00	00:01:00.0	69.1	58.9	78.1
702	05:52:00	00:01:00.0	64.9	56.9	73.5
703	05:54:00	00:01:00.0	77.2	56.5	86.9
704	05:55:00	00:01:00.0	69.2	59.0	77.6
	55.55.00	22.02.00.0	23.2	55.0	

705	05.56.00	00.01.00.0	71.0	FO 1	02.7
705	05:56:00	00:01:00.0	71.8	59.1	83.7
706	05:57:00	00:01:00.0	68.4	57.2	74.6
707	05:58:00	00:01:00.0	64.7	57.8	72.6
708	05:59:00	00:01:00.0	66.0	56.4	76.2
709	06:00:00	00:01:00.0	67.3	57.8	75.4
710	06:01:00	00:01:00.0	64.3	57.8	73.9
711	06:02:00	00:01:00.0	67.0	58.4	76.4
712	06:03:00	00:01:00.0	70.5	57.5	79.2
713	06:04:00	00:01:00.0	63.1	56.7	71.5
714	06:05:00	00:01:00.0	66.0	58.6	72.8
715	06:06:00	00:01:00.0	68.6	58.1	74.3
716	06:07:00	00:01:00.0	69.7	58.2 57.4	80.7 71.7
717 718	06:08:00 06:09:00	00:01:00.0 00:01:00.0	63.2 68.7	57.4 59.3	74.0
718 719	06:09:00	00:01:00.0	66.7	59.5 57.6	75.3
720	06:10:00	00:01:00.0	67.6	57.0 57.2	79.7
721	06:11:00	00:01:00.0	72.1	57.2 57.6	82.2
721	06:12:00	00:01:00.0	69.7	57.0 59.1	79.5
723	06:14:00	00:01:00.0	68.1	57.6	77.0
724	06:15:00	00:01:00.0	73.6	56.9	86.9
725	06:16:00	00:01:00.0	69.7	61.0	77.5
726	06:17:00	00:01:00.0	72.4	62.5	78.4
727	06:17:00	00:01:00.0	72.6	60.1	84.5
728	06:19:00	00:01:00.0	70.7	58.3	82.0
729	06:20:00	00:01:00.0	71.4	62.2	78.7
730	06:21:00	00:01:00.0	64.5	58.1	72.8
731	06:22:00	00:01:00.0	67.0	58.4	73.4
732	06:23:00	00:01:00.0	70.7	59.0	80.3
733	06:24:00	00:01:00.0	71.6	59.0	79.4
734	06:25:00	00:01:00.0	70.6	58.4	81.6
735	06:26:00	00:01:00.0	66.4	58.1	75.0
736	06:27:00	00:01:00.0	76.1	60.2	87.1
737	06:28:00	00:01:00.0	73.0	57.1	79.9
738	06:29:00	00:01:00.0	67.4	57.1	78.5
739	06:30:00	00:01:00.0	68.0	57.8	73.9
740	06:31:00	00:01:00.0	71.3	58.3	80.2
741	06:32:00	00:01:00.0	69.0	59.0	76.2
742	06:33:00	00:01:00.0	65.1	56.8	74.4
743	06:34:00	00:01:00.0	72.8	60.5	81.5
744	06:35:00	00:01:00.0	74.8	60.9	82.6
745	06:36:00	00:01:00.0	70.2	58.1	80.1
746	06:37:00	00:01:00.0	70.1	58.1	77.7
747	06:38:00	00:01:00.0	71.8	57.6	83.2
748	06:39:00	00:01:00.0	73.0	58.3	81.6
749	06:40:00	00:01:00.0	70.3	58.7	79.6
750	06:41:00	00:01:00.0	71.2	57.4	79.9
751	06:42:00	00:01:00.0	72.4	57.2	79.7

	06.40.00	00.04.00.0	70.4	53.0	00.6
752	06:43:00	00:01:00.0	72.4	57.9	82.6
753	06:44:00	00:01:00.0	68.4	58.6	76.5
754	06:45:00	00:01:00.0	72.1	58.1	77.4
755	06:46:00	00:01:00.0	67.2	58.0	74.9
756	06:47:00	00:01:00.0	73.5	58.8	81.6
757	06:48:00	00:01:00.0	75.8	63.4	82.6
758	06:49:00	00:01:00.0	76.9	57.6	86.2
759	06:50:00	00:01:00.0	71.7	58.7	81.4
760	06:51:00	00:01:00.0	73.9	61.5	80.4
761	06:52:00	00:01:00.0	73.4	58.0	82.5
762	06:53:00	00:01:00.0	68.5	57.8	78.0
763	06:54:00	00:01:00.0	74.3	61.9	84.2
764	06:55:00	00:01:00.0	71.9	58.2	78.4
765	06:56:00	00:01:00.0	71.9	57.9	80.0
766	06:57:00	00:01:00.0	76.4	58.9	83.7 77.2
767	06:58:00	00:01:00.0 00:01:00.0	71.4	58.2	
768 760	06:59:00		69.1	59.2	76.0
769 770	07:00:00 07:01:00	00:01:00.0 00:01:00.0	69.2 74.1	57.7 60.0	79.2 84.6
770 771	07:01:00	00:01:00.0	74.1	58.9	82.7
771	07:02:00	00:01:00.0	73.3 71.1	60.5	79.2
772	07:03:00	00:01:00.0	72.5	58.0	81.1
773 774	07:04:00	00:01:00.0	69.0	58.2	76.2
775	07:05:00	00:01:00.0	73.5	60.8	81.9
776	07:00:00	00:01:00.0	72.4	58.6	79.7
777	07:07:00	00:01:00.0	73.2	62.9	79.6
778	07:09:00	00:01:00.0	75.9	57.9	85.6
779	07:10:00	00:01:00.0	70.8	57.9	83.2
780	07:11:00	00:01:00.0	70.6	61.6	79.2
781	07:12:00	00:01:00.0	77.7	60.1	87.2
782	07:13:00	00:01:00.0	73.2	59.8	81.3
783	07:14:00	00:01:00.0	72.9	58.5	79.4
784	07:15:00	00:01:00.0	73.2	58.0	81.6
785	07:16:00	00:01:00.0	71.6	59.4	77.2
786	07:17:00	00:01:00.0	71.0	59.3	80.6
787	07:18:00	00:01:00.0	73.2	63.5	79.3
788	07:19:00	00:01:00.0	68.4	58.8	76.4
789	07:20:00	00:01:00.0	72.4	58.7	80.2
790	07:21:00	00:01:00.0	71.6	59.2	80.1
791	07:22:00	00:01:00.0	69.9	60.3	77.9
792	07:23:00	00:01:00.0	75.8	60.8	85.1
793	07:24:00	00:01:00.0	71.5	62.4	77.2
794	07:25:00	00:01:00.0	72.3	59.7	82.0
795	07:26:00	00:01:00.0	71.1	58.6	79.1
796	07:27:00	00:01:00.0	72.6	59.6	79.7
797	07:28:00	00:01:00.0	72.8	60.1	79.3
798	07:29:00	00:01:00.0	73.5	58.4	80.9

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799	07:30:00	00:01:00.0	72.8	58.2	80.0
800	07:31:00	00:01:00.0	73.4	59.2	81.0
801	07:32:00	00:01:00.0	74.1	58.8	82.6
802	07:33:00	00:01:00.0	73.2	61.0	79.5
803	07:34:00	00:01:00.0	69.9	59.1	77.7
804	07:35:00	00:01:00.0	72.2	59.9	81.3
805	07:36:00	00:01:00.0	70.5	58.7	76.7
806	07:37:00	00:01:00.0	72.2	59.0	78.5
807	07:38:00	00:01:00.0	72.8	59.9	79.6
808	07:39:00	00:01:00.0	76.2	58.5	86.6
809	07:40:00	00:01:00.0	75.2	65.6	81.9
810	07:41:00	00:01:00.0	73.9	62.7	79.0
811	07:42:00	00:01:00.0	72.6	59.4	78.6
812	07:43:00	00:01:00.0	75.3	62.5	82.1
813	07:44:00	00:01:00.0	72.8	61.4	78.4
814	07:45:00	00:01:00.0	76.3	58.0	84.9
815	07:46:00	00:01:00.0	73.2	61.8	79.2 80.5
816	07:47:00 07:48:00	00:01:00.0	75.4	62.1	80.5
817		00:01:00.0	73.6	61.0	87.6
818 819	07:49:00 07:50:00	00:01:00.0 00:01:00.0	79.8 73.8	63.6 64.7	82.7
820	07:50:00	00:01:00.0	73.6 74.5	61.4	82.7
820 821	07.51.00	00:01:00.0	74.5 75.4	59.5	82.5
822	07:52:00	00:01:00.0	73. 4 74.7	64.2	81.7
823	07:54:00	00:01:00.0	74.7	60.1	82.2
824	07:55:00	00:01:00.0	74.0 76.1	60.1	83.5
825	07:56:00	00:01:00.0	72.9	59.3	80.5
826	07:57:00	00:01:00.0	74.0	63.3	81.7
827	07:58:00	00:01:00.0	74.8	57.5	83.2
828	07:59:00	00:01:00.0	74.1	57.7	80.1
829	08:00:00	00:01:00.0	76.4	63.5	84.9
830	08:01:00	00:01:00.0	73.3	59.2	81.8
831	08:02:00	00:01:00.0	74.6	57.6	82.1
832	08:03:00	00:01:00.0	71.5	57.0	77.9
833	08:04:00	00:01:00.0	71.5	58.3	80.0
834	08:05:00	00:01:00.0	74.8	59.2	81.5
835	08:06:00	00:01:00.0	71.6	59.5	79.1
836	08:07:00	00:01:00.0	73.3	56.9	81.0
837	08:08:00	00:01:00.0	76.0	59.4	81.9
838	08:09:00	00:01:00.0	71.1	58.4	81.8
839	08:10:00	00:01:00.0	69.7	56.9	79.9
840	08:11:00	00:01:00.0	75.0	60.8	83.2
841	08:12:00	00:01:00.0	73.1	58.4	79.9
842	08:13:00	00:01:00.0	76.1	57.7	83.5
843	08:14:00	00:01:00.0	70.3	60.4	79.6
844	08:15:00	00:01:00.0	71.5	58.0	81.4
845	08:16:00	00:01:00.0	74.0	61.1	80.0

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846	08:17:00	00:01:00.0	72.2	58.2	79.8
847	08:18:00	00:01:00.0	70.4	57.6	78.3
848	08:19:00	00:01:00.0	76.1	63.4	84.5
849	08:20:00	00:01:00.0	74.3	58.6	82.7
850	08:21:00	00:01:00.0	70.9	57.8	77.4
851	08:22:00	00:01:00.0	73.0	61.5	79.1
852	08:23:00	00:01:00.0	76.7	64.3	81.4
853	08:24:00	00:01:00.0	70.5	56.6	79.6
854	08:25:00	00:01:00.0	71.3	57.4	79.9
855	08:26:00	00:01:00.0	70.8	57.1	78.0
856	08:27:00	00:01:00.0	71.7	57.8	81.9
857	08:28:00	00:01:00.0	74.7	57.9	83.2
858	08:29:00	00:01:00.0	74.5	57.3	82.2
859	08:30:00	00:01:00.0	73.6	58.9	82.5
860	08:31:00	00:01:00.0	68.3	56.6	74.4
861	08:32:00	00:01:00.0	72.6	59.7	78.6
862	08:33:00	00:01:00.0	70.2	57.1	79.6
863	08:34:00	00:01:00.0	73.1	60.0	82.3
864	08:35:00	00:01:00.0	75.5	62.7	81.8
865	08:36:00	00:01:00.0	68.1	56.2	76.4
866	08:37:00	00:01:00.0	70.4	57.7	75.8
867	08:38:00	00:01:00.0	73.4	56.5	81.6
868	08:39:00	00:01:00.0	74.1	56.6	82.3
869	08:40:00	00:01:00.0	74.8	55.4	81.1
870	08:41:00	00:01:00.0	74.0	67.5	80.2
871	08:42:00	00:01:00.0	75.6	62.5	85.4
872	08:43:00	00:01:00.0	68.7	57.5	74.9
873	08:44:00	00:01:00.0	68.3	54.4	76.2
874 975	08:45:00 08:46:00	00:01:00.0 00:01:00.0	73.9 70.5	57.1 57.2	81.2 79.0
875 876	08:47:00	00:01:00.0	70.5 71.7	61.2	78.7
876 877	08:48:00	00:01:00.0	73.1	57.8	81.9
878	08:49:00	00:01:00.0	73.1 72.5	61.2	79.6
879	08:50:00	00:01:00.0	73.7	58.1	83.5
880	08:51:00	00:01:00.0	75.7 75.4	60.2	87.1
881	08:52:00	00:01:00.0	73.1	60.2	86.7
882	08:53:00	00:01:00.0	77.0	60.7	86.0
883	08:54:00	00:01:00.0	69.5	57.6	81.7
884	08:55:00	00:01:00.0	73.6	58.2	82.0
885	08:56:00	00:01:00.0	67.9	54.7	75.0
886	08:57:00	00:01:00.0	69.5	55.7	76.8
887	08:58:00	00:01:00.0	74.1	63.5	81.8
888	08:59:00	00:01:00.0	65.4	56.5	73.6
889	09:00:00	00:01:00.0	72.4	65.1	77.6
890	09:01:00	00:01:00.0	70.4	57.2	77.4
891	09:02:00	00:01:00.0	71.1	55.9	79.8
892	09:03:00	00:01:00.0	70.4	54.9	77.8

893 09:04:00 00:01:00.0 73.6 58.3 82.0 895 09:06:00 00:01:00.0 70.9 54.8 80.0 895 09:06:00 00:01:00.0 66.6 54.0 77.5 896 09:07:00 00:01:00.0 69.6 54.1 78.7 898 09:09:00 00:01:00.0 72.0 58.8 81.0 900 09:11:00 00:01:00.0 70.7 55.2 79.2 901 09:12:00 00:01:00.0 71.1 55.1 78.8 902 09:13:00 00:01:00.0 71.1 55.1 78.5 903 09:14:00 00:01:00.0 67.3 54.4 76.3 904 09:15:00 00:01:00.0 71.6 55.9 80.0 905 09:16:00 00:01:00.0 72.1 55.1 80.3 907 09:18:00 00:01:00.0 71.6 55.9 80.0 907 09:18:00 00:01:00.0 71.6 55.9 </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>						
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980 10:31:00 00:01:00.0 70.2 55.1 79.2 981 10:32:00 00:01:00.0 72.0 55.9 82.2 982 10:33:00 00:01:00.0 71.6 51.9 80.7 983 10:34:00 00:01:00.0 69.0 50.7 82.0 984 10:35:00 00:01:00.0 72.2 56.9 82.2 985 10:36:00 00:01:00.0 73.4 60.5 83.2	978	10:29:00	00:01:00.0	73.5	59.0	82.0
981 10:32:00 00:01:00.0 72.0 55.9 82.2 982 10:33:00 00:01:00.0 71.6 51.9 80.7 983 10:34:00 00:01:00.0 69.0 50.7 82.0 984 10:35:00 00:01:00.0 72.2 56.9 82.2 985 10:36:00 00:01:00.0 73.4 60.5 83.2	979	10:30:00	00:01:00.0	71.2	54.9	81.6
982 10:33:00 00:01:00.0 71.6 51.9 80.7 983 10:34:00 00:01:00.0 69.0 50.7 82.0 984 10:35:00 00:01:00.0 72.2 56.9 82.2 985 10:36:00 00:01:00.0 73.4 60.5 83.2	980	10:31:00	00:01:00.0	70.2	55.1	79.2
983 10:34:00 00:01:00.0 69.0 50.7 82.0 984 10:35:00 00:01:00.0 72.2 56.9 82.2 985 10:36:00 00:01:00.0 73.4 60.5 83.2	981	10:32:00	00:01:00.0	72.0	55.9	82.2
984 10:35:00 00:01:00.0 72.2 56.9 82.2 985 10:36:00 00:01:00.0 73.4 60.5 83.2	982	10:33:00	00:01:00.0	71.6	51.9	80.7
985 10:36:00 00:01:00.0 73.4 60.5 83.2	983	10:34:00	00:01:00.0	69.0	50.7	82.0
	984	10:35:00	00:01:00.0	72.2	56.9	82.2
986 10:37:00 00:01:00.0 65.7 50.9 74.0	985	10:36:00	00:01:00.0	73.4	60.5	83.2
	986	10:37:00	00:01:00.0	65.7	50.9	74.0

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987	10:38:00	00:01:00.0	72.2	56.6	80.9
988	10:39:00	00:01:00.0	69.3	51.4	77.6
989	10:40:00	00:01:00.0	76.2	55.4	88.8
990	10:41:00	00:01:00.0	68.7	53.2	78.1
991	10:42:00	00:01:00.0	69.0	53.1	80.6
992	10:43:00	00:01:00.0	71.4	53.6	81.2
993	10:44:00	00:01:00.0	67.0	51.9	76.0
994	10:45:00	00:01:00.0	69.1	59.6	75.3
995	10:46:00	00:01:00.0	70.4	51.9	81.4
996	10:47:00	00:01:00.0	70.1	52.2	78.1
997	10:48:00	00:01:00.0	71.1	53.3	77.1
998	10:49:00	00:01:00.0	72.6	57.8	80.8
999	10:50:00	00:01:00.0	72.7	55.1	80.0
1000	10:51:00	00:01:00.0	68.8	54.2	77.9
1001	10:52:00	00:01:00.0	69.8	54.1	78.7
1002	10:53:00	00:01:00.0	67.3	54.3	73.4
1003	10:54:00	00:01:00.0	67.6	54.7	77.9
1004	10:55:00	00:01:00.0	66.6	52.5	73.7
1005	10:56:00	00:01:00.0	74.6	53.9	84.3
1006	10:57:00	00:01:00.0	72.8	54.9	82.9
1007	10:58:00	00:01:00.0	69.7	56.6	80.4
1008	10:59:00	00:01:00.0	71.0	56.3	79.7
1009	11:00:00	00:01:00.0	72.7	52.8	81.1
1010	11:01:00	00:01:00.0	69.5	55.4	78.2
1011	11:02:00	00:01:00.0	71.9	60.8	82.6
1012	11:03:00	00:01:00.0	72.1	51.9	82.1
1013	11:04:00	00:01:00.0	71.0	54.8	77.7
1014	11:05:00	00:01:00.0	71.4	58.1	77.8
1015	11:06:00	00:01:00.0	76.9	53.8	87.2
1016	11:07:00	00:01:00.0	68.6	50.6	80.8
1017	11:08:00	00:01:00.0	73.4	53.0	85.9
1018	11:09:00	00:01:00.0	71.7	55.9	77.3
1019	11:10:00	00:01:00.0	67.0	51.9	77.1
1020	11:11:00	00:01:00.0	73.9	60.2	81.6
1021	11:12:00	00:01:00.0	68.7	51.2	81.6
1022	11:13:00	00:01:00.0	72.5	52.3	80.0
1023	11:14:00	00:01:00.0	64.2	55.8	74.2
1024	11:15:00	00:01:00.0	71.2	48.9	79.8
1025	11:16:00	00:01:00.0	70.5	50.9	79.4
1026	11:17:00	00:01:00.0	70.6	52.5	79.0
1027	11:18:00	00:01:00.0	71.4	58.6	79.3
1028	11:19:00	00:01:00.0	60.4	49.8	69.7
1029	11:20:00	00:01:00.0	71.1	53.6	78.3
1030	11:21:00	00:01:00.0	69.5	51.3	77.0
1031	11:22:00	00:01:00.0	73.4	53.7	80.6
1032	11:23:00	00:01:00.0	70.2	53.9	79.2
1033	11:24:00	00:01:00.0	74.3	59.4	80.4

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1034	11:25:00	00:01:00.0	67.6	50.2	75.3
1035	11:26:00	00:01:00.0	73.5	51.7	81.6
1036	11:27:00	00:01:00.0	70.0	50.1	78.4
1037	11:28:00	00:01:00.0	71.5	54.8	83.9
1038	11:29:00	00:01:00.0	70.9	53.3	79.3
1039	11:30:00	00:01:00.0	69.0	50.1	79.8
1040	11:31:00	00:01:00.0	72.3	50.1	83.0
1041	11:32:00	00:01:00.0	71.3	54.1	80.5
1042	11:33:00	00:01:00.0	69.0	54.2	76.8
1043	11:34:00	00:01:00.0	70.1	55.2	81.5
1044	11:35:00	00:01:00.0	70.1	53.4	79.1
1045	11:36:00	00:01:00.0	75.4	52.4	83.0
1046	11:37:00	00:01:00.0	69.2	54.4	76.0
1047	11:38:00	00:01:00.0	74.3	55.6	84.8
1048	11:39:00	00:01:00.0	69.0 68.7	50.2	78.0
1049	11:40:00	00:01:00.0	00.7	49.5	78.8 78.7
1050	11:41:00	00:01:00.0	68.8 73.2	50.1	
1051 1052	11:42:00 11:43:00	00:01:00.0 00:01:00.0	73.2 66.4	53.0 51.4	79.7 78.2
1052	11:43:00	00:01:00.0	74.0	51. 4 51.8	82.6
1053	11:44:00	00:01:00.0	74.0 72.3	50.6	79.8
1054	11:45:00	00:01:00.0	72.3 70.4	54.7	78.2
1056	11:47:00	00:01:00.0	73.0	60.3	82.8
1057	11:47:00	00:01:00.0	73.8	54.3	82.3
1057	11:49:00	00:01:00.0	70.9	56.6	79.0
1059	11:50:00	00:01:00.0	68.2	60.2	74.9
1060	11:51:00	00:01:00.0	72.9	57.8	81.2
1061	11:52:00	00:01:00.0	72.9	56.9	81.2
1062	11:53:00	00:01:00.0	69.7	55.7	79.3
1063	11:54:00	00:01:00.0	73.1	55.9	81.4
1064	11:55:00	00:01:00.0	71.2	53.3	79.6
1065	11:56:00	00:01:00.0	67.3	52.4	77.2
1066	11:57:00	00:01:00.0	75.3	57.3	81.8
1067	11:58:00	00:01:00.0	68.1	55.7	78.5
1068	11:59:00	00:01:00.0	71.1	53.4	81.1
1069	12:00:00	00:01:00.0	69.0	47.1	78.4
1070	12:01:00	00:01:00.0	73.1	53.4	80.5
1071	12:02:00	00:01:00.0	73.2	48.8	81.7
1072	12:03:00	00:01:00.0	74.7	56.3	83.1
1073	12:04:00	00:01:00.0	69.6	52.6	80.7
1074	12:05:00	00:01:00.0	70.6	51.3	79.1
1075	12:06:00	00:01:00.0	73.6	59.4	80.4
1076	12:07:00	00:01:00.0	73.7	58.1	86.4
1077	12:08:00	00:01:00.0	72.5	49.5	80.4
1078	12:09:00	00:01:00.0	68.5	51.5	76.6
1079	12:10:00	00:01:00.0	74.1	54.3	83.5
1080	12:11:00	00:01:00.0	73.1	56.3	80.8

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1081	12:12:00	00:01:00.0	70.4	49.4	81.0
1082	12:13:00	00:01:00.0	74.1	52.4	81.6
1083	12:14:00	00:01:00.0	68.3	52.0	77.7
1084	12:15:00	00:01:00.0	71.6	56.9	81.7
1085	12:16:00	00:01:00.0	71.1	52.4	78.7
1086	12:17:00	00:01:00.0	73.8	59.1	82.0
1087	12:18:00	00:01:00.0	71.4	52.6	81.8
1088	12:19:00	00:01:00.0	69.9	53.2	80.7
1089	12:20:00	00:01:00.0	71.6	54.3	79.5
1090	12:21:00	00:01:00.0	68.0	50.9	78.2
1091	12:22:00	00:01:00.0	72.4	55.4	84.5
1092	12:23:00	00:01:00.0	75.5	57.4	81.7
1093	12:24:00	00:01:00.0	67.2	56.6	74.5
1094	12:25:00	00:01:00.0	72.6	55.1	80.8
1095	12:26:00	00:01:00.0	72.0	53.6	80.8
1096	12:27:00	00:01:00.0	70.2	52.6	77.2
1097	12:28:00	00:01:00.0	72.0	51.4	83.5
1098 1099	12:29:00	00:01:00.0	66.9 70.9	49.9 52.8	74.3 79.8
1100	12:30:00 12:31:00	00:01:00.0	70.9 70.4	52.8 51.2	79.8 78.8
1100	12:31:00	00:01:00.0 00:01:00.0	70.4 70.9	51.2 51.8	76.6 82.5
1101	12:32:00	00:01:00.0	70.9 70.8	51.6	79.7
1102	12:34:00	00:01:00.0	70.6 72.2	53.6	79.7 82.7
1103	12:34:00	00:01:00.0	72.2 74.4	60.2	81.0
1104	12:36:00	00:01:00.0	63.5	53.5	69.8
1106	12:37:00	00:01:00.0	69.9	55.5	79.8
1107	12:37:00	00:01:00.0	70.9	55.4	81.2
1108	12:39:00	00:01:00.0	73.4	51.1	85.3
1109	12:40:00	00:01:00.0	74.1	51.1	82.5
1110	12:41:00	00:01:00.0	72.5	58.6	82.8
1111	12:42:00	00:01:00.0	68.0	50.6	76.3
1112	12:43:00	00:01:00.0	74.1	60.6	81.2
1113	12:44:00	00:01:00.0	72.0	54.7	82.5
1114	12:45:00	00:01:00.0	71.8	55.2	79.7
1115	12:46:00	00:01:00.0	70.0	54.3	79.9
1116	12:47:00	00:01:00.0	73.9	65.2	79.4
1117	12:48:00	00:01:00.0	69.1	54.9	76.5
1118	12:49:00	00:01:00.0	73.2	57.1	81.7
1119	12:50:00	00:01:00.0	72.7	55.7	79.5
1120	12:51:00	00:01:00.0	71.4	53.1	80.2
1121	12:52:00	00:01:00.0	71.6	59.0	79.5
1122	12:53:00	00:01:00.0	70.7	53.7	80.3
1123	12:54:00	00:01:00.0	68.3	48.1	76.5
1124	12:55:00	00:01:00.0	70.4	53.9	81.2
1125	12:56:00	00:01:00.0	71.1	52.6	80.5
1126	12:57:00	00:01:00.0	69.6	52.0	78.4
1127	12:58:00	00:01:00.0	70.0	52.4	80.7

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1128	12:59:00	00:01:00.0	76.9	56.9	90.8
1129	13:00:00	00:01:00.0	73.0	52.4	81.1
1130	13:01:00	00:01:00.0	67.4	49.9	79.2
1131	13:02:00	00:01:00.0	74.6	55.1	81.9
1132	13:03:00	00:01:00.0	68.7	49.7	79.8
1133	13:04:00	00:01:00.0	68.1	49.7	79.4
1134	13:05:00	00:01:00.0	74.5	55.0	82.4
1135	13:06:00	00:01:00.0	69.0	52.0	79.9
1136	13:07:00	00:01:00.0	71.8	49.6	80.2
1137	13:08:00	00:01:00.0	72.2	51.9	78.9
1138	13:09:00	00:01:00.0	74.7	63.1	83.2
1139	13:10:00	00:01:00.0	68.1	55.3	76.9
1140	13:11:00	00:01:00.0	73.7	56.2	80.3
1141	13:12:00	00:01:00.0	76.6	52.3	86.2
1142	13:13:00	00:01:00.0	68.9	56.7	77.5
1143	13:14:00	00:01:00.0	72.2	52.7	79.6
1144	13:15:00	00:01:00.0	71.2	51.8	77.9
1145	13:16:00	00:01:00.0	68.6	51.5	80.1
1146	13:17:00	00:01:00.0	73.1	53.5	81.6
1147	13:18:00	00:01:00.0	70.1	53.5	81.1
1148	13:19:00	00:01:00.0	73.6	56.1	80.9
1149	13:20:00	00:01:00.0	68.8	56.7	79.0
1150	13:21:00	00:01:00.0	72.9	55.5	82.0
1151	13:22:00	00:01:00.0	71.5	50.4	80.8
1152	13:23:00	00:01:00.0	72.5	54.8	80.9
1153	13:24:00	00:01:00.0	67.1	47.4	78.8
1154	13:25:00	00:01:00.0	69.0	48.3	79.8
1155	13:26:00	00:01:00.0	70.9	52.0	81.0
1156	13:27:00	00:01:00.0	73.7	51.9	82.1
1157	13:28:00	00:01:00.0	73.2	51.3	84.7
1158	13:29:00	00:01:00.0	69.8	55.4	80.2
1159	13:30:00	00:01:00.0	73.5	55.0	81.6
1160	13:31:00	00:01:00.0	69.7	51.8	80.4
1161	13:32:00	00:01:00.0	78.8	59.6	88.7
1162	13:33:00	00:01:00.0	67.9	53.5	73.4
1163	13:34:00	00:01:00.0	74.3	51.7	83.6
1164	13:35:00	00:01:00.0	76.0	65.2	83.8
1165	13:36:00	00:01:00.0	68.7	52.1	79.8
1166	13:37:00	00:01:00.0	72.1	57.5	79.7
1167	13:38:00	00:01:00.0	73.1	52.6	83.8
1168	13:39:00	00:01:00.0	70.4	54.8	80.8
1169	13:40:00	00:01:00.0	72.3	51.6	81.1
1170	13:41:00	00:01:00.0	72.5	55.0	80.8
1171	13:42:00	00:01:00.0 00:01:00.0	71.1	53.1	79.7
1172	13:43:00	00:01:00.0	70.5	56.0	80.7
1173	13:44:00	00:01:00.0	71.5	55.6	81.9
1174	13:45:00	00:01:00.0	71.1	53.4	81.0

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1175	13:46:00	00:01:00.0	72.6	54.5	81.6
1176	13:47:00	00:01:00.0	74.2	49.5	81.8
1177	13:48:00	00:01:00.0	70.4	48.1	82.8
1178	13:49:00	00:01:00.0	74.3	52.9	85.1
1179	13:50:00	00:01:00.0	65.4	52.7	76.5
1180	13:51:00	00:01:00.0	71.3	50.7	81.5
1181	13:52:00	00:01:00.0	75.1	53.9	82.0
1182	13:53:00	00:01:00.0	72.7	52.7	83.9
1183	13:54:00	00:01:00.0	70.1	53.2	81.0
1184	13:55:00	00:01:00.0	67.8	53.3	77.4
1185	13:56:00	00:01:00.0	74.6	60.6	84.0
1186	13:57:00	00:01:00.0	67.8	56.1	75.1
1187	13:58:00	00:01:00.0	75.3	52.9	82.9
1188	13:59:00	00:01:00.0	67.8	51.2	75.6
1189	14:00:00	00:01:00.0	73.0	52.3	79.7
1190	14:01:00	00:01:00.0	72.5	51.9	83.6 78.6
1191	14:02:00	00:01:00.0 00:01:00.0	71.1 71.0	51.5	78.6 77.7
1192 1193	14:03:00 14:04:00	00:01:00.0	71.0 74.9	55.1 56.9	84.1
1193	14:04:00	00:01:00.0	74.9 71.0	56.2	80.5
1194	14:06:00	00:01:00.0	69.1	55.6	74.9
1196	14:07:00	00:01:00.0	74.5	51.7	83.8
1197	14:07:00	00:01:00.0	74.3 70.3	54.3	78.1
1198	14:09:00	00:01:00.0	70.3	56.3	80.8
1199	14:10:00	00:01:00.0	70.8	54.8	81.4
1200	14:11:00	00:01:00.0	72.2	50.5	81.1
1201	14:12:00	00:01:00.0	71.6	57.9	80.5
1202	14:13:00	00:01:00.0	67.1	52.4	76.6
1203	14:14:00	00:01:00.0	74.1	62.7	82.6
1204	14:15:00	00:01:00.0	66.6	51.0	75.3
1205	14:16:00	00:01:00.0	71.6	55.7	78.7
1206	14:17:00	00:01:00.0	68.6	47.7	76.0
1207	14:18:00	00:01:00.0	70.5	51.2	77.4
1208	14:19:00	00:01:00.0	74.7	57.5	81.9
1209	14:20:00	00:01:00.0	70.9	58.8	80.2
1210	14:21:00	00:01:00.0	74.1	62.9	80.6
1211	14:22:00	00:01:00.0	70.7	60.1	78.7
1212	14:23:00	00:01:00.0	69.8	48.0	78.6
1213	14:24:00	00:01:00.0	71.2	50.8	79.7
1214	14:25:00	00:01:00.0	70.9	50.1	79.1
1215	14:26:00	00:01:00.0	75.1	52.7	82.3
1216	14:27:00	00:01:00.0	71.1	49.4	80.1
1217	14:28:00	00:01:00.0	72.3	59.8	81.6
1218	14:29:00	00:01:00.0	70.5	50.3	80.2
1219	14:30:00	00:01:00.0	73.5	50.5	82.2
1220	14:31:00	00:01:00.0	67.9	54.0	77.1
1221	14:32:00	00:01:00.0	72.8	57.9	81.0

4000	442222	00.04.00.0	70.7	50.0	00.0
1222	14:33:00	00:01:00.0	73.7	58.3	80.0
1223	14:34:00	00:01:00.0	69.0	59.0	75.9
1224	14:35:00	00:01:00.0	72.9	51.9	80.0
1225	14:36:00	00:01:00.0	68.8	51.0	77.9
1226	14:37:00	00:01:00.0	74.2	52.7	83.7
1227	14:38:00	00:01:00.0	72.8	55.8	81.2
1228 1229	14:39:00 14:40:00	00:01:00.0	71.1 74.5	57.2 63.3	78.8 81.5
1229	14:40:00	00:01:00.0 00:01:00.0	74.5 66.7	55.8	74.6
1230	14:41:00	00:01:00.0	75.7	65.2	81.5
1231	14:42:00	00:01:00.0	73.7 73.7	57.8	79.5
1232	14:44:00	00:01:00.0	73.7 74.6	63.1	82.5
1234	14:45:00	00:01:00.0	73.7	58.2	81.3
1235	14:46:00	00:01:00.0	70.2	55.4	78.2
1236	14:47:00	00:01:00.0	70.4	53.7	81.7
1237	14:48:00	00:01:00.0	73.8	53.4	83.4
1238	14:49:00	00:01:00.0	71.5	57.0	80.5
1239	14:50:00	00:01:00.0	73.7	59.8	80.7
1240	14:51:00	00:01:00.0	72.7	57.1	80.5
1241	14:52:00	00:01:00.0	68.7	53.6	76.6
1242	14:53:00	00:01:00.0	71.4	52.6	79.3
1243	14:54:00	00:01:00.0	73.9	57.1	80.1
1244	14:55:00	00:01:00.0	72.4	52.8	80.7
1245	14:56:00	00:01:00.0	73.3	58.8	79.4
1246	14:57:00	00:01:00.0	72.4	55.9	80.2
1247	14:58:00	00:01:00.0	70.2	56.9	76.5
1248	14:59:00	00:01:00.0	74.9	60.8	81.4
1249	15:00:00	00:01:00.0	64.4	50.1	76.9
1250	15:01:00	00:01:00.0	76.1	61.9	84.2
1251	15:02:00	00:01:00.0	71.7	55.1	79.8
1252	15:03:00	00:01:00.0	74.3	58.4	82.1
1253 1254	15:04:00 15:05:00	00:01:00.0 00:01:00.0	75.4 74.8	53.6 64.7	84.3 84.7
1255	15:06:00	00:01:00.0	74.5	60.2	82.5
1256	15:07:00	00:01:00.0	75.6	61.4	81.4
1257	15:08:00	00:01:00.0	69.3	61.4	77.2
1258	15:09:00	00:01:00.0	75.5	58.8	84.1
1259	15:10:00	00:01:00.0	71.0	57.3	77.8
1260	15:11:00	00:01:00.0	70.2	57.4	78.2
1261	15:12:00	00:01:00.0	75.9	55.6	82.3
1262	15:13:00	00:01:00.0	70.3	58.0	75.6
1263	15:14:00	00:01:00.0	73.2	54.9	80.3
1264	15:15:00	00:01:00.0	72.9	60.0	82.2
1265	15:16:00	00:01:00.0	72.6	61.3	80.9
1266	15:17:00	00:01:00.0	74.4	56.9	81.0
1267	15:18:00	00:01:00.0	73.1	55.5	82.4
1268	15:19:00	00:01:00.0	75.8	56.0	82.8

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1269	15:20:00	00:01:00.0	72.9	52.9	81.1
1270	15:21:00	00:01:00.0	70.9	52.8	79.3
1271	15:22:00	00:01:00.0	75.8	63.6	81.3
1272	15:23:00	00:01:00.0	71.3	56.6	79.8
1273	15:24:00	00:01:00.0	73.7	56.8	82.3
1274	15:25:00	00:01:00.0	74.5	57.6	80.7
1275	15:26:00	00:01:00.0	73.7	55.9	81.5
1276	15:27:00	00:01:00.0	71.7	53.5	79.6
1277	15:28:00	00:01:00.0	77.3	53.4	87.4
1278	15:29:00	00:01:00.0	69.2	53.6	80.0
1279	15:30:00	00:01:00.0	73.3	54.5	82.1
1280	15:31:00	00:01:00.0	70.2	54.8	78.0
1281	15:32:00	00:01:00.0	73.7	54.1	83.5
1282	15:33:00	00:01:00.0	71.8	55.0	80.6
1283	15:34:00	00:01:00.0	65.3	52.0	73.1
1284	15:35:00	00:01:00.0	74.4 72.3	57.0	82.8
1285	15:36:00	00:01:00.0 00:01:00.0		54.4	80.8 81.1
1286 1287	15:37:00 15:38:00	00:01:00.0	75.6 74.2	62.8 52.6	85.0
1287	15:39:00	00:01:00.0	74.2 71.8	54.3	81.4
1289	15:40:00	00:01:00.0	71.8 72.7	54.5 53.8	82.8
1289	15:41:00	00:01:00.0	70.5	54.4	80.1
1291	15:42:00	00:01:00.0	70.3 74.9	54.4 54.7	81.4
1292	15:42:00	00:01:00.0	69.4	53.7	79.4
1293	15:44:00	00:01:00.0	73.9	54.0	81.6
1294	15:45:00	00:01:00.0	74.0	60.0	80.1
1295	15:46:00	00:01:00.0	72.2	53.5	78.6
1296	15:47:00	00:01:00.0	76.5	57.8	84.5
1297	15:48:00	00:01:00.0	70.4	54.4	77.7
1298	15:49:00	00:01:00.0	75.0	59.2	82.6
1299	15:50:00	00:01:00.0	73.4	59.1	80.8
1300	15:51:00	00:01:00.0	74.7	54.2	82.5
1301	15:52:00	00:01:00.0	75.1	54.5	83.3
1302	15:53:00	00:01:00.0	72.4	53.5	81.3
1303	15:54:00	00:01:00.0	76.1	66.0	82.3
1304	15:55:00	00:01:00.0	71.3	55.3	81.1
1305	15:56:00	00:01:00.0	76.4	62.0	87.5
1306	15:57:00	00:01:00.0	73.9	57.0	80.7
1307	15:58:00	00:01:00.0	72.1	51.6	81.4
1308	15:59:00	00:01:00.0	73.9	55.6	82.1
1309	16:00:00	00:01:00.0	72.0	55.4	79.9
1310	16:01:00	00:01:00.0	74.2	52.7	81.8
1311	16:02:00	00:01:00.0	71.6	52.7	81.2
1312	16:03:00	00:01:00.0	74.7	55.1	81.7
1313	16:04:00	00:01:00.0	74.4	54.6	83.6
1314	16:05:00	00:01:00.0	77.1	57.1	85.7
1315	16:06:00	00:01:00.0	73.6	54.9	81.5

1010	l .				
1316	16:07:00	00:01:00.0	74.0	55.7	79.2
1317	16:08:00	00:01:00.0	74.5	58.7	81.0
1318	16:09:00	00:01:00.0	76.1	55.4	88.1
1319	16:10:00	00:01:00.0	77.7	61.1	88.1
1320	16:11:00	00:01:00.0	70.7	57.9	77.7
1321	16:12:00	00:01:00.0	73.4	54.9	81.5
1322	16:13:00	00:01:00.0	72.1	55.7	82.0
1323	16:14:00	00:01:00.0	76.0	53.5	83.8
1324	16:15:00	00:01:00.0	70.8	52.0	80.4
1325	16:16:00	00:01:00.0	73.7	58.2	81.1
1326	16:17:00	00:01:00.0	76.1	62.6	81.4
1327	16:18:00	00:01:00.0	74.8	59.9	83.1
1328	16:19:00	00:01:00.0	74.3	59.3	81.0
1329	16:20:00	00:01:00.0	67.8	56.4	76.2
1330	16:21:00	00:01:00.0	74.5	54.5	86.0
1331	16:22:00	00:01:00.0	73.7	59.9	80.0
1332	16:23:00 16:24:00	00:01:00.0	73.6	57.2 58.1	83.7
1333 1334		00:01:00.0	74.5 74.4	58.1 54.7	82.2 82.7
1335	16:25:00 16:26:00	00:01:00.0 00:01:00.0	74.4 75.6	54.7 56.0	81.7
1336	16:27:00	00:01:00.0	73.5	55.1	81.4
1337	16:27:00	00:01:00.0	75.5 76.6	55.1 59.4	82.5
1337	16:29:00	00:01:00.0	66.8	52.9	72.4
1339	16:30:00	00:01:00.0	73.6	55.3	79.9
1340	16:31:00	00:01:00.0	75.4	57.8	82.3
1341	16:32:00	00:01:00.0	71.3	53.4	80.8
1342	16:33:00	00:01:00.0	76.3	57.8	84.7
1343	16:34:00	00:01:00.0	73.3	60.8	79.2
1344	16:35:00	00:01:00.0	75.7	65.7	81.6
1345	16:36:00	00:01:00.0	72.5	60.3	79.1
1346	16:37:00	00:01:00.0	74.1	61.5	81.5
1347	16:38:00	00:01:00.0	74.6	61.3	82.5
1348	16:39:00	00:01:00.0	71.2	56.4	78.1
1349	16:40:00	00:01:00.0	75.6	65.8	84.3
1350	16:41:00	00:01:00.0	69.6	57.5	76.1
1351	16:42:00	00:01:00.0	75.7	60.1	84.5
1352	16:43:00	00:01:00.0	77.5	56.5	83.6
1353	16:44:00	00:01:00.0	73.5	54.1	83.0
1354	16:45:00	00:01:00.0	79.4	65.7	89.1
1355	16:46:00	00:01:00.0	74.8	60.7	80.7
1356	16:47:00	00:01:00.0	76.4	60.1	82.8
1357	16:48:00	00:01:00.0	71.2	54.0	78.8
1358	16:49:00	00:01:00.0	74.3	59.7	80.9
1359	16:50:00	00:01:00.0	76.3	62.7	82.8
1360	16:51:00	00:01:00.0	72.9	56.4	82.0
1361	16:52:00	00:01:00.0	76.1	61.7	80.4
1362	16:53:00	00:01:00.0	70.8	52.5	79.2

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1363	16:54:00	00:01:00.0	70.7	53.7	80.0
1364	16:55:00	00:01:00.0	73.3	61.5	79.8
1365	16:56:00	00:01:00.0	71.7	56.8	80.4
1366	16:57:00	00:01:00.0	78.2	58.6	86.3
1367	16:58:00	00:01:00.0	71.8	53.1	79.5
1368	16:59:00	00:01:00.0	74.2	52.6	79.3
1369	17:00:00	00:01:00.0	70.4	53.4	80.0
1370	17:01:00	00:01:00.0	73.9	55.9	82.8
1371	17:02:00	00:01:00.0	72.7	56.3	80.1
1372	17:03:00	00:01:00.0	75.3	62.5	85.2
1373	17:04:00	00:01:00.0	73.5	53.5	82.3
1374	17:05:00	00:01:00.0	72.6	54.6	80.5
1375	17:06:00	00:01:00.0	74.4	50.3	81.4
1376	17:07:00	00:01:00.0	73.4	52.2	82.5
1377	17:08:00	00:01:00.0	73.6	52.6	81.0
1378	17:09:00	00:01:00.0	71.4	51.0	79.9
1379	17:10:00	00:01:00.0	73.5	56.7	80.3
1380 1381	17:11:00 17:12:00	00:01:00.0 00:01:00.0	70.4 75.8	49.9 54.5	79.3 81.4
1382	17:12:00	00:01:00.0	73.8 72.9	65.3	77.3
1383	17:13:00	00:01:00.0	72.5 72.5	53.3	77.3 79.9
1384	17:14:00 17:15:00	00:01:00.0	72.3 75.6	53.8	80.0
1385	17:15:00	00:01:00.0	73.0	58.4	77.4
1386	17:17:00	00:01:00.0	73.3	57.3	78.0
1387	17:17:00	00:01:00.0	70.0	57.9	75.9
1388	17:19:00	00:01:00.0	77.7	57.5 57.1	90.3
1389	17:20:00	00:01:00.0	74.3	63.3	81.9
1390	17:21:00	00:01:00.0	66.7	56.3	74.8
1391	17:22:00	00:01:00.0	72.0	59.1	77.6
1392	17:23:00	00:01:00.0	74.1	57.8	81.4
1393	17:24:00	00:01:00.0	72.5	56.6	78.3
1394	17:25:00	00:01:00.0	74.1	65.8	81.6
1395	17:26:00	00:01:00.0	70.2	55.1	78.4
1396	17:27:00	00:01:00.0	74.5	62.8	79.7
1397	17:28:00	00:01:00.0	73.3	62.4	79.7
1398	17:29:00	00:01:00.0	72.8	53.3	79.5
1399	17:30:00	00:01:00.0	73.3	56.0	80.3
1400	17:31:00	00:01:00.0	77.5	59.9	85.4
1401	17:32:00	00:01:00.0	72.7	56.7	77.7
1402	17:33:00	00:01:00.0	75.4	58.2	81.2
1403	17:34:00	00:01:00.0	74.4	55.5	82.1
1404	17:35:00	00:01:00.0	75.6	53.4	83.6
1405	17:36:00	00:01:00.0	72.0	51.3	84.9
1406	17:37:00	00:01:00.0	74.6	54.0	82.0
1407	17:38:00	00:01:00.0	73.5	54.0	81.8
1408	17:39:00	00:01:00.0	74.3	53.8	80.9
1409	17:40:00	00:01:00.0	75.3	64.3	81.0

4.440	47.44.00	00 04 00 0	72.2	64.7	70.4
1410	17:41:00	00:01:00.0	72.3	61.7	78.4
1411	17:42:00	00:01:00.0	74.0	57.9	82.9
1412	17:43:00	00:01:00.0	71.2	59.1	79.6
1413	17:44:00	00:01:00.0	74.5	55.9	81.9
1414	17:45:00	00:01:00.0	74.1	61.2	80.4
1415	17:46:00	00:01:00.0	74.4	57.3	82.9
1416	17:47:00	00:01:00.0	72.8	56.2	80.3
1417	17:48:00	00:01:00.0	73.3	63.1	81.7
1418	17:49:00	00:01:00.0	73.7 80.2	60.3 56.4	80.2
1419	17:50:00	00:01:00.0	80.2 74.6		90.2
1420 1421	17:51:00 17:52:00	00:01:00.0 00:01:00.0	74.6 74.6	61.7 61.8	82.9 80.9
1421	17.52.00 17:53:00	00:01:00.0	74.6 70.8	58.0	77.3
1423	17:54:00	00:01:00.0	73.9	56.8	83.1
1424	17:55:00	00:01:00.0	73.3 77.1	53.9	85.9
1425	17:56:00	00:01:00.0	73.6	52.7	82.3
1426	17:57:00	00:01:00.0	74.5	59.6	82.3
1427	17:57:00	00:01:00.0	74.9	54.5	80.4
1428	17:59:00	00:01:00.0	73.4	60.6	79.6
1429	18:00:00	00:01:00.0	71.5	57.9	77.7
1430	18:01:00	00:01:00.0	72.4	57.2	79.9
1431	18:02:00	00:01:00.0	73.8	59.3	80.9
1432	18:03:00	00:01:00.0	69.7	53.6	79.3
1433	18:04:00	00:01:00.0	73.7	53.3	77.9
1434	18:05:00	00:01:00.0	70.7	56.6	79.3
1435	18:06:00	00:01:00.0	74.2	60.9	80.2
1436	18:07:00	00:01:00.0	71.7	55.4	79.8
1437	18:08:00	00:01:00.0	72.4	56.3	77.8
1438	18:09:00	00:01:00.0	69.8	58.4	78.8
1439	18:10:00	00:01:00.0	75.2	66.5	80.7
1440	18:11:00	00:01:00.0	70.6	56.8	79.3
1441	18:12:00	00:01:00.0	74.5	59.0	83.7
1442	18:13:00	00:01:00.0	74.6	67.6	80.4
1443	18:14:00	00:01:00.0	71.5	55.3	79.5
1444	18:15:00	00:01:00.0	76.6	55.4	86.3
1445	18:16:00	00:01:00.0	70.8	58.5	79.5
1446	18:17:00	00:01:00.0	73.8	58.2	82.4
1447	18:18:00	00:01:00.0	71.6	53.4	80.8
1448	18:19:00	00:01:00.0	72.8	53.3	80.1
1449	18:20:00	00:01:00.0	74.1	56.3	83.2
1450	18:21:00	00:01:00.0	72.9	59.6	79.4
1451	18:22:00	00:01:00.0	70.0	57.1	76.7
1452	18:23:00	00:01:00.0	70.4	54.9	80.7
1453	18:24:00	00:01:00.0	67.2	52.8	77.4
1454	18:25:00	00:01:00.0	71.8	55.1	80.8
15	18:26:00	00:01:00.0	70.8	56.3	78.5
16	18:27:00	00:01:00.0	75.1	59.3	83.0

17	18:28:00	00:01:00.0	69.7	57.8	76.9
18	18:29:00	00:01:00.0	74.7	63.4	83.7
19	18:30:00	00:01:00.0	68.9	51.9	77.9
20	18:31:00	00:01:00.0	73.0	54.5	80.8
21	18:32:00	00:01:00.0	66.3	52.5	75.6
22	18:33:00	00:01:00.0	74.9	53.7	84.8
23	18:34:00	00:01:00.0	72.9	57.5	80.3
24	18:35:00	00:01:00.0	72.0	55.7	83.2
25	18:36:00	00:01:00.0	71.2	53.0	80.8
26	18:37:00	00:01:00.0	69.8	56.8	77.3
27	18:38:00	00:01:00.0	74.0	60.9	84.6
28	18:39:00	00:01:00.0	71.0	59.8	79.3
29	18:40:00	00:01:00.0	73.5	57.1	80.3
30	18:41:00	00:01:00.0	74.3	54.5	88.4
31	18:42:00	00:01:00.0	72.8	55.3	80.5
32	18:43:00	00:01:00.0	69.3	53.5	80.0
33	18:44:00	00:01:00.0	73.6	55.4	81.7
34	18:45:00	00:01:00.0	71.5	55.8	78.0
35	18:46:00	00:01:00.0	74.4	57.3	80.3
36	18:47:00	00:01:00.0	70.4	54.0	81.6
37	18:48:00	00:01:00.0	71.2	55.1	81.4
38	18:49:00	00:01:00.0	60.8	53.9	70.8
39	18:50:00	00:01:00.0	73.6	53.0	82.3
40	18:51:00	00:01:00.0	70.7	53.4	79.4
41	18:52:00	00:01:00.0	72.4	56.2	82.2
42	18:53:00	00:01:00.0	74.1	56.5	81.0
43	18:54:00	00:01:00.0	66.5	54.2	74.6
44	18:55:00	00:01:00.0	65.6	54.5	75.4
45	18:56:00	00:01:00.0	73.2	55.4	83.4
46	18:57:00	00:01:00.0	70.6	55.6	81.1
47	18:58:00	00:01:00.0	67.2	58.1	76.9
48	18:59:00	00:01:00.0	72.4	55.2	81.3

Building Type	Oomestic Housing		Distance
Construction Noise at 50 Feet (dBA Leq)			50
Construction Phase	All Applicable Equipment in Use ¹	Minimum Required Equipment in Use ¹	
Ground Clearing/Demolition	83	83	
excavation	88	75	
oundation Construction	81	81	
uilding Construction	81	65	
	88	72	
inishing and Site Cleanup	00	12	
residential Use to the North of the Project	Site		
laximum Construction Noise (dBA Leq)			10
Construction Phase	All Applicable Equipment in Use ¹	Minimum Required Equipment in Use ¹	
Fround Clearing/Demolition	97	97	
xcavation (Site Preparation)	102	89	
oundation Construction	95	95	
uilding Construction	95	79	
aving	102	86	
verage Construction Noise (dBA Leq)			130
Construction Phase	All Applicable Equipment in Use ¹	Minimum Required Equipment in Use ¹	100
	75	75	
round Clearing/Demolition	75 80	75 67	
xcavation (Site Preparation)			
oundation Construction	73	73	
uilding Construction	73	57	
aving	80	64	
dustrial Use to the West of the Project Si	te		470
Iaximum Construction Noise (dBA Leq) Construction Phase	All Applicable Equipment in Use ¹	Minimum Required Equipment in Use ¹	170
Ground Clearing/Demolition	72	72	
excavation (Site Preparation)	77	64	
foundation Construction	70	70	
uilding Construction	70	54	
aving	70	61	
aving		ζ.	
verage Construction Noise (dBA Leq)	1		380
Construction Phase	All Applicable Equipment in Use ¹	Minimum Required Equipment in Use ¹	
Ground Clearing/Demolition	65	65	
xcavation (Site Preparation)	70	57	
oundation Construction	63	63	
Building Construction	63	47	
Paving	70	54	
Shaffer Park to the South of the Project Sit	e		
Maximum Construction Noise (dBA Leq)			60
Construction Phase	All Applicable Equipment in Use ¹	Minimum Required Equipment in Use ¹	
Ground Clearing/Demolition	81	81	
excavation (Site Preparation)	86	73	
oundation Construction	79	79	
uilding Construction	79	63	
aving	86	70	
-			400
verage Construction Noise (dBA Leq) Construction Phase	All Applicable Equipment in Use ¹	Minimum Required Equipment in Use ¹	190
round Clearing/Demolition	71	71	
excavation (Site Preparation)	76	63	
oundation Construction	69	69	
uilding Construction	69	53	
aving	76	60	
anidamid Handa Wa Fard CO. B. 112			
esidential Use to the East of the Project S aximum Construction Noise (dBA Leq)	oite		10
•	All Applicable Equipment in Use1	Minimum Deguired Carriers at the Un 1	10
Construction Phase	All Applicable Equipment in Use	Minimum Required Equipment in Use ¹	
round Clearing/Demolition	97	97	
xcavation (Site Preparation)	102	89	
oundation Construction	95	95	
uilding Construction	95	79	
aving	102	86	
verses Construction Notes (JDA L.)			040
verage Construction Noise (dBA Leq)	AH A P	w	240
Construction Phase	All Applicable Equipment in Use ¹	Minimum Required Equipment in Use ¹	
round Clearing/Demolition	69	69	
xcavation (Site Preparation)	74	61	
	67	67	
oundation Construction	VI.		
	67	51	
oundation Construction suilding Construction Paving	67 74	51 58	

Source: Bolt, Beranek and Newman, "Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances," prepared for the USEPA, December 31, 1971. Based on analysis for Office Building, Hotel, Hospital, School, and Public Works.

Construction Generated Vibration

Residential Use to the North of the Project Site		Closest Distance (feet):	10
r roject dite	Approximate RMS a	Approximate RMS	
	Velocity at 25 ft,	Velocity Level,	
Equipment	inch/second	inch/second	
√ibratory roller	0.21	0.830	
Caisson Drill	0.089	0.352	
Large bulldozer	0.089	0.352	
Small bulldozer	0.003	0.012	
Jackhammer	0.003	0.012 0.138	
_oaded trucks	0.035	0.300	
Loaded trucks	0.076 Criteria	0.040	
understated the ten the Mark of the	Chleria		17
ndustrial Use to the West of the Project Site		Closest Distance (feet):	17
,	Approximate RMS a	Approximate RMS	
	Velocity at 25 ft,	Velocity Level,	
Equipment	inch/second	inch/second	
/ibratory roller	0.21	0.012	
Caisson Drill	0.089	0.005	
arge bulldozer	0.089	0.005	
Small bulldozer	0.003	0.000	
Jackhammer	0.035	0.002	
oaded trucks	0.076	0.004	
Loudou iruoko	Criteria	0.040	
Shaffer Park to the South of the		Closest Distance (feet):	6
Project Site	Approximate RMS a	Approximate RMS	
	Velocity at 25 ft,	Velocity Level,	
Equipment	inch/second	inch/second	
/ibratory roller	0.21	0.056	
Caisson Drill	0.089	0.024	
∟arge bulldozer	0.089	0.024	
Small bulldozer	0.003	0.001	
Jackhammer	0.005	0.009	
_oaded trucks	0.035	0.009	
.uaucu (IUUNS	0.076 Criteria	0.020	
Residential Use to the East of the	Cilieria	Closest Distance (feet):	10
Project Site			
	Approximate RMS a	Approximate RMS	
	Velocity at 25 ft,	Velocity Level,	
Equipment	inch/second	inch/second	
/ibratory roller	0.21	0.830	
Caisson Drill	0.089	0.352	
_arge bulldozer	0.089	0.352	
Small bulldozer	0.003	0.012	
Jackhammer	0.035	0.138	
∟oaded trucks	0.076	0.300	
	Criteria	0.040	
Based on distance to nearest structure			
Determined based on use of jackhammers or pneum	atic hammers that may be used for pav	ement demolition at a distance of 25 feet	
Notes: RMS velocity calculated from vibration level (Vd	B) using the reference of one microinch	/second.	
·	, •	Federal Transit Administration, <i>Transit Noise and</i>	Vibration Impact
Assessment (2006).			

APPENDIX G TRAFFIC MEMORANDUM

MEMORANDUM

To: David Cohen

Cohen Living Trust

From: Darlene Danehy Yellowhair, T.E, PTOE, RSP

Date: June 5, 2020

Subject: Cohen Property, City of Orange

Traffic Memorandum

INTRODUCTION

The Cohen Property is expected to include 32 single family residential units, which is consistent with the City of Orange General Plan for the site. The project will be replacing two buildings which currently support a variety of commercial uses, a K-8 school serving homeless students, and a restaurant. The City of Orange requires a Traffic Impact Analysis (TIA) for a proposed project that meets any of the following criteria:

- When either the AM or PM peak hour trip generation is expected to exceed 100 vehicle trips from the proposed development
- Projects on the Arterial Highway System which generate 1,600 Average Daily Trips (ADT)
- Projects that will add 51 or more trips during either the AM or PM peak hours to any intersection
- Any project where variations from the standards and guidelines provided in the *City of Orange Traffic Impact Analysis Guidelines* are being proposed.

It is expected that the project will generate far fewer than 100 peak hour trips; therefore, a full traffic impact study is not required. However, this memorandum provides information about the estimated trip generation and distribution for the project for reference and addresses construction traffic. The project site plan is included as an attachment to this memorandum.

TRIP GENERATION

The new trips to be generated by this project were estimated using the 10th Edition of the *Institute of Transportation Engineers (ITE) Trip Generation Manual* and are shown in Table 1. As seen in the table, the project is expected to generate 302 trips per day, including 24 trips in the AM peak hour and 32 trips in the PM peak hour.

There are multiple existing uses on site which will be replaced with the project, including a K-8 school which serves homeless children, a fast casual restaurant (with dine-in and take-out services), and partially occupied retail spaces.

Because the number of trips currently generated by the site is likely to be lower than what would be calculated with the ITE trip generation rates, it is assumed for this memorandum that the site is currently unoccupied. Further, this provides a conservative assumption because the project will actually be replacing trips instead of generating completely new trips on the site.

Table 1. Project Trip Generation

ITE LU 210 - Single-Family Detached Housing							
Units				32			
Period	Trips/Unit	Trips	% In	% Out	Trips In	Trips Out	
AM Peak	0.74	24	25%	75%	6	18	
PM Peak	0.99	32	63%	37%	20	12	
Daily	9.44	302	50%	50%	151	151	

TRIP DISTRIBUTION

Although the project is expected to add a minimal amount of traffic to the network, the trip distribution was estimated to help visualize where traffic generated by the project may travel. The site will be served by a single driveway located on Grove Avenue. The intersection of Grove Avenue and Orange Olive Road provides access to the north and south; however, based on conversations with the City, it was assumed that all traffic wishing to travel south from the project would turn left onto Grove Avenue, then would travel south on Shaffer Street to access the signalized intersection at Taft Avenue. This is a conservative assumption, as it is likely that some or all of the site traffic wishing to travel south would make the left turn directly onto Orange Olive Road.

Figure 1 shows the anticipated trip distribution out of and into the site and the projected AM peak hour, PM peak hour, and daily trips expected to make each movement. As shown in the figure, most of the site traffic is expected to use Grove Avenue and Orange Olive Road to travel to and/or from the site. Although this memorandum includes the conservative assumption that 40% of traffic exiting the site will travel along Shaffer Street, that results in only 7 vehicles in the peak hour along that roadway. Further, Shaffer Street between Grove Avenue and Taft Avenue includes one stop sign for southbound traffic immediately south of Grove Avenue and three speed humps, both of which will help deter cut-through traffic.

VEHICLE MILES TRAVELED (VMT)

Per the 2018 CEQA Statute and Guidelines, vehicle miles traveled (VMT) is "the most appropriate measure of transportation impacts." The City has a screening tool to determine if a project can be screened out from further VMT analysis. One of the criteria states that if the project is within a low VMT generating zone, the project would not be required to conduct further VMT analysis. In addition, a secondary criterion for projects within low VMT generating zones is that it should be confirmed that the project is consistent with the existing land use within the Transportation Analysis Zone (TAZ). This project is in a low VMT generating zone and is consistent with the TAZ, so no further VMT analysis is required. The screening results are included as an attachment to this memorandum.

Meats Ave 11 (12)(7) [91] [91] **Project Site** 60% Grove Ave 40% (5) (8) [60] [60] **LEGEND** XX AM Peak Hour Volume (veh/hr) (XX) PM Peak Hour Volume (veh/hr) Blueridge Ave [XX] Daily Volume (veh/day)

Figure 1. Trip Distribution

CONSTRUCTION TRAFFIC

Because of the size of the project, construction traffic is not expected to create any significant impacts. However, construction traffic (particularly heavy trucks) should access the site either directly from Orange Olive Road or via Grove Avenue from Orange Olive Road. No construction traffic should travel along Shaffer Street within the residential area immediately east of the project site.

Attachments: Site Plan

VMT Screening Results

Attachments Site Plan VMT Screening Results



NOCC+













North Orange County Collaborative VMT Traffic Study Screening Tool

Project Information Project Name Opening Year Orange-Olive/Grove Residential Project 2021 Parcel Number (OCTAM TAZ#432) 374-431-17 **Screening Criteria for Orange** Is the project location in a Transit Priority Area? Yes Is the project location in a low VMT generating zone? No Is the Project one of these land use types? (show land use types) No Does the project generate fewer than 110 daily trips? (enter project land use in the section below) The Project can be considered for screening from additional analysis. Please refer to the 'secondary screening checks' table in the User Guide.

Project Land Use Information		Unit
Residential : Single Family Homes	32	Dwelling Units
Residential : MultiFamily Homes	0	Dwelling Units
Office	0.000	1,000 Square Feet
Retail	0.000	1,000 Square Feet
Industrial	0.000	1,000 Square Feet
Private School	0	Students
University	0	Students
Entertainment	0.000	1,000 Square Feet
Hotel	0	Rooms

Project Trips and VMT Information

Origin Destination (OD) VMT Methodology

Daily Trips: 206 Average Trip Length: 7.5 Service Population: 48

VMT per service population 32.3

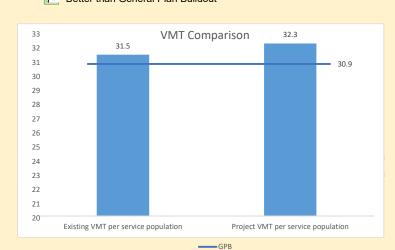
Project VMT Thresholds Comparison

OPR Guidance (15% Below Existing)

GHG Reduction Targets (14.3% Below Existing)

Below Existing

Better than General Plan Buildout



FEHR PEERS

APPENDIX H FIRE FLOW STUDY

FIRE FLOW STUDY

For:

Orange-Olive Ave and Grove Ave 305 Grove

Prepared for:
City of Orange Fire Department

Owner/Developer/Contractor:
Cohen Living Trust

Prepared by:
DRC Engineering, Inc.
160 S. Old Springs Road, Suite 210
Anaheim Hills, CA 92808
(714) 685-6860

February 6, 2019

DRC Job Number: 18-860

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PROJECT DESCRIPTION FIRE FLOW METHODOLOGY SUMMARY AND CONCLUSION

SECTION 2: EXISTING FIRE HYDRANT TEST RESULTS

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PRIVATE FIRE HYDRANT FLOW CALCULATIONS

SECTION 4: BACKFLOW DEVICE PRESSURE LOSS TABLE



Purpose of Report

This Fire Flow Calculations Report has been prepared to evaluate the proposed private water system for use of providing the required fire hydrant flow and pressure for the proposed residential on Orange-Olive and Grove Avenue.

Project Description

Fire service for three proposed fire hydrants will be connected to a proposed 8" iron service off of the public main that serves a portion of Grove Avenue. The proposed service was modeled with an 8" Zurn-Wilkins 350DA double check detector assembly that feeds the proposed 8" PVC fire main onsite.

Fire Flow and Daily Flow Methodology

Hydraulic calculations were done using the Hazen Williams method for determining pressure loss in pipe flow. Computations were prepared using Haestad Methods, WaterCAD program, Version 8. Minor loss values for fittings and pipe material friction losses were based upon typical values and are shown for each pipe run in the pipe report tables in the calculation section. The pressure losses due to the backflow device at the connection to the public main were calculated based upon manufacturer specifications shown in Section 4. Modeling the performance of the existing off-site public water system was accomplished by designating a 3-point pump curve that has properties based upon a fire hydrant test done adjacent to the connection point by Provo Engineering. The static pressure, residual pressure, and predicted flow rate at 20 psi are derived from the fire flow results.

DRC modeled the water system by setting Pipe Elements and Junction Nodes to describe the existing and proposed water system. Junction Nodes were set at the location of each connection point or change in pipe material or size. The flow characteristics at the source were modeled by placing a reservoir at the test location. A pump was then placed at the reservoir to model the flow data taken from the field at the source point. Each proposed hydrant was flowed at 2,000 gpm to stimulate a worst-case scenario and the backflow device was modeled to yield a 6 psi pressure loss at 2,000 gpm per product specifications that can be seen in Section 4. See the fire flow calculations for a graphical layout of the fire system.

Summary & Conclusion

Fire Appurtenance	Flow Rate Demand (gpm)	Pressure (psi)
Fire Hydrant J-3 FH	2,000	65

Based upon the hydrant flow test results with proposed 8" PVC main servicing each appurtenance, the system is capable of delivering the demand flow at more than 20 psi. Therefore, our fire water system is sufficiently sized to meet the flow/pressure requirements set by the fire department.



EXISTING WATER LINE FLOW CALCULATIONS



Provo Engineering

22931 Savi Ranch Pkwy, Yorba Linda, CA 92887

714-393-3877 *** 714-261-5716

email: info@provoengineering.com

Hydrant Flow Test Report

Project Address	Commercia 305 E. Grov	I development	at 305 E (Grove			Test date _ Test time	2/5/19 09:45
City	Orange	- CAVC			State	CA	File no.	00.40
Test hyd	drant location	Hydrant on th	ne northea	st corner of O	range (Olive I	Rd & Grove A	ve
				Hydr#	G7-42	267	Elev (ft +/-)	Grade
Flow hy	drant location	Second hydra	ant north o	of Grove Ave o	n east	side c	of Orange Oliv	re Rd
				Hydr #	G7-48	852	Elev (ft +/-) _	Grade
Static	Pressure	76	PSI				Report Date _	2/5/19
Outlet	C-val	ue	Diam	1	Pitot		Volume	
Α	0.9)	2.0		0	PSI	0	GPM
В	0.9)	2.5		40	PSI	1061	GPM
С	0.9	_	3.0		0	_ PSI	0	GPM
D	0.83	3	4.0		0	_ PSI	0	GPM
Residu	ıal Pressure	71	PSI	at an obser	rved vo	lume	of 1061	GPM
Projec	ted Pressure	€ 20	PSI	calculates	to a vo	lume	of 3912	GPM

Although the results are accurate for the date and time given, they may not accurately reflect higher or lower readings which vary due to seasonal conditions and time of day.

Per NFPA 24-10, Table C.4.10.1(a), note 1, Q=29.84 x c(d)² (p)^{0.5} Per NFPA 24-10, Paragraph C.4.10.1.2, Q_z = Q_x x $(h/h_x)^{0.54}$

Test by: George Provencher

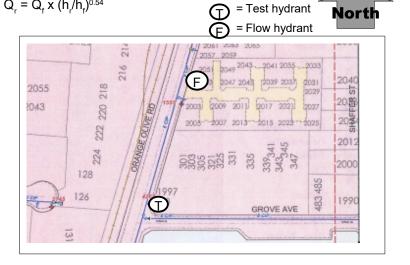
Witness Robert Desimone

Fire Safety Specialist
City of Orange Fire Dept

Client Michael Brhel

DRC Engineering, Inc.
160 S Old Springs Rd, Suite 210
Anaheim Hills, CA 92808

cc: rdesimone@cityoforange.org mbrhel@drc-eng.com cmack@drc-eng.com jfelton@cityoforange.org



Symbols



Orange City Fire Department Fire Prevention Division Flow Test Record

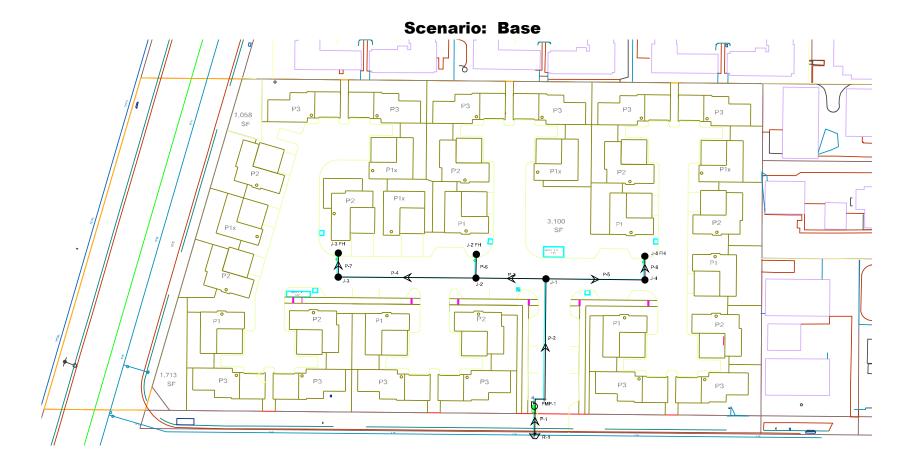


TEST HYDRANT DATA

TEST HIDRANI DATA		
LOCATION: 305 E. Grove		
HYDRANT I.D. NO.: 4267 SIZE MAIN	:6 TYPE HYDI	RANT: WEX
STATIC (PSI):		
RESIDUAL (PSI): 71		
PRESSURE DROP (PSI):	"K" FACTOR FOR (PDI)*:	
FLOW HYDRANT(S) DATA		
LOCATION NO. 1: 2035 Orange-Olive	RP. 1.D. NO.: 4852	
LOCATION NO. 2:	I.D. NO.:	
LOCATION NO. 3:(MAIN)	I.D. NO.:	
#1 PITOT-PSI 40	_ GPM <u> </u>	2 1/2") 2 =
#2 PITOT-PSI	_ GPM (4" OF	₹ 2 ½")
#3 PITOT-PSI	GPM (4" OF	? 2 1/2")
(Completed by test company) CALCULATED TEST AND FLOW DATA Q1 X PD2 K (Completed by test company) PD1 K	= Q2	
STATIC (PSI)		
DESIRED RESID.		
PRESSURE DROP (PD2)	"K" FACTOR FOR (PD	2)
	(ENTER K-FACT	OR IN FORMULA)
(Q1) TIMES DIVIDED BY	(PD1)K EQUALS (Q2)	GPM @ 20 PSI RESIDUAL
TEST CONDUCTED FOR: 305 E	. Grove/Design (LOCATION & REASON)	
NAME: George provencher		
TITLE: proliful owner		
COMPANY: PROVO Engineering		
DATE: 2/5/19 TIME:	INSPECTOR:_	Desimone

FIRE FLOW CALCULATION RESULTS AND DIAGRAM





FlexTable: Junction Table

ID	Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
35	J-2 FH	0.00	0	172.31	75
37	J-2	0.00	0	172.31	75
39	J-1	0.00	0	175.22	76
41	J-3	0.00	0	166.59	72
46	J-4	0.00	0	175.22	76
48	J-4 FH	0.00	0	175.22	76
56	J-3 FH	0.00	2,000	149.20	65

FlexTable: Pipe Table

Length (Scaled) (ft)	Start Node	Stop Node	Label	Diameter (in)	Material	Hazen-Williams C	Minor Loss Coefficient (Local)	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)
25	PMP-1	R-1	P-1	60.0	Ductile Iron	130.0	6.900	-2,000	0.23	0.000
112	J-1	PMP-1	P-2	8.0	PVC	150.0	2.020	-2,000	12.77	0.096
58	J-2	J-1	P-3	8.0	PVC	150.0	0.000	-2,000	12.77	0.051
113	J-2	J-3	P-4	8.0	PVC	150.0	0.000	2,000	12.77	0.051
81	J-1	J-4	P-5	8.0	PVC	150.0	0.000	0	0.00	0.000
19	J-2 FH	J-2	P-6	6.0	PVC	150.0	1.670	0	0.00	0.000
20	J-3 FH	J-3	P-7	6.0	PVC	150.0	1.670	-2,000	22.69	0.885
19	J-4	J-4 FH	P-8	6.0	PVC	150.0	1.670	0	0.00	0.000

FlexTable: Pump Table

ID	Label	Elevation (ft)	Pump Definition	Status (Initial)	Hydraulic Grade (Suction) (ft)	Hydraulic Grade (Discharge) (ft)	Flow (Total) (gpm)	Pump Head (ft)
30	PMP-1	0.00	Public Hydrant Results	On	175.79	185.99	2,000	10.20

BACKFLOW DEVICE FLOW CHARACTERISTICS





Model 350DA

Double Check Detector Assembly

Application

Designed for installation on water lines in fire protection systems to protect against both backsiphonage and backpressure of polluted water into the potable water supply. Model 350DA shall provide protection where a potential health hazard does not exist. Incorporates metered by-pass to detect leaks and unauthorized water use.

Standards Compliance

(Sizes 2 1/2" - 10" Horiz. & Vert.)

(12" Horizontal Only)

- ASSE® Listed 1048 (Sizes 2 1/2" thru 12")
- CSA® Certified B64.5 (Sizes 2 1/2" thru 8", & 12")
- AWWA Compliant C510 (Sizes 2 1/2" thru 12"), and C550
- UL® Classified (Sizes 2 1/2" thru 12")
- C-UL® Classified (Sizes 2 1/2" thru 12")
- FM® Approved (Sizes 2 1/2" thru 10")
- NYC MEA 147-99-M Vol 4 (2-1/2" 10)
- Approved by the Foundation for Cross Connection Control and Hydraulic Research at the University of Southern California (Sizes 2 1/2" thru 12")
- Meets the requirements of NSF/ANSI 61* *(0.25% MAX. WEIGHTED AVERAGE LEAD CONTENT)

By-Pass Backflow Assembly 3/4" Model 950XLD

Materials

Ductile Iron ASTM A 536 Main valve body Access covers Ductile Iron ASTM A 536

Coatings NSF Approved fusion epoxy finish

Stainless steel, 300 Series Internals

NORYL™

Stainless Steel, 300 Series **Fasteners** Elastomers EPDM (FDA approved) Buna Nitrile (FDA approved)

Polymers NORYL™

Stainless Steel, 300 Series **Springs**

Sizes: 2 1/2", 3", 4", 6", 8", 10", 12"

Maximum working water pressure Maximum working water temperature 140°F Hydrostatic test pressure

End connections (Grooved for steel)

(Flanged)

175 PSI 350 PSI AWWA C606

ANSI B16.1 Class 125





Options

(Suffixes can be combined)

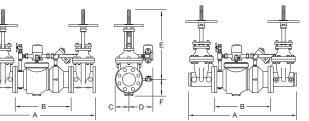
- with OS & Y gate valves (standard) - less shut-off valves (flanged body
 - connections)
- LM less water meter - with remote reading meter
 - with gallon meter (standard)
- CFM with cu ft meter
 - CMM with cu meter meter
 - G with groove end gate valves
- FG with flanged inlet connection and grooved outlet connection
 - PI with Post Indicator Gate Valve
 - GF with flanged inlet connection and grooved outlet
- connection BG - with grooved end butterfly valves with integral
- monitor switches (2 1/2" 10")
- -509 with AWWA C509 gate valves

Accessories

- Repair kit (rubber only)
- Thermal expansion tank (Model XT)
- OS & Y Gate valve tamper switch (OSY-40)

Attention:

Model 350DA (flange body) and Model 350ADA (grooved body) have different lay lengths.



Dimensions & Weights (do not include pkg.)

MODEL 350DAG SHOWN ABOVE

			DIMENSION (approximate)																WE	IGHT							
MOI 350 SI		Δ		A WIT BUTTE VALV	H RFLY	B LE GAT VALV	Έ	С	;	D		OS- OPI		OS CLOS	-	E WI ⁻ BUTTE VAL\	RFLY	F		SHU	SS TOFF VES	OS GA VAL\ FLAN	TE /ES	OS GA VAL' GROO	TE VES	BUTTE VALV GROO	/ES
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg
2 1/2	65	31	787	28	711	15 7/8	403	3 3/4	95	9	229	17 3/4	451	15 3/8	391	8 1/4	210	3 1/2	89	68	31	178	81	160	73	140	64
3	80	32	813	28 1/2	724	15 7/8	403	3 3/4	95	9	229	20 1/4	514	17	432	8 1/2	216	3 1/2	89	68	31	198	90	150	68	120	54
4	100	37 5/8	956	32 8/9	835	19 1/2	495	4 1/2	114	9	229	22 1/2	572	18 1/4	464	9	229	6	152	106	48	296	134	282	128	190	86
6	150	44 3/4	1137	37 5/8	956	23 1/2	597	6	152	10 1/2	267	30 1/2	775	24 1/4	616	10 1/4	260	7	178	180	82	480	218	454	206	298	135
8	200	60 3/4	1543	53 7/8	1369	37 3/4	959	10	254	12	305	37	940	28 1/2	724	12	305	8 1/2	216	374	170	850	386	802	364	548	249
10	250	63 3/4	1619	57 7/8	1470	37 3/4	959	10	254	12	305	45 5/8	1159	34 3/4	883	13	330	8 1/2	216	404	183	1222	554	1156	524	792	359
12	300	66 1/4	1683	n/a	n/a	38	965	10	254	12	305	53	1346	40 1/2	1029	n/a	n/a	8 7/8	226	463	210	1623	736	n/a	n/a	n/a	n/a

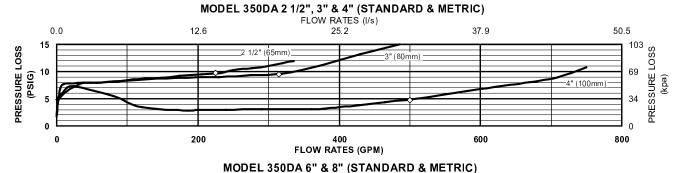
Zurn Industries, LLC | Wilkins

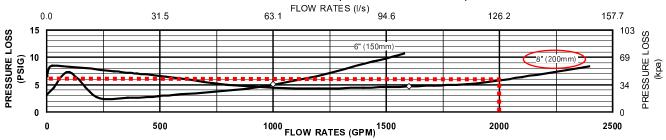
1747 Commerce Way, Paso Robles, CA U.S.A. 93446 Ph. 855-663-9876, Fax 805-238-5766

In Canada | Zurn Industries Limited

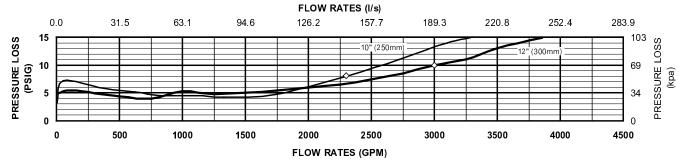
3544 Nashua Drive, Mississauga, Ontario L4V 1L2 Ph. 905-405-8272, Fax 905-405-1292

Date: 1/17 Document No. BF-350DA Patent No. 5, 913, 331 Product No. Model 350DA





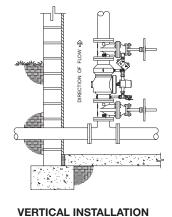
MODEL 350DA 10" & 12" (STANDARD & METRIC)

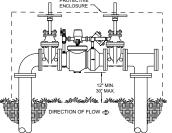


Typical Installation

Local codes shall govern installation requirements. Unless otherwise specified, the assembly shall be mounted at a minimum of 12" (305mm) and a maximum of 30" (762mm) above adequate drains with sufficient side clearance for testing and maintenance. The installation shall be made so that no part of the unit can be submerged.

Capacity thru Schedule 40 Pipe (GPM)												
Pipe size	5 ft/sec	7.5 ft/sec	10 ft/sec	15 ft/sec								
2 1/2"	75	112	149	224								
3"	115	173	230	346								
4"	198	298	397	595								
6"	450	675	900	1351								
8"	780	1169	1559	2339								
10"	1229	1843	2458	3687								
12"	1763	2644	3525	5288								





OUTDOOR INSTALLATION

Specifications

The Double Check Detector Backflow Prevention Assembly shall be certified to NSF/ANSI 61, ASSE® Listed 1048, and supplied with full port gate valves. The main body and access cover shall be epoxy coated ductile iron (ASTM A 536), the seat ring and check valve shall be Noryl™, the stem shall be stainless steel (ASTM A 276) and the seat disc elastomers shall be EPDM. The first and second check valves shall be accessible for maintenance without removing the device from the line. The Double Check Detector Backflow Prevention Assembly shall be a ZURN WILKINS Model 350DA.

www.zurn.com Page 2 of 2