

## 5. Environmental Analysis

### 5.7 HAZARDS AND HAZARDOUS MATERIALS

This section evaluates the potential impacts of the proposed project on human health and the environment due to exposure to hazardous materials or conditions associated with the project site, project construction, and project operations. Potential project impacts and appropriate mitigation measures or standard conditions are included as necessary. The analysis in this section is based, in part, upon the following source(s):

- *Phase I Environmental Site Assessment*, Terrax Environmental, Inc., September 1, 2017. (Appendix F1)
- *Phase II Soil Site Investigation Report*, Terrax Environmental, Inc., September 27, 2017. (Appendix F2)

Complete copies of these studies are included in Appendices F1 and F2, respectively, of this DEIR.

#### 5.7.1 Environmental Setting

##### 5.7.1.1 REGULATORY BACKGROUND

Federal, state, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the project site are summarized below.

##### **Federal**

##### *Comprehensive Environmental Response, Compensation and Liability Act*

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) is a law developed to protect the water, air, and soil resources from the risks created by past chemical disposal practices. This law is also referred to as the Superfund Act and regulates sites on the National Priority List, which are called Superfund sites.

##### *Emergency Planning and Community Right-To-Know Act*

In 1986, Congress passed the Superfund Amendments and Reauthorization Act. Title III of this regulation is called the “Emergency Planning and Community Right-to-Know Act of 1986” (EPCRA). The act required the establishment of state commissions, planning districts, and local committees to facilitate the preparation and implementation of emergency plan. Under its requirements, local emergency planning committees (LEPCs) are responsible for developing a plan for preparing for and responding to a chemical emergency, including:

- An identification of local facilities and transportation routes where hazardous materials are present.
- The procedures for immediate response in case of an accident (this must include a community-wide evacuation plan).
- A plan for notifying the community that an incident has occurred.

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- The names of response coordinators at local facilities.
- A plan for conducting drills to test the plan.

The emergency plan is reviewed by the State Emergency Response Commission and publicized throughout the community. The LEPC is required to review, test, and update the plan each year. The Orange County Environmental Health Department (EHD) is responsible for coordinating hazardous material and disaster preparedness planning and appropriate response efforts with city departments and local and state agencies. The goal is to improve public and private sector readiness and to mitigate local impacts resulting from natural or manmade emergencies.

Another purpose of the EPCRA is to inform communities and citizens of chemical hazards in their areas. Sections 311 and 312 of EPCRA require businesses to report to state and local agencies the location and quantities of chemicals stored onsite. Under section 313 of EPCRA, manufacturers are required to report chemical releases for more than 600 designated chemicals. In addition to chemical releases, regulated facilities are also required to report offsite transfers of waste for treatment or disposal at separate facilities, pollution prevention measures, and chemical recycling activities. The US Environmental Protection Agency (EPA) maintains the Toxic Release Inventory database that documents the information that regulated facilities are required to report annually.

#### *Resource Conservation and Recovery Act*

Federal hazardous waste laws are generally promulgated under Resource Conservation and Recovery Act (RCRA), which is the principal federal law that regulates generation, management, and transportation of hazardous waste. These laws provide for the “cradle to grave” regulation of hazardous wastes. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed. The California Department of Toxic Substances Control (DTSC) is responsible for implementing the RCRA program as well as California’s own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law. Under the Certified Unified Program Agency (CUPA) program, the California Environmental Protection Agency (CalEPA) has in turn delegated enforcement authority to the County of Orange for state law regulating hazardous waste producers or generators.

#### *Hazardous Materials Transportation Regulations*

The Hazardous Materials Transportation Act and Hazardous Materials Transportation Uniform Safety Act provide regulatory and enforcement authority to the Secretary of Transportation to reduce risks to life and property from hazards associated with the transport of hazardous materials. These acts promote uniformity among different state and local highway routing regulations to develop criteria for the issuance of federal permits to motor carriers of hazardous materials, and to regulate the transport of radioactive materials. The CFR (Title 49, Parts 172, 173, 177, and 397) contains the rules for labeling, packing, shipping, and transporting hazardous materials, including medical waste

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### *Title 40, Code of Federal Regulations, Section 61 Subpart M*

Code of Federal Regulations Title 40, Section 61 Subpart M—National Emissions Standards for Asbestos—sets forth emissions standards for asbestos from demolition and renovation activities, and for waste disposal from such activities.

### *Title 29, Code of Federal Regulations, Section 1926.62*

Title 29, CFR Section 1926.62, sets standards for occupational health and environmental controls for lead exposure in construction, regardless of the lead content of paints and other materials. The standards include requirements addressing exposure assessment, methods of compliance, respiratory protection, protective clothing and equipment, hygiene facilities and practices, medical surveillance, medical removal protection, employee information and training, signs, recordkeeping, and observation and monitoring.

## **State**

### *Hazardous Materials Release Notification*

Many state statutes require emergency notification of a hazardous chemical release:

- California Health and Safety Codes Sections 25270.8, and 25507
- Vehicle Code Section 23112.5
- Public Utilities Code Section 7673, (PUC General Orders #22-B, 161)
- Government Code Sections 51018, 8670.25.5 (a)
- Water Codes Sections 13271, 13272,
- California Labor Code Section 6409.1 (b)10

Requirements for immediate notification of all significant spills or threatened releases cover owners, operators, persons in charge, and employers. Notification is required regarding significant releases from facilities, vehicles, vessels, pipelines, and railroads. In addition, all releases that result in injuries or harmful exposure to workers must be immediately reported to the California Occupational Safety and Health Administration pursuant to the California Labor Code Section 6409.1(b).

### *Hazardous Materials Disclosure Programs*

The Unified Program administered by the State of California consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities for environmental and emergency management programs, which include: Hazardous Materials Release Response Plans and Inventories (business plans), the California Accidental Release Prevention (CalARP) Program, and the Underground Storage Tank (UST) Program. The Unified Program is implemented at the local government level by Certified Unified Program Agencies (CUPAs).

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The CUPA for San Juan Capistrano is the Orange County EHD, which is responsible for regulating hazardous materials business plans and chemical inventory, hazardous waste and tiered permitting, underground storage tanks, aboveground storage tanks, and risk management plans.

#### *Hazardous Materials Business Plans*

Both the federal government (Code of Federal Regulations) and the State of California (California Health and Safety Code) require all businesses that handle more than a specified amount—or “reporting quantity”—of hazardous or extremely hazardous materials to submit a hazardous materials business plan to its CUPA. According to the EHD guidelines, the preparation, submittal, and implementation of a business plan is required by any business that handles a hazardous material or a mixture containing a hazardous material in specified quantities.

Business plans must include an inventory of the hazardous materials at the facility. Businesses must update the whole plan at least every three years and the chemical portion every year. Also, business plans must include emergency response plans and procedures to be used in the event of a significant or threatened significant release of a hazardous material. These plans need to identify the procedures for immediate notification of all appropriate agencies and personnel, identification of local emergency medical assistance appropriate for potential accident scenarios, contact information for all company emergency coordinators, a listing and location of emergency equipment at the business, an evacuation plan, and a training program for business personnel.

The EHD currently reviews submitted business plans and updates. Businesses that handle hazardous materials are required by law to provide an immediate verbal report of any release or threatened release of hazardous materials if there is a reasonable belief that the release or threatened release poses a significant present or potential hazard to human health and safety, property, or the environment. The EHD is also charged with the responsibility of conducting compliance inspections of regulated facilities in Orange County.

#### *California Accidental Release Prevention Program*

CalARP became effective on January 1, 1997, in response to Senate Bill 1889 (Chapter 715, Statutes of 1996). CalARP aims to be proactive and therefore requires businesses to prepare risk management plans, which are detailed engineering analyses of the potential accident factors present at a business and the mitigation measures that can be implemented to reduce this accident potential. This requirement is coupled with the requirements for preparation of hazardous materials business plans under the Unified Program, implemented by the CUPA.

#### *Leaking Underground Storage Tanks*

Leaking USTs have been recognized since the early 1980s as the primary cause of groundwater contamination from gasoline compounds and solvents. In California, regulations aimed at protecting against UST leaks have been in place since 1983 (Health and Safety Code). This was a year before RCRA was amended to add Subtitle I, which required UST systems to be installed in accordance with standards that address the

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prevention of future leaks. The State Water Resources Control Board has been designated the lead California regulatory agency in the development of UST regulations and policy.

Older tanks are typically single-walled steel tanks. Many of these have leaked as a result of corrosion, punctures, and detached fittings. As a result, the State of California required the replacement of older tanks with new double-walled fiberglass tanks with flexible connections and monitoring systems. UST owners were given 10 years to comply with the new requirements—the deadline was December 22, 1998. However, many UST owners did not act by the deadline, so the state granted an extension for their replacement ending January 1, 2002. The California Regional Water Quality Control Boards, in cooperation with the Office of Emergency Services, maintain an inventory of leaking USTs in a statewide database.

### *California Code of Regulations, Title 22, Division 4.5*

Title 22, Division 4.5, of the California Code of Regulations (CCR) sets forth the requirements for hazardous-waste generators; transporters; and owners or operators of treatment, storage, or disposal facilities. These regulations include the requirements for packaging, storage, labeling, reporting, and general management of hazardous waste prior to shipment. In addition, the regulations identify standards applicable to transporters of hazardous waste. These regulations specify the requirements for transporting shipments of hazardous waste, including manifesting, vehicle registration, and emergency accidental discharges during transportation.

### *California Fire Code*

The 2013 California Fire Code (CCR Title 24 Part 9) sets requirements pertaining to fire safety and life safety, including for building materials and methods, fire protection systems in buildings, emergency access to buildings, and handling and storage of hazardous materials.

### *California Health and Safety Code, Sections 17920.10 and 105255*

Lead was formerly used as an ingredient in paint (before 1978) and as a gasoline additive; both of these uses have been banned. Lead is listed as a reproductive toxin and a cancer-causing substance; it also impairs the development of the nervous system and blood cells in children (DTSC 2018). Paint containing lead at concentrations of 5,000 milligrams per kilogram (or parts per million) is considered lead-based paint (LBP). Structures built before 1978 are presumed to contain LBP. Lead must be contained during demolition activities (California Health & Safety Code Sections 17920.10 and 105255).

### *California Code of Regulations Title 8 Sections 1529 and 1532.1: Worker Safety Standards: Asbestos and Lead*

Asbestos is the name of a group of silicate minerals that are heat resistant, and thus were commonly used as insulation and fire retardant. Inhaling asbestos fibers has been shown to cause lung disease (asbestosis) and lung cancer (mesothelioma) (DTSC 2018). Beginning in the early 1970s, a series of bans on the use of certain asbestos-containing materials (ACM) in construction were established by the EPA and the Consumer Product Safety Commission. Most US manufacturers voluntarily discontinued the use of asbestos in certain building products during the 1980s.

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California Code of Regulations (CCR) Title 8 Section 1529 sets forth worker safety standards for lead exposure for employees conducting demolition, construction, and renovation work, including painting and decorating.

CCR Title 8 Section 1532.1 sets forth worker safety standards for asbestos for employees performing construction, demolition, renovation, and maintenance.

#### Regional

##### *South Coast Air Quality Management District*

SCAQMD Rule 1403 governs the demolition of buildings containing asbestos materials. Rule 1403 specifies work practices with the goal of minimizing asbestos emissions during building demolition and renovation activities, including the removal and associated disturbance of ACM. The requirements for demolition and renovation activities include asbestos surveying, notification, ACM removal procedures and time schedules, ACM handling and cleanup procedures, and storage and disposal requirements for asbestos-containing waste materials.

#### Local

##### *Orange County Fire Service Fire Prevention Guidelines*

The Orange County Fire Service has set fire prevention guidelines that address such matters as fire flow, fire access, building construction, flammable and combustible liquids, and fire protection systems.

#### 5.7.1.2 PAST USES OF PROPERTY

According to available historic records, the subject property was undeveloped land from at least 1902 up to at least 1967. The current subject property owner (Ito Nursery) reportedly purchased the property in the late 1950s. According to historic aerial photographs, a nursery has operated at the subject property from at least 1972 up to the present day.

#### 5.7.1.3 EXISTING CONDITIONS

The subject property is an active nursery operated by Ito Nursery, which is improved with a small office building (built in 2004). A small trailer and storage shed are also located on the subject property and are utilized for storage purposes. A parking lot is located along the northern boundary. The remaining area of the subject property is utilized for nursery sales. Two historic water wells are located onsite, one is located near the office and one is located near the parking lot area. The nursery has an irrigation system located throughout the subject property. The nursery contains several plants for sale, which covers the majority of the project site (Terrax, 2017b).

Storage and use of fertilizers and herbicides at the subject property, including Ranger Pro herbicide, was observed during the Phase I Environmental Site Assessment investigation. The primary active ingredient of Ranger Pro is glyphosate (an Organophosphorus pesticide). No other environmental hazards were found on site (Terrax, 2017a).

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### Soil Sampling and Testing

Based on the findings of the Phase I Environmental Site Assessment, further soil sampling was recommended to confirm or deny the presence of pesticides, herbicides, metals and other hazardous wastes as a result of historic and current site operations and potential contamination of reported fill dirt which was historically brought onsite from an unknown origin. Thus a Phase II soil survey was completed to determine if any actionable levels of herbicides, pesticides, or metals were present on the project site (see Appendix F2 of this DEIR). Soil samples were collected at 0.5 ft below ground surface (bgs) and 1.5 ft bgs. A total of 28 soil samples were collected (see Figure 5.7-1, *Soil Sampling Locations*). Of the total soil samples collected, 20 samples were discrete samples collected at 0.5 ft and 1.5 ft bgs. The remaining 8 samples were composite samples collected at 0.5 and 1.5 ft bgs (including two duplicate samples). Soil samples from all soil borings were analyzed for Title 22 metals (USEPA method 6010B), Mercury (USEPA method 7471A Soil), Organophosphorus Pesticides (USEPA method 8841B), Organochlorine Pesticides (USEPA method 8081B), and Chlorinated Herbicides (USEPA method 8151B). Table 5.7-1 provides a summary of detected contaminants and regional screening level (RSL).

The results of the soil sample analysis for the metals were below the USEPA Industrial RSL except for arsenic. However, in accordance with DTSC, if arsenic in site soils does not exceed background levels, no further evaluation is necessary (Terrax, 2017b). Arsenic concentrations are below the DTSC regional upper bound arsenic background concentration of 12 mg/kg. Lead concentrations were below the RSL of 800 mg/kg.

The results of the soil sample analysis for organophosphorus pesticides, organochlorine pesticides, and chlorinated herbicides were below the USEPA Industrial RSL. All sample results were below laboratory detection limits except for Alphachlordane (6.9 µg/kg in boring SB-2-0.5) and Toxaphene (<2,000 µg/kg in borings SB-10-11-0.5 and SB-10-11-1.5), both were below the Industrial RSL of 7,800 µg/kg and 2,100 µg/kg, respectively.

In summary, the project site is a relatively clean site and does not present an existing health risk the public.

### Other Environmental Concerns

There were no ACMs, LBPs or suspected mold observed on the project site.

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**Table 5.7-1 Summary Metals, Pesticides and Herbicides Laboratory Analysis Listings**

Chemical	Maximum Concentration (mg/kg)	Boring ID and Depth in feet	NOTE 3 RSL Industrial	Background Concentrations*	
			(mg/kg)	Range low to high (mg/kg)	
Arsenic	9.2	SB-1-0.5	3	1	12#
Barium	200	SB-4-0.5	2200	299	719
Chromium	38	SB-4-0.5	N/A <sup>(1)</sup>	0	345
Cobalt	13	SB-4-0.5	350	5.7	24.1
Copper	22	SB-4-0.5	4700	9.4	48
Lead	100	SB-4-1.5	800 <sup>(2)</sup>	10.1	37.7
Mercury	0.16	SB-14-15-0.5	350 <sup>(3)</sup>	0.05	0.47
Nickel	49	SB-4-0.5	12000 <sup>(4)</sup>	0	137
Vanadium	34	SB-4-0.5	5800 <sup>(5)</sup>	59	165
Zinc	140	SB-2-0.5	350	117	181
Organochlorine Pesticides	Maximum Concentration (µg/kg)	Boring ID and Depth in feet	RSL Industrial (µg/kg)	RSL Residential (ug/kg)	
Alpha-chlordane	6.9	SB-2-0.5	7,800	1,800	
Toxaphene	<2000**	SB-10-11-0.5 SB-10-11-1.5	2,100	490	

Source: Terrax 2017b

Notes: \* From Kearney Foundation of Soil Science March 1996 report Background Concentrations of Trace and Major Elements in California Soils. Background concentrations of metals are considered to be within one standard deviation from the mean metal concentrations determined by the study. Concentrations indicated in milligrams per kilogram (mg/kg).

# DTSC Determination of a Southern California Regional Background Arsenic Concentration in Soil (Upper Bound) <https://dtsc.ca.gov/upload/Background-Arsenic.pdf>

\*\*Recording limit for sample above residential RSL

Note 3 – HERO HHRA NOTE NUMBER: 3, DTSC-modified Screening Levels (DTSC-SLs) – August 2017

N/A – Not Available

(1) No HERO screening level

(2) Lead and Compounds

(3) Mercuric Chloride (and other Mercury salts)

(4) Nickel Oxide

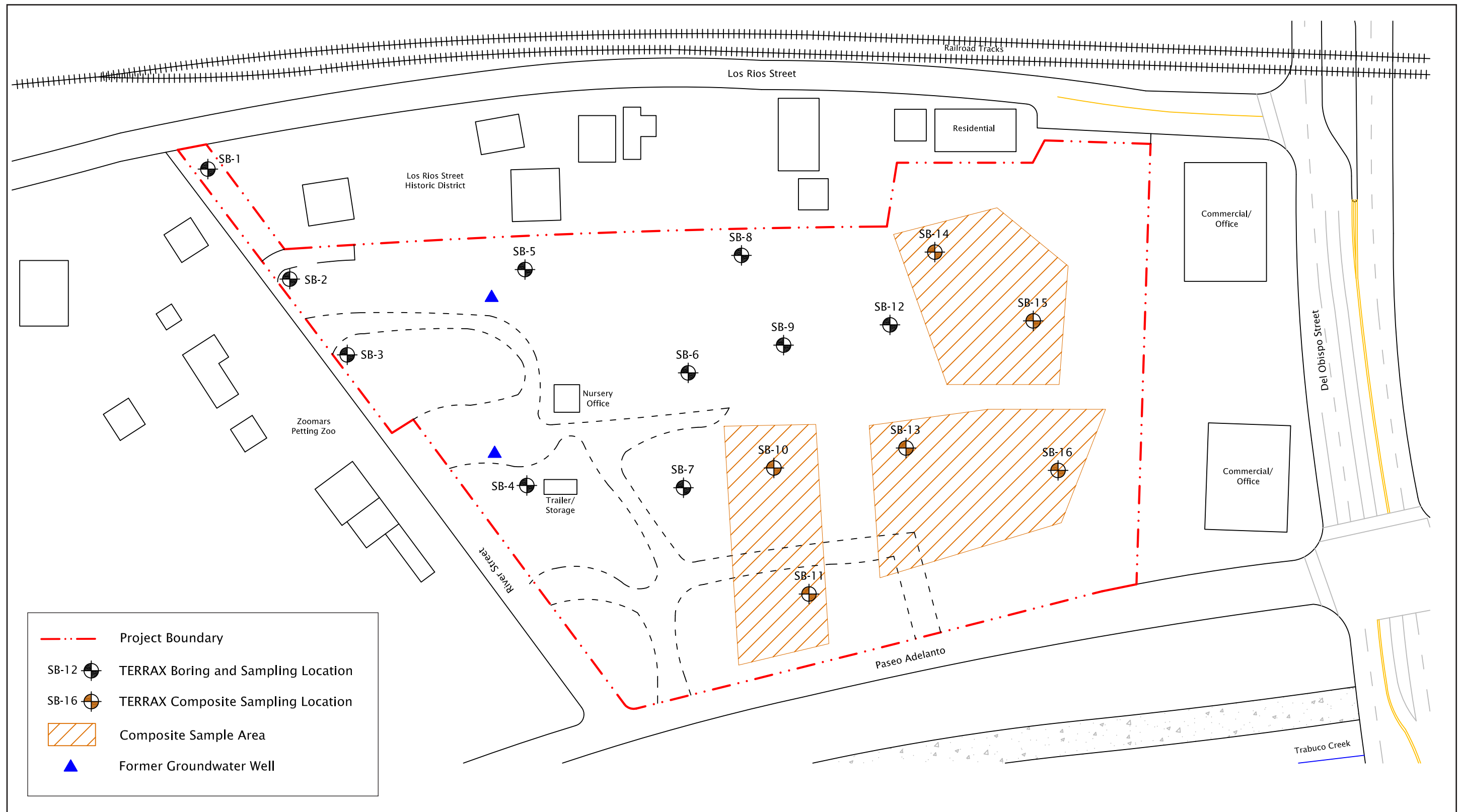
(5) Vanadium and Compounds

### Environmental Records Search Results

As part of the Phase I and Phase II investigations, various Federal, State, and local agencies were contacted to determine any current and/or historic hazardous materials usage, storage and/or releases of hazardous substances on the project site. Based on correspondence with US EPA, DTSC, Regional Water Quality Control Board, California Department of Oil, Gas, and Geothermal, South Coast Air Quality Management District, Orange County Fire Authority, Orange County Health Care Agency, and the City of San Juan Capistrano there were no environmental records on file for the project site.



Figure 5.7-1 - Soil Sampling Locations  
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	Project Boundary
	TERRAX Boring and Sampling Location
	TERRAX Composite Sampling Location
	Composite Sample Area
	Former Groundwater Well

0 80  
Scale (Feet)



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An environmental database search—Federal, State, and local agency environmental records—was conducted on the project site (see Appendix F1 of this DEIR). Findings of the database search of listings within one mile of the project site are summarized on Table 5.7-2. A one-quarter mile radius is a standard search distance for environmental database searches that reasonably captures all potentially hazardous sites near a project site. None of these sites are considered environmental concerns for the project site since all cases adjacent to the site have been closed and/or are small quantity generators of hazardous wastes. Non-adjacent sites do not represent an environmental concern based on their distance from the site, lack of documented releases/spills/violations, presumed direction of groundwater flow, current regulatory status, or other considerations.

**Table 5.7-2 Summary of Environmental Radius Report Findings**

Environmental Regulatory Listing	Number Of Sites That Are			Any Sites Of Concern?
	<1/4 Mile Away	1/4-1/2 Mile Away	1/2-1 Mile Away	
National Priorities List (NPL)	0	0	0	N/A
Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) List	0	0	0	N/A
CERCLIS No Further Remedial Action Planned (NFRAP)	0	0	0	N/A
Resource Conservation and Recovery Act (RCRA) Corrective Action Report (CORRACTS) Facilities	0	0	0	N/A
RCRA Non-CORRACTS Treatment, Storage and Disposal (TSD) Facilities	0	0	0	N/A
Federal Institutional Control/Engineering Control (IC/EC) Registry	0	0	0	N/A
Emergency Response Notification System (ERNS)	10	0	1	NO
United States (US) Toxic Release Inventory (TRI)	0	0	0	N/A
US RCRA Conditionally Exempt Small/Small/Large Quantity Generators (CESQG/SQG/LQG)	6	6	7	NO
US Assessment, Cleanup and Redevelopment Exchange System (ACRES) Database (Brownfields)	0	0	0	N/A
US National Pollution Discharge Elimination System (NPDES)	0	0	0	N/A
US Air Facility System (AIRS/AFS)	0	0	0	N/A
California (CA) Registered Underground Storage Tanks (USTs)	8	8	14	NO
CA Leaking Underground Storage Tanks (LUSTs)	7	6	6	NO
CA CERCLIS Equivalent	0	0	0	N/A
CA NPL Equivalent	0	0	0	N/A
CA Hazardous Waste Sites	0	1	2	NO
CA Activity Use Restrictions	0	0	0	N/A
CA Spills, Leaks, Investigations, and Cleanups (SLIC)	7	6	7	NO
CA Solid Waste Landfills	1	0	1	NO
CA Oil and Gas Wells	0	0	0	N/A
CA Oil and Gas Wells	0	0	1	NO

Source: Terrax 2017

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#### Vapor Encroachment Screening

A Tier 1 Vapor Encroachment Screening (VES) was performed on the project in accordance ASTM Standard Practice E 2600-15 to identify the presence or likely presence of chemicals of concern caused by the release of vapors from contaminated soil or groundwater. Based on the findings of the Tier 1 VES a vapor encroachment condition is not an issue of concern for the project site (Terrax 2017a).

#### 5.7.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- H-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- H-2 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.
- H-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school.
- H-4 Be located on a site which is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.
- H-5 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 result in a safety hazard for people residing or working in the project area.
- H-6 For a project in the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area.
- H-7 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- H-8 Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to the urbanized areas or where residences are intermixed with wildlands.

No impacts relating to thresholds H-3, H-4, H-5, H-6, H-7, and H-8 were identified, as substantiated in Chapter 8, *Impacts Found Not to Be Significant*, of this DEIR.

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### 5.7.3 Environmental Impacts

#### 5.7.3.1 METHODOLOGY

This analysis evaluates the potential impacts of the proposed project on human health and the environment due to potential exposure of hazardous materials or conditions associated with the project site, project construction, and project operations. Numerous databases were searched as identified in Table 5.7-2 to determine the existing conditions of the site. Soil sampling was conducted in conformance with US EPA methods 6010B, 7471A, 8841B, 8081B, and 8151B. The proposed project's operations were evaluated in the context of the on-site and surrounding environmental conditions to determine the project's potential hazard risks.

#### 5.7.3.2 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which there are potentially significant or less than significant impacts. Effects of the project determined to have no impact are identified and described in Chapter 8 of this DEIR. The applicable thresholds are identified in brackets after the impact statement.

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**Impact 5.7-1: Project construction and operations would involve limited transport, use, and/or disposal of hazardous materials. [Thresholds H-1, and H-2]**

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#### *Impact Analysis:*

##### **Construction**

Construction activities would involve demolition, grading and construction of new buildings. Potentially hazardous materials used during construction include substances such as paints, sealants, solvents, adhesives, cleaners, and diesel fuel. There is potential for these materials to spill or to create hazardous conditions. However, the materials used would not be in such quantities or stored in such a manner as to pose a significant safety hazard. These activities would also be short term or one time in nature, and would cease upon completion of the proposed project's construction phase. Project construction workers would also be trained in safe handling and hazardous materials use.

The use, storage, transport, and disposal of construction-related hazardous materials would be required to conform to existing laws and regulations. Any project-related hazardous waste generation, transportation, treatment, storage, and disposal will be conducted in compliance with the Subtitle C of the Resource Conservation and Recovery Act (RCRA) (Code of Federal Regulations, Title 40, Part 263), including the management of non-hazardous solid wastes and underground tanks storing petroleum and other hazardous substances. The project will be designed and constructed in accordance with the regulations of the Orange County EHD, which serves as the designated CUPA and which implements State and federal regulations for the following programs: (1) Hazardous Waste Generator Program, (2) Hazardous Materials Release Response Plans and Inventory Program, (3) California Accidental Release Prevention (CalARP), (4) Above Storage Tank (AST) Program, and (5) Underground Storage Tank (UST) Program.

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Compliance with applicable laws and regulations governing the use, storage, transportation, and disposal of hazardous materials would ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts. For example, compliance with existing regulations would ensure that construction workers and the general public are not exposed to any risks related to hazardous materials during demolition and construction activities. Cal/OSHA has regulations concerning the use of hazardous materials, including requirements for safety training, exposure warnings, availability of safety equipment, and preparation of emergency action/prevention plans. Additionally, all spills or leakage of petroleum products during construction activities are required to be immediately contained, the hazardous material identified, and the material remediated in compliance with applicable state and local regulations for the cleanup and disposal of that contaminant. All contaminated waste would be required to be collected and disposed of at an appropriately licensed disposal or treatment facility. Therefore, hazards to the public or the environment arising from the routine use of hazardous materials during project construction would be less than significant. The project will not create any significant health risks to construction workers or members of the public.

#### Operation

Operation of the proposed commercial and office uses would involve the use of small amounts of hazardous materials, such as cleansers, paints, fertilizers, and pesticides for cleaning and maintenance purposes. However, the proposed land uses are not associated with uses that use, generate, store, or transport large quantities of hazardous materials; such uses generally include manufacturing, industrial, medical (e.g., hospital), and other similar uses.

Additionally, the use, storage, transport, and disposal of hazardous materials would be governed by existing regulations of several agencies, including the US EPA, US Department of Transportation, California Division of Occupational Safety and Health, and Orange County EHD. Compliance with applicable laws and regulations governing the use, storage, transportation, and disposal of hazardous materials would ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts. The proposed project would also be constructed and operated with strict adherence to all emergency response plan requirements set forth by the Orange County EHD and Orange County Fire Service. Therefore, substantial hazards to the public or the environment arising from the routine use, storage, transport, and disposal of hazardous materials during long-term operation of the proposed project would not occur. Implementation of the project will not create any significant health risks to future patrons or members of the public. Impacts would be less than significant.

*Level of Significance before Mitigation:* Impact 5.7-1 would be less than significant.

#### 5.7.4 Cumulative Impacts

The area considered for cumulative impacts is Orange County, the service area for EHD, the affected CUPA. The population of Orange County is forecast to increase from about 3.07 million in 2012 to 3.46 million in 2040, and employment in the County is forecast to increase from about 1.53 million to 1.90 million over the same period (SCAG 2016). Other projects would use, store, transport, and dispose of increased amounts of

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hazardous materials; and thus could pose substantial risks to the public and the environment. However, hazards and hazardous waste impacts are typically unique to each site and do not usually contribute to cumulative impacts. Cumulative development projects would be required to assess potential hazardous materials impacts on the development site prior to grading. The project and other cumulative projects would be required to comply with laws and regulations governing hazardous materials and hazardous wastes used and generated as described above in Section 5.7-1. Therefore, cumulative impacts related to hazards and hazardous materials would be less than significant after regulatory compliance.

*Level of Significance before Mitigation:* Cumulative impacts related to hazards and hazardous materials would be less than significant

### 5.7.5 Existing Regulations and Standard Conditions

This analysis assumes compliance with all applicable laws. The following codes, rules, and regulations pertain to hazards and hazardous materials and were described in detail in Section 5.7.1.1 of this DEIR and are listed below.

#### Federal

- United States Code Title 42 Sections 9601 et seq.: Comprehensive Environmental Response, Compensation and Liability Act and Superfund Amendments and Reauthorization Act
- United States Code Title 42 Sections 11001 et seq: Emergency Planning & Community Right to Know Act
- United States Code Title 42, Sections 6901 et seq.: Resource Conservation and Recovery Act
- United States Code Title 49 Sections 5101 et seq.: Hazardous Materials Transportation Act
- Code of Federal Regulations (CFR) Title 40 Sections Section 61
- CFR Title 29, Section 1926.62: Occupational health and environmental controls for lead

#### State

- California Health and Safety Codes Sections 25270.8, and 25507
- Vehicle Code Section 23112.5
- Public Utilities Code Section 7673, (PUC General Orders #22-B, 161)
- Government Code Sections 51018, 8670.25.5 (a)
- Water Codes Sections 13271, 13272,
- California Labor Code Section 6409.1 (b)10

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- California Health and Safety Code Chapter 6.95 (Hazardous Materials Release Response Plans and Inventory)
- California Accidental Release Prevention Program
- California Health and Safety Code Chapter 6.8: Hazardous Substances Account Act
- California Code of Regulations, Title 19, Section 2729: Business Emergency Plans
- California Fire Code (CCR Title 24, Part 9)
- California Health and Safety Code, Sections 17920.10 and 105255
- CCR Title 8, Sections 1529 and 1532.1: Worker Safety Standards (Asbestos and Lead)

#### Regional

- South Coast Air Quality Management District Rule 1403: Asbestos
- Orange County EHD: Certified Unified Program Agency
  - Hazardous Materials Business Plans
  - California Accidental Release Prevention Program
  - Underground Storage Tank (UST) Program
  - Hazardous Waste Generator and Onsite Hazardous Waste Treatment (tiered permitting) Programs
  - California Uniform Fire Code: Hazardous Materials Management Plans and Hazardous Material Inventory Statements
  - Aboveground Storage Tanks
  - Emergency Response for Hazardous Materials Releases

#### 5.7.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements, the following impacts would be less than significant: 5.7-1

#### 5.7.7 Mitigation Measures

No mitigation measures are required.

#### 5.7.8 Level of Significance After Mitigation

Impacts would be less than significant.

#### 5.7.9 References

California Department of Resource Recovery and Recycling (CalRecycle) Solid Waste Information System (SWIS). 2018. <http://www.calrecycle.ca.gov/SWFacilities/Directory/Search.aspx>.



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Department of Toxic Substances Control (DTSC). 2018, February 5. Glossary of Environmental Terms.  
[http://www.dtsc.ca.gov/InformationResources/Glossary\\_of\\_Environmental\\_Terms.cfm](http://www.dtsc.ca.gov/InformationResources/Glossary_of_Environmental_Terms.cfm).

Department of Toxic Substances Control (DTSC) EnviroStor. 2018.  
<http://www.envirostor.dtsc.ca.gov/public/>.

Southern California Association of Governments (SCAG). 2016, April 7. Demographics and Growth Forecast. Appendix to 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy.  
[http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS\\_DemographicsGrowthForecast.pdf](http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS_DemographicsGrowthForecast.pdf).

State Water Resources Control Board GeoTracker. 2015. <http://geotracker.waterboards.ca.gov/>.

Terrax Environmental, Inc. (Terrax). 2017a, September 1. Phase I Environmental Site Assessment, 31825 Los Rios Street, San Juan Capistrano, California 92675.

———. 2017b, September 27. Phase II Soil Site Investigation Report, 31825 Los Rios Street, San Juan Capistrano, California 92675.

United States Environmental Protection Agency (USEPA) EJScreen. 2017.  
<https://ejscreen.epa.gov/mapper/>.

United States Environmental Protection Agency (USEPA) EnviroMapper. 2017.  
<http://www.epa.gov/emefdata/em4ef.home>.

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