3.6 Environmental Contamination and Hazards

3.6.1 Introduction

This section describes effects related to environmental contamination and hazards that would be caused by implementation of the Tehachapi Renewable Transmission Project (TRTP). The following discussion addresses existing environmental conditions in the affected area, identifies and analyzes environmental impacts for a range of Project alternatives, and recommends measures to reduce or avoid adverse impacts anticipated from Project construction and operation. In addition, existing laws and regulations relevant to environmental contamination and hazards are described. In some cases, compliance with these existing laws and regulations would serve to reduce or avoid certain impacts that might otherwise occur with the implementation of the Project.

Scoping Issues Addressed

During the scoping period for the EIR/EIS (August-October 2007), a series of scoping meetings were conducted with the public and government agencies, and written comments were received by agencies and the public that identified issues and concerns. No issues relevant to environmental contamination and hazards were raised during the scoping process.

Summary and Comparison of Alternatives

Table 3.6-1 on the following page presents some key factors related to environmental contamination and hazards for each alternative. It is important to note that the "Environmental Issues" indicated in Table 3.6-1 are not impact statements, but rather selected information items that provide a comparison between the alternatives. Specific impact statements that have been identified for the Project and alternatives, in accordance with the significance criteria introduced in Section 3.6.4.1 (Criteria for Determining Impact Significance) are described in Sections 3.6.5 through 3.6.11.

3.6.2 Affected Environment

The study area includes eight separate segments (4-11) and substations, extending approximately 175 miles north to south incorporating parts of Kern, Los Angeles, and San Bernardino Counties in California. The majority of listed hazard sites are in the southern portion of the proposed Project in Los Angeles and San Bernardino counties.

To collect information on the existing conditions for the TRTP, a search of regulatory agency databases was conducted by Environmental Data Resources, Inc (EDR, 2007a and 2007b). The agency databases identify sites with current or past hazardous waste concerns, such as the use and storage of chemicals, leaks and spills of chemicals, and leaking underground storage tanks. Such database searches by third-party specialized contractors are often relied upon by agencies and others to identify known or potential sources of contamination. Review of other available regulatory agency databases (SWRCB Geotracker and DTSC Envirostor) and of aerial photographs to verify land uses of concern was also performed. This review was performed in order to note any issues related to use and storage of hazardous materials within the Project area.

Table 3.6-1. Summary Comparison of Environmental Issues – Environmental Contamination and Hazards

Environmental Issues	Alternative 1 (No Project/Action)	Alternative 2 (SCE's Proposed Project)	Alternative 3 (West Lancaster)	Alternative 4 (Chino Hills)	Alternative 5 (Partial Underground)	Alternative 6 (Max. Helicopter in ANF)	Alternative 7 (66-kV Subtransmission)
Soil contamination, including flammable or toxic gases, during construction (Impact E-1)	Construction of new T/Ls of comparable length and new, upgraded, or expanded substations in lieu of Project would have the same impacts.	Construct 853 new transmission structures across 172.9 miles (Total does not include 66-kV structures). Includes 12 temporary helicopter staging areas along Segments 6 and 11 supporting 6,633 (min.) to 9,339 (max.) helicopter round trips.	Construct 852 new transmission structures across 173.3 miles (Total does not include 66-kV structures).	Approximate number of new tower structures constructed and miles of T/L upgrades: Alt 4A: 762 T/L structures across approx. 157 miles; Alt 4B: 781 T/L structures across approx.161 miles; Alt 4C: 802 T/L structures across approx. 163 miles (includes re-routes of existing CHSP T/Ls); Alt 4D: 791 T/L structures across approx. 161 miles.	Construct 838 new transmission structures across 172.9 miles (Total does not include 66-kV structures).	Same as Alternative 2. Includes 11 temporary helicopter staging areas along Segments 6 and 11 supporting 27,423 (min.) to 38,335 (max.) helicopter round trips.	Same as Alternative 2.
Mobilization of contaminants currently existing in the soil (Impact E-2)	Construction of new T/Ls in urban areas with historic and recent commercial/industrial land uses in lieu of the Project would have the same impacts.	228 known contaminated sites within 0.25-mile of ROW.	Same as Alternative 2.	Known contamination sites within 0.25 mile of ROW: Alts 4A and 4B: 169; Alts 4C and 4D: 170. One known munitions testing/ disposal site within 150 feet of alignment.	Underground construction at shafts has increased potential to encounter pre-existing contaminated soil. Deep tunnel section likely below known soil and groundwater contamination.	Same as Alternative 2.	Underground construction of 0.6 mile of 66-kV subtransmission line in commercial land use areas has incrementally increased potential to encounter preexisting contaminated soil.
Exposure of workers and the public to landfill/natural gas (Impact E-3)	New T/Ls may or may not avoid landfills and oil fields.	19 landfills, 2 oil fields within 0.25-mile of ROW.	Same as Alternative 2.	Alts 4A, 4B, and 4C: 19 landfills, 2 oil fields within 0.25-mile of ROW; Alt 4D: 19 landfills, 4 oil fields within 0.25-mile of ROW.	Same as Alternative 2.	Same as Alternative 2.	Same as Alternative 2.

Table 3.6-1. Summary Comparison of Environmental Issues – Environmental Contamination and Hazards

Environmental Issues	Alternative 1 (No Project/Action)	Alternative 2 (SCE's Proposed Project)	Alternative 3 (West Lancaster)	Alternative 4 (Chino Hills)	Alternative 5 (Partial Underground)	Alternative 6 (Max. Helicopter in ANF)	Alternative 7 (66-kV Subtransmission)
Unanticipated preexisting soil and/or groundwater contamination could be encountered during excavation or grading (Impact E-4)	Construction of new T/Ls in urban areas with historic and recent commercial/industrial land uses in lieu of the Project would have the same impacts.	New T/Ls traverse 48.5 miles of urban area with commercial/industrial land use.	Same as Alternative 2.	New T/Ls traverse 32.5 miles of urban area with commercial/industrial land use.	Generally the same as Alternative 2. Only east transition station located in urban area; remainder of deep tunnel and shafts are in non-urban areas.	Same as Alternative 2.	Same as Alternative 2.
Contamination of soils or groundwater within the Project area during operation (Impact E-5)	Operation and maintenance (O&M) of comparably-sized substations and length of T/L would have the same impacts as the Project.	O&M of one new substation and 3 expanded substations and 172.9 miles of new T/L infrastructure (181.7 circuit miles).	Same as Alternative 2.	The total distance of any of the Alternative 4 routes would be shorter than Alternative 2, but all of these routes would result in O&M of one new substation, one new switching station, and two expanded substations. T/L upgrade distances: Alt. 4A – 157.2 miles; Alt. 4B – 160.8 miles; Alt. 4C – 162.8 miles; Alt. 4D – 160.8 miles.	Same as Alternative 2.	Same as Alternative 2.	Same as Alternative 2.
Mobilization of contaminants or encountering ordnance currently existing in the soil (Impact E-6)	Construction of new T/Ls in areas with historic and recent munitions testing and disposal in lieu of the Project would have the same impacts.	No known munitions testing and disposal sites within 0.25-mile of ROW.	Same as Alternative 2.	Known area of munitions testing and disposal within 0.25 mile of ROW: Alts 4A and 4B avoid the munitions areas; Alts 4C and 4D: construction areas and access routes may encounter munitions testing and disposal sites.	Same as Alternative 2.	Same as Alternative 2.	Same as Alternative 2.

The EDR database search for the proposed TRTP Segments 4-11 highlighted any sites within one mile of either side of the proposed alignment that are listed as past or current hazardous waste sites (EDR, 2007a). However, this section focuses on sites located within 0.25 mile of either side of the alignment as having real potential to impact the Project. Information about these sites was collected within the database report (EDR, 2007a) and reviewed for this analysis. The site-specific information is described in sections and tables below, each section representing a different segment of the proposed alignment or alternative to the Project.

No Phase I Environmental Site Assessments (ESAs) have been or were conducted as part of this study; however, SCE does plan to conduct Phase I ESA studies in areas of planned ground disturbance prior to Project construction.

3.6.2.1 Regional Setting

The transmission line for the proposed TRTP traverses land utilized for a variety of uses including: open-space recreation and preserve, national forest, residential housing, recreational, industrial and commercial businesses. Existing and past land use activities are used as potential indicators of hazardous material storage and use.

Many current and former commercial, industrial, and military sites have soil or groundwater that is contaminated by hazardous substances such as heavy metals, chemicals, solvents and vehicle fuel. Other hazardous materials sources include leaking underground storage tanks (LUSTs) in commercial, rural, and agricultural areas. Contaminated surface runoff may occur from polluted sites and agricultural fields that have been treated with pesticides, herbicides, and fumigants. In areas of past and current commercial or industrial use, contaminated groundwater plumes could exist along the transmission line routes.

Unknown contamination could also be present within the right-of-way (ROW) due to nearby past and current land uses. Examples of past and current land uses that could have resulted in unknown contamination include rural residences and farms that commonly have old or inactive underground fuel tanks (USTs); pesticide polluted runoff from agricultural properties; and commercial and industrial sites, historic and current, could have soil or groundwater contamination from unreported hazardous substance spills.

3.6.2.2 Alternative 2: SCE's Proposed Project

The proposed transmission line alignment and substation sites traverse and are located in areas with a mix of land uses, ranging from undeveloped to commercial and light industrial. Properties along the routes with land uses associated with hazardous material use, i.e. agricultural, commercial, and light industrial, have an increased potential to have had environmental contamination that may impact construction activities.

Segment 10

Segment 10 begins at the Windhub Substation site located within an unincorporated area of Kern County and traverses County land until it ends at the proposed Whirlwind Substation. Existing land uses along Segment 10 include residential, vacant, agricultural (grazing), and the Los Angeles Aqueduct. Aerial photographs along Segment 10 reveal vacant scrub land with scattered farms. One contaminated site with potential to impact the Project has been identified within 0.25 mile of the Segment 10 alignment (EDR, 2007a). This site is summarized in Table 3.6-2.

Table 3.6-2. Contaminated Sites within 0.25 mile of the Alignment Segment 10

EDR Map ID[1]	Site Name	Site Address	Database Lists	Comments
1	Alan Richard Dyer	7045 140th St West Rosamond, Ca	CDL	Illegal drug lab

Source: EDR, 2007a.
[1] EDR Environmental Information Data Site I.D. Number.
FEDERAL RECORDS
CDL: Clandestine Drug Lab

Segment 4

Segment 4 of the proposed Project traverses lands within unincorporated Kern County, unincorporated Los Angeles County, and the City of Lancaster. The predominant current land use traversed by the proposed Segment 4 is undeveloped open space, with a few small sections of scattered irrigated agriculture. Agricultural lands, including those that have been abandoned, are designated as Open and Non-developable. The existing land use of the last 2.2 miles of Segment 4 is predominantly vacant. There are no hazardous material sites listed within 0.25 mile of the Segment 4 alignment (EDR, 2007a).

Segment 5

Segment 5 extends from the Antelope Substation in the City of Lancaster to the existing Vincent Substation in Soledad Canyon. The predominant land use traversed by the proposed Segment 5 is undeveloped open space, with one small area devoted to agricultural use at S5 MP 5.8 through MP 7.4. Existing land uses also include vacant, residential, commercial, wildlife preserves and sanctuaries and electrical utility facilities. A review of aerial photos indicates some agricultural use, residential areas, mountainous open-space, and a low-density rural residential area approximately five miles northwest of the Vincent Substation. Planned residential developments are currently under construction throughout this area. There are two hazardous material sites within 0.25 mile of Segment 5 with potential to impact the proposed Project (EDR, 2007a). These sites are summarized below in Table 3.6-3.

Table 3.6-3. Contaminated Sites within 0.25 mile of the Alignment Segment 5

EDR Map ID[1]	Site Name	Site Address	Database Lists	Comments
2	Antelope Substation	9364 W Avenue J Lancaster, Ca	HIST UST	Unleaded fuel, no leak detected
3	Jason's Auto Parts	415 W Sierra Highway Palmdale, Ca	LUST	Waste oil leak, tank closure

Source: EDR, 2007a.
[1] EDR Environmental Information Data Site I.D. Number.
STATE AND LOCAL RECORDS
HIST UST: Hazardous Substance Storage Container Database, a historical listing of UST sites.
LUST: Leaking Underground Storage Tank report

Segment 11

Segment 11 begins at Vincent Substation in the High Desert area of the County of Los Angeles and ends at the Mesa substation. Existing land uses within the 0.5 mile wide buffer include vacant, residential, special use facilities, and wildlife preserve from S11 MP 0.0 to MP 18.7 (Gould Substation). From Gould Substation to the Mesa Substation, existing land uses within the 0.5-mile buffer are mostly urban uses, and include electrical power facilities, single family and other residential, school, commercial, industrial, public facilities, utilities, park, and agriculture.

Aerial photos show Segment 11 traverses open space land south from the Vincent substation through the ANF into the Gould substation. Then from Gould to Mesa substation, the alignment passes through commercial, residential, and industrial facilities that include car dealerships and service stations.

According to oil field maps (DOGGR, 2004a; DOGGR, 2006), Segment 11 approaches six plugged and abandoned wells (dry holes) within approximately 500 feet as it heads south towards the Mesa substation. These abandoned, dry wells pose a low risk from a health and safety standpoint.

Eighty-one contaminated sites are located within 0.25 mile of Segment 11 with potential to impact the proposed Project (EDR, 2007a). These sites are summarized below in Table 3.6-4. EDR Sites 20, 170, and 174 are designated as landfill operations, located at S11 MP 26, and at the Mesa substation, respectively. Site 33 is a designated US and Cal EPA Brownfield with Deed Restriction, located at mile marker S11 MP 28 in the City of Pasadena. Also of note, at approximately 1.5 miles west of the Segment 11 alignment and approximately 3 miles north of the Mesa substation, lies the San Gabriel Valley Groundwater Basin (Area 3) Superfund site (not listed in Table 3.6-4 due to distance from alignment).

Table 3.6-4. Contaminated Sites within 0.25 mile of the Alignment Segment 11

EDR Map ID[1]	Site Name	Site Address	Database Lists	Comments
10	Gould Substation	5858 Angeles Crest Hwy La Canada, Ca	RCRA-LQG	No violations found.
11	Conscon Davidson Homes	3900 Lincoln Ave N Altadena, Ca	LUST, Cortese	Diesel, case closed
12	Las Flores Debris Disposal Site	3400 Rubio Canyon Altadena, Ca	WMUDS/SWAT	
13	Kelly-Altadena	2400 Kinclair Drive Altadena, Ca	WMUDS/SWAT	
14	Los Angeles County Fire Station #066	2764 E Eaton Canyon Dr Pasadena, Ca	SWEEPS UST	
14	Pasadena Civil Defense Center	2783 Eaton Canyon Dr. Pasadena, Ca	UST	
15	Arco #875	1633 Altadena Dr Pasadena, Ca	LUST, Cortese	Gasoline. Affecting soil only. Case closed. Site not tested for MTBE.
16	F & F Fire Warden # 66	2764 New York Dr Pasadena, Ca	HIST UST	Diesel
16	City Of Pasadena	2783 New York Dr Pasadena, Ca	HIST UST, SWEEPS UST	Unleaded
17	Unocal #6088	1320 Altadena Dr N Pasadena, Ca	LUST, Cortese	Affecting soil only.
18	Eaton Debris Disposal Site	2986 New York Drive Pasadena, Ca	WMUDS/SWATUST, HIST UST, Los Angeles CO. HMS, SWEEPS UST	Regular, unleaded, diesel
18	Home Savings Pasadena Loan Center	2947 Bradley St Pasadena, Ca	Los Angeles CO. HMS, SWEEPS UST	
18	Pasadena Loan Service	2923 Bradley St Pasadena, Ca	CA FID UST, SWEEPS UST	Diesel
18	Avery Int Research Center	2900 Bradley St Pasadena, Ca	Los Angeles CO. HMS, SWEEPS UST	
19	Osborne Contractors	2900 Woodlyn Pasadena, Ca	WMUDS/SWAT	

Table 3.6-4. Contaminated Sites within 0.25 mile of the Alignment Segment 11

EDR Map ID[1]	Site Name	Site Address	Database Lists	Comments
20	North Avenue Dump / Osborn Construction	3100 New York Drive Pasadena, Ca	LF	
22	Burroughs Corp	460 N Sierra Madre Villa Ave Pasadena, Ca	LOS ANGELES CO. HMS, SWEEPS UST	
23	Service Station 2248	3275 E Foothill Blvd Pasadena, Ca	HIST UST, Los Angeles CO. HMS, UST, SWEEPS UST, LUST, Cortese	Unleaded, premium, waste oil. Affected soil only. MTBE detected
24	Naval Information Research Foundation; Space Bank Mini-Storage	3202 E. Foothill Blvd Pasadena, Ca	LUST, ENVIROSTOR, SLIC, RESPONSE, HIST CAL-SITES, FUDS	The level of contaminants at the site poses an unacceptable excess cancer risk of 4.4 x 10-4 due to arsenic, lead, mercury, thallium, Semi-VOCs, and other petroleum hydrocarbon. Based on this result, further action is required at the site.
25	Avon Products - Pasadena Branch	2940 E. Foothill Blvd. Pasadena, Ca	SWEEPS UST, HIST UST, LOS ANGELES CO. HMS, CA FID UST	Diesel
26	Thrifty #024	2800 Foothill Blvd E Pasadena, Ca	LUST, Cortese	Gasoline
29	ABC Cleaners	2982 E Colorado St Pasadena, Ca	CLEANERS	
29	Pasadena Chrysler-Plymouth	2965 E Colorado Blvd Pasadena, Ca	HIST UST, CA FID UST, LOS ANGELES CO. HMS, SWEEPS UST	Waste oil, unleaded
29	Arco Oil #14; Arco Petroleum Prod Co # 5184; Prestige Stations Inc #675	3100 E. Colorado Blvd. Pasadena, Ca	UST, CA FID UST, LOS ANGELES CO. HMS, SWEEPS UST, HIST UST	
29	Jack Wall Chevrolet	3003 E Colorado Blvd Pasadena, Ca	CA FID UST, HIST UST, LOS ANGELES CO. HMS, SWEEPS UST	Unleaded, diesel
30	Vince S Auto Service	3230 E. Colorado Blvd Pasadena, Ca	LOS ANGELES CO. HMS	
33	Kinneloa Ave Property; City of Pasadena	175 S Kinneloa Ave Pasadena, Ca	DEED, VCP, ENVIROSTOR, BROWNFIELD	Voluntary Cleanup of halogenated organic compounds, metals, other inorganic solid waste, asbestos containing materials. Cal DTSC Deed Restriction: no excavation or activities which disturb the soil at any depth without approval.
39	Mobil Oil Corp	2549 Huntington Dr San Marino, Ca	SWEEPS UST, CA FID UST	

Table 3.6-4. Contaminated Sites within 0.25 mile of the Alignment Segment 11

EDR Map ID[1]	Site Name	Site Address	Database Lists	Comments
39	M H Whittier Corp	1600 Huntington Dr South Pasadena, Ca	CA FID UST, SWEEPS UST	
39	Unocal Corp Ss 4356	2390 Huntington Dr San Marino, Ca	CA FID UST, SWEEPS UST	
40	Gasoline Storage Tank	3303 Huntington Dr Pasadena, Ca	HIST UST	unleaded
53	Ensign Jim Trucking	6336 N Lemon Ave San Gabriel, Ca	RCRA	1 violation record(s) reported at this site
74	Jefferson Middle School Expansion	1358/1364 - 1374 E. Las Tunas Dr San Gabriel, Ca	ENVIROSTOR	
74	Arco #9665/Former Thrifty Station #284	1386 E. Las Tunas Dr San Gabriel, Ca	LUST, Cortese	Tank replaced march 1998. 484 tons of contaminated soil removed and treated.
74	San Gabriel Cleaner	1307-1309 E Las Tunas Dr San Gabriel, Ca	CLEANERS	
75	88 Dry Cleaners	1131 E. Las Tunas Dr. San Gabriel, Ca	LUST, SLIC	VOC leak detected and confirmed 1999, case open
91	ETC Carpet Mills Ltd.	5012 Walnut Grove San Gabriel, Ca	LUST, Cortese	Diesel
91	Duke's Landscape Service	5009 Walnut Grove Ave San Gabriel, Ca	HIST UST	
91	Walnut Dyeing & Finishing	5012 N Walnut Grove Ave Rosemead, Ca	LOS ANGELES CO. HMS, SWEEPS UST	
92	Rayne Water Systems	8428 E Clanton St San Gabriel, Ca	LOS ANGELES CO. HMS	
94	Huy Fong Foods Inc	5001 Earle Ave; 5045 Earle Ave Rosemead, Ca	LOS ANGELES CO. HMS, LUST, SLIC	
94	Tur-Bo Jet Products Co	5025 Earle Ave. Rosemead, Ca	LUST, SLIC	VOC release
94	So Cal Edison Co; Rosemead Service Center	5016 Earle Ave Rosemead, Ca	LOS ANGELES CO. HMS, HIST UST, SWEEPS UST	Waste oil
94	Gordon Pest Control; Ladco Labs	4939 Earle Ave Rosemead, Ca	LOS ANGELES CO. HMS, HIST UST, LUST, SLIC	
94	San Gabriel County Water Dist	8366 Grand Ave. Rosemead, Ca	LUST, SLIC	
100	Pacific Bell	8633 Grand Ave Rosemead, Ca	LOS ANGELES CO. HMS, HIST UST, SWEEPS UST, UST, CA FID UST, LUST, SLIC	Waste oil
100	Calif-American Water Co	8657 Grand Ave Rosemead, Ca	HIST UST, SWEEPS UST	Unleaded
100	Sakaida Nursery Inc	8626 Grand Ave Rosemead, Ca	UST, LOS ANGELES CO. HMS, SWEEPS UST	

Table 3.6-4. Contaminated Sites within 0.25 mile of the Alignment Segment 11

EDR Map ID[1]	Site Name	Site Address	Database Lists	Comments
102	California Christian Home	8417 E Mission Dr San Gabriel, Ca	SWEEPS UST	
108	Alvarez. Charles & Jeanet	1425 Delta San Gabriel, Ca	Cortese	
110	Cal Brick & Tile	8632 Valley Blvd Rosemead, Ca	LOS ANGELES CO. HMS, SWEEPS UST	
110	Reliable Lumber Inc.	8614 Valley Blvd Rosemead, Ca	HIST UST, CA FID UST, LOS ANGELES CO. HMS, LUST, Cortese	gasoline
110	Gas Station; Century Pacific Associates; John's Service Station	8548 Valley Blvd Rosemead, Ca	CA FID UST, SWEEPS UST, Cortese, HIST UST, LUST	Affected soil only, unleaded, oil, premium, regular
111	Mac Boyd Estate-Mary Parker; Charlie Hanks	1029 E Valley Blvd San Gabriel, Ca	HIST UST, LOS ANGELES CO. HMS, SWEEPS UST	
121	Vacant Service Station	3365 Walnut Grove Ave Rosemead, Ca	LOS ANGELES CO. HMS. SWEEPS UST	
126	East - West Auto Center	3127 San Gabriel Blvd Rosemead, Ca	HIST UST	Waste oil
129	Gary Mankerian 14-886; Mobil Oil Corp; Wee Auto Sales Property	3003 San Gabriel Blvd Rosemead, Ca	HIST UST, LOS ANGELES CO. HMS, SWEEPS UST, LUST, Cortese	Waste oil, regular, unleaded
129	Arco #1285; Bob Sugasawara	8204 Garvey Ave Rosemead, Ca	LUST, Cortese, LOS ANGELES CO. HMS, SWEEPS UST, HIST UST	Gasoline, waste oil
129	Kmart Enterprises	8150 Garvey Ave Rosemead, Ca	HIST UST, LOS ANGELES CO. HMS, SWEEPS UST	Waste oil
131	Circle K Store #5221 Former	8609 Garvey Rosemead, Ca	Cortese, LUST, LOS ANGELES CO. HMS, SWEEPS UST	3 tanks removed 6/12/90. Contaminated soil back- filled, confirmation soil boring indicated very low levels of benzene and TPH
132	Ta-Ting Kan	8515 Garvey Ave Rosemead, Ca	HIST UST, SWEEPS UST	premium
133	California Target Enterprises Service Station 014	8350 Garvey Ave Rosemead, Ca	HIST UST, LUST, Cortese, SLIC, LOS ANGELES CO. HMS, SWEEPS UST	Diesel, regular
133	Laidlaw Harvey Davidson	8351 Garvey Ave Rosemead, Ca	LUST, LOS ANGELES CO. HMS	Waste oil

Table 3.6-4. Contaminated Sites within 0.25 mile of the Alignment Segment 11

EDR Map ID[1]	Site Name	Site Address	Database Lists	Comments
133	Laidlaw Harley Davidson	8399 Garvey Ave Rosemead, Ca	LUST	Waste oil
136	Los Angeles County Fire Dept Fire Station #005	2644 San Gabriel Blvd Rosemead, Ca	LOS ANGELES CO. HMS, SWEEPS UST, HIST UST, LUST, SLIC	Diesel, VOCs
136	Venus Motel Corp	2618 San Gabriel Blvd Rosemead, Ca	LOS ANGELES CO. HMS, SWEEPS UST	
136	Db Performance Engineering; Hui Property	2602 San Gabriel Blvd. Rosemead, Ca	LUST, SLIC, Cortese, LOS ANGELES CO. HMS	Gasoline, the UST had been removed before the Phase II.
136	Deanco, Inc. Upgrade Auto Parts	2445 San Gabriel Blvd Rosemead, Ca	HIST UST, LOS ANGELES CO. HMS	Unleaded, diesel
136	K.A. Fogg	2435 San Gabriel Blvd Rosemead, Ca	SWEEPS UST	
136	Lyndow Partners	2438 San Gabriel Blvd Rosemead, Ca	SWEEPS UST	
145	Southern California Edison; SCE - General Office Garage	8380 Klingerman St Rosemead, Ca	SWEEPS UST, UST	
160	San Gabriel Nursery	2015 Potrero Grande Dr Monterey Park, Ca	UST	
163	Union Bank Operations Center	1980 Saturn St Monterey Park, Ca	SWEEPS UST, UST, LOS ANGELES CO. HMS	
163	Sanwa Bank California	1977 Saturn St Monterey Park, Ca	LOS ANGELES CO. HMS, SWEEPS UST, UST	
166	Alpha Photonics	2019 Saturn St Monterey Park, Ca	RCRA, LQG	
167, 174	SCE - Montebello Service Center	1000 Potrero Grande Dr Monterey Park, Ca	UST, LOS ANGELES CO. HMS, LA Co. Site Mitigation, HIST UST, CA FID UST, SWEEPS UST, LUST, Cortese	Unleaded, waste oil
170, 174	Operating Industries, Inc. OII Landfill	900 Potrero Grande Drive Monterey Park, Ca	LF, LUST, WMUDS/SWAT CA BOND EXP. PLAN, HIST UST, ENVIROSTOR, HISTORICAL CAL-SITES, Cortese	Unleaded, diesel. Designated in Segment 7 as Superfund site (site 0).
174	Resurrection Cemetery	966 Potrero Grande Dr Rosemead, Ca	HIST UST	Unleaded, diesel

Table 3.6-4. Contaminated Sites within 0.25 mile of the Alignment Segment 11

EDR Map ID[1]	Site Name	Site Address	Database Lists	Comments
184	Southern California Edison; Mesa Substation	700 Potrero Grande Dr Monterey Park, Ca	LUST, LOS ANGELES CO. HMS, CA FID UST, SWEEPS UST, HIST UST	MTBE Detected.
184	Shell 4 U	430 Potrero Grande Dr Monterey Park, Ca	UST	

Source: EDR, 2007a.

[1] EDR Environmental Information Data Site I.D. Number.

FEDERAL RECORDS

FUDS: Formerly Used Defense Sites, locations of Formerly Used Defense Sites properties where the U.S. Army Corps of Engineers is actively working or will take necessary cleanup actions.

RCRA-LQG: Resource Conservation and Recovery Act Information, Large Quantity Generator

US BROWNFIELDS: A listing of Brownfield Sites

STATE AND LOCAL RECORDS

CA BOND EXP. PLAN: Bond Expenditure Plan

CA FID UST: Facility Inventory Database of Underground Storage Tank locations

CLEANERS: Cleaner Facilities, a list of drycleaner related facilities that have EPA ID numbers.

CORTESE: "Cortese" Hazardous Waste & Substances Sites List.

DEED: Deed Restriction Listing

ENVIROSTOR: EnviroStor Database

HISTORICAL CAL-SITES: Calsites Database; potential or confirmed hazardous substance release properties

HIST UST: Hazardous Substance Storage Container Database, a historical listing of UST sites.

LF: Active, closed and inactive landfills

LUST: Leaking Underground Storage Tank report

RESPONSE : State Response sites

SLIC: Spills, Leaks, Investigations, Cleanups cases

SWEEPS UST: Statewide Environmental Evaluation and Planning System, listing of USTs from 1980s.

UST: Active UST Facilities, Active UST facilities gathered from the local regulatory agencies

VCP: Voluntary Cleanup Program Properties

WMUDS/SWAT: Waste Management Unit Database System

COUNTY RECORDS

LOS ANGELES CO. HMS: Street number list of industrial waste and underground storage tank sites

Segment 6

Segment 6 begins at the Vincent Substation and traverses National Forest System (NFS) lands until it ends at the southern boundary of the ANF. Existing land uses are electrical power facilities (primarily within the Project ROW) and vacant, undeveloped open space within 0.25 mile of the alignment. Aerial photos reveal mountainous terrain until Segment 6 reaches Segment 7 just north of the City of Duarte. Five helicopter staging areas (SCE #6, 6B, 7, 8, and 9) will be graded within the ANF along the southern part of Segment 6. There are five hazardous material sites within 0.25 mile of the Segment 6 with potential to impact the proposed Project (EDR, 2007a). These sites are summarized below in Table 3.6-5.

Table 3.6-5. Contaminated Sites within 0.25 mile of the Alignment Segment 6

EDR Map ID[1]	Site Name	Site Address	Database Lists	Comments
4	Los Angeles County Forester & Fire Warden Mt. Gleason	26650 Angeles Forest Hwy Acton, Ca	HIST UST	Diesel
5	Los Angeles County Fire Camp #16	26652 Angeles Forest Hwy Palmdale, Ca	LUST; Cortese	Leak being confirmed
5	Los Angeles County Mt. Gleason Fire Camp 16 Inmate Camp	26650 Angeles Forest Hwy Palmdale, Ca	HIST UST CA FID UST; SWEEPS UST	Diesel, unleaded
6	Monte Cristo Station Angeles National Forest	23681 Angeles Forest Hwy Palmdale, Ca	HIST UST	Non-leaking UST removed in 1990s; currently 4 active ASTs
7	Tanbark Flats Angeles National Forest	Tanbark Station Rd Tanbark Flats, Ca	LUST; Cortese	Diesel leak, affecting soil only. Case closed.

Source: EDR, 2007a.

[1] EDR Environmental Information Data Site I.D. Number.

STATE AND LOCAL RECORDS

CA FID UST: Facility Inventory Database of Underground Storage Tank locations

CORTESE: "Cortese" Hazardous Waste & Substances Sites List.

HIST UST: Hazardous Substance Storage Container Database, a historical listing of UST sites.

LUST: Leaking Underground Storage Tank report

SWEEPS UST: Statewide Environmental Evaluation and Planning System, listing of USTs from 1980s.

Segment 7

Segment 7 begins at the ANF boundary in the northernmost portion of the City of Duarte and ends at the Mesa Substation. Areas within the ROW or flanking it within the northernmost 1.2-mile portion of Segment 7 are used exclusively as undeveloped open space. Continuing south all the way to Mesa Substation, areas within or adjacent to the ROW are in urban use and open space along the San Gabriel River. Existing SCE permitted secondary land uses within the ROW include the following: plant nurseries, golf course greens, at-grade vehicular parking lots, undeveloped industrial areas, and specialty fruit or vegetable crop production.

A portion of Segment 7 is within the northern boundary of the Montebello oil field in Los Angeles County for a distance of approximately 3.5 miles. The Montebello oil field was first discovered in 1917 and by the 1920s was producing one-eighth of California's crude oil (CTI, 2008). According to oil field maps (DOGGR, 2003), Segment 7 approaches 20 plugged and abandoned wells, either dry holes or previously oil producing, within approximately 500 feet. In addition, Segment 7 approaches two plugged and abandoned dry wells within approximately 500 feet, just north of the Rio Hondo substation (DOGGR, 2004a).

Within approximately 200 feet of the alignment, are eight completed oil wells (DOGGR, 2003). These wells are active, as the Montebello oil field is still producing. The new larger structures proposed for Segment 7 may require deeper foundations and the proximity to active oil wells, oil field waste, and subterranean methane must be considered.

Aerial photograph review shows Segment 7 borders the Santa Fe Flood Control Basin and follows the San Gabriel River south. Abundant commercial, residential and industrial sites are near the alignment.

Fifty sites were designated as contaminated or potentially contaminated within 0.25 mile of the Segment 7 with potential to impact the proposed Project, including landfill disposal sites, nurseries, trucking

companies, and gas stations (EDR, 2007a). Several EDR sites [35 (S7 MP 2), 47 (S7 MP 4.2), 50, 51, 52, 56 (S7 MP 4.3-4.4), 62, 64 (S7 MP 4.7-4.9), 165 (S7 MP 10.8), 185/193 (S7 MP 14.2-14.5), and 0 (Mesa Substation, S7 MP 15.8)] are noted as landfill operations, and are located along the San Gabriel River from I-210 southwest towards the Mesa substation. The Operating Industries Landfill (Site 0) is a designated Superfund site located immediately east of the Mesa Substation and incorporates 190 acres. Also of note, the Segment 7 alignment overlies the San Gabriel Valley (Area 1 and Area 2) designated Superfund sites. The groundwater Superfund site and on-going cleanup is a large regional effort to remove volatile organic compounds from the San Gabriel groundwater basin aquifers. The boundaries of the groundwater Superfund sites are more than 0.25 mile from the proposed Project and alignment. These sites are summarized below in Table 3.6-6.

Table 3.6-6. Contaminated Sites within 0.25 mile of the Alignment Segment 7

EDR Map ID[1]	Site Name	Site Address	Database Lists	Comments
0	Operating Industries Inc Landfill	2550 Greenwood Ave. Monterey Park, CA 91755	NPL, CERCLIS, RCRA-LQG, CORRACTS, CONSENT ROD	Designated Superfund site located at Mesa Substation, 900 Potrero Grande Drive, Monterey Park, CA, totaling 190 acres. Also listed in Segment 11 (Site 170, 174).
28	Maddock Debris Disposal Site	400 Vineyard Ave. Duarte, Ca	WMUDS/SWAT	
35	Watson Duarte Substation; Watson Biogas Systems - #400; Canyon Park Dump	1000 Las Lomas Rd Duarte, Ca	HIST UST, SWEEPS UST, LF	Diesel
35	Heyden-Canyon Park	1100 Fish Canyon Road Duarte, Ca	WMUDS/SWAT	
35	O Brien Mach Co	1100 Las Lomas Rd Duarte, Ca	LOS ANGELES CO. HMS, SWEEPS UST	
35	7-Eleven Store #20248 (2132); The Southland Corp Ss 20248	2705 Huntington Dr Duarte, Ca	HIST UST, LUST, Cortese, CA FID UST, LOS ANGELES CO. HMS, SWEEPS UST	Gasoline
35	Abor Nursery Inc.	2758 Huntington Dr Duarte, Ca	SWEEPS UST	
35	Mike Brown Grandstand	2800 Huntington Dr Duarte, Ca	LUST, Cortese, CA FID UST, SWEEPS UST, HIST UST	Affected soil only, gasoline, unleaded, diesel
47	Aldon Concrete Products Corp.; City of Irwindale Lvts Operation	2455 Buena Vista St. Irwindale, Ca	LUST, SLIC, HIST UST, LF	VOCs, diesel
50	Griffith Company; Irwindale Yard	1380 Arrow Hwy Irwindale, Ca	LUST, Cortese, LOS ANGELES CO. HMS, SWEEPS UST, HIST UST:	Gasoline, unleaded. Affected soil only.
50	The Muller Company	1440 Arrow Hwy Irwindale, Ca	LOS ANGELES CO. HMS	

Table 3.6-6. Contaminated Sites within 0.25 mile of the Alignment Segment 7

EDR Map ID[1]	Site Name	Site Address	Database Lists	Comments
50, 56	Livingston-Graham; Irwindale Quarry Landfill	13550 Live Oak Los Angeles, Ca	Cortese, LUST LOS ANGELES CO. HMS,LF, UST, WMUDS/SWAT	
50	Jonell Oil Corporation	13649 Live Oak Lane Irwindale, Ca	CERCLIS	
50	Owl Rock Products	13646 Live Oak Lane Irwindale, Ca	LOS ANGELES CO. HMS	
50	Consolidated Freightways Motorfreight	13645 Live Oak Ln Irwindale, Ca	LUST, Cortese	Diesel, affected soil only.
50, 64	Chem Arrow Corp.	13643 Live Oak Lane Irwindale, Ca	LOS ANGELES CO. HMS, Notify 65	
50, 62, 64	Nu-Way Live Oak Landfill/Waste Management, Inc.; Irwindale Site	13620 Live Oak Lane Irwindale, Ca	LF, LOS ANGELES CO. HMS, WMUDS/SWAT	
51	Nu-Way Arrow Reclamation, Inc.	1270 Arrow Highway Irwindale, Ca	LF	
52	Irwindale Rock Plant Dumpsite; United Rock Products-Pit No. 1	1245 Arrow Highway Irwindale, Ca	HIST UST, LF, LUST, UST	Waste oil, unleaded. MTBE Detected.
61	B & B Redi-Mix Concrete	590 Live Oak Ave Irwindale, Ca	LUST, Cortese, LOS ANGELES CO. HMS, SWEEPS UST, HIST UST	Hydrocarbons, affected soil only. Waste oil, diesel, unleaded.
61	Superior Fast Freight	600 Live Oak Irwindale, Ca	LOS ANGELES CO. HMS, SWEEPS UST, ENVIROSTOR	A medium priority PEA recommended because of potential release of asbestos.
62	Robertson's Ready Mix	13623 Live Oak Ln Baldwin Park, Ca 91706	UST	
64	Consolidated Freightways	13645 Live Oak Ave Irwindale, Ca	HIST UST, SWEEPS UST	
64	Griffis Warehouse	13654 E Live Oak Ave Irwindale, Ca	LOS ANGELES CO. HMS, SWEEPS UST	
72	Home Savings of America	1002 Commerce Dr Irwindale, Ca	SWEEPS UST	
78	Home Savings of America	5050 Commerce Dr Baldwin Park, Ca	SWEEPS UST	
81	Home Savings of America	4900 Rivergrade Rd Irwindale, Ca	HIST UST, SWEEPS UST	Diesel, waste oil, unleaded.
85	Lucent Technologies	4920 Rivergrade Rd Irwindale, Ca	RCRA LQG	
89	Bob Zadium Trucking	4600 Rivergrade Rd Baldwin Park, Ca	UST, HIST UST, SWEEPS UST	Diesel
97, 98	Southern California Edison; Irwindale Auto Service Center	13025 Los Angeles St Irwindale, Ca	LOS ANGELES CO. HMS, SWEEPS UST, CHMIRS, HIST UST, UST	Mineral Oil. While moving a transformer with a forklift, the transformer fell and broke. Oil went into a storm drain while it was raining. Waste Oil. Unleaded, diesel

Table 3.6-6. Contaminated Sites within 0.25 mile of the Alignment Segment 7

EDR Map ID[1]	Site Name	Site Address	Database Lists	Comments
97	United Ready Mixed Con Co Inc; Spancrete of California	13131 Los Angeles St Irwindale, Ca	HIST UST, SWEEPS UST, UST	Regular fuel
97	Industrial Asphalt	13130 Los Angeles St Irwindale, Ca	HIST UST, Cortese, LOS ANGELES CO. HMS, SWEEPS UST, LUST	Diesel, waste oil
98	Conrock Co Plant #3;	13000 Los Angeles St Irwindale, Ca	SWEEPS UST, AST, HIST UST	Diesel
115	Ghassan Abu Lashin; Mobil Oil Corp Service Station	12670 Ramona Blvd Baldwin Park, Ca	HIST UST, CA FID UST, SWEEPS UST, LUST, Cortese, UST	Waste oil, premium
117	Valle Lindo High School	12347 East Ramona Boulevard El Monte, Ca	LUST, ENVIROSTOR	Affected soil only, school clean-up
146	Fairchild Fasteners	13001 Temple Ave Industry, Ca	LUST, SLIC	VOCs
153	Woodland Farms Inc.;	263 San Fidel Ave La Puente, Ca	HIST UST, SWEEPS UST, UST	Premium, unleaded
165	Gallos Nursery Composting Operation	11528 Thienes Ave South El Monte, Ca	LF	
171	Ecology Auto Wrecking	2200 Greenwood Ave Monterey Park, Ca	SWEEPS UST	
173	Tosco/Unocal #31092; Unocal 76 Serv Station #6095;	1600 Paramount Blvd Montebello, Ca	UST, CHMIRS, SWEEPS UST, HIST UST, Cortese LUST	Unleaded, premium, waste oil
175	G&M Oil Co. #7; Petro Center; Eagle Stations	820 San Gabriel Blvd Rosemead, Ca	HIST UST, LUST, Cortese UST, SWEEPS UST	Waste oil, regular
176, 183	Los Angeles County Whittier Narrows Rec Ctr	823 Lexington Gallatin Rd. El Monte, Ca	HIST UST, UST	unleaded
177	Exxon Mobil Oil Corp; S. Girges	1220 Peck Rd South El Monte, Ca	RCRA LQG, LUST, HIST UST, LOS ANGELES CO. HMS, SWEEPS UST, UST	Gasoline, waste oil, MTBE Detected.
177	Peck Rd & Durfee Ave., El Monte	Peck Rd / Durfee Ave South El Monte, Ca	WMUDS/SWAT	
177	Shell Service Station; #204-7389-0232	1130 Peck Rd South El Monte, Ca	SWEEPS UST, LUST, Cortese, RCRA LQG., UST, HIST UST	MTBE Detected. SITE HAS LOCALIZED GROUNDWATER CONTAMINATION.
180	Montebello Shopping Center	San Gabriel Blvd Montebello, Ca	Notify 65, LUST, SLIC	
181	Lfo T. Salais	712 San Gabriel Blvd Rosemead, Ca	HIST UST	Regular, unleaded, waste oil
185	Chevron USA Service Station 091049; J. C. Penney Store #2172-5	1500 Paramount Blvd Montebello, Ca	UST, SWEEPS UST	

Table 3.6-6. Contaminated Sites within 0.25 mile of the Alignment Segment 7

EDR Map ID[1]	Site Name	Site Address	Database Lists	Comments
185	Montebello Earth Station	1300 Montebello Blvd Montebello, Ca	UST, LOS ANGELES CO. HMS	
185, 193	Chevron USA Production; Standard Oil of California	1400 Montebello Blvd Montebello, Ca	LF, HIST UST, SWEEPS UST, LUST, SLIC	unleaded
186		926 DURFEE AVE EL MONTE, CA	CHMIRS	Storage of materials illegally,
190	Chevron #9-3895	2422 Peck Whittier, Ca	Cortese, HIST UST, LUST	Contaminated soil found at several boring locations
190	Chevron Station 93856	2442 Peck Rd Whittier, Ca	SWEEPS UST, LUST, HIST UST, Cortese	
190	Los Angeles Truck Centers L; La Freightliner Inc	2429 Peck Rd Whittier, Ca	CA FID UST, CERCLIS-NFRA, SWEEPS UST, UST, LUST, Cortese	
197	U.S. Army Corps of Engineers	645 Durfee Ave. South El Monte, Ca	LUST, SLIC, Cortese	

Source: EDR, 2007a.

[1] EDR Environmental Information Data Site I.D. Number.

FEDERAL RECORDS

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System
CONSENT: Superfund (CERCLA) Consent Decrees
CORRACTS: Corrective Action Report
NPL: National Priority List (Superfund)
RCRA-LQG: Resource Conservation and Recovery Act Information, Large Quantity Generator
ROD: Records of Decision

STATE AND LOCAL RECORDS

AST: Aboveground Petroleum Storage Tank Facilities.
CA FID UST: Facility Inventory Database of Underground Storage Tank locations
CHMIRS: California Hazardous Material Incident Report System
CORTESE: "Cortese" Hazardous Waste & Substances Sites List.
ENVIROSTOR: EnviroStor Database
HIST UST: Hazardous Substance Storage Container Database, a historical listing of UST sites.
LF: Active, closed and inactive landfills
LUST: Leaking Underground Storage Tank report
NOTIFY 65: Proposition 65 Records, facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.
SLIC: Spills, Leaks, Investigations, Cleanups cases
SWEEPS UST: Statewide Environmental Evaluation and Planning System, listing of USTs from 1980s.
UST: Active UST Facilities, Active UST facilities gathered from the local regulatory agencies
WMUDS/SWAT: Waste Management Unit Database System

COUNTY RECORDS

LOS ANGELES CO. HMS: Street number list of industrial waste and underground storage tank sites

Segment 8

Segment 8A begins at the Mesa Substation and connects to the Chino Substation in the City of Chino. From the Chino Substation Segment 8A connects to the east at the Mira Loma Substation in the City of Ontario. Most of Segment 8A is located in urbanized areas within Los Angeles and San Bernardino Counties. Predominant existing land uses within the Segment 8A 0.5-mile wide buffer include agriculture,

electrical power facilities/utilities, parks/recreation, and vacant. Some commercial, industrial, and water uses are also located along Segment 8A. Within the eastern portion of Segment 8A, in the Cities of Chino Hills, Chino, and Ontario, existing land uses also include single family residential uses.

Segments 8B and 8C start at the Chino Substation and end at the Mira Loma Substation, and generally parallel Segment 8A. Existing land uses along Segment 8B and 8C are single family residential, agriculture, parks, vacant, electrical power facilities/utilities, public facilities, and industrial in the Cities of Chino and Ontario.

Aerial photos show Segment 8 traverses the San Gabriel River Whittier Narrows Reservoir flood control basin as it leaves the Mesa substation, then travels through major industrial parks, service stations, Nike missile battery silos, and residential housing developments, among other commercial and industrial facilities. The majority of Segments 8A, 8B, and 8C travel through approximately seven miles of dairy farms and farmland that are converting to residential tracts between the Chino and Mira Loma Substations.

The Segment 8A alignment, beginning approximately two miles east of the Mesa substation, is within the northern boundary of the Montebello oil field in Los Angeles County for a distance of approximately 1.5 miles. According to oil field maps (DOGGR, 2003), Segment 8A approaches 15 plugged and abandoned wells, either dry holes or previously oil producing, within approximately 500 feet. In this area, Segment 8A passes within approximately 200 feet of four completed oil wells (DOGGR, 2003). These wells are active, as the Montebello oil field is still producing. As discussed for Segment 7, construction of new towers in this area must consider the proximity to the wells, oil field contamination and subsurface methane during construction.

The proposed Segment 8A alignment then travels east through the abandoned Lapworth oil field, where it approaches approximately eight plugged and abandoned wells (dry holes) (DOGGR, 2006). As it travels east through Los Angeles County, the alignment approaches the northern boundaries of the Whittier and Sansinena oil field areas for approximately five miles. This portion of Segment 8A passes within 500 feet of ten plugged and abandoned wells (dry holes) (DOGGR, 2005). Continuing east to the Chino and Mira Loma Substations, eight plugged and abandoned wells (dry holes) are within approximately 300-500 feet of the proposed alignment (DOGGR, 2004b).

There are eighty-three hazardous material sites within 0.25 mile of Segment 8 (8A, 8B and 8C) portion of the proposed TRTP transmission route with potential to impact the Project (EDR, 2007a). These sites are summarized below in Tables 3.6-7 through 3.6-9. The tables include three landfills (EDR Sites 207, 219 and 254), located at approximately S8A MP 4.8, S8B MP 4.4 and S8B MP 0.3, respectively.

Table 3.6-7. Contaminated Sites within 0.25 mile of the Alignment Segment 8A

EDR Map ID[1]	Site Name	Site Address	Database Lists	Comments
195	Mobil Oil Corp Ss 11hnl	284 San Gabriel Blvd Montebello, Ca	CA FID UST, SWEEPS UST	
201, 202	Texaco Inc-Research Plant; Chevron/Texaco; Montebello Research Laboratory	329 Durfee Ave South El Monte, Ca	UST, LUST, SLIC, SWEEPS UST, RCRA LQG, HIST UST	Unleaded
204	Chemical Resource Corporation	12236 Coast Driver Whittier, Ca	HIST UST	
205	Shell Service Station	2600 Pellissier Pl Whittier, Ca	LUST	gasoline

Table 3.6-7. Contaminated Sites within 0.25 mile of the Alignment Segment 8A

EDR Map ID[1]	Site Name	Site Address	Database Lists	Comments
206	Arga's Mexican Food	2825 Pellissier Pl. Industry, Ca	LUST, Cortese	gasoline
207	Los Angeles County Sanitation District-Puente Hills Landfill	2800 Workman Mill Rd Whittier, Ca	LF, UST, ENVIROSTOR, WMUDS/SWAT LUST, Cortese, CHMIRS, RCRA LQG, HIST UST	Landfill gas condensate
207	Unitog Rental Services; Cintas	2829 Workman Mill Rd. Whittier, Ca	LUST, SLIC, SWEEPS UST, HIST UST, CLEANERS	
207	Viking Freight System Inc; Milne Truck Lines Inc; Fedex Freight West	3200 Workman Mill Rd Whittier, Ca	UST, HIST UST, SWEEPS UST, LUST	Diesel, unleaded, waste oil
207	Pac-Tel Cellular; Rio Hondo Microwave Station	3300 Workman Mill Rd Whittier, Ca	LOS ANGELES CO. HMS, HIST UST	
208	Kilsby Roberts Co.	3700 Capitol Ave La Puente, Ca	HIST UST	unleaded
208	Moore Business Forms Inc; Alum A Fold Pacific	3730 Capitol Avenue Whittier, Ca	CA FID UST, LOS ANGELES CO. HMS, HIST UST, SWEEPS UST, LUST, SLIC, RCRA LQG	Drinking water aquifer affected
208, 209	Genuine Parts Distributors; Tomapur Engine Co.	3737 Capitol Ave Whittier, Ca	UST, LUST, SLIC, Cortese	Drinking water aquifer affected
210	Rio Hondo Community Dist	3600 Workman Mill Rd Whittier, Ca	RCRA LQG, CA FID UST, SWEEPS UST, UST	Diesel, oil
213	Nike Battery 14 - Silos	Skyline Fire Road, Whittier, Ca	FUDS	
258	Layne Western Co/Mccalla	13855 Central Ave Chino, Ca	LUST, Cortese	
278	SCE-Chino Substation	5766 Edison Ave Chino, Ca	HIST UST, CA FID UST, SWEEPS UST	unleaded
280	Davidson Pwp	5150 Edison Chino, Ca	CA FID UST, SWEEPS UST	
280	Trus Joist, A Weyerhaeuser Business	5088 Edison Avenue Chino, Ca	CA FID UST, HIST UST, SWEEPS UST	
285	Chino Sieroty Property	14312 Central Ave Chino, Ca	CA FID UST, SWEEPS UST	Diesel, unleaded
290	Sundance Spas	14525 Monte Vista Ave Chino, Ca	RCRA LQG	There is 1 violation record reported at this site:
292	Superior Metal Shapes Inc	4730 Eucalyptus Ave Chino, Ca	RCRA LQG	
297	Pacific Coast Warehouse Co. Clorox; Pepsi Cola Sales And Distribution	4340 Eucalyptus Ave Chino, Ca	RCRA LQG	
298	Chino Fire District #2	4040 Eucalyptus Ave Chino, Ca	CA FID UST, SWEEPS UST, HIST UST, Notify 65, Cortese, LUST	diesel

Table 3.6-7. Contaminated Sites within 0.25 mile of the Alignment Segment 8A

EDR Map ID[1]	Site Name	Site Address	Database Lists	Comments
304	Chino Hills Cleaners	14564 Pipeline Ave Chino, Ca	CLEANERS	
304	Chino Hills Yard; Water Works 8	14575 Pipeline Ave Chino, Ca	LUST, Cortese, CA FID UST, SWEEPS UST, HIST UST	
304, 311	Chino Hills Car Wash	14694 Pipeline Ave Chino Hills, Ca	UST, LUST	
305	Jacuzzi Whirlpool Bath	14880 Monte Vista Ave Chino, Ca	RCRA LQG	
307	Proctor And Gamble Distributing Co	14701 Yorba Ave Chino, Ca	RCRA LQG	
311	Marketplace Cleaners	4200 Chino Hills Pkwy 168 Chino, Ca	CLEANERS	
311	Circle K #5728	4200 Chino Hills Parkway #205 Chino Hills, Ca	LUST, UST	MTBE Detected.
311	Arco #1923	4080 Chino Hills Pkwy Chino, Ca	LUST, Cortese	Drinking water aquifer affected
311	Arco #5656	4123 Chino Hills Parkway Chino Hills, Ca	LUST	MTBE Detected.
312	Ca Institute For Men Dairy Barn; Brine Pond	14901 Central Ave Chino, Ca	SLIC, LUST, WMUDS/SWAT	Drinking water aquifer affected
313	Dupree Property	14800 Rustic Dr Chino Hills, Ca	LUST, Cortese	
314	Qwt Rmlr Rcl	3421 Belle River Dr Whittier, Ca	CA FID UST, SWEEPS UST	Petroleum, one 500 gallon tank
316	Abbona Property	3150 Chino Hills Parkway Chino Hills, Ca	LUST	MTBE Detected.
319	McFarland Energy Reilly And Hearn	650 W Skyline Dr La Habra, Ca	HIST UST	Oil & Gas Production, 7 tanks on site
321	Fantastic Cleaners	2010 La Habra Blvd La Habra, Ca	CLEANERS	
321	Hanoco	1951 La Habra Blvd La Habra, Ca	LUST, Cortese	Gasoline spill. Soil only. Release date 2-11-1987. Case closed.
322	Rowland Water District	3021 Fullerton Rd Rowland Heights, Ca	UST	
324	Nike Battery 29	Brea, Ca	FUDS	Facility removed

Source: EDR, 2007a.

[1] EDR Environmental Information Data Site I.D. Number.

FEDERAL RECORDS

FUDS: Formerly Used Defense Sites, locations of Formerly Used Defense Sites properties where the U.S. Army Corps of Engineers is actively working or will take necessary cleanup actions.

RCRA-LQG: Resource Conservation and Recovery Act Information, Large Quantity Generator

STATE AND LOCAL RECORDS

CA FID UST: Facility Inventory Database of Underground Storage Tank locations

CHMIRS: California Hazardous Material Incident Report System

CLEANERS: Cleaner Facilities, a list of drycleaner related facilities that have EPA ID numbers.

CORTESE: "Cortese" Hazardous Waste & Substances Sites List.

ENVIROSTOR: EnviroStor Database

HIST UST: Hazardous Substance Storage Container Database, a historical listing of UST sites.

LF: Active, closed and inactive landfills

LUST: Leaking Underground Storage Tank report

NOTIFY 65: Proposition 65 Records, facility notifications about any release which could impact drinking water and thereby expose the public to a potential health risk.

SLIC: Spills, Leaks, Investigations, Cleanups cases

SWEEPS UST: Statewide Environmental Evaluation and Planning System, listing of USTs from 1980s.

UST: Active UST Facilities, Active UST facilities gathered from the local regulatory agencies
WMUDS/SWAT: Waste Management Unit Database System
COUNTY RECORDS
LOS ANGELES CO. HMS: Street number list of industrial waste and underground storage tank sites

Table 3.6-8. Contaminated Sites within 0.25 mile of the Alignment Segment 8B

EDR Map ID[1]	Site Name	Site Address	Database Lists	Comments
216	Worm Farm	8271 Chino Avenue Ontario, Ca	LUST, WMUDS/SWAT	
219	Artesia Sawdust Products	13434 South Ontario Avenue Ontario, Ca	LF	
220	Joe Heim & Sons Dairy	13456 S Walker Ave Ontario, Ca	HIST UST, CA FID UST, SWEEPS UST	regular
221	Mira Loma Substation	13568 Milliken Ave. Mira Loma, Ca	HIST UST	Fuel tank on site
226	Vanderham Bros Dairy	13575 Walker Ontario, Ca	CA FID UST, SWEEPS UST, HIST UST	unleaded
233	Ag-Kamstra Dairy	8921 Schaefer Ave Ontario, Ca	UST	
234	Composting Plant, Ontario	8605 Schaefer Avenue Ontario, Ca	WMUDS/SWAT	
237, 238	Vander Schaaf Dairy	7849 Schaefer Ontario, Ca	CA FID UST, SWEEPS UST, HIST UST, UST	unleaded
240	Ag-Rodgriguez, Antonio	7416 Schaefer Ave Chino, Ca	UST, HIST UST, CA FID UST, SWEEPS UST	
244	Fikse & Co	13710 So Euclid Ontario, Ca	LUST, Cortese	
253	RMS Finishing Inc	5777 Soestern Ct Chino, Ca	RCRA LQG	
253	American Eagle Wheel Corp	5780 Soestern Court Chino, Ca	RCRA LQG	
253	M Company	13925 Benson Ave Chino, Ca	HIST UST, SWEEPS UST	
253	Edison/Chino; SCE-Chino Substation	14005 Benson Ave. Chino, Ca	VCP, ENVIROSTOR	Voluntary Clean-up Agreement
254	Penske Truck Leasing Co; California Milk Producers	13980 Magnolia Ave Chino, Ca	UST, LUST, Cortese	
254	Mission Landscape Services, Inc.	14025 Magnolia Avenue Chino, Ca	LF	
256	K & W Dairy #2	13844 San Antonio Ave Chino, Ca	HIST UST, CA FID UST, SWEEPS UST	
260	Savannah Corp.;	13818 Oaks Ave Chino, Ca	CA FID UST, SWEEPS UST, HIST UST	unleaded
260	Sunshine Metal Prods; Reed Manufacturing; Chino Valley Galvanizing Co, Inc.	13822 Oaks Ave Chino, Ca	CERCLIS-NFRAP, HIST UST, ENVIROSTOR	

Source: EDR, 2007a.
[1] EDR Environmental Information Data Site I.D. Number.
FEDERAL RECORDS
CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System
RCRA-LQG: Resource Conservation and Recovery Act Information, Large Quantity Generator
STATE AND LOCAL RECORDS

CA FID UST: Facility Inventory Database of Underground Storage Tank locations
CORTESE: "Cortese" Hazardous Waste & Substances Sites List.
ENVIROSTOR: EnviroStor Database
HIST UST: Hazardous Substance Storage Container Database, a historical listing of UST sites.
LF: Active, closed and inactive landfills
LUST: Leaking Underground Storage Tank report
SWEEPS UST: Statewide Environmental Evaluation and Planning System, listing of USTs from 1980s.
UST: Active UST Facilities, Active UST facilities gathered from the local regulatory agencies
VCP: Voluntary Cleanup Program Properties
WMUDS/SWAT: Waste Management Unit Database System

Table 3.6-9. Contaminated Sites within 0.25 mile of the Alignment Segment 8C

EDR Map ID[1]	Site Name	Site Address	Database Lists	Comments
229	Johnson Bros. Egg Ranches, Inc	13610 S Archibald Ave Ontario, Ca	CA FID UST, SWEEPS UST, HIST UST	3 fuel tanks on site
231	C. Vander Eyk Jr.	13661 Haven Ontario, Ca	CA FID UST, SWEEPS UST, HIST UST, UST	Fuel tanks on site. Dairy farm.
245, 251	Dick Dykstra Dairy	10129 Schaefer Ontario, Ca	CA FID UST, SWEEPS UST, HIST UST	Fuel tanks on site
246	Standard Feeding Co.	13751 S Haven Ave Ontario, Ca	HIST UST, CA FID UST, SWEEPS UST	Fuel tank on site
246	Oord Dairy, Inc.	13750 S Haven Ave Ontario, Ca	HIST UST, CA FID UST, SWEEPS UST	
246	Ag-Standard Feeding Co-On	13751 S Haven Ave Ontario, Ca	UST	
261	Cabot Investments	13926 Euclid Ave Chino, Ca	LUST, Cortese	MTBE Detected.
267	Robert Ford Trucking; Valley Hay Company	14042 Euclid Ave Chino, Ca	UST, LUST, Cortese	
267	Germania Dairy Center; Veterinarian's Outlet	14058 Euclid Ave Chino, Ca	CA FID UST, SWEEPS UST, LUST, Cortese	
267	Dora Pickering	14080 Euclid Ave Chino, Ca	HIST UST	Regular
267	Dora Pickering	7050 Edison Ave. Chino, Ca	HIST UST	
267	Euclid Pump Station	7152 Euclid Ave. Chino, Ca	HIST UST	
267	Charlie Tadema Inc.	7145 Edison Ave Chino, Ca	UST	
267	Mars Market	14107 Euclid Ave Chino, Ca	CA FID UST, SWEEPS UST, LUST, Cortese, HIST UST	Premium, regular
268	Struikmans & Sons Dairy	8535 Edison Ave Chino, Ca	HIST UST, UST, CA FID UST, SWEEPS UST	Regular
271	Jack Alewyn Dairy	8185 Edison Chino, Ca	CA FID UST, SWEEPS UST, HIST UST, UST	Diesel
274	Ag-Twin Palm Dairy	7587 Edison Ave Chino, Ca	UST	
277	Koetsier Bros. Dairy	6555 Edison Ave Chino, Ca	HIST UST	

Table 3.6-9. Contaminated Sites within 0.25 mile of the Alignment Segment 8C

EDR Map ID[1]	Site Name	Site Address	Database Lists	Comments
277	Tino Usle Sales	6577 Edison Ave Chino, Ca	HIST UST, CA FID UST, SWEEPS UST	
284	J.P. Loubet	14211 Euclid Ave Chino, Ca	LUST, Cortese, SWEEPS UST	Unleaded, diesel

Source: EDR, 2007a.

[1] EDR Environmental Information Data Site I.D. Number.

STATE AND LOCAL RECORDS

CA FID UST: Facility Inventory Database of Underground Storage Tank locations

CORTESE: "Cortese" Hazardous Waste & Substances Sites List.

HIST UST: Hazardous Substance Storage Container Database, a historical listing of UST sites.

LUST: Leaking Underground Storage Tank report

SWEEPS UST: Statewide Environmental Evaluation and Planning System, listing of USTs from 1980s.

UST: Active UST Facilities, Active UST facilities gathered from the local regulatory agencies

Segment 9

Segment 9 involves the construction, operation, and maintenance of the substation improvements. The proposed Whirlwind Substation sites are currently utilized either as open space or for agricultural use. The proposed 18-acre expansion to the existing Antelope Substation is currently exclusively under an undeveloped open space use. The proposed expansion to the existing Vincent Substation to be acquired is currently an undeveloped open space use. Existing land uses within the 0.5-mile buffer include vacant, electrical power facilities, and some scattered residential uses.

Land use designation and zoning for the Gould Substation are Open Space (Public). Existing land uses within the site are identified as electrical power facilities, and existing uses within the 0.5-mile buffer also include residential, vacant, golf course, and electrical power facility uses.

Land use designation for the Mesa Substation is General Commercial. Existing land uses within the site are identified as electrical power facilities, and existing uses within the 0.5-mile buffer also include commercial, utilities, vacant, and residential uses.

Land use designation for the Mira Loma Substation is Agriculture and the zoning is Specific Plan. Existing land uses within the site are identified as agriculture/vacant and existing uses within the 0.5-mile buffer also include commercial, water, and school.

Twenty-two contaminated sites with potential to impact the Project have been identified within 0.25 mile of Segment 9 substation construction (EDR, 2007a). These sites are summarized below in Table 3.6-10.

Table 3.6-10. Contaminated Sites within 0.25 mile of Segment 9 Substations

EDR Map ID [1]	Site Name	Site Address	Database Lists	Comments
0	Operating Industries Inc Landfill	2550 Greenwood Ave. Monterey Park, CA 91755	NPL, CERCLIS RCRA-LQG CORRACTS CONSENT ROD	Designated Superfund site located at Mesa Substation, 900 Potrero Grande Drive, Monterey Park, CA, totaling 190 acres. Also listed in Segment 11 (Site 170, 174).
2	Antelope Substation	9364 W Avenue J Lancaster, Ca	HIST UST	Unleaded fuel, no leak detected
10	Gould Substation	5858 Angeles Crest Hwy La Canada, Ca	RCRA-LQG	No violations found.

Table 3.6-10. Contaminated Sites within 0.25 mile of Segment 9 Substations

EDR Map ID [1]	Site Name	Site Address	Database Lists	Comments
160	San Gabriel Nursery	2015 Potrero Grande Dr Monterey Park, Ca	UST	
163	Union Bank Operations Center	1980 Saturn St Monterey Park, Ca	SWEEPS UST, UST, LOS ANGELES CO. HMS	
163	Sanwa Bank California	1977 Saturn St Monterey Park, Ca	LOS ANGELES CO. HMS, SWEEPS UST, UST	
166	Alpha Photonics	2019 Saturn St Monterey Park, Ca	RCRA, LQG	
167, 174	SCE - Montebello Service Center	1000 Potrero Grande Dr Monterey Park, Ca	UST, LOS ANGELES CO. HMS, LA Co. Site Mitigation, HIST UST, CA FID UST, SWEEPS UST, LUST, Cortese	Unleaded, waste oil
170, 174	Operating Industries, Inc. OII Landfill	900 Potrero Grande Drive Monterey Park, Ca	LF, LUST, WMUDS/SWAT CA BOND EXP. PLAN, HIST UST, ENVIROSTOR, HISTORICAL CAL-SITES, Cortese	Unleaded, diesel. Designated in Segment 7 as Superfund site (site 0).
171	Ecology Auto Wrecking	2200 Greenwood Ave Monterey Park, Ca	SWEEPS UST	
174	Resurrection Cemetery	966 Potrero Grande Dr Rosemead, Ca	HIST UST	Unleaded, diesel
184	Southern California Edison; Mesa Substation	700 Potrero Grande Dr Monterey Park, Ca	LUST, LOS ANGELES CO. HMS, CA FID UST, SWEEPS UST, HIST UST	MTBE Detected.
184	Shell 4 U	430 Potrero Grande Dr Monterey Park, Ca	UST	
221	Mira Loma Substation	13568 Milliken Ave. Mira Loma, Ca	HIST UST	Fuel tank on site
229	Johnson Bros. Egg Ranches, Inc	13610 S Archibald Ave Ontario, Ca	CA FID UST, SWEEPS UST, HIST UST	3 fuel tanks on site
231	C. Vander Eyk Jr.	13661 Haven Ontario, Ca	CA FID UST, SWEEPS UST, HIST UST, UST	Fuel tanks on site. Dairy farm.
245, 251	Dick Dykstra Dairy	10129 Schaefer Ontario, Ca	CA FID UST, SWEEPS UST, HIST UST	Fuel tanks on site
246	Standard Feeding Co.	13751 S Haven Ave Ontario, Ca	HIST UST, CA FID UST, SWEEPS UST	Fuel tank on site
246	Oord Dairy, Inc.	13750 S Haven Ave Ontario, Ca	HIST UST, CA FID UST, SWEEPS UST	
246	Ag-Standard Feeding Co-On	13751 S Haven Ave Ontario, Ca	UST	

Source: EDR, 2007a.
[1] EDR Environmental Information Data Site I.D. Number.
FEDERAL RECORDS
CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System
CONSENT: Superfund (CERCLA) Consent Decrees
CORRACTS: Corrective Action Report
NPL: National Priority List (Superfund)
RCRA-LQG: Resource Conservation and Recovery Act Information, Large Quantity Generator
ROD: Records of Decision
STATE AND LOCAL RECORDS
CA BOND EXP. PLAN: Bond Expenditure Plan
CA FID UST: Facility Inventory Database of Underground Storage Tank locations
CORTESE: "Cortese" Hazardous Waste & Substances Sites List.
ENVIROSTOR: EnviroStor Database
HISTORICAL CAL-SITES: Calsites Database; potential or confirmed hazardous substance release properties
HIST UST: Hazardous Substance Storage Container Database, a historical listing of UST sites.
LF: Active, closed and inactive landfills
LUST: Leaking Underground Storage Tank report
SWEEPS UST: Statewide Environmental Evaluation and Planning System, listing of USTs from 1980s.
UST: Active UST Facilities, Active UST facilities gathered from the local regulatory agencies
WMUDS/SWAT: Waste Management Unit Database System
COUNTY RECORDS
LOS ANGELES CO. HMS: Street number list of industrial waste and underground storage tank sites

3.6.2.3 Alternative 3: West Lancaster Alternative

Alternative 3 is identical to the proposed Project, except for one deviation. It would re-route the new 500-kV T/L in Segment 4 along 115th Street West rather than 110th Street West. This alternative would deviate from the proposed route at approximately S4 MP 14.9,where the new 500-kV T/L would turn south down 115th Street West for approximately 2.9 miles and turn east for approximately 0.5 mile, rejoining the proposed route at S4 MP 17.9. This re-route traverses through undeveloped land with scattered residential use along West Avenue I and J and would increase the overall distance of Segment 4 by approximately 0.4 mile. There are no additional listed hazard sites within the re-routed section of Segment 4 (EDR, 2007a).

3.6.2.4 Alternative 4: Chino Hills Route Alternatives

Alternative 4, which includes Routes A, B, C, and D, is identical to the proposed Project, except for a portion of Segment 8 2. These routes deviate from the proposed Project beginning at approximately S8A MP 19.2 and head southeast towards Chino Hills State Park (CHSP), terminating at a new switching station. Environmental setting information relative to these re-routes that differ from Alternative 2 (SCE's Proposed Project) is detailed below.

Route A

The proposed switching station at the east end of Route A is located about one mile southeast of the Chino-Soquel oil field and two miles west of the Mahala oil field. These small fields were discovered pre-1900 and 1921, respectively, with modest production continuing into the late 1950s (Durham and Yerkes, 1964). There are no oil wells near the switching station site or along the Route A alignment in the Chino Hills. There are no hazardous material sites listed within 0.25 mile of the Alternative 4 Route A alignment (EDR, 2007b).

Route B

The proposed switching station is located about one mile northeast of the Mahala oil field and the nearest dry hole is more than 500 feet east; there are no oil wells within 1,000 feet of the switching station site. The proposed Route B alignment continues west avoiding the area oil fields. There are no hazardous material sites listed within 0.25 mile of the Alternative 4 Route B alignment (EDR, 2007b).

Route C

The proposed switching station and the transmission line re-route alignments of Route C are located about one mile south of the Chino-Soquel oil field. The Aerojet Chino Hills Facility is located immediately west of the oil field and the 800-acre munitions assembly and test facility extends south toward the Route C transmission line. The Aerojet facility is a designated RCRA Corrective Action Site and is actively undergoing cleanup (DTSC, 2008). The Aerojet facility operated from 1954 until it was closed in November 1995 (DTSC, 2008). The site closure investigation field work and site clean up began in 1994 with field work completed in fall 2007. Although significant clean up was required at 10 of the 29 solid waste management units, all of these are located more than 0.25 mile from the Alternative Route C alignment and the proposed switching station. Solid waste management unit (SWMU) #9 is located about 0.7 mile west of the proposed switching station but only 100 feet north of the Route C alignment (McLaren/Hart, 1999a). SWMU #9 was a relatively small unlined burn pit (approximately 500 cubic feet) used from 1954 to 1977 to burn CS (tear gas) (McLaren/Hart 1999b). Soil testing results at SWMU #9 identified very low levels of dioxin/furan, CS, and semi-volatile organic compounds (SVOCs). The low levels of residual chemicals detected in the soil were determined to not pose a risk to human health, including carcinogenic risk (Mclaren/Hart 1999a). Subsequent to the soil testing, a workplan outlined procedures to excavate the soil and CS canisters from the former burn pit, remove the CS canisters by screening, dispose of the recovered CS canisters off site, and use the screened soil to backfill the excavation (McLaren/Hart, 1999b). However, at the time of publication of this document, no reports to verify that this work was completed, if the integrity of the CS canisters was compromised, or if confirmation soil testing was performed, have been made available to the authors.

There is one hazardous material site listed within 0.25-mile of the Alternative 4, Route C, alignment; one option for the proposed permanent all-weather access road to the switching station passes through the active RCRA facility (EDR, 2007b), as presented below in Table 3.6-11.

Table 3.6-11. Contaminated Sites within 0.25 mile of the Alternative 4 - Route C Alignment

EDR Map ID[1]	Site Name	Site Address	Database Lists	Comments
None (Orphan List Only)	Aerojet Chino Hills Facility	End of Woodview Road Chino Hills, Ca	CORRACTS, ENVIROSTOR	Solid Waste Management Unit #9 located about 100 feet north of the proposed re-routed 220-kV line. Soil testing indicated no risk for human health prior to site clean. No records of site remediation.

Source: EDR, 2007b.

[1] EDR Environmental Information Data Site I.D. Number.

FEDERAL RECORDS

CORRACTS: Corrective Action Report

STATE AND LOCAL RECORDS

ENVIROSTOR: EnviroStor Database

Route D

The proposed switching station is less than 500 feet from the nearest dry drill hole, but more than 1,000 feet from oil wells of the Mahala oil field. The Route D Alternative alignment passes near the southeast part of the Chino-Soquel oil field. The proposed alignment passes very near dry drill holes but remains more than 1,000 feet from the completed oil wells. Route D Alternative transmission line passes through the southern end of the 800-acre Aerojet Chino Hills Facility munitions assembly and test facility. The Aerojet facility operated from 1954 until it was closed in November 1995 (DTSC, 2008) and a former burn pit (SWMU #9) is located about 200 feet north of the Route D alignment (McLaren/Hart, 1999a). Ordinance has been discovered during geophysical sweeps of CHSP lands adjacent to the Aerojet property.

There is one hazardous material site listed within 0.25-mile of the Alternative 4, Route D, alignment (EDR, 2007b) as presented below in Table 3.6-12.

Table 3.6-12. Contaminated Sites within 0.25 mile of the Alternative 4 - Route D Alignment

EDR Map ID[1]	Site Name	Site Address	Database Lists	Comments
None (Orphan)	Aerojet Chino Hills Facility	End of Woodview Road Chino Hills, Ca	CORRACTS, ENVIROSTOR	Solid Waste Management Unit #9 located about 200 feet north of the proposed Route D alignment. Soil testing indicated no risk for human health prior to site clean. No records of site remediation.

Source: EDR, 2007a
[1] EDR Environmental Information Data Site I.D. Number.
FEDERAL RECORDS
CORRACTS: Corrective Action Report
STATE AND LOCAL RECORDS
ENVIROSTOR: EnviroStor Database

3.6.2.5 Alternative 5: Partial Underground Alternative

This alternative would utilize underground construction in place of the proposed overhead line construction following generally the same routes as the proposed Project from MP 8A-21.9 to MP 8A-25.4. New underground facilities would not replace existing aboveground facilities, and transition stations would be required at each end of an underground segment to transfer the transmission lines from overheard to underground and vice versa. Three access/ventilation shafts would be constructed at approximately one mile intervals. Therefore, the affected environmental for Alternative 5 would be identical to that of Alternative 2, as presented above in Section 3.6.2.2.

3.6.2.6 Alternative 6: Maximum Helicopter Construction in the ANF Alternative

Implementation of this alternative would result in the grading of eleven helicopter staging areas within or near Angeles National Forest lands near Segment 6 (between MP 3.0 and 19.6) and Segment 11 (MP 3.7 and 14.5). No other additional routing alternatives or work areas are included in Alternative 6. Therefore, please refer to Section 3.6.2.2 for listed hazardous materials sites along the proposed alignment. Helicopter Site #7 – Barley Flat is a former U.S. Air Force Nike Missile site and is currently operated as a helipad by the Los Angeles County Sheriff Department. The Nike missile site included mission control and mission launch facilities completed in 1955; the facility was deactivated in 1961 and only the administration buildings remain in serviceable condition. There are no known contamination issues at the site (GeoTracker, 2008). Use of the existing helipad for the proposed Project will not require significant

grading, use, or demolition of any existing structures. Due to the age of the facilities there is potential for asbestos containing materials and lead-based paint within the existing structures. There are no known active contamination sites within 0.25-mile of helicopter Sites #1 through #11 (EDR, 2007a; Geotracker, 2008).

3.6.2.7 Alternative 7: 66-kV Subtransmission Alternative

This alternative consists of three 66-kV subtransmission line elements including two underground sections along Segment 7 and an overhead route along Segment 8A. The two Segment 7 underground 66-kV routes are located on the east bank of the San Gabriel River west of El Monte to reduce viewshed impacts in a proposed park (S7 MP 8.9 to MP 9.9) and northwest of the San Gabriel River (S7 MP 11.4 to 12.0) to avoid the Whittier Narrows Recreation Area. There are no contaminated sites on the east side of the river that would impact underground construction between S7 MP 8.9 and 9.9. However, due to the urban and commercial land uses along S7 MP 11.4 to 12.0, including two leaking underground fuel tank sites within 0.25-miles of the north and south ends of this subtransmission line, there is a low potential for the shallow trench excavation to encounter contaminated soil beneath the existing roadways because the alignment is separated from the adjacent commercial facilities and fuel tank sites.

The overhead section of 66-kV alignment along Segment 8A (S8A MP 2.2 to 3.8) passes through the southeast corner of the Montebello Oil Field for a distance of about one mile that extends across Rosemead Boulevard into the Whittier Narrows Recreation Area where several wildcat and dry test holes were drilled (DOGGR, 2003 and 2006). There are no contaminated sites within 0.25-miles of this overhead alignment (EDR, 2007a) although oil field waste and inactive or abandoned oil wells may occur in the Montebello Oil Field. A description of the Montebello Oil Field is provided in Section 3.6.2.2.

3.6.3 Applicable Laws, Regulations, and Standards

3.6.3.1 Federal

Angeles National Forest Land Management Plan (FLMP), 2005

At the time of this analysis, the USDA Forest Service had completed its update of the 1987 Land and Resources Management Plan. The 2005 Angeles National Forest Land Management Plan (FLMP) was approved through a Record of Decision signed September 20, 2005. Due to a technical error in the Record of Decision, the USDA Forest Service reissued it on April 21, 2006, and provided a second 90-day appeal period on the Forest Plan in accordance with the provision of 36 CFR 217.

The FLMP consists of three Parts which respectively examine the Forest Service's Vision (Part 1), Management Strategy (Part 2), and Design Criteria (Part 3) for the ANF, as summarized below:

- Part 1 of the Plan includes a Forest vision of serving as an open space, visual backdrop, recreation destination, and natural environment for a diverse urban population.
- Part 2 of the FLMP includes the ANF program emphasis and objectives and strategic management direction, which allows the USDA Forest Service to make progress towards its vision presented in Part 1 of the FLMP.
- Part 3 of the FLMP provides design criteria for managers to operate within in order to realize the Forest vision described in Part 1.

The Forest Service Vision, as presented in Part 1 of the FLMP, is organized by identified Goals and Objectives. The only Goal or Objective from Part 1 that is relevant to this Environmental Contamination and Hazards analysis for the proposed Project is Goal 5.1 (Improve watershed conditions through

cooperative management) which requires that Forest management activities are planned and implemented in a manner that minimizes the risk to forest ecosystems from hazardous materials.

Part 2 of the FLMP describes the Management Strategies, or the trends and expectations as well as anticipated resource improvements planned over the next three to five years in the Forest. The program emphasis and objectives for non-recreation special uses is to manage infrastructure needs to support communities while preserving open space and natural settings. Special uses are authorized only when they cannot be reasonably accommodated on non-NFS lands. Maintaining open space is given priority over accommodating urban needs. In addition, Appendix B of Part 2 includes a list of program strategies that the ANF may choose to emphasize to progress toward achieving the desired conditions and goals of the FLMP. The following Strategy from the FLMP is applicable to the proposed Project:

- **WAT 3: Hazardous Materials**. The goal of this strategy is to manage known hazardous materials risks by:
  - Maintaining a written Hazardous Materials Response Plan that addresses risk and standard cleanup procedures.
  - Coordinate with federal, tribal, state, city and county agencies, and local landowners to develop emergency response guidelines for hazardous spills on National Forest System land or on adjacent land with the potential to affect threatened, endangered, proposed, candidate, and sensitive fish and amphibian habitat. In the event of hazardous material spills in known habitat on National Forest System land, the Forest Service will contact the USFWS within 24 hours.
  - Quickly contact resource personnel and use them as consultants to minimize impacts to habitat and to initiate emergency consultation with the USFWS if necessary.
  - Provide habitat maps to response personnel for hazardous spills.

U.S. Environmental Protection Agency (USEPA)

The USEPA was established in 1970 in response to the growing public demand for cleaner water, air and land. The USEPA was established to consolidate in one agency a variety of federal research, monitoring, standard-setting and enforcement activities to ensure environmental protection. USEPA's mission is to protect human health and to safeguard the natural environment — air, water, and land — upon which life depends. USEPA works to develop and enforce regulations that implement environmental laws enacted by Congress, is responsible for researching and setting national standards for a variety of environmental programs, and delegates to states and tribes the responsibility for issuing permits and for monitoring and enforcing compliance. Where national standards are not met, USEPA can issue sanctions and take other steps to assist the states and tribes in reaching the desired levels of environmental quality.

The Federal Toxic Substances Control Act (1976) and the Resource Conservation and Recovery Act of 1976 (RCRA) established a program administered by the USEPA for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the "cradle to grave" system of regulating hazardous wastes.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, was enacted by Congress on December 11, 1980. This law (US Code Title 42, Chapter 103) provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites; provides for liability of persons responsible for releases of hazardous waste at these sites; and establishes a trust fund to provide for cleanup when no responsible party could be identified. CERCLA also enables the revision of the National

Contingency Plan (NCP). The NCP (Title 40, Code of Federal Regulation [CFR], Part 300) provides the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, and/or contaminants. The NCP also established the National Priorities List (NPL). CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) on October 17, 1986.

As part of the Clean Water Act, the USEPA oversees and enforces the Oil Pollution Prevention regulation contained in Title 40 of the CFR, Part 112 (Title 40 CFR, Part 112) which is often referred to as the "SPCC rule" because the regulations describe the requirements for facilities to prepare, amend and implement Spill Prevention, Control and Countermeasure (SPCC) Plans. A facility is subject to SPCC regulations if a single oil storage tank has a capacity greater than 660 gallons, or the total above ground oil storage capacity exceeds 1,320 gallons, or the underground oil storage capacity exceeds 42,000 gallons, and if, due to its location, the facility could reasonably be expected to discharge oil into or upon the "Navigable Waters" of the United States.

Other federal regulations overseen by the USEPA relevant to hazardous materials and environmental contamination include Title 40, CFR, Chapter I, Subchapter D – Water Programs and Subchapter I – Solid Wastes. Title 40, CFR, Chapter I, Subchapter D Parts 116 and 117 designate hazardous substances under the Federal Water Pollution Control Act and set forth a determination of the reportable quantity for each substance that is designated as hazardous in Title 40, CFR, Part 116. Title 40, CFR, 117 applies to quantities of designated substances equal to or greater than the reportable quantities that may be discharged into waters of the United States.

Occupational Safety and Health Administration (OSHA), U.S. Department of Labor

OSHA's mission is to assure the safety and health of America's workers by setting and enforcing standards; providing training, outreach, and education; establishing partnerships; and encouraging continual improvement in workplace safety and health. OSHA staff establishes protective standards, enforce those standards, and reaches out to employers and employees through technical assistance and consultation programs. OSHA standards are listed in Title 29 CFR Part 1910.

Bureau of Land Management (BLM)

The BLM engages in hazardous material emergency response actions, site evaluations, and prioritization of cleanups in accordance with laws and regulations. This involves working with the USEPA, State environmental quality departments, counties, and responsible parties (both public and private) to fund and expedite the cleanup of hazardous sites within their jurisdictions. Those sites that are an imminent threat to public health and safety, as well as those sites that are under a consent order and can therefore generate penalties and fines, are a BLM priority. Under the BLM 1703 – Hazard Management and Resource Restoration Manual (BLM, 2006) the following policies have been set:

- Protect public health and safety and environmental resources by minimizing environmental contamination and hazards on public land and BLM owned or operated facilities.
- Comply with federal and state hazardous materials management laws and regulations and laws and regulations dealing with other hazards.
- Maintain the health of ecosystems through assessment, cleanup, correction, and restoration of contaminated sites and other hazards.
- Manage hazards and hazardous materials related risks, costs and liabilities.
- Integrate environmental protection and compliance with all environmental statutes into all BLM activities.

3.6.3.2 State

California Environmental Protection Agency (Cal-EPA)

The Cal-EPA was created in 1991. It centralized California's environmental authority, consolidating Air Resources Board (ARB), State Water Resources Control Board (SWRCB), Integrated Waste Management Board (IWMB), Department of Toxic Substance Control (DTSC), Office of Environmental Health Hazard Assessment (OEHHA), and Department of Pesticide Regulation under one agency. These agencies were placed within the Cal-EPA "umbrella" to create a cabinet-level advocate for the protection of human health and the environment and to ensure the coordinated deployment of State resources. Its mission is to restore, protect and enhance the environment, and to ensure public health, environmental quality, and economic vitality. The DPR, DTSC, IWMB, and SWRCB regulate hazardous materials and hazardous waste that have the potential to cause soil, water, and groundwater contamination, and their missions are summarized below.

- **Department of Pesticide Regulation.** The Department of Pesticide Regulation has the primary responsibility for regulating all aspects of pesticide sales and use to protect the public health and the environment. The Department's mission is to evaluate and mitigate impacts of pesticide use, maintain the safety of the pesticide workplace, ensure product effectiveness, and encourage the development and use of reduced risk pest control practices while recognizing the need for pest management in a healthy economy.
- **Department of Toxic Substances Control.** The DTSC mission is to restore, protect, and enhance the environment, and to ensure public health, environmental quality and economic vitality by regulating hazardous waste, conducting and overseeing cleanups, and developing and promoting pollution prevention.
- **Integrated Waste Management Board.** The mission of the IWMB is to protect the public health and safety and the environment through waste prevention, waste diversion, and safe waste processing and disposal.
- **State Water Resources Control Board.** The SWRCB mission is to preserve and enhance the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations.

Department of Toxic Substances Control

DTSC is a department of Cal-EPA and is the primary agency in California that regulates hazardous waste, cleans up existing contamination, and looks for ways to reduce the hazardous waste produced in California. DTSC regulates hazardous waste in California primarily under the authority of the federal Resource Conservation and Recovery Act of 1976 (RCRA) and, the California Health and Safety Code -, primarily Division 20, Chapters 6.5 through 10.6, and Title 22 (Social Security), Division 4.5. Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

Government Code §65962.5 (commonly referred to as the Cortese List) includes DTSC-listed hazardous waste facilities and sites, California Department of Public Health (CDPH) lists of contaminated drinking water wells, sites listed by the SWRCB as having UST leaks and which have had a discharge of hazardous wastes or materials into the water or groundwater, and lists form local regulatory agencies of sites that have had a known migration of hazardous waste/material.

California Office of Emergency Services (OES)

In order to protect the public health and safety and the environment, the OES is in charge of establishing and managing statewide standards for business and area plans relating to the handling and release or threatened release of hazardous materials. Basic information on the location, type, quantity, and the health risks of hazardous materials handled, used, stored, or disposed of in the state, which could be accidentally

released into the environment, needs to be available to firefighters, health officials, planners, public safety officers, health care providers, regulatory agencies, and other interested parties. The information provided by business and area plans is necessary in order to prevent or mitigate the damage to the health and safety of persons and the environment from the release or threatened release of hazardous materials into the workplace and environment. These regulations are covered under Chapter 6.95 of the California Health and Safety Code Article 1 - Hazardous Materials Release Response and Inventory Program (Sections 25500-25520) and Article 2 - Hazardous Materials Management (Sections 25531-25543.3).

CCR Title 19, Public Safety, Division 2, Office of Emergency Services, Chapter 4 - Hazardous Material Release Reporting, Inventory, And Response Plans, Article 4 (Minimum Standards for Business Plans) establishes minimum statewide standards for Hazardous Materials Business Plans (HMBPs). These plans shall include the following: 1) a hazardous material inventory in accordance with Sections 2729.2 - 2729.7; (2) emergency response plans and procedures in accordance with Section 2731; and (3) training program information in accordance with Section 2732. Business plans contain basic information on the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of in the state. Each business shall prepare a HMBP if that business uses, handles, or stores a hazardous material or an extremely hazardous material in quantities greater than or equal to the following:

- 500 pounds of a solid substance
- 55 gallons of a liquid
- 200 cubic feet of compressed gas
- hazardous compressed gas in any amount
- hazardous waste in any quantity

California Occupational Safety and Health Administration (Cal-OSHA)

The California Occupational Safety and Health Administration (Cal-OSHA) is the primary agency responsible for worker safety in the handling and use of chemicals in the workplace. Cal-OSHA standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (Title 8, Code of California Regulations [CCR], Sections 337-340). The regulations specify requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings.

Title 8 CCR, Chapter 4, Subchapter 7, Group 14 and 15, and Group 16, Articles 107, 109, and 110 sets forth the Permissible exposure limit (PEL), the exposure, inhalation or dermal permissible exposure limit for numerous chemicals. Included are chemicals, mixture of chemicals, or pathogens for which there is statistically significant evidence, based on at least one study conducted in accordance with established scientific principles, that acute or chronic health effects may occur in exposed employees.

It is the responsibility of the Division of Occupational Safety and Health to ensure that compliance with the provisions of the Hazard Communication Standard. California Labor Code Sections 6360 through 6399.7 and Title 8 California Code of Regulations Sections 5191 and 5194 are intended to ensure that both employers and employees understand how to identify potentially hazardous substances in the workplace, understand the health hazards associated with these chemicals, and follow safe work practices. This is accomplished by preparation of a Hazard Communication Plan.

Office of Environmental Health Hazard Assessment (OEHHA)

Proposition 65, the Safe Drinking Water and Toxic Enforcement Act of 1986, was enacted as a ballot initiative in November 1986. The Proposition was intended by its authors to protect California citizens and the State's drinking water sources from chemicals known to cause cancer, birth defects, or other reproductive harm, and to inform citizens about exposures to such chemicals. Proposition 65 requires the Governor to publish, at least annually, a list of chemicals known to the State to cause cancer or reproductive toxicity. OEHHA has established safe harbor levels (levels of exposure that trigger the warning requirement) for some, but not all, listed chemicals. Businesses that cause exposures greater than the safe harbor level must provide Proposition 65 warnings. These safe harbor levels are available in the October 2007 Status Report available at http://www.oehha.ca.gov/prop65/pdf/October2007StatusRpt.pdf. If there is no safe harbor level for a chemical, businesses that knowingly expose individuals to that chemical would generally be required to provide a Proposition 65 warning, unless the business could show that risks of cancer or reproductive harm resulting from the exposure would be below levels specified in Proposition 65 and its accompanying regulations.

Division of Oil, Gas and Geothermal Resources (DOGGR)

The abandonment requirements of oil wells and dry test holes are specified by DOGGR. Following discovery of inactive oil wells, the abandonment operations must be witnessed by DOGGR staff. DOGGR is also charged with implementing Section 3208.1 of the Public Resource Code (PRC). As a result, the Construction-Site Plan Review Program was developed to assist local permitting agencies in identifying and reviewing the status of oil or gas wells located near or beneath structures. Before issuing building or grading permits, local agencies review and implement the DOGGR preconstruction well requirements. Interaction between local permitting agencies and the DOGGR helps resolve land use issues and allows for responsible development in oil and gas fields.

3.6.3.3 Local

Los Angeles County

The County of Los Angeles Fire Department, Health Hazardous Materials Division is the agency responsible for regulating and monitoring hazardous material use and storage in unincorporated and most incorporated areas of Los Angeles County. Its mission is to protect the public health and the environment throughout Los Angeles County from accidental releases and improper handling, storage, transportation, and disposal of hazardous materials and wastes through coordinated efforts of inspections, emergency response, enforcement, and site mitigation oversight (LACFD, 2005).

The County of Los Angeles Department of Public Works, Environmental Programs Division oversees permitting and inspection of underground storage tanks and regulates all unauthorized releases from underground storage tanks. The Los Angeles County Underground Storage Tank Program was established in 1983, and its goal is to protect the public, the environment, and UST owners and operators by ensuring the UST facilities are permitted, designed/installed/modified, operating, and eventually closed in compliance with local, State, and federal requirements.

Kern County

The County of Kern Environmental Health Services Department, Hazardous and Solid Waste Division oversees businesses generating, storing, and transporting hazardous waste. to protect the public health and the environment. The Division provides surveillance and enforcement for hazardous waste, radiological

health, vector control, solid waste and infectious waste. The program also provides emergency response to chemical events to furnish substance identification; health and environmental risk assessment; air, soil, water and waste sample collection; incident mitigation and cleanup feasibility options; and on-scene coordination for state superfund incidents. The program also provides for the oversight, investigation, and remediation of unauthorized releases from underground tanks.

San Bernardino County

The San Bernardino County Fire Department (SBCFD), Hazardous Materials Division (HMD) is the certified unified program agency (CUPA) responsible for administering the hazardous materials program within San Bernardino County.

3.6.4 Impact Analysis Approach

3.6.4.1 Criteria for Determining Impact Significance

To satisfy CEQA requirements, conclusions are made regarding the significance of each identified impact that would result from the proposed Project and alternatives. Appropriate criteria have been identified and utilized to make these significance conclusions. The following significance criteria for environmental contamination and hazards were derived from previous environmental impact assessments and from the CEQA Guidelines (Appendix G, Environmental Checklist Form, Section IX). Impacts of the proposed Project or alternatives would be considered significant and would require mitigation if they would:

- Criterion ECH1: Result in soil contamination, including flammable or toxic gases, at levels exceeding federal, State, or local hazardous waste limits established by 40 CFR Part 261 and Title 22 CCR 66261.21, 66261.22, 66261.23, and 66261.24.
- Criterion ECH2: Result in mobilization of contaminants currently existing in the soil, creating potential pathways of exposure to humans or other sensitive receptors. Contaminants may include leaking munitions and explosives of concern (MEC) and the ordnance itself.
- Criterion ECH3: Cause contamination of soils or groundwater within the Project area during operation of the Project, resulting in exposure of workers and/or the public to contaminated or hazardous materials at levels in excess of those permitted by California Occupational Safety and Health Administration (Cal-OSHA) in CCR Title 8 and the Federal Occupational Safety and Health Administration (OSHA) in Title 29 CFR Part 1910.

Significance conclusions for individual impacts are not required for compliance with NEPA. Therefore, conclusions presented in the following analysis regarding the significance of identified impacts are provided for the purposes of CEQA only.

3.6.4.2 Applicant-Proposed Measures (APMs)

APMs were identified by SCE in the PEA. Table 3.6-13 presents the APMs that are relevant to the issue area of environmental contamination and hazards. APMs are a commitment by the Applicant (SCE) and are considered part of the proposed Project. Therefore, the following discussions of impact analysis assume that all APMs will be implemented as defined in the table. Additional mitigation measures are recommended in this section if it is determined that APMs do not fully mitigate the impacts for which they are presented.

Table 3.6-13. Applicant-Proposed Measures – Environmental Contamination and Hazards	
APM HAZ-1	Phase I Environmental Site Assessment (ESA). A Phase I ESA would be performed at each new or expanded substation location and along newly acquired transmission line rights-of-way (ROWs). The Phase I ESAs would include an electronic records search of federal, state, and local databases. The electronic records search would be contracted to Environmental Data Resources (EDR), a company which specializes in this type of work and who would produce a comprehensive report for the entire TRTP ROW. The EDR Report is used to identify sites located on federal, state, and local government agency databases which may have the potential to impact the proposed Project. The EDR report would be reviewed and, based on such review, any potential areas of concern along the ROW would be identified for further assessment. In addition, a Phase I ESA, which is compliant with ASTM 1927-05 (ASTM, 2005) would be performed on all property to be acquired. Based on the results of the Phase I ESAs, additional assessment, characterization, and remediation of potential or known subsurface impacts may be conducted prior to construction activities. Such remediation could include the relocation of T/L structures as necessary to avoid impacted areas, or the removal and disposal of impacted soils and/or groundwater according to applicable regulations.
APM HAZ-2	Hazardous Materials and Waste Handling Management. Hazardous materials used and stored on site for the proposed construction activities – as well as hazardous wastes generated on site as a result of the proposed construction activities – would be managed according to the specifications outlined below. • Hazardous Materials and Hazardous Waste Handling: A Project-specific hazardous materials management and hazardous waste management program would be developed prior to initiation of the Project. The program would outline proper hazardous materials use, storage and disposal requirements as well as hazardous waste management procedures. The program would identify types of hazardous materials to be used during the Project and the types of wastes that would be generated. All Project personnel would be provided with Project-specific training. This program would be developed to ensure that all hazardous materials and wastes were handled in a safe and environmentally sound manner. Hazardous wastes would be handled and disposed of according to applicable rules and regulations. Employees handling wastes would receive hazardous materials training and shall be trained in hazardous waste procedures, spill contingencies, waste minimization procedures and treatment, storage and disposal facility (TSDF) training in accordance with OSHA Hazard Communication Standard and 22 CCR. SCE would use landfill facilities that are authorized to accept treated wood pole waste in accordance with HSC 25143.1.4(b). • Construction Stormwater Pollution Prevention Plan (SWPPP): A Project-specific construction SWPPP would be prepared and implemented prior to the start of construction of the transmission line and substations. The SWPPP would utilize Best Management Practices (BMPs) to address the storage and handling of hazardous materials and sediment runoff during construction activities (California Stormwater Quality Association, 2004). • Transport of Hazardous Materials: Hazardous materials that would be transported by truck include fuel (diesel fuel and gasoline) and oil and lubricants for equipment. Containers used to stored hazardous materials would be properly labeled and kept in good condition. Written procedures for the transport of hazardous materials used would be established in accordance with U.S. Department of Transportation and Caltrans regulations. A qualified transporter would be selected to comply with U.S. Department of Transportation and Caltrans regulations. • Fueling and Maintenance of Construction Equipment: Written procedures for fueling and maintenance of construction equipment would be prepared prior to construction. Vehicles and equipment would be refueled on site or by tanker trucks. Procedures would include the use of drop cloths made of plastic, drip pans and trays to be placed under refilling areas to ensure that chemicals do not come into contact with the ground. Refueling stations would be located in designated areas where absorbent pad and trays would be available. The fuel tanks would also contain a lined area to ensure that accidental spillage does not occur. Drip pans or other collection devices would be placed under the equipment at night to capture drips or spills. Equipment would be inspected daily for potential leakage or failures. Hazardous materials such as paints, solvents, and penetrants would be kept in an approved locker or storage cabinet. • Fueling and Maintenance of Helicopters: Written procedures for fueling and maintenance of helicopters would be prepared prior to construction. Helicopters would be refueled at helicopter staging areas or local airports. Procedures would include the use of drop cloths made of plastic, drip pans and trays to be placed under refilling areas to ensure that chemicals do not come into contact with the ground. Refueling areas would be located in designated areas where absorbent pad and trays are available. • Emergency Release Response Procedures: An Emergency Response Plan detailing responses to releases of hazardous materials would be developed prior to construction activities. It would prescribe hazardous materials handling procedures for reducing the potential for a spill during construction, and would include an emergency response program to ensure quick and safe cleanup of accidental spills. All hazardous materials spills or threatened release, including petroleum products such as gasoline, diesel, and hydraulic fluid, regardless of the quantity spilled would be immediately reported if the spill has entered a navigable water,

Table 3.6-13. Applicant-Proposed Measures – Environmental Contamination and Hazards	
	stream, lake, wetland, or storm drain, if the spill impacted any sensitive area including conservation areas and wildlife preserved, or if the spill caused injury to a person or threatens injury to public health. All construction personnel, including environmental monitors, would be aware of state and federal emergency response reporting guidelines.
APM HAZ-3	Soil Management Plan. A Soil Management Plan would be developed and implemented for construction of the proposed Project. The objective of the Soil Management Plan is to provide guidance for the proper handling, onsite management, and disposal of impacted soil that might be encountered during construction activities. The plan would include practices that are consistent with the California Title 8, Occupational Safety and Health Administration (Cal-OSHA) regulations, as well as appropriate remediation standards that are protective of the planned use. Appropriately trained professionals would be on site during preparation, grading, and related earthwork activities to monitor soil conditions encountered. The Soil Management Plan would provide guidelines for the following: • Identifying impacted soil • Assessing impacted soil • Soil excavation • Impacted soil storage • Verification sampling • Impacted soil characterization and disposal In the event that potentially contaminated soils were encountered within the footprint of construction, soils would be tested and stockpiled. The appropriate CUPA would determine whether further assessment is warranted.
APM HAZ-5	Spill Prevention, Countermeasure, and Control Plan and Hazardous Materials Business Plan • Spill Prevention, Countermeasure, and Control Plan (SPCC Plan). In accordance with Title 40 of the CFR, Part 112, SCE would prepare a SPCC for proposed and/or expanded substations. The plans would include engineered and operational methods for preventing, containing, and controlling potential releases, and provisions for quick and safe cleanup. • Hazardous Materials Business Plans (HMBPs). Prior to operation of new or expanded substations, SCE would prepare or update and submit, in accordance with Chapter 6.95 of the CHSD, and Title 22 CCR, an HMBP. The required documentation would be submitted to the CUPA. The HMBPs would include hazardous materials and hazardous waste management procedures and emergency response procedures including emergency spill cleanup supplies and equipment.

3.6.4.3 Impact Assessment Methodology

The environmental contamination and hazards impacts of the proposed Project are discussed below under subheadings corresponding to each of the significance criterion presented in the preceding section. The analysis describes the impacts of the proposed Project related to environmental contamination and, for each criterion, determines whether implementation of the proposed Project would result in significant impacts by evaluating effects of construction and operation of the proposed Project against the affected environment described above in Section 3.6.2.

For the purposes of satisfying CEQA requirements, the significance of each impact is also identified according to the following classifications: Class I: Significant impact; cannot be mitigated to a level that is less than significant; Class II: Significant impact; can be mitigated to a level that is less than significant; Class III: Adverse impact; less than significant; and Class IV: Beneficial impact. Sections 3.6.5 through 3.6.11, below, provide a detailed discussion of the impacts identified for the proposed Project and alternatives.

3.6.5 Alternative 1: No Project/Action

Selection of the No Project/Action Alternative would mean that the TRTP, as proposed, would not be implemented. As such, the environmental impacts associated with the Project, as described in Sections

3.6.6 through 3.6.11, would not occur. However, in the absence of the proposed Project or an alternative to the Project, the purposes and need for the power transmission capabilities that would be met by the proposed Project (or an alternative) would not be achieved. As a result, it is possible that another, similar transmission line project would be constructed in the future to meet the power transmission needs of developing wind farms in the Tehachapi Wind Resource Area. Such a project would likely introduce similar environmental contamination or hazardous impacts that would be introduced through the proposed TRTP or an alternative.

Environmental conditions in the Project Area are expected to naturally change or evolve over time and therefore, independently of the proposed Project or an alternative to the Project (including the No Project/Action Alternative), the regional setting and baseline conditions in the Project Area which are discussed in Section 3.6.2.1 (Regional Setting) would not remain static. If the No Project/Action Alternative is implemented, soil and groundwater conditions within the Project Area will continue to naturally evolve over time, independently of the potential impacts associated with the proposed TRTP.

Because the potential impacts of the proposed Project would not occur under the No Project/Action Alternative, the significance criteria described in Section 3.6.4.1 (Impact Analysis Approach) are not used for analysis of the No Project/Action Alternative. The continued development of lands within the Counties of Kern, Los Angeles, and San Bernardino will result in the continued potential for public health and safety risk factors as former contaminated sites undergo cleanup or are developed for new uses. However, sites with known environmental contamination will be required by law to be investigated and remediated in accordance with regulatory agency standards prior to redevelopment. In addition, areas with previously unknown contamination will likely be discovered during planning, followed by the required reporting and cleanup.

3.6.6 Alternative 2: SCE's Proposed Project

3.6.6.1 Direct and Indirect Effects Analysis

Result in soil contamination, including flammable or toxic gases, during construction (Criterion ECH1)

Impact E -1: Soil or groundwater contamination results due to improper handling and/or storage of hazardous materials during construction activities.

During construction operations, hazardous materials such as vehicle fuels, oil, hydraulic fluid, and other vehicle maintenance fluids would be used and stored in construction staging yards. Gasoline, diesel fuel, oil, hydraulic fluid, lubricants paints, solvents, adhesives, and cleaning chemicals used in construction activities, equipment, and vehicles can be released during construction as a result of accidents, and/or leaking equipment or vehicles. Spills and leaks of hazardous materials during construction activities could result in soil or groundwater contamination.

An accidental release of a potentially harmful or hazardous material into a dry stream bed or wash would not directly impact water quality. Similarly, an accidental spill or release of hazardous materials outside of a stream channel would not directly impact water quality. However, accidental spills or releases of hazardous materials into a dry stream bed or wash, or on the banks of a stream channel, could indirectly impact water quality through runoff during a subsequent storm event, when the spilled material would be washed into a stream or waterbody. Analysis of spills and leaks of hazardous materials in stream channels is presented in Section 3.8 (Hydrology and Water Quality).

Accidental spills or releases of hazardous materials could indirectly impact groundwater through leaching. Hazardous material spills that are left on the ground surface for an extended period or that are followed quickly by a storm event could leach through the soil and into the groundwater, thereby resulting in the degradation of groundwater quality. In the event of a spill, if sensitive fish species are present, direct impacts could include mortality due to the spill. Indirect impacts could include loss of suitable breeding and spawning habitat (see Section 3.8, Hydrology and Water Quality).

SCE's APM HAZ-2 (Hazardous Materials and Waste Handling Management Program) would be included as part of the Project in order to reduce the likelihood of spills through implementation of several measures including: proper storage and handling procedures; standard hazardous waste transport; Project-specific training for personnel; procedures for fueling and maintaining construction equipment and helicopters; and an emergency response program to ensure quick and safe cleanup of accidental spills (SCE, 2007). The measures provided in APM HAZ-2 would reduce the potential for spills to occur through implementation of protocols for storage, transport, and handling of hazardous materials on site for the proposed construction activities. In addition, any hazardous waste generated on site would be managed according to specified procedures for storing, labeling and transporting the material. Fueling and maintenance of equipment, including helicopters, would be performed according to written procedures prepared prior to any construction activities. Refueling stations would be located in designated areas to guard against accidental spills, and equipment would be inspected daily for any potential leakage.

APM HAZ-2 would also require that an Emergency Response Plan be in place in the event of an accidental spill. Such a plan would enable workers to respond to any potential release of hazardous materials and ensure quick and safe cleanup. Any hazardous materials spill would be reported immediately to the appropriate agency per State and federal emergency response reporting guidelines. Implementation of APM HAZ-2 would reduce the potential for a spill to occur. Furthermore, this measure and would reduce the potential for contamination and exposure of workers or the public to hazardous materials in the event of an accidental spill, by providing various measures to ensure that any spilled material and any resulting surficial contaminated soil would be quickly and correctly cleaned up and disposed of.

Additionally, as discussed in detail in Section 3.8 Hydrology and Water Quality, the following APMs would reduce the likelihood that an accidental spill or release of hazardous materials would directly or indirectly impact water quality: HYD-1 (Construction SWPPP), HYD-2 (Environmental Training Program), HYD-3 (Accidental Spill Control), and HYD-4 (Non-storm Water and Waste Management Pollution Controls).

Although APMs APM HYD-1 through APM HYD-4 and APM HAZ-2 would reduce the potential for accidental releases of hazardous materials to occur as well as the potential for such releases to adversely affect soil and groundwater, these adverse effects could still occur. In order to further reduce the potential for degradation of water quality through accidental release of potentially harmful or hazardous materials, implementation of Mitigation Measures H-1a and H-1b, described under the discussion for Impact H-1 in Section 3.8 Hydrology and Water Quality, would be required.

CEQA Significance Conclusion

Implementation of APM HAZ-2 would reduce the potential for accidental releases of hazardous materials to occur. If a spill were to occur, APM HAZ-2 would reduce the potential for contamination by ensuring that that any spilled material and any resulting surficial contaminated soil would be quickly and correctly

cleaned up and disposed of, resulting in limited to no exposure of hazardous materials to the environment and workers. This would result in a less than significant impact with no mitigation required (Class III).

Result in mobilization of contaminants currently existing in the soil, creating potential pathways of exposure to humans or other sensitive receptors (Criterion ECH2)

The proposed Project and alternatives do not traverse areas of intensive agricultural use where pesticides and herbicides would be applied regularly. Consequently, there is no potential to expose construction workers to residual pesticides and herbicides in the soil and no impact would occur.

Impact E- 2: Excavation or grading could result in mobilization of existing soil or groundwater contamination from known sites.

Depth to groundwater throughout the Project area is generally at least 75 feet bgs, although shallow and perched groundwater may be present locally near Whittier Narrows and Chino Valley. The maximum construction-related excavation depth is approximately 40 feet bgs and therefore, direct contact with groundwater (or contaminated groundwater) would be expected to occur only locally during construction of the proposed Project. Many areas of the proposed Project, such as the undeveloped lands along Segments 4, 5, 6, 10 and 11, are unlikely to have existing soil or groundwater contamination. However, in developed urban areas along Segments 7, 8, and 11 (south of S11 MP26), environmental contamination may be present at each new or expanded substation location and along newly acquired transmission line rights-of-way (ROWs). There are several sites with existing contamination along this portion of the route. Such contamination includes leaking underground storage tanks (LUST), landfills, industrial and manufacturing sites, and former defense sites. SCE has committed to implementation of Phase I ESAs under APM HAZ-1, which would further investigate the potential for existing contamination at these sites. However, contamination may also be present along *existing* transmission line ROWs due to the nature of the industrial/commercial setting of adjacent sites along some segments of the proposed alignment. Any potential areas of concern, such as LUST and industrial sites with on-going investigation and clean up, landfills, and oil fields, would need to be evaluated for possible further assessment. These areas are listed in Mitigation Measure E-3a, below.

Mitigation Measures for Impact E-2

E-2a **Perform Phase I ESAs along existing transmission line ROWs.** SCE shall conduct Phase I Environmental Site Assessments (ESAs) within a 0.25-mile corridor along the segments identified below to determine whether there is a record of hazardous material contamination which would affect construction activities. This investigation will determine the likelihood of on-site contamination and shall identify the need for further investigation and/or remediation of soil or groundwater within areas of ground disturbance for the Project. For example, if there would be little or no human contact with contaminated materials by avoidance of the area or because no excavation is required during construction, no further mitigation would be required. However, if Project construction activities would involve human contact with contaminated materials that could potentially affect the health or safety of workers or the public during construction of the Project, then Mitigation Measure E-2b (Perform Phase II Investigations for potentially contaminated sites) shall be implemented.

- Segment 7 from S7 MP 1.8 to MP 15.8
- Segment 8A from S8A MP 2.2 to MP 7.0, S8A MP 15.2 to MP 15.5, S8A MP 24 to 35.2
- Segment 8B from S8B MP 0.0 to MP 6.8
- Segment 8C from S8C MP 0.0 to MP 6.4

- Segment 11 from S11 MP 26 to MP 36.2

E-2b **Perform Phase II Investigations for potentially contaminated sites.** Phase II Environmental Site Investigations (ESIs) shall be performed on sites that have been determined by the Phase I ESAs performed under APM HAZ-1 and Mitigation Measure E-2a (Perform Phase I ESAs along existing transmission line ROWs) to be potentially contaminated. If it is determined that disturbance or excavation of contaminated soils or groundwater would occur during construction at a given site, SCE would undertake a Phase II ESI involving sampling and further characterization of potentially contaminated areas within the Project ROW or reroute the line away from the contamination area. Should further investigation reveal high levels of hazardous materials, SCE would mitigate health and safety risk according to Los Angeles County Certified Unified Program Agency (CUPA) or Regional Water Quality Control Board (RWQCB) regulations or requirements. This would include site-specific Health and Safety Plans, Work Plans, and/or Remediation Plans.

Environmental Effects of Mitigation Measure E-2b

While Mitigation Measure E-2b is recommended to reduce impacts from potentially contaminated sites, this measure may adversely affect other issue areas. A transmission line reroute would potentially disturb sensitive biological resources or would possibly damage any cultural resources that may be located along a proposed reroute. Such potential impacts are similar to the effects of other Project activities, and would require the implementation of mitigation measures presented in Section 3.4 (Biological Resources) and Section 3.5 (Cultural Resources).

CEQA Significance Conclusion

Implementation of Mitigation Measures E-2a and E-2b would reduce the potential for excavation or grading to result in mobilization of existing soil or groundwater contamination to a less-than-significant level (Class II).

Impact E-3: Landfill gas and/or natural gas located near active, inactive or abandoned oil wells could be encountered during excavation or grading, resulting in explosions or exposure of workers to toxic gases.

Methane and other toxic gases are produced as a result of decomposition of waste in landfills. Natural gas (methane) commonly occurs at oil wells. Methane gas from landfills, improperly sealed active oil wells, or improperly destroyed oil wells can migrate through natural geologic formations and soil and accumulate in depressions, utility vaults and excavations. The proximity of the proposed alignment to designated landfill areas represents a potential risk of encountering methane gas during construction. Toxic and inflammable gases that have migrated from a landfill or oil well could accumulate in excavations or depressions at construction sites and could result in explosions or exposure of workers to these toxic gases.

The proposed Segment 7 alignment extending east from the Mesa substation traverses very near the North Parcel of the Operating Industries Landfill (EDR Site No. 0 in Table 3.6-6 presented above in Section 3.6.2.2) from approximately S7 MP 14.8 to S7 15.8, a 190-acre designated Superfund site. In addition, Segment 7 nears EDR Sites 35 (S7 MP 2), 47 (S7 MP 4.2), 50, 51, 52, 56 (S7 MP 4.3-4.4), 62, 64 (S7 MP 4.7-4.9), 165 (S7 MP 10.8), and 185/193 (S7 MP 14.2-14.5), which are all noted as landfill operations, located along the San Gabriel River northeast of the Mesa Substation. Segment 8 nears landfill areas (EDR Sites 207, 219 and 254), located at approximately S8A MP 4.8 to 6.0, S8B MP 4.4 and S8B MP 0.3, respectively. Segment 11 approaches EDR identified landfill Sites 20, 170 and 174, located at

S11 MP 26, and at the Mesa Substation, respectively. EDR Site 33 is a designated USEPA and Cal EPA Brownfield with Deed Restriction, located at mile marker S11 MP 28 in the City of Pasadena. These sites pose a low but potential risk of encountering methane gas or toxic fumes during excavation or grading.

Additionally, the proximity of the proposed alignment to active, inactive, and abandoned oil wells may expose workers to natural gas leaking leaks from improperly sealed wells. According to oil field maps (DOGGR, 2003, 2004a, 2004b, 2005, and 2006), portions of Segments 7, 8, and 11 are located within 200 to 500 feet of plugged and abandoned wells, dry holes, or active oil wells. Considering the proximity of the proposed Project to these oil wells, there is potential for contacting natural gas pocket during construction. Oil wells within 500 feet of the Project are located at S7 MP 13.6 to 14.6, S8A MP 2.2 to 4.0, S8A MP 4.7 to 5.5, and S11 MP 35.1 to 35.4.

Mitigation Measures for Impact E-3

E-3a **Determine if landfill gases are present.** To assess the likelihood that contamination from identified landfills could be present in the Project alignment construction zone, SCE shall complete a search of landfill records, plans, maps and gas monitoring to determine the limits of landfill waste and landfill gas plume for all landfills listed below. For all locations at which the records review cannot confirm a gas-free landfill perimeter adjacent to the Project construction zone, a soil vapor survey shall be conducted. The soil vapor survey shall consist of driving probes in areas of proposed excavation and grading activities along the transmission line corridors and substation sites. Vapor samples shall be tested for methane, other flammable gases, and volatile organic compounds. Laboratory test results shall be reported to the Department of Toxic Substances Control (DTSC) or the appropriate County Environmental Health Division and shall include an assessment of the contamination potential in the excavation area. Documentation of all site research and a copy of the Los Angeles CUPA approval letter shall be provided to the CPUC at least 30 days prior to the start of construction within the appropriate Project segment.

Landfill Sites Near the Project Alignment

Segment	Milepost	Corresponding EDR Site ID Nos.
Segment 7	MP 2	35
Segment 7	MP 4.2	47
Segment 7	MP 4.3-4.4	50-52, 56
Segment 7	MP 4.7-4.9	62, 64
Segment 7	MP 10.8	165
Segment 7	MP 14.2-14.5	185, 193
Segment 7	MP 14.8-15.8	0
Segment 8A	MP 4.8-6.0	207
Segment 8B	MP 0.3	254
Segment 8B	MP 4.4	219

Source: EDR, 2007a.

E-3b **Implement personnel safety and monitoring measures.** If laboratory tests indicate the presence of landfill gases in the construction areas, a Health and Safety Plan shall be developed by a licensed industrial hygienist and a gas monitoring program shall be implemented by SCE or its contractors. A Health and Safety Plan shall also be developed for work in areas within 500 feet of active, inactive or abandoned oil wells that includes requirements for gas monitoring of excavations. A copy of the Health and Safety Plan and monitoring program shall be submitted to the appropriate CUPA agency and the CPUC at least 30 days prior to the start of construction within the appropriate Project segment.

E-3c **Verify location and status of abandoned oil and natural gas wells.** Prior to excavation and construction activities, SCE shall contact the California Department of Conservation, Division of Oil, Gas and Geothermal Resources (DOGGR) for specific information on wells located within 500 feet of the transmission line route, including location and abandonment details. SCE shall avoid construction near (within 50 feet) abandoned oil or gas wells. If a tower or trench is located within 50 feet of a plugged or abandoned well, SCE shall coordinate with DOGGR and provide written confirmation to the CPUC that the well has been correctly abandoned and does not require remedial plugging or the installation of a gas venting system. If an unrecorded well is encountered during construction, SCE shall stop construction and notify DOGGR immediately. Construction at the location will resume after SCE provides the CPUC with written confirmation that the well has been correctly abandoned and does not require remedial plugging or the installation of a gas venting system.

CEQA Significance Conclusion

Implementation of Mitigation Measures E-3a, E-3b and E-3c would reduce the potential for encountering toxic gas or natural gas located near landfills or active, inactive or abandoned oil wells to a less-than-significant level (Class II).

Impact E-4: Unanticipated preexisting soil and/or groundwater contamination could be encountered during excavation or grading.

Depth to groundwater throughout the Project area is generally greater than 75 feet bgs, and the maximum construction-related excavation depth is approximately 40 feet bgs and therefore, direct contact with groundwater (or contaminated groundwater) would be expected to occur only locally during construction of the proposed Project. However, unanticipated soil and/or groundwater contamination could exist along the proposed alignment due to illegal dumping or other historical activities (e.g., mining). Possible types of contamination include gasoline and diesel fuel residuals, heavy metals, and/or other hazardous materials. While SCE's Soil Management Plan developed under APM HAZ-3 would be incorporated into the Project in order to identify and dispose of potentially impacted soil (by assigning appropriately trained professionals to monitor soil conditions, identifying and assessing any impacted soil, performing soil excavation, and/or verifying sampling and disposal), these measures do not specify how or who would determine if regulatory limits are exceeded. If laboratory data are not properly interpreted, environmentally contaminated soil or groundwater could be improperly handled and disposed of, resulting in additional environmental contamination or exposure of workers to contaminated materials.

In addition, this measure does not include requirements for documentation and reporting of incidents of encountered contaminants, such as documenting locations of occurrence, sampling results, and reporting actions taken to remediate contaminated materials to the CPUC and Forest Service (if on NFS lands).

Mitigation Measures for Impact E-4

E-4a **Appoint individuals with correct training for sampling, data review, and regulatory coordination.** In the event that potential contaminated soil or groundwater is encountered during construction activities, samples shall be collected by an Occupational Safety and Health Administration (OSHA) trained individual with a minimum of 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) worker training. Laboratory data from suspected contaminated material shall be reviewed by the contractor's Health and Safety Officer and/or SCE's Field Environmental Representative and they shall coordinate with the appropriate regulatory agency (RWQCB or local CUPA agency) if contamination is confirmed, to determine the suitable level of worker protection and the necessary handling and/or disposal requirements.

E-4b **Document compliance with APM HAZ-3.** If the visual or olfactory evidence of contamination in the exposed soil is observed during grading or excavation work, the location and the potential contamination, results of laboratory testing, recommended remediation (if contamination is verified), and actions taken shall be documented in a report and submitted to the CPUC and FS (for NFS lands) for each event. This report shall be submitted within 30 days of receipt of laboratory data.

CEQA Significance Conclusion

Implementation of Mitigation Measures E-4a and E-4b are required to ensure that laboratory data is properly interpreted by trained personnel regarding contamination levels for reporting to the appropriate regulatory agency and documentation that these measures are properly implemented, which would reduce the impact from encountering unknown contamination to less than significant (Class II).

Cause contamination of soils or groundwater within the Project area during operation of the Project, resulting in exposure of workers and/or the public to contaminated or hazardous materials (Criterion ECH3)

Impact E-5: Soil or groundwater contamination could result from an accidental spill during operation.

Soil or groundwater contamination could result from accidental spill or release of hazardous materials at the substations during facility operation or along the transmission line during maintenance operations. This could potentially result in exposure of facility workers and the public to hazardous materials. According to APM HAZ-5, SCE plans to minimize and/or avoid unforeseen spills of hazardous materials during operation at the substations by updating and utilizing the Spill Prevention, Countermeasure, and Control (SPCC) plan and Hazardous Materials Business Plans (HMBPs) for the upgraded substations (Antelope, Vincent, Rio Hondo, Mesa, Gould, Chino, and Mira Loma) and by preparing and utilizing SPCC and HMBP plans for the new Whirlwind substation. In the event of a spill, APM HAZ-5 would reduce the potential for contamination and exposure of workers or the public to hazardous materials by ensuring that any spilled material and any resulting surficial contaminated soil would be quickly and correctly cleaned up and disposed of, resulting in limited to no exposure of hazardous materials to the environment and workers.

CEQA Significance Conclusion

Implementation of APM HAZ-5 would reduce the potential for contamination and hazardous exposure from an accidental spill and would ensure that that any spilled material and any resulting surficial contaminated soil would be cleaned up quickly and correctly and disposed of, resulting in limited to no exposure of hazardous materials to the environment and workers. Impacts would therefore be less than significant with no mitigation required (Class III).

3.6.6.2 Cumulative Effects Analysis

Geographic Extent

The geographic extent for the analysis of cumulative impacts related to environmental contamination is limited to the Project site and the immediate vicinity surrounding Project substations, laydown areas, and the transmission line ROWs occupied by the proposed alignment. These geographic limits are appropriate to consider the potential cumulative impacts as the current and past land uses on the Project site and directly adjacent to the Project site are the most significant factors to evaluate the potential for

environmental contamination at a project site. Impacts would have the potential to occur during construction and operation and would be limited to the areas where concurrent construction or maintenance is occurring.

Existing Cumulative Conditions

The area along the route of the proposed Project alignment consists of undeveloped land, open space land, scattered rural residences, residential developments, as well as agricultural, commercial and industrial properties. The Project alignment passes near oil fields and landfills with ongoing activities related to operation and expansion. Within the undeveloped and open space land and residential areas there is little likelihood of significant soil or groundwater contamination, based on a lack of uses that would involve hazardous materials. However, within the commercial and industrial land use areas, many sites, historic and current, have soil or groundwater contaminated by hazardous substances such as heavy metals and vehicle fuels. Refer to Section 3.6.2 for a detailed discussion of existing conditions and lists of potential hazardous material sites along the proposed alignment, which includes a variety of hazardous waste sources such as landfills, gas stations, industrial sites, and oil fields. The continued development of lands within the Counties of Kern, Los Angeles, and San Bernardino will result in the continued potential for public health and safety risk factors as former contaminated sites undergo cleanup or developed for new uses. However, sites with known environmental contamination will be required by law to be investigated and remediated in accordance with regulatory agency standards prior redevelopment. In addition, areas with previously unknown contamination will likely be discovered during planning, followed by the required reporting and cleanup.

Reasonably Foreseeable Future Projects and Changes

Foreseeable future projects identified for this analysis include major energy and transmission projects, as well as numerous commercial and residential development projects throughout the jurisdictions traversed by the proposed Project. The list was reviewed to identify cumulative projects that are planned in areas with known significant soil or groundwater contamination based on prior land use. Although localized areas of soil contamination could be encountered by some of these projects, most are new developments in open areas or expansions of existing commercial areas. The Walnut Creek Energy Park Power Plant is located in a recently developed (past 20 years) commercial warehouse and light industrial area that is unlikely to have contaminated soil. Also, the schedule to have this plant on-line by October 2008 suggests that if any soil cleanup was necessary it has already been completed, since it would have to have been completed prior to construction. Major rail projects (California High Speed Train, Orangeline Maglev Project, and Metro Gold Line Extension) cross Segments 7 and 8A and may locally encounter contaminated soil in former commercial and industrial areas. However these projects are in early stages of planning, design and funding, therefore construction of these projects would most likely begin after the proposed Project would begin. Consequently, reasonably foreseeable cumulative projects with significant excavation, transport, and treatment of contaminated soil were not identified.

Cumulative Impact Analysis

With regard to cumulative environmental contamination impacts, the proposed Project's contribution to a cumulative impact would only be considered significant if it combined with other projects to result in substantial volumes of contaminated soil that require off-site treatment and that, as a combined volume, exceeded the capacity of available treatment facilities or resulted in substantial exposure of hazardous

materials to the public. For the reasons discussed below, the proposed Project's contribution to cumulative impacts would not be cumulatively considerable.

Impact E-1 (Soil or groundwater contamination results due to improper handling and/or storage of hazardous materials during construction activities) could occur through accidental releases of hazardous materials used during construction. However, APM HAZ-2 would be implemented as part of the proposed Project to decrease the potential for accidental releases to occur and to clean up potentially harmful materials in the unlikely event of a release. Therefore, since any spills of contaminated material would be cleaned, soil or groundwater contamination would not occur and Impact E-1 would not have the potential to combine with impacts of other projects and would not be cumulatively considerable (Class III).

Impact E-2 (Excavation or grading could result in mobilization of existing soil or groundwater contamination from known sites) could occur if preexisting soil and groundwater contamination is encountered during proposed Project construction, which would result in exposure of construction workers to potential health hazards. Such exposure would be hazardous to people in the immediate vicinity of the contamination since the contaminant would either be limited to the medium in which it is discovered or would volatilize and become airborne. If fumes from potential contamination volatilized, risk of exposure would decrease as distance from the source of contamination increased due to dispersal of the fumes. Additionally, the proposed Project includes APM HAZ-1 and Mitigation Measures E-2a and E-2b, which would require investigation of potentially contaminated sites along the proposed transmission line route as well as clean up of any contamination identified. Therefore, because any contamination encountered would be removed and/or remediated prior to construction, Impact E-2 would not have the potential to combine with impacts of other projects and would not be cumulatively considerable (Class III).

Impact E-3 (Landfill gas and/or natural gas located near active, inactive or abandoned oil wells could be encountered during excavation or grading, resulting in explosions or exposure of workers to toxic gases) could occur along portions of the Project alignment that are in close proximity to landfills and active, inactive, and abandoned oil wells. Although, Mitigation Measures E-3a (Determine if landfill gases are present), E-3b (Implement personnel safety and monitoring measures), and E-3c Verify location and status of abandoned oil and natural gas wells) would reduce the potential for encountering methane and other natural gases, the potential for encountering natural gases would still exist. For a cumulative impact to occur, natural gas encountered by the proposed Project would have to combine with gas encountered during concurrent construction activities of a project located in very close proximity to the proposed Project. No concurrent projects located immediately adjacent to the portions of the route located near landfills or oil wells have been identified. Therefore, Impact E-3 would not have the potential to combine with impacts of other projects and would not be cumulatively considerable (Class III).

Impact E-4 (Unanticipated preexisting soil and/or groundwater contamination could be encountered during excavation or grading) could occur if preexisting soil and groundwater contamination is encountered during proposed Project construction, which would result in exposure of construction workers to potential health hazards. Such exposure would be hazardous to people in the immediate vicinity of the contamination since the contaminant would either be limited to the medium in which it is discovered or would volatilize and become airborne. If fumes from potential contamination volatilized, risk of exposure would decrease as distance from the source of contamination increased due to dispersal of the fumes. Additionally, the proposed Project includes APM HAZ-3 and Mitigation Measures E-4a (Appoint individuals with correct training for sampling, data review, and regulatory coordination) and E-4b

(Document compliance with APM HAZ-3) which require identification and disposal of potentially impacted soil. Therefore, because any contamination encountered would be removed and/or remediated prior to construction, Impact E-4 would not have the potential to combine with impacts of other projects and would not be cumulatively considerable (Class III).

Impact E-5 (Soil or groundwater contamination could result from an accidental spill during operation) could result at the substations during facility operation or along the transmission line during maintenance operations. However, APM HAZ-5 would require measures to minimize and/or avoid unforeseen spills of hazardous materials during operations as well as to clean up potentially harmful materials in the unlikely event of a release. These measures would greatly reduce the likelihood of a release as well as the potentially harmful effect of a release. Since measures would be in place to greatly reduce the likelihood of a release as a result of proposed Project activities, Impact E-5 would not be cumulatively considerable (Class III).

Mitigation to Reduce the Project's Contribution to Significant Cumulative Effects

There are no significant cumulative effects related to environmental contamination and no mitigation is needed.

3.6.7 Alternative 3 (West Lancaster)

3.6.7.1 Direct and Indirect Effects Analysis

Result in soil contamination, including flammable or toxic gases, during construction (Criterion ECH1)

Impacts associated with Criterion ECH1 for Alternative 3 would be the same as impacts associated with this criterion for the proposed Project. Although this alternative introduces a re-route of part of Segment 4 of the proposed transmission line, construction activities and methods would be identical to those of the proposed Project and there would be no substantial increase in the potential for Impact E-1 (Soil or groundwater contamination results due to improper handling and/or storage of hazardous materials during construction activities) to occur. Additionally, APM HAZ-2 (Hazardous Materials and Waste Handling Management Program) would be included as part of the Project in order to reduce the likelihood of spills, develop proper storage and handling procedures, outline hazardous waste transport, provide Project-specific training for personnel, develop procedures for fueling and maintaining construction equipment and helicopters, and include an emergency response program to ensure quick and safe cleanup of accidental spills (SCE, 2007). With implementation of APM HAZ-2, as described in Section 3.6.6.1, and APMs HYD-1 through HYD-4, as described in Section 3.8 Hydrology and Water Quality, Impact E-1 of Alternative 3 would be less than significant (Class III).

Result in mobilization of contaminants currently existing in the soil, creating potential pathways of exposure to humans or other sensitive receptors (Criterion ECH2)

Impacts associated with Criterion ECH2 for Alternative 3 would be the same as impacts associated with this criterion for the proposed Project. Although this alternative introduces a re-route of Segment 4 of the proposed Project, the re-route would not cross through or adjacent to any areas with known or suspected contamination, landfills or oil wells. Therefore, the Environmental Contamination impacts of Alternative 3 would be the same as the proposed Project. These impacts and their associated mitigation measures that fall under Criterion ECH2 are summarized in the following paragraphs. Please see Section 3.6.6.1 (Direct

and Indirect Effects Analysis) for a detailed description of these impacts, as they are the same as the proposed Project.

Alternative 3 does not traverse areas of intensive agricultural use where pesticides and herbicides would be applied regularly. Consequently, there is no potential to expose workers during construction to residual pesticides and herbicides in the soil and no impact would occur.

Impact E-2 (Excavation or grading could result in mobilization of existing soil or groundwater contamination from known sites) would be the same under Alternative 3 as it would for the proposed Project (please see Section 3.6.6.1). The rerouted portion of Alternative 3 is located in an undeveloped area with scattered residences and there are no industrial or commercial areas or known contaminated sites. Therefore there is little potential for contamination to exist along the proposed new ROW. Additionally, SCE proposes to complete Phase I ESAs (APM HAZ-1) to verify the potential for contamination for newly acquired ROW, and if necessary, complete Phase II investigations. The remaining portion of Alternative 3 is identical to Alternative 2 and the potential for encountering and mobilizing existing soil contamination is the same as presented in Section 3.6.6.1, and would require implementation of Mitigation Measures E-2a (Perform Phase I ESAs along existing transmission line ROWs) and E-2b (Based on Phase I ESAs, perform Phase II Investigations for potentially contaminated sites). With implementation of these measures, as described in Section 3.6.6.1, Impact E-2 of Alternative 3 would be less than significant (Class II).

Impact E-3 (Landfill gas and/or natural gas located near active, inactive or abandoned oil wells could be encountered during excavation or grading, resulting in explosions or exposure of workers to toxic gases) would be the same under Alternative 3 as it would for the proposed Project (please see Section 3.6.6.1). Similar to the portion of Segment 4 it would replace, the rerouted portion would not be located near any landfills or oil wells and construction in this area would therefore not be expected to encounter methane or natural gas. The remaining portion of Alternative 3 is identical to Alternative 2 and would have same potential for Impact E-3 as the proposed Project, as presented in Section 3.6.6.1. Impact E-3 for Alternative 3 would require implementation of the following mitigation measures, which are fully described in Section 3.6.6.1: E-3a (Determine if landfill gases are present), E-3b (Implement Personnel Safety and Monitoring Measures), and E-3c (Verify location and status of abandoned natural oil and gas wells). With implementation of the mitigation measures listed above and described in detail in Section 3.6.6.1, Impact E-3 of Alternative 3 would be less than significant (Class II).

Impact E-4 (Unanticipated preexisting soil and/or groundwater contamination could be encountered during excavation or grading) would be the same under Alternative 3 as it would for the proposed Project (please see Section 3.6.6.1) and would require implementation of the following mitigation measures, which are fully described in Section 3.6.6.1: E-4a (Appoint individuals with correct training for sampling, data review, and regulatory coordination) and E-4b (Document compliance with APM HAZ-3). With implementation of the mitigation measures listed above and described in detail in Section 3.6.6.1, Impact E-4 of Alternative 3 would be less than significant (Class II).

Cause contamination of soils or groundwater within the Project area during operation of the Project (Criterion ECH3)

Impacts associated with Criterion ECH3 for Alternative 3 would be the same as impacts associated with this criterion for the proposed Project. Alternative 3 is identical to the proposed Project with respect to the operational use of hazardous materials at substations and the transmission line. Accidental spills during operation and maintenance of the Project could cause soil contamination and expose workers or the public

to hazardous materials (Impact E-5). According to APM HAZ-5, SCE plans to minimize and/or avoid unforeseen spills of hazardous materials during operation at the substations by utilizing Spill Prevention, Countermeasure, and Control (SPCC) plans and Hazardous Materials Business Plans (HMBPs) for the substations.

Impact E-5 (Soil or groundwater contamination could result from an accidental spill during operation) would be the same under Alternative 3 as it would for the proposed Project (please see Section 3.6.6.1) and would require implementation of APM HAZ-5 (Spill Prevention, Countermeasure, and Control Plan and Hazardous Materials Business Plan). With implementation of APM HAZ-5, as described in Section 3.6.6.1, Impact E-5 of Alternative 3 would be less than significant (Class III).

3.6.7.2 Cumulative Effects Analysis

Geographic Extent

The geographic extent for the analysis of cumulative impacts related to environmental contamination is limited to the Project site and the immediate vicinity surrounding Project substations, laydown areas, and the transmission line ROWs occupied by the proposed alignment. These geographic limits are appropriate to consider the potential cumulative impacts as the current and past land uses on the Project site and directly adjacent to the Project site are the most significant factors to evaluate the potential for environmental contamination at a project site. Impacts would have the potential to occur during construction and operation and would be limited to the areas where concurrent construction is occurring. The geographic extent is identical to the proposed Project, as presented in Section 3.6.6.2.

Existing Cumulative Conditions

The existing cumulative conditions of Alternative 3 are identical to the proposed Project as discussed in Section 3.6.6.2.

Reasonably Foreseeable Future Projects and Changes

Reasonably foreseeable future projects and changes to the cumulative scenario for Alternative 3 would be exactly the same as Alternative 2, described in Section 3.6.6.2.

Cumulative Impact Analysis

Impacts of Alternative 3 would not have the potential to combine with impacts of other past, present and reasonably foreseeable projects for the same reasons discussed in Section 3.6.6.2. Therefore, Impacts E-1 through E-5 for Alternative 3 would not be cumulatively considerable (Class III).

Mitigation to Reduce the Project's Contribution to Significant Cumulative Effects

There are no impacts or significant cumulative effects of Alternative 3 related to environmental contamination and no additional mitigation is needed.

3.6.8 Alternative 4 (Chino Hills Routes)

3.6.8.1 Direct and Indirect Effects Analysis

Result in soil contamination, including flammable or toxic gases, during construction (Criterion ECH1)

Impacts associated with Criterion ECH1 for Alternative 4 would be the same as impacts associated with this criterion for the proposed Project. The shorter length of all four routes of this alternative compared to the proposed Project, would result in incrementally decreased opportunity for Impact E-1 (Soil or groundwater contamination results due to improper handling and/or storage of hazardous materials during construction activities) to occur. However, construction activities and methods for this alternative would be identical to those of the proposed Project, resulting in the same potential for soil contamination to occur. APM HAZ-2 (Hazardous Materials and Waste Handling Management Program) would be included as part of the Project in order to reduce the likelihood of spills, develop proper storage and handling procedures, outline hazardous waste transport, provide Project-specific training for personnel, develop procedures for fueling and maintaining construction equipment and helicopters, and include an emergency response program to ensure quick and safe cleanup of accidental spills (SCE, 2007). With implementation of APM HAZ-2, as described in Section 3.6.6.1, and APMs HYD-1 through HYD-4 , as described in Section 3.8 Hydrology and Water Quality, Impact E-1 of Alternative 4 (Routes A through D) would be less than significant (Class III).

Result in mobilization of contaminants currently existing in the soil, creating potential pathways of exposure to humans or other sensitive receptors (Criterion ECH2)

Impacts associated with Criterion ECH2 for Alternative 4 would be similar to impacts associated with this criterion for the proposed Project. However this alternative would introduce reroutes to the proposed Project that would result in avoiding the industrial/commercial areas located in Chino and Ontario with 59 known contaminated sites, as well as nearby landfill and oil field areas. Environmental Contamination impacts of Alternative 4 and their associated mitigation measures that fall under Criterion ECH2 are summarized in the following paragraphs.

Alternative 4 Routes A through D do not traverse areas of intensive agricultural use where pesticides and herbicides would be applied regularly. Consequently, there is no potential to expose workers during construction to residual pesticides and herbicides in the soil and no impact would occur.

Impact E-2 (Excavation or grading could result in mobilization of existing soil or groundwater contamination from known sites) would be the same under Alternative 4 as it would for the proposed Project (please see Section 3.6.6.1), with the exception of the four routing options which are described below. There are several sites with existing contamination along different portions of the route. Such contamination could be encountered and mobilized through ground disturbing construction activities. SCE has committed to implementation of Phase I ESAs under APM HAZ-1, which would further investigate the potential for existing contamination at these sites. However, contamination may also be present along existing transmission line ROWs due to the nature of the industrial/commercial setting of adjacent sites along some segments of the proposed alignment. Impact E-2 for Alternative 4 would require implementation of Mitigation Measures E-2a (Perform Phase I ESAs along existing transmission line ROWs) and E-2b (Based on Phase I ESAs, perform Phase II Investigations for potentially contaminated sites), which are fully described in Section 3.6.6.

Route A. Route A would be located near 59 fewer sites with known contamination than the proposed Project. With implementation of the mitigation measures listed above and described in detail in Section 3.6.6.1, Impact E-2 of Alternative 4, Route A, would be less than significant (Class II).

Route B. Impacts of Route B would be identical to impacts of Route A. With implementation of the mitigation measures listed above and described in detail in Section 3.6.6.1, Impact E-2 of Alternative 4, Route B, would be less than significant (Class II).

Route C. Route C would also avoid the 59 contaminated sites located in Chino and Ontario near which the proposed Project would be located. However, Route C would traverse within approximately 100 to 400 feet (re-routed 220-kV and new 500-kV lines, respectively) of the former burn area #18 at the Aerojet Chino Hills munitions testing facility (McLaren/Hart, 1999a). Furthermore, one of the proposed alignments for the permanent all-weather access road to the new switching station would use existing paved and unpaved roads within the Aerojet facility, as well as require segments of new road. With implementation of the mitigation measures listed above and described in detail in Section 3.6.6.1, Impact E-2 of Alternative 4, Route C, would be less than significant (Class II).

Route D. Route D of Alternative 4 would also traverse within approximately 100 to 400 feet of the former burn area #18 at the Aerojet Chino Hills facility. Impacts of Route D would be identical to impacts of Route C. With implementation of the mitigation measures listed above and described in detail in Section 3.6.6.1, Impact E-2 of Alternative 4, Route D, would be less than significant (Class II).

Impact E-3 (Landfill gas and/or natural gas located near active, inactive or abandoned oil wells could be encountered during excavation or grading, resulting in explosions or exposure of workers to toxic gases) would be the same under Alternative 4 as it would for the proposed Project (please see Section 3.6.6.1), with the exception of the four routing options which are described below. The portions of this alternative route that are identical to that of Alternative 2 would be located in close proximity to landfills and oil wells. This proximity could result in methane and natural gas accumulation in excavations or depressions at construction sites and could result in explosions or exposure of workers to these toxic gases. Impact E-3 for Alternative 4 would require implementation of Mitigation Measures E-3a (Determine if landfill gases are present), E-3b (Implement Personnel Safety and Monitoring Measures), and E-3c (Verify location and status of abandoned natural oil and gas wells), which are fully described in Section 3.6.6.

Route A. Route A would avoid landfill sites located near Segments 8B MP 0.3 and 8B MP 4.4 of Alternative 2. With implementation of the mitigation measures listed above and described in detail in Section 3.6.6.1, Impact E-3 of Alternative 4, Route A, would be less than significant (Class II).

Route B. Impacts of Route B would be identical to impacts of Route A. With implementation of the mitigation measures listed above and described in detail in Section 3.6.6.1, Impact E-3 of Alternative 4, Route B, would be less than significant (Class II).

Route C. Impacts of Route C would be identical to impacts of Route A. With implementation of the mitigation measures listed above and described in detail in Section 3.6.6.1, Impact E-3 of Alternative 4, Route C, would be less than significant (Class II).

Route D. With respect to proximity to landfill sites, Route D would be identical to Route A. However, according to oil field maps (DOGGR, 2005), portions of Route D approach either

plugged and abandoned wells or dry holes, or active oil wells. There is potential for encountering natural gas during construction. With implementation of the mitigation measures listed above and described in detail in Section 3.6.6.1, Impact E-3 of Alternative 4, Route D, would be less than significant (Class II).

With regard to Impact E-4 (Unanticipated preexisting soil and/or groundwater contamination could be encountered during excavation or grading), the shorter length of all four routes of Alternative 4 and the rural character of the areas traversed by each route, compared to the proposed Project, would result in incrementally decreased opportunity and likelihood for unknown contamination to exist along Routes A through D. However, the potential to encounter unknown contamination would still exist and Impact E-4 for this alternative would be the same as the proposed Project (please see Section 3.6.6.1). Impact E-4 would require implementation of the following mitigation measures, which are fully described in Section 3.6.6.1: E-4a (Appoint individuals with correct training for sampling, data review, and regulatory coordination) and E-4b (Document compliance with APM HAZ-3). With implementation of the mitigation measures listed above and described in detail in Section 3.6.6.1, Impact E-4 of Alternative 4 would be less than significant (Class II).

Impact E- 6: Excavation or grading could result in mobilization of existing soil contamination or encountering ordnance from known munitions testing and disposal sites.

Soil testing within the Aerojet Facility identified very low levels of dioxin/furan, tear gas, and semi-volatile organic compounds (SVOCs) about 100 feet north of and 100 feet below the proposed Alternative 4 (Route C and Route D) alignments. The low levels of residual chemicals detected in the soil were determined to not pose a risk to human health, including carcinogenic risk (Mclaren/Hart 1999a). However, although the risk is considered to be low, the potential remains for ordnance and soil contamination to be present along this portion of Route C and Route D and the permanent all-weather switching station access road alignment (DTSC, 2008). The potential for munitions and explosives of concern (MEC) cannot be ruled out along Route C and Route D or along the permanent access roads passing through or near the Aerojet Facility. Encountering ordnance or contaminated soil could expose workers and the public to hazardous chemicals or explosion hazard.

Mitigation Measures for Impact E-6

E-6a **Provide ordnance recognition training.** SCE shall conduct training of all site personnel assigned to Alternative 4, Route C or Route D to recognize ordnance and, if possible, associated soil contamination. The training program shall be developed in consultation with Aerojet General and Cal EPA (DTSC). In addition, construction superintendents shall observe and direct all grading and excavation work along Alternative 4, Route C and Route D.

E-6b **Detect and remove MEC from access roads.** SCE shall develop plans of access roads required to construct Alternative 4, Route C or Route D, and the permanent all-weather switching station access road. The plans shall be reviewed with the DTSC conceptual model of areas having or potentially having munitions and explosives of concern (MEC). All access roads with potential to encounter MEC shall be evaluated by trained munitions specialists to detect and remove any MEC within existing or proposed access roads. MEC removal and disposal shall be coordinated with DTSC and Aerojet General.

CEQA Significance Conclusion

Implementation of Mitigation Measures E-6a and E-6b would reduce the potential for construction to result in mobilization of existing soil contamination or encountering ordnance from known munitions

testing and disposal sites along Alternative 4 Route C and Route D to a less-than-significant level (Class II). Alternative 4 Route A and Route B do not traverse the areas of known munitions testing and disposal, and would therefore not result in impacts related to mobilization of existing soil contamination or encountering ordnance from known munitions testing and disposal sites(Impact E-6).

Cause contamination of soils or groundwater within the Project area during operation of the Project (Criterion ECH3)

Impacts associated with Criterion ECH3 for all four routes of Alternative 4 would be identical to impacts associated with this criterion for the proposed Project. Alternative 4 is identical to the proposed Project with respect to the operational use of hazardous materials at substations and the transmission line and would result in the same potential for Impact E-5 (Soil or groundwater contamination could result from an accidental spill during operation) to occur and would require implementation of APM HAZ-5 (Spill Prevention, Countermeasure, and Control Plan and Hazardous Materials Business Plan). With implementation of APM HAZ-5, as described in Section 3.6.4.2, Impact E-5 of Alternative 4 would be less than significant (Class III).

3.6.8.2 Cumulative Effects Analysis

Geographic Extent

The geographic extent for the analysis of cumulative impacts related to environmental contamination is limited to the immediate vicinity surrounding the transmission line ROWs occupied by the proposed alignment. These geographic limits are appropriate to consider the potential cumulative impacts as the current and past land use are the most significant factor to evaluate the potential for environmental contamination at a project site. The geographic extent is identical to the proposed Project, as presented in Section 3.6.6.2.

Existing Cumulative Conditions

Each of the four routes of Alternative 4 are shorter than the proposed Project and avoid approximately 14 miles of commercial and industrial areas with numerous known environmental contamination sites that would be crossed by the proposed Project. This would result in less opportunity to encounter contaminated soil or release hazardous substances during construction and any associated transport and treatment that would be cumulatively considered.

Reasonably Foreseeable Future Projects and Changes

The future conditions related to Alternative 4 are similar to the proposed Project as discussed in Section 3.6.6.2 because there are no reasonably foreseeable future projects near Alternative 4 where contaminated soil is expected.

Cumulative Impact Analysis

Impacts of Alternative 4 would not have the potential to combine with impacts of other past, present and reasonably foreseeable projects for the same reasons discussed in Section 3.6.6.2. Therefore, Impacts E-1 through E-5 for Alternative 4 would not be cumulatively considerable (Class III).

Soil testing and mitigation required for Impact E-6 would also be required for any past, present or reasonably foreseeable projects. Therefore, impacts resulting from mobilization of existing soil

contamination or encountering ordnance from known munitions testing and disposal sites would not be cumulatively considerable (Class III).

Mitigation to Reduce the Project's Contribution to Significant Cumulative Effects

There are no impacts or significant cumulative effects of Alternative 4 related to environmental contamination and no additional mitigation is needed.

3.6.9 Alternative 5 (Partial Underground)

3.6.9.1 Direct and Indirect Effects Analysis

Result in soil contamination during construction (Criterion ECH1)

Impacts associated with Criterion ECH1 for Alternative 5 would be the same as impacts associated with this criterion for the proposed Project. The identical length of this alternative compared to the proposed Project, would result in the same potential for Impact E-1 (Soil or groundwater contamination results due to improper handling and/or storage of hazardous materials during construction activities) to occur. APM HAZ-2 (Hazardous Materials and Waste Handling Management Program) would be included as part of the Project in order to reduce the likelihood of spills, develop proper storage and handling procedures, outline hazardous waste transport, provide Project-specific training for personnel, develop procedures for fueling and maintaining construction equipment and helicopters, and include an emergency response program to ensure quick and safe cleanup of accidental spills (SCE, 2007). Although the more extensive amount of ground disturbance and increased duration of construction activities associated with underground installation would incrementally increase the potential for this to occur, compared to the proposed Project, with implementation of APM HAZ-2, as described in Section 3.6.6.1, and APMs HYD-1 through HYD-4, as described in Section 3.8 (Hydrology and Water Quality), Impact E-1 of Alternative 5 would be less than significant (Class III).

Result in mobilization of contaminants currently existing in the soil, creating potential pathways of exposure to humans or other sensitive receptors (Criterion ECH2)

Impacts associated with Criterion ECH2 for Alternative 5 would be the same as impacts associated with this criterion for the proposed Project. Although portions of this alternative would be installed underground, including deep shafts and tunnel sections, the transmission line route would be identical to that of the proposed Project and would not cross through or adjacent to any new areas with known or suspected contamination, landfills or oil wells. Therefore, the Environmental Contamination impacts of Alternative 5 would be the same as the proposed Project. These impacts and their associated mitigation measures that fall under Criterion ECH2 are summarized in the following paragraphs. Please see Section 3.6.6.1 (Direct and Indirect Effects Analysis) for a detailed description of these impacts, as they are identical to the proposed Project.

Alternative 5 does not traverse areas of intensive agricultural use where pesticides and herbicides would be applied regularly. Consequently, there is no potential to expose workers during construction to residual pesticides and herbicides in the soil and no impact would occur.

Impact E-2 (Excavation or grading could result in mobilization of existing soil or groundwater contamination from known sites) would be the same under Alternative 5 as it would for the proposed Project (please see Section 3.6.6.1). Although portions of this alternative would be installed underground, the transmission line route would be identical to that of the proposed Project and would traverse through

or near the same sites with known contamination as the proposed Project. Although Alternative 5 includes the excavation and construction of the deep access shaft and transition station in a urban area, the potential for encountering and mobilizing existing soil contamination is the same as presented in Section 3.6.6.1, and would require implementation of Mitigation Measures E-2a (Perform Phase I ESAs along existing transmission line ROWs) and E-2b (Based on Phase I ESAs, perform Phase II Investigations for potentially contaminated sites). Although the more extensive amount of ground disturbance and increased duration of construction activities associated with underground installation would incrementally increase the potential for this to occur, compared to the proposed Project, with implementation of these measures, as described in Section 3.6.6.1, Impact E-2 of Alternative 5 would be less than significant (Class II).

Impact E-3 (Landfill gas and/or natural gas located near active, inactive or abandoned oil wells could be encountered during excavation or grading, resulting in explosions or exposure of workers to toxic gases) would be the same under Alternative 5 as it would for the proposed Project (please see Section 3.6.6.1). Although portions of this alternative would be installed underground, the transmission line route would be identical to that of the proposed Project and would have the same potential for Impact E-3 as the proposed Project, as presented in Section 3.6.6.1. The underground section of Alternative 5 is not located near landfills or oil fields. Impact E-3 for Alternative 5 would require implementation of the following mitigation measures, which are fully described in Section 3.6.6.1: E-3a (Determine if landfill gases are present), E-3b (Implement Personnel Safety and Monitoring Measures), and E-3c (Verify location and status of abandoned natural oil and gas wells). Although the more extensive amount of ground disturbance and increased duration of construction activities associated with underground installation would incrementally increase the potential for this to occur, compared to the proposed Project, with implementation of the mitigation measures listed above and described in detail in Section 3.6.6.1, Impact E-3 of Alternative 5 would be less than significant (Class II).

Impact E-4 (Unanticipated preexisting soil and/or groundwater contamination could be encountered during excavation or grading) would be the same under Alternative 5 as it would for the proposed Project. Although portions of this alternative would be installed underground, the transmission line route would be identical to that of the proposed Project and would have the same potential for encountering unknown contamination as the proposed Project (please see Section 3.6.6.1). Most of the underground section is located in residential areas with limited potential for unanticipated preexisting soil or groundwater contamination. Impact E-4 would require implementation of the following mitigation measures, which are fully described in Section 3.6.6.1: E-4a (Appoint individuals with correct training for sampling, data review, and regulatory coordination) and E-4b (Document compliance with APM HAZ-3). Although the more extensive amount of ground disturbance and increased duration of construction activities associated with underground installation would incrementally increase the potential for this to occur, compared to the proposed Project, with implementation of the mitigation measures listed above and described in detail in Section 3.6.6.1, Impact E-4 of Alternative 5 would be less than significant (Class II).

Cause contamination of soils or groundwater within the Project area during operation of the Project (Criterion ECH3)

Impacts associated with Criterion ECH3 for Alternative 5 would be identical to impacts associated with this criterion for the proposed Project. Alternative 5 is identical to the proposed Project with respect to the operational use of hazardous materials at substations, transition stations, and the transmission line and would result in the same potential for Impact E-5 (Soil or groundwater contamination could result from an accidental spill during operation) to occur and would require implementation of APM HAZ-5 (Spill

Prevention, Countermeasure, and Control Plan and Hazardous Materials Business Plan). The sulfur hexafluoride insulating gas (SF_6) is potentially a suffocation hazard, it is not considered to be hazardous (toxic) with potential to contaminate the soil or groundwater. With implementation of APM HAZ-5, as described in Section 3.6.6.1, Impact E-5 of Alternative 5 would be less than significant (Class III).

3.6.9.2 Cumulative Effects Analysis

Geographic Extent

The geographic extent for the analysis of cumulative impacts related to environmental contamination is limited to the immediate vicinity surrounding the transmission line ROWs occupied by the proposed alignment. These geographic limits are appropriate to consider the potential cumulative impacts as the current and past land use are the most significant factor to evaluate the potential for environmental contamination at a project site. The geographic extent is identical to the proposed Project as presented in Section 3.6.6.2.

Existing Cumulative Conditions

The existing cumulative conditions of Alternative 5 are identical to the proposed Project as discussed in Section 3.6.6.2.

Reasonably Foreseeable Future Projects and Changes

The future conditions related to Alternative 5 are identical to the proposed Project as discussed in Section 3.6.6.2.

Cumulative Impact Analysis

Impacts of Alternative 5 would not have the potential to combine with impacts of other past, present and reasonably foreseeable projects for the same reasons discussed in Section 3.6.6.2. Therefore, Impacts E-1 through E-5 for Alternative 5 would not be cumulatively considerable (Class III).

Mitigation to Reduce the Project's Contribution to Significant Cumulative Effects

There are no impacts or significant cumulative effects of Alternative 5 related to environmental contamination and no additional mitigation is needed.

3.6.10 Alternative 6: Maximum Helicopter Construction in the ANF Alternative

3.6.10.1 Direct and Indirect Effects Analysis

Result in soil contamination during construction (Criterion ECH1)

Impacts associated with Criterion ECH1 for Alternative 6 would be the same as impacts associated with this criterion for the proposed Project. However, because Alternative 6 would require greater use of helicopters and increased fueling and maintenance in the field along Segment 6 and Segment 11 than the proposed Project, this alternative would result in an incrementally increased potential for soil contamination resulting from spills and leaks (Impact E-1) to occur. APM HAZ-2 (Hazardous Materials and Waste Handling Management Program) would be included as part of the Project in order to reduce the likelihood of spills, develop proper storage and handling procedures, outline hazardous waste transport, provide Project-specific training for personnel, develop procedures for fueling and maintaining construction

equipment and helicopters, and include an emergency response program to ensure quick and safe cleanup of accidental spills (SCE, 2007). Although the increased amount of helicopter use and associated fueling and maintenance in undeveloped areas of this alternative would incrementally increase the potential for this to occur compared to the proposed Project, with implementation of APM HAZ-2, as described in Section 3.6.6.1, and APMs HYD-1 through HYD-4, as described in Section 3.8 - Hydrology and Water Quality, Impact E-1 of Alternative 6 would be less than significant (Class III).

Result in mobilization of contaminants currently existing in the soil, creating potential pathways of exposure to humans or other sensitive receptors (Criterion ECH2)

Impacts associated with Criterion ECH2 for Alternative 6 would be the same as impacts associated with this criterion for the proposed Project. Although less ground disturbance would occur under this alternative than the proposed Project as a result of the decreased amount of road construction that would be required along Segment 6 and Segment 11 for this alternative, the transmission line route would be identical to that of the proposed Project and would not cross through or adjacent to any new areas with known or suspected contamination, landfills or oil wells. Therefore, the Environmental Contamination impacts of Alternative 6 would be the same as the proposed Project. These impacts and their associated mitigation measures that fall under Criterion ECH2 are summarized in the following paragraphs. Please see Section 3.6.6.1 (Direct and Indirect Effects Analysis) for a detailed description of these impacts, as they are identical to the proposed Project.

Alternative 6 does not traverse areas of intensive agricultural use where pesticides and herbicides would be applied regularly. Consequently, there is no potential to expose workers during construction to residual pesticides and herbicides in the soil and no impact would occur.

Impact E-2 (Excavation or grading could result in mobilization of existing soil or groundwater contamination from known sites) would be the same under Alternative 6 as it would for the proposed Project (please see Section 3.6.6.1). Although portions of this alternative include grading of 10 new helicopters staging sites, the transmission line route would be identical to that of the proposed Project and would traverse through or near the same sites with known contamination as the proposed Project. Although Alternative 6 includes grading of level pads in hillside areas in undeveloped areas of the ANF, the potential for encountering and mobilizing existing soil contamination is the same as presented in Section 3.6.6.1, and would require implementation of Mitigation Measures E-2a (Perform Phase I ESAs along existing transmission line ROWs) and E-2b (Based on Phase I ESAs, perform Phase II Investigations for potentially contaminated sites). Alternative 6 has comparable ground disturbance and duration of construction activities as the proposed Project. With implementation of these measures, as described in Section 3.6.6.1, Impact E-2 of Alternative 6 would be less than significant (Class II).

Impact E-3 (Landfill gas and/or natural gas located near active, inactive or abandoned oil wells could be encountered during excavation or grading, resulting in explosions or exposure of workers to toxic gases) would be the same under Alternative 6 as it would for the proposed Project (please see Section 3.6.6.1). None of the helicopter staging areas is located near oil fields or landfills and the transmission line route would be identical to that of the proposed Project and would have the same potential for Impact E-3 as the proposed Project, as presented in Section 3.6.6.1. Impact E-3 for Alternative 6 would require implementation of the following mitigation measures, which are fully described in Section 3.6.6.1: E-3a (Determine if landfill gases are present), E-3b (Implement Personnel Safety and Monitoring Measures), and E-3c (Verify location and status of abandoned natural oil and gas wells). With implementation of the

mitigation measures listed above and described in detail in Section 3.6.6.1, Impact E-3 of Alternative 6 would be less than significant (Class II).

Impact E-4 (Unanticipated preexisting soil and/or groundwater contamination could be encountered during excavation or grading) would be the same under Alternative 6 as it would for the proposed Project. Although portions of this alternative include grading of level areas within hillside terrain, the transmission line route would be identical to that of the proposed Project and would have the same potential for encountering unknown contamination as the proposed Project (please see Section 3.6.6.1). Although Alternative 6 would require more grading locally along Segment 6 and Segment 11 than the proposed Project and would result in an incrementally increased area of ground disturbance, this ground disturbance would occur in undeveloped areas of ANF and construction activities would have no potential to encounter unanticipated preexisting soil or groundwater contamination. Impact E-4 would require implementation of the following mitigation measures, which are fully described in Section 3.6.6.1: E-4a (Appoint individuals with correct training for sampling, data review, and regulatory coordination) and E-4b (Document compliance with APM HAZ-3). With implementation of the mitigation measures listed above and described in detail in Section 3.6.6.1, Impact E-4 of Alternative 6 would be less than significant (Class II).

Cause contamination of soils or groundwater within the Project area during operation of the Project (Criterion ECH3)

Impacts associated with Criterion ECH3 for Alternative 6 would be identical to impacts associated with this criterion for the proposed Project. Alternative 6 is identical to the proposed Project with respect to the operational use of hazardous materials at substations and along the transmission line and would result in the same potential for Impact E-5 (Soil or groundwater contamination could result from an accidental spill during operation) to occur and would require implementation of APM HAZ-5 (Spill Prevention, Countermeasure, and Control Plan and Hazardous Materials Business Plan). With implementation of APM HAZ-5, as described in Section 3.6.6.1, Impact E-5 of Alternative 6 would be less than significant (Class III).

3.6.10.2 Cumulative Effects Analysis

Geographic Extent

The geographic extent for the analysis of cumulative impacts related to environmental contamination is limited to the immediate vicinity surrounding the transmission line ROWs occupied by the proposed alignment. These geographic limits are appropriate to consider the potential cumulative impacts as the current and past land use are the most significant factor to evaluate the potential for environmental contamination at a project site. The geographic extent is identical to the proposed Project as presented in Section 3.6.6.2.

Existing Cumulative Conditions

The existing cumulative conditions of Alternative 6 are identical to the proposed Project as discussed in Section 3.6.6.2.

Reasonably Foreseeable Future Projects and Changes

The future conditions related to Alternative 6 are identical to the proposed Project as discussed in Section 3.6.6.2.

Cumulative Impact Analysis

Impacts of Alternative 6 would not have the potential to combine with impacts of other past, present and reasonably foreseeable projects for the same reasons discussed in Section 3.6.6.2. Therefore, Impacts E-1 through E-5 for Alternative 6 would not be cumulatively considerable (Class III).

Mitigation to Reduce the Project's Contribution to Significant Cumulative Effects

There are no impacts or significant cumulative effects of Alternative 6 related to environmental contamination and no additional mitigation is needed.

3.6.11 Alternative 7: 66-kV Subtransmission Alternative

3.6.11.1 Direct and Indirect Effects Analysis

Result in soil contamination during construction (Criterion ECH1)

Impacts associated with Criterion ECH1 for Alternative 7 would be the same as impacts associated with this criterion for the proposed Project. However, because Alternative 7 would require a minor increase in overall construction effort (underground versus overhead construction), this alternative would result in an incrementally increased potential for soil contamination resulting from spills and leaks (Impact E-1) to occur. APM HAZ-2 (Hazardous Materials and Waste Handling Management Program) would be included as part of the Project in order to reduce the likelihood of spills, develop proper storage and handling procedures, outline hazardous waste transport, provide Project-specific training for personnel, develop procedures for fueling and maintaining construction equipment, and include an emergency response program to ensure quick and safe cleanup of accidental spills (SCE, 2007). Although the increased amount of construction effort and associated fueling and maintenance of equipment for this alternative would incrementally increase the potential for this to occur compared to the proposed Project, with implementation of APM HAZ-2, as described in Section 3.6.6.1, and APMs HYD-1 through HYD-4, as described in Section 3.8 Hydrology and Water Quality, Impact E-1 of Alternative 7 would be less than significant (Class III).

Result in mobilization of contaminants currently existing in the soil, creating potential pathways of exposure to humans or other sensitive receptors (Criterion ECH2)

Impacts associated with Criterion ECH2 for Alternative 7 would be the same as impacts associated with this criterion for the proposed Project. Although more underground construction would occur under this alternative than the proposed Project, only 0.6 mile of underground construction occurs in areas of commercial land use activities. The three subtransmission alignments do not pass through or adjacent to any new areas with known or suspected contamination, landfills or oil wells. Therefore, the Environmental Contamination impacts of Alternative 7 would be the same as the proposed Project. These impacts and their associated mitigation measures that fall under Criterion ECH2 are summarized in the following paragraphs. Please see Section 3.6.6.1 (Direct and Indirect Effects Analysis) for a detailed description of these impacts, as they are identical to the proposed Project.

Alternative 7 does not traverse areas of intensive agricultural use where pesticides and herbicides would be applied regularly. Consequently, there is no potential to expose construction workers to residual pesticides and herbicides in the soil and no impact would occur.

Impact E-2 (Excavation or grading could result in mobilization of existing soil or groundwater contamination from known sites) would be the same under Alternative 7 as it would for the proposed

Project (please see Section 3.6.6.1). Although portions of this alternative include a 0.6 mile underground 66-kV subtransmission line, the transmission line route would be nearly identical to that of the proposed Project and would traverse through or near the same sites with known contamination as the proposed Project. Although Alternative 7 includes underground construction for 0.6 mile, the potential for encountering and mobilizing existing soil contamination beneath the existing paved roadways is the same as presented in Section 3.6.6.1, and would require implementation of Mitigation Measures E-2a (Perform Phase I ESAs along transmission line ROWs) and E-2b (Based on Phase I ESAs, perform Phase II Investigations for potentially contaminated sites). With implementation of these measures, as described in Section 3.6.6.1, Impact E-2 of Alternative 7 would be less than significant (Class II).

Impact E-3 (Landfill gas and/or natural gas located near active, inactive or abandoned oil wells could be encountered during excavation or grading, resulting in explosions or exposure of workers to toxic gases) would be the same under Alternative 7 as it would for the proposed Project (please see Section 3.6.6.1). None of the underground alignments of Alternative 7 are located within oil fields or near landfills. The Whittier Narrows overhead alignment passes through the Montebello Oil Field and would have the same potential for Impact E-3 as the proposed Project, as presented in Section 3.6.6.1. Impact E-3 for Alternative 7 would require implementation of the following mitigation measures, which are fully described in Section 3.6.6.1: E-3a (Determine if landfill gases are present), E-3b (Implement Personnel Safety and Monitoring Measures), and E-3c (Verify location and status of abandoned natural oil and gas wells). With implementation of the mitigation measures listed above and described in detail in Section 3.6.6.1, Impact E-3 of Alternative 7 would be less than significant (Class II).

Impact E-4 (Unanticipated preexisting soil and/or groundwater contamination could be encountered during excavation or grading) would be the same under Alternative 7 as it would for the proposed Project. Although portions of this alternative include underground construction in commercial land use areas, the transmission line routes would be nearly identical to that of the proposed Project and would have the same potential for encountering unknown contamination as the proposed Project (please see Section 3.6.6.1). Although Alternative 7 would require more underground construction in commercial areas locally along Segment 7 than the proposed Project and would result in an incrementally increased potential to encounter unanticipated preexisting soil or groundwater contamination. Impact E-4 would require implementation of the following mitigation measures, which are fully described in Section 3.6.6.1: E-4a (Appoint individuals with correct training for sampling, data review, and regulatory coordination) and E-4b (Document compliance with APM HAZ-3). With implementation of the mitigation measures listed above and described in detail in Section 3.6.6.1, Impact E-4 of Alternative 7 would be less than significant (Class II).

Cause contamination of soils or groundwater within the Project area during operation of the Project (Criterion ECH3)

Impacts associated with Criterion ECH3 for Alternative 7 would be identical to impacts associated with this criterion for the proposed Project. Alternative 7 is identical to the proposed Project with respect to the operational use of hazardous materials at substations and along the transmission line and would result in the same potential for Impact E-5 (Soil or groundwater contamination could result from an accidental spill during operation) to occur and would require implementation of APM HAZ-5 (Spill Prevention, Countermeasure, and Control Plan and Hazardous Materials Business Plan). With implementation of APM HAZ-5, as described in Section 3.6.6.1, Impact E-5 of Alternative 7 would be less than significant (Class III).

3.6.11.2 Cumulative Effects Analysis

Geographic Extent

The geographic extent for the analysis of cumulative impacts related to environmental contamination is limited to the immediate vicinity surrounding the transmission line ROWs occupied by the proposed alignment. These geographic limits are appropriate to consider the potential cumulative impacts as the current and past land use are the most significant factor to evaluate the potential for environmental contamination at a project site. The geographic extent is identical to the proposed Project as presented in Section 3.6.6.2.

Existing Cumulative Conditions

The existing cumulative conditions of Alternative 7 are identical to the proposed Project as discussed in Section 3.6.6.2.

Reasonably Foreseeable Future Projects and Changes

The future conditions related to Alternative 7 are identical to the proposed Project as discussed in Section 3.6.6.2.

Cumulative Impact Analysis

Impacts of Alternative 7 would not have the potential to combine with impacts of other past, present and reasonably foreseeable projects for the same reasons discussed in Section 3.6.6.2. Therefore, Impacts E-1 through E-5 for Alternative 7 would not be cumulatively considerable (Class III).

Mitigation to Reduce the Project's Contribution to Significant Cumulative Effects

There are no impacts or significant cumulative effects of Alternative 7 related to environmental contamination and no additional mitigation is needed.

3.6.12 Impact Significance Summary

Table 3.6-14 summarizes the direct and indirect environmental impacts of the proposed Project (Alternative 2) and the other alternatives related to environmental contamination and hazards. The direct and indirect effects of the Project and alternatives have been fully described in Sections 3.6.6 through 3.6.11 above. Alternative 1 (No Project/No Action) impacts are fully described in Section 3.6.5; however, since no potential future project information is available an impact significance level for Alternative 1 is not included in the table on the following page.

Table 3.6-14. Summary of Impacts and Mitigation Measures – Environmental Contamination & Hazards

Impact	Impact Significance								Mitigation Measures
	Alt. 1+	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	NFS Lands*	
E-1: Soil or groundwater contamination results due to improper handling and/or storage of hazardous materials during construction activities.	N/A	Class III	Class III	Class III	Class III	Class III	Class III	Yes	None recommended.
E-2: Excavation or grading could result in mobilization of existing soil or groundwater contamination from known sites	N/A	Class II	Class II	Class II	Class II	Class II	Class II	Yes	E-2a: Perform Phase I ESAs along existing transmission line ROWs. E-2b: Perform Phase II Investigations for potentially contaminated sites.
E-3: Landfill gas and/or natural gas located near active, inactive or abandoned oil wells could be encountered during excavation or grading, resulting in explosions or exposure of workers to toxic gases.	N/A	Class II	Class II	Class II	Class II	Class II	Class II	No	E-3a: Determine if landfill gases are present. E-3b: Implement Personnel Safety and Monitoring Measures. E-3c: Verify location and status of abandoned oil and natural gas wells.
E-4: Unanticipated preexisting soil and/or groundwater contamination could be encountered during excavation or grading.	N/A	Class II	Class II	Class II	Class II	Class II	Class II	No	E-4a: Appoint individuals with correct training for sampling, data review, and regulatory coordination. E-4b: Document compliance with APM HAZ-3.
E-5: Soil or groundwater contamination could result from an accidental spill during operation.	N/A	Class III	Class III	Class III	Class III	Class III	Class III	Yes	None recommended.
E-6: Excavation or grading could result in mobilization of existing soil contamination or encountering ordnance associated with munitions and explosives from known sites	N/A	No Impact	No Impact	Class III	No Impact	No Impact	No Impact	No	E-6a: Conduct ordnance recognition training E-6b: Detect and remove MEC from access roads

N/A = Not Available

* Indicates whether this impact is applicable to the portion of the Project on National Forest System lands.

+ Potential projects would likely traverse the same geographic regions as either the proposed Project or Alternatives 3 through 7, and subsequently introduce similar types of impacts.