

## E.1.10 Public Health and Safety – Environmental Contamination

The route of the Interstate 8 Alternative would parallel the SWPL for 35.7 miles from the Imperial Valley Substation. The alternative would then turn northwest, approaching the I-8 from the southeast, crossing to the north side of I-8 about a mile east of Boulevard, and then turning west and following the freeway. At MP I8-44.7, just east of the Campo Wind Farm, the transmission line would cross to the south side of the freeway and would remain on the south side of the freeway for 1.21 miles before crossing back to the north side of the freeway. The Interstate 8 Alternative route would continue north-west parallel to the freeway, and into the Interstate 8 Alternative Substation at approximately MP I8-65, then continuing west for approximately 6 miles.

At MP I8-70.8 immediately east of the Viejas Reservation, the 500 kV line would cross over to the south side of I-8 before converting to a 230 kV underground line through a double transition structure. The route would continue underground, south of I-8 in Alpine Boulevard for 8.8 miles, at which point the line would transition back to overhead and cross over I-8 again. This alternative would then diverge from I-8, heading generally north-northwest until joining the Proposed Project route at MP I8-92.7. The total length of this route would be 92.7 miles, 38.3 miles shorter than the proposed route to the same point.

There are five options to various portions of the Interstate 8 Alternative. At the Campo Reservation, the Campo North Option would remain on the north side of the freeway between I-8 MP-44.7 and I-8 MP 45.9, rather than cross to the south of the freeway and re-cross to the north about a mile further. In the Buckman Springs area there are three options which would avoid disrupting hang gliding and paragliding opportunities in Horse Canyon. The Buckman Springs Underground Option would follow the Interstate 8 Alternative, but at MP I8-55 would transition to an underground line for nearly 2 miles, and then transition back to a 500 kV overhead line; this option is approximately 2.4 miles long and would essentially follow the alternative's route. The West Buckman Springs Option would cross to the south side of the interstate at MP I8-54 and head west and then would follow Buckman Springs Road north for approximately 4 miles before rejoining the Interstate 8 Alternative alignment; this option is approximately 5.6 miles in length. The South Buckman Springs Route Option would start from the Modified Route D Alternative (described in Section E.4.1). At approximately MP MRD-4.5, rather than turn south and continue on the Modified Route D Alternative, the South Buckman Springs Option would continue due west to Buckman Springs Road before turning north and joining the West Buckman Springs Option.

### E.1.10.1 Environmental Setting

**Land Uses along the I-8 Alternative.** The Interstate 8 Alternative parallels the north side of the existing SWPL right-of-way across undeveloped desert valley and gentle hillside terrain from MPs I8-0 to I8-23. In this segment the alignment passes approximately 0.25 miles southwest of irrigated agriculture (MP I8-2.8) and the large gypsum sheetrock manufacturing plant in Plaster City (MP I8-10.5), and 0.25 miles south of several large quarries in the southern foothills of the Coyote Mountains (MP I8-18.5). From MPs I8-23 to I8-28 the alignment ascends the steep eastern escarpment of the Jacumba Mountains and remains east of the commercial activities near In-Ko-pah and Oasis near the summit along I-8. The Interstate 8 Alternative crosses Carrizo Gorge Road in Jacumba at MP I8-33.2 about 0.4 miles south of the active service stations at the I-8 off-ramp and passes through irrigated agriculture at the north end of Jacumba Valley (MPs I8-33.9 to I8-34.1).

At MP I8-35.5, the Interstate 8 Alternative turns northwest away from SWPL to roughly parallel the north side of I-8 extending 18 miles to near Buckman Springs. The Interstate 8 Alternative passes about 0.5 miles southwest of the commercial areas of Pine Valley and continues northwest and west through largely undeveloped mountain terrain with scattered residences towards Viejas Reservation east of Alpine. The Interstate 8 Alternative traverses undeveloped mountain terrain.

An underground segment of the alternative would be located in Alpine Boulevard, passing through low density residential and commercial land uses from MPs I8-71.2 to I8-75.8. Moderate density commercial activities border both sides of Alpine Boulevard from MPs I8-75.8 to I8-77.5, approximately 0.5 miles west of Tavern Road. Commercial activities and potential contamination associated with service stations and numerous automotive repair shops along Alpine Boulevard may impact the underground segment. The western portion of the underground segment from west of Tavern Road to MP I8-79.6 is characterized by low density residential use on the south side of Alpine Boulevard and I-8 on the north side. The underground segment transitions to aboveground at MP I8-79.6 on the south side of I-8.

The alternative travels north after crossing I-8 for about 3 miles, crossing the San Diego River about 0.5 miles downstream of El Capitan Dam. The alignment then turns west and then north-northwest remaining on undeveloped hillside. It continues in undeveloped hillside areas to the terminus at MP I8-92.8 and generally remains more than 0.25 miles east and up gradient of the large construction contractor storage yards, trucking yards, steel fabricators, auto dismantlers, gravel and rock quarries, and asphalt and concrete plants located along Moreno Avenue, Vigilante Road, and both sides of SR67.

**Database Search.** An EDR environmental database search (EDR, 2006a) provided by the applicant for a one-mile-wide corridor (one-half mile on both sides) along the first 21 miles of the of the SWPL corridor and a new EDR environmental database search (EDR, 2007g) for a one-half mile wide corridor (one-quarter mile on both sides) for the alternative alignment were reviewed and analyzed. Sites within 0.25 miles of the Interstate 8 Alternative route and route options were identified if they were known environmental contamination sites or sites that stored, used, and disposed of significant quantities of hazardous materials. These sites were then evaluated based on type of site and types and volumes of hazardous materials to determine is the site has~~analysis also searched for sites with the~~ potential to have resulted in environmental contamination within the alternative ROWs.

Based on review of the EDR environmental databases (EDR, 2006a and 2007g), there are 15 hazardous material sites (primarily gas stations) were identified within 0.25 miles of the Interstate 8 Alternative with potential to impact the alternative. Sites along the alternative are summarized in Table E.1.10-1. A summary of all the sites identified in the EDR databases is included in Appendix 13.

Table E.1.10-1. Identified Hazardous Material Sites within 0.25 Miles of the Interstate 8 Alternative

EDR Map ID <sup>1</sup>	Site Name	Site Address	Database Lists <sup>2</sup>	Comments
9	Padre Dam Water District	9790 Chocolate Summit Drive, Lakeside	UST, SD Co. HMMS	3 UST, no violations reported. Small quantity generator waste oil.
14	Alpine Self Service/Alpine Valero/Alpine Ultramar	1145 Tavern Road, Alpine	HIST UST, LUST, UST	1999 leaking fuel tank, case closed 2004. 4 new USTs
14	Tavern Road Texaco	1140 Tavern Road, Alpine	UST	Site listed with 4 USTs.

**Table E.1.10-1. Identified Hazardous Material Sites within 0.25 Miles of the Interstate 8 Alternative**

EDR Map ID <sup>1</sup>	Site Name	Site Address	Database Lists <sup>2</sup>	Comments
19	Circle K #8581	1666 Alpine Blvd., Alpine	UST, HAZNET, SD Co. HMMD	Site listed with 3 USTs.
20	Pacific Bell	2249/2267 Victoria Dr., Alpine	RCRA-SQG, HAZNET, HIST UST	2 diesel USTs listed.
22	Alpine Fire Protection District	1834 Alpine Blvd., Alpine	HIST UST, HAZNET	1 UST listed at the site, waste oil.
22	Alpine Elementary School/Alpine Union High School	1850 Alpine Blvd., Alpine	HAZNET, HIST UST	Small quantity generator. Listed as having leaded gasoline UST, tank status is uncertain.
24	Alpine Shell	1340 Tavern Road, Alpine	HIST UST, LUST, UST	1970 Historic UST listing. 1999 LUST with groundwater affected; 12 monitoring wells. 9 active USTs listed at the site.
25	Alpine Auto Center	2042 Alpine Blvd., Alpine	SD Co. HMMD, HIST UST, HAZNET	4 historic USTs listed at the site, waste oil generated.
28	Alpine Shell/Chevron USA/Alpine Texaco	2235 Alpine Blvd., Alpine	HAZNET, HIST UST, SD Co. HMMD, LUST, SD Co. SAM, CORTESE	4 historic USTs, 7 active USTs. 1989 leaking fuel tank, soil only, case closed 1992.
28	Progressive Auto Center/Alpine Country Station/Alpine Texaco/Mobil of Alpine	2232 Alpine Blvd., Alpine	LUST, SD Co. SAM, SD Co. HMMD, UST	1999 leaking fuel tank. Active USTs
38	Tulloch Ranch	3971 Buckman Springs Road, Pine Valley	HIST UST, HMMD	Historic UST diesel and regular gas, former gas station 1988, 1992. Waste oil and oil filters.
40	Mountain Empire Unified School District	3291 Buckman Springs Road, Pine Valley	HAZNET, SD Co. HMMD, UST	Small quantity generator and PCB disposal. Store welding gases, motor oil. 2 diesel UST and 3 motor fuel UST.
45	Jacumba Texaco	1451 Carrizo Gorge Road, Jacumba	LUST	1989 leaking fuel tank, Case closed. 1992 leaking waste oil, soil only, Case closed. 1999 leaking fuel tank, Case open.
45	Woodward's Shell/Jacumba Shell	1494 Carrizo Gorge Road, Jacumba	LUST, UST, SD Co. HMMD	1998 leaking fuel tank, Case closed 1999.

Sources: EDR, 2007g.

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

2 See Appendix 13 for detailed description of regulatory agency listings.

**FEDERAL DATABASES**

RCRA-SQG: Resource Conservation and Recovery Act Information, Small Quantity Generator

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

FINDS: Facility Index System/Facility Registry System, contains both facility information and 'pointers' to other sources that contain more detail.

**STATE AND LOCAL DATABASES**

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

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

LUST: Leaking Underground Storage Tank Incident Reports, contains an inventory of reported leaking underground storage tank incidents.

HAZNET: Facility and Manifest Data, data are extracted from the copies of hazardous waste manifests received each year by the DTSC.

SD Co. HMMD: San Diego County Hazardous Materials Management Division Database

SD Co. SAM: Contains listing of all underground tank release cases and projects actively under review by the Site Assessment and Mitigation Program.

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

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

### E.1.10.2 Environmental Impacts and Mitigation Measures

Table E.1.10-2 summarizes the impacts of the Interstate 8 Alternative for public health and safety.

Table E.1.10-2. Impacts Identified – Interstate 8 Alternative – Public Health and Safety (Contamination)

Impact No.	Description	Impact Significance
<b>Interstate 8 Alternative</b>		
P-1	<del>Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and or storage of hazardous materials during construction activities</del> Improper handling and/or storage of hazardous materials during construction could cause soil or groundwater contamination	Class II
P-2	Residual pesticides and/or herbicides could be encountered during grading or excavation <u>on currently or historically farmed land in agricultural areas</u>	Class II
P-3	Unanticipated preexisting soil and/or groundwater contamination could be encountered during excavation or grading	Class II
P-5	Soil or groundwater contamination could result from accidental spill or release of hazardous materials during operation and maintenance	Class III
P-6	Herbicides used for vegetation control around towers and other project facilities could result in adverse health effects to the public or maintenance workers	Class III
P-7	Excavation or grading could result in mobilization of existing soil or groundwater contamination from known sites	Class III
<b>Interstate 8 Alternative Substation</b>		
P-1	<del>Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and or storage of hazardous materials during construction activities</del> Improper handling and/or storage of hazardous materials during construction could cause soil or groundwater contamination	Class II
P-3	Unanticipated preexisting soil and/or groundwater contamination could be encountered during excavation or grading	Class II
P-5	Soil or groundwater contamination could result from accidental spill or release of hazardous materials during operation and maintenance	Class III
<b>Campo North Route Option, Buckman Springs Underground Option, West Buckman Springs Option, South Buckman Springs Option, Chocolate Canyon Option</b>		
P-1	<del>Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and or storage of hazardous materials during construction activities</del> Improper handling and/or storage of hazardous materials during construction could cause soil or groundwater contamination	Class II
P-3	Unanticipated preexisting soil and/or groundwater contamination could be encountered during excavation or grading	Class II
P-5	Soil or groundwater contamination could result from accidental spill or release of hazardous materials during operation and maintenance	Class III
P-6	Herbicides used for vegetation control around towers and other project facilities could result in adverse health effects to the public or maintenance workers	Class III

### Construction Impacts

Impact P-4 (encountering unexploded ordinance) would not occur along the Interstate 8 Alternative or Route Options and therefore is not addressed in this section.

***Impact P-1: Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and/or storage of hazardous materials during construction activities~~Improper handling and/or storage of hazardous materials during construction could cause soil or groundwater contamination~~ (Class II)***

Hazardous materials such as vehicle fuels and oils would be used and stored during construction activities for the Interstate 8 Alternative alignment (see Table D.10-7), resulting in a potential for environmental contamination due to improper handling and/or storage of hazardous materials. ~~This~~ Soil or groundwater contamination resulting from spills or leaks of hazardous material during project construction would be a significant impact. APMs HS-APM-1 (personnel trained in proper use and safety procedures for the chemicals used), HS-APM-2 (personnel trained in refueling of vehicles), HS-APM-3 (preparation of environmental safety plans including spill prevention and response plan), HS-APM-8 (SDG&E's and/or General Contractor environmental/health and safety personnel), and HS-APM-10 (proper storage and disposal of generated waste), would be included as part of the project in order to reduce the likelihood of spills. Small spills or drips that may occur would be easily cleaned up, especially if identified quickly. However, in the event of larger spills or leaks, soil or groundwater contamination could still occur, particularly if not identified promptly~~and cause soil contamination~~, resulting in a significant impact. Implementation of Mitigation Measures P-1a (Implement Environmental Monitoring Program) and P-1b (Maintain emergency spill supplies and equipment) would reduce the significant environmental impacts to less than significant (Class II).

***Mitigation Measure for Impact P-1: Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and/or storage of hazardous materials during construction activities~~Improper handling and/or storage of hazardous materials during construction could cause soil or groundwater contamination~~***

**P-1a Implement Environmental Monitoring Program.**

**P-1b Maintain emergency spill supplies and equipment.**

***Impact P-2: Residual pesticides and/or herbicides could be encountered during grading or excavation on currently or historically farmed land in agricultural areas (Class II)***

Residual pesticide and herbicide contamination of the soil and/or groundwater may exist along the portion of the Interstate 8 Alternative route that passes through irrigated agriculture farm land at the north end of Jacumba Valley from MP I8-33.9 to I8-34.1. This represents a potential significant impact due to the potential health hazards to construction workers and the public from exposure to pesticide or herbicide contaminated soil and/or groundwater. SDG&E's APMs HS-APM-15, -16 and -17 would be incorporated into the project in order to reduce the significance of this impact by stopping work if suspected contamination is identified. Suspected areas of contamination would be cordoned off and appropriate health and safety measures taken, including sampling and testing of suspected material would be conducted. If contamination greater than regulatory limits is found, then the appropriate agency (RWQCB or CUPA) would be notified. However, even with the implementation of APMs, the impact would be significant because pesticide and herbicide contamination is not always readily apparent by visual or olfactory indicators. Mitigation Measure P-2a (Test for residual pesticides/herbicides) is required to reduce this impact to less than significant (Class II).

*Mitigation Measure for Impact P-2: Residual pesticides and/or herbicides could be encountered during grading or excavation on currently or historically farmed land in agricultural areas*

**P-2a Test for residual pesticides/herbicides on currently or historically farmed land in agricultural areas.**

*Impact P-3: Unanticipated preexisting soil and/or groundwater contamination could be encountered during excavation or grading (Class II)*

Numerous hazardous material sites are located along the Interstate 8 Alternative alignment. These are primarily where the alignment passes through the communities of Jacumba, Pine Valley, Alpine, and Lakeside, as listed in Table E.1.10-1. Unreported or unidentified leaks or spills at these sites could have resulted in unknown soil or groundwater contamination that could have migrated to the alignment. In turn, this could be encountered during grading for access roads and excavation for tower foundations, and trenches and vaults. This would be a potentially significant impact. Although unanticipated contamination along the other portions of the Interstate 8 Alternative is unlikely due to the primarily undeveloped and rural nature of the surrounding areas, there is an additional potential for unknown contamination to have occurred along and near area roads due to illegal dumping, which results in a potential to encounter contamination where the Interstate 8 Alternative is near or crosses these roads.

Contamination from petroleum products (gasoline, oil, and diesel) is one of the most common types of unknown contamination encountered and is generally detectable by visual and olfactory observation.

The potential to encounter unknown environmental contamination is a significant impact. SDG&E's APMs HS-APM-15, -16 and -17 would be incorporated into the project in order to reduce the significance of this impact by stopping work if suspected contamination is identified. Suspected areas of contamination would be cordoned off and appropriate health and safety measures taken, including sampling and testing of suspected material would be conducted. If ~~contamination greater than regulatory limits~~ contamination levels greater than regulatory limits are found, then the appropriate agency (RWQCB or CUPA) would be notified. However, these measures do not specify how or who will determine if regulatory limits are exceeded. In addition, if laboratory data are not properly interpreted, contaminated soil or groundwater could be improperly handled and disposed. This could result in additional environmental contamination or exposure of workers to contaminated materials. This would be a significant impact. In addition, no requirements for documentation of these incidents are included in the APMs, including reporting to the CPUC and BLM sampling results and actions taken at potentially contaminated sites. Therefore, Mitigation Measures P-3a and P-3b would also need to be implemented to ensure that laboratory data are properly interpreted by trained personnel with regard to contamination levels for reporting to the appropriate regulatory agency and documentation that these measures are properly implemented, reducing the impact from encountering unknown contamination to less than significant (Class II).

*Mitigation Measure for Impact P-3: Unanticipated preexisting soil and/or groundwater contamination could be encountered during excavation or grading*

**P-3a Appoint individuals with correct training for sampling, data review, and regulatory coordination.**

**P-3b Document compliance with measures for encountering unknown contamination.**

***Impact P-7: Excavation or grading could result in mobilization of existing soil or groundwater contamination from known sites (Class III)***

The environmental database review indicates that several sites with current or past known contamination (undergoing site assessment, remediation, or case closed) are listed along the Interstate 8 Alternative. These are listed in Table E.1-1. These sites are primarily located where the alignment passes through the communities of Jacumba, Pine Valley, Alpine, and Lakeside. The presence of these contaminated sites adjacent to the alignment results in a significant potential for contaminated soil and/or groundwater to have migrated to the project ROW. In that event, the contamination be encountered during excavation or grading. This would be a significant impact. SDG&E will implement APMs HS-APM-5 and HS-APM-10 to reduce impacts from known contaminated sites. HS-APM-5 requires that SDG&E investigate all California government code §65962.5 sites along the project ROW that could potentially impact the project. Government code §65962.5 (commonly referred to as the Cortese List) includes DTSC listed hazardous waste facilities and sites, DHS 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 from local regulatory agencies of sites that have had a known migration of hazardous waste/material. HS-APM-10 requires that all hazardous waste be stored and disposed of in accordance with federal, State, and local requirements.

Nevertheless, environmental impacts would still be significant if contaminated sites near the project ROW were not adequately characterized and contamination from these areas has migrated to the soil or groundwater within the project ROW. In order to reduce potential health hazards of exposure of construction personnel and/or the public to hazardous materials in the soil, groundwater, or surface water to less than significant, SDG&E will implement Mitigation Measure P-7a (Evaluate contaminated sites). This mitigation measure will reduce environmental impacts to less than significant (Class II).

***Mitigation Measure for Impact P-7: Excavation or grading could result in mobilization of existing soil or groundwater contamination from known sites***

**P-7a Evaluate contaminated sites.**

**Operational Impacts**

***Impact P-5: Soil or groundwater contamination could result from accidental spill or release of hazardous materials during operation and maintenance (Class III)***

Soil or groundwater contamination could result from accidental spill or release of hazardous materials during maintenance of the transmission lines, transition towers, and other associated transmission components for the Interstate 8 Alternative. This could potentially result in exposure of the maintenance workers and the public to hazardous materials; and could result in contamination to soil and/or groundwater. SDG&E would reduce these impacts with APMs that require: personnel using hazardous material be trained in their use, safety procedures, and proper use of safety equipment (HS-APM-1); environmental safety plans associated with hazardous material use and storage for the project be developed (HS-APM-3); and that all hazardous materials and waste be stored and disposed of in accordance with federal, State, and local regulations (HS-APM-10). While these measures will greatly reduce the likelihood of spills and would reduce impacts of spills, they would not completely prevent spills from occurring, resulting in an adverse but less than significant impact (Class III).

***Impact P-6: Herbicides used for vegetation control around towers and other project facilities could result in adverse health effects to the public or maintenance workers (Class III)***

SDG&E applies herbicide, in conjunction with mechanical clearing of vegetation, to prevent or remove vegetation in the right-of-way. Herbicide is applied to bare soil to prevent emergence of new growth and to emergent plant material (SDG&E, 2006, Chapter 2 and Appendix A). The vegetation removal program uses eight different herbicides to clear all vegetation to mineral soil within a 10-foot radius around poles and structures, and their known toxicity and persistence in soil are summarized in Table D.10-8. SDG&E and their contractor's follow a Herbicide Application Protocol (SDG&E, 2006, Appendix A) to prevent environmental hazards and safety and health concerns. All herbicide is applied by hand sprayer to restrict the chemical to within 10 feet of the structures (SDG&E, 2006). This herbicide application during operation and maintenance of the Proposed Project could potentially impact the workers applying the chemical, maintenance workers in the ROW, or public that enters the affected right of way areas; however, all of these herbicides are classified by USEPA as Class III - Low Toxicity. The potential exposure of workers applying the herbicide would also be minimized by following the manufacturer's recommendations for mixing and applying the chemicals, and for use of protective clothing and respiratory protection. Maintenance workers in the ROW could be exposed to residual herbicides if the soil application was recent and excessive dust was inhaled. Public accessing the ROW may cause dust to become airborne and inhaled. However, considering the generally low toxicity of these herbicides, their restricted use at project structures, and the non-routine access of these areas by maintenance workers and the general public the presence of residual herbicide in soil and airborne dust does not pose a significant adverse health risk. This is a less than significant impact (Class III).

**Field Related Public Concerns**

~~As described in Sections D.10.23 through D.10.25, there are five impacts related to electric and magnetic fields. The impact discussions for these issues presented in those sections would apply equally to the renewable alternatives, because all involve transmission lines. Those impacts and relevant mitigation measures are summarized below; for additional discussion, please see Sections D.10.23 to D.10.25.~~

~~•**Impact PS-1:** Transmission line operation causes radio and television interference (Class II). Two mitigation measures are recommended for this impact (see Appendix 12 for full text of all mitigation measures):~~

~~•**Mitigation Measure PS-1a** (Limit the conductor surface electric gradient) and **PS-1b** (Document and resolve electronic interference complaints)~~

~~•**Impact PS-2:** Transmission line operation causes induced currents and shock hazards in joint use corridors (Class II). One mitigation measure is recommended:~~

~~•**Mitigation Measure PS-2a** (Implement grounding measures).~~

~~The remaining three impacts (listed below) are found to have less than significant impacts, requiring no mitigation:~~

~~•**Impact PS-3:** Electric fields can affect cardiac pacemakers (Class III)~~

~~•**Impact PS-4:** Project structures can be affected by wind and earthquakes (Class III)~~

~~•**Impact PS-5:** Transmission or substation facilities can suffer an outage from terrorism or wildfire (Class III)~~

### E.1.10.3 Interstate 8 Alternative Substation

#### Environmental Setting

The I-8 Alternative Substation site is located on flat to gently sloping undeveloped grassland with some scattered scrub brush. The EDR database (EDR, 2007g) was reviewed for sites with known environmental contamination and for sites with potential to have resulted in environmental contamination within the ROW of this alignment. Many of the sites reviewed in the EDR database search are not hazardous materials release sites (known contaminated sites), but rather are listed as facilities that use, store, or dispose of hazardous materials offsite. Sites listed in the environmental database were then reviewed based on distance from the alignment, type of site, and regulatory status of the site. Based on these characteristics, a determination was made whether the site would have potential to impact the project. There are no identified hazardous material sites listed at or near the I-8 Alternative Substation site (EDR, 2007g).

#### Construction Impacts

Because of the substation site's location, no impacts from residual herbicides or pesticides (Impact P-2), encountering unexploded ordnance (UXO) (Impact P-4), and excavation or grading resulting in mobilization of existing soil or groundwater contamination from known sites (Impacts P-7) are expected at the I-8 Alternative Substation site and are therefore not addressed in this section.

***Impact P-1: Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and or storage of hazardous materials during construction activities***  
~~*Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and or storage of hazardous materials during construction activities*~~ ***(Class II)***

Hazardous materials such as vehicle fuels and oils and paints would be used and stored during excavation and grading of the site and actual construction at the substation facilities (see Table D.10-7), resulting in a potential for environmental contamination due to improper handling and/or storage of hazardous materials, a significant impact. Soil or groundwater contamination resulting from spills or leaks of hazardous materials during project construction would be a significant impact. APMs HS-APM-1 (personnel trained in proper use and safety procedures for the chemicals used), HS-APM-2 (personnel trained in refueling of vehicles), HS-APM-3 (preparation of environmental safety plans including spill prevention and response plan), HS-APM-8 (SDG&E's and/or General Contractor environmental/health and safety personnel), and HS-APM-10 (proper storage and disposal of generated waste), would be included as part of the project in order to reduce the likelihood of spills. Small spills or drips that may occur would easily be cleaned up, especially if identified quickly. However, in the event larger spills or leaks occurred, soil or groundwater contamination could occur, particularly if not identified promptly, resulting in a significant impact.~~However, spills could still occur and cause soil contamination, resulting in a significant impact.~~ Implementation of Mitigation Measures P-1a (Implement Environmental Monitoring Program) and P-1b (Maintain emergency spill supplies and equipment) would reduce the significant environmental impacts to less than significant (Class II).

***Mitigation Measures for Impact P-1: Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and or storage of hazardous materials during construction activities***  
~~*Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and or storage of hazardous materials during construction activities*~~

**P-1a Implement Environmental Monitoring Program.**

**P-1b Maintain emergency spill supplies and equipment.**

***Impact P-3: Unanticipated preexisting soil and/or groundwater contamination could be encountered during excavation or grading (Class II)***

Although unanticipated contamination at the I-8 Alternative Substation site is unlikely due to the primarily undeveloped nature of the site and surrounding areas, there is a potential for unknown contamination to have occurred along and near roads close to the site due to illegal dumping which results in potential to encounter contamination where the I-8 Alternative Substation site is close to these roads. The potential to encounter unknown environmental contamination is a significant impact. Contamination from petroleum products (gasoline, oil, and diesel) is one of the most common types of unknown contamination encountered and is generally detectable by visual and olfactory observation. SDG&E's APMs HS-APM-15, -16 and -17 would be incorporated into the project in order to reduce the significance of this impact by stopping work if suspected contamination is identified. Suspected areas of contamination would be cordoned off and appropriate health and safety measures taken, including sampling and testing of suspected material would be conducted. If contamination greater than regulatory limits is found, then the appropriate agency (RWQCB or CUPA) would be notified. However, these measures do not specify how or who will determine if regulatory limits are exceeded, and 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, a significant impact. In addition, no requirements for documentation of these incidents are included, including reporting locations of, sampling results, and actions taken for potentially contaminated sites to the CPUC and BLM. Therefore, Mitigation Measures P-3a and P-3b would also need to be implemented to ensure that laboratory data are properly interpreted by trained personnel with regard to contamination levels for reporting to the appropriate regulatory agency and documentation that these measures are properly implemented, reducing the impact from encountering unknown contamination to less than significant (Class II).

***Mitigation Measures for Impact P-3: Unanticipated preexisting soil and/or groundwater contamination could be encountered during excavation or grading***

**P-3a Appoint individuals with correct training for sampling, data review, and regulatory coordination.**

**P-3b Document compliance with measures for encountering unknown contamination.**

**Operational Impacts**

***Impact P-5: Soil or groundwater contamination could result from accidental spill or release of hazardous materials during operation and maintenance (Class III)***

Soil or groundwater contamination could result from accidental spill or release of hazardous materials at the substation during operation and maintenance of substation facilities. This could result in exposure of facility workers and the public to hazardous materials and contamination of the soil and/or groundwater. Mineral oil would be used in the new transformers, switches, circuit breakers, capacitors, and other new electrical equipment (PEA, 2006). Mineral oil is considered a hazardous material under California regulations (CWA Section 311), and mineral oil storage or use in aboveground storage containers in levels exceeding 660 gallons in a single oil storage tank or greater than 1,320 gallons in one or multiple containers at a site is regulated under Title 40 CFR 112 – “the SPCC rule” which is part of the federal Clean Water Act (CWA). The new I-8 Alternative Substation will require new Hazardous Material Business Plans, including a Hazardous Communication Plan, Spill Response Plan, Temporary

Storage and Disposal facility permit, and Spill Prevention, Control, and Countermeasure Plan for the facility. SDG&E would reduce potential impacts from accidental spill or release with APMs that require: personnel using hazardous material be trained in their use, safety procedures, and proper use of safety equipment (HS-APM-1); environmental safety plans associated with hazardous material use and storage for the project be developed (HS-APM-3); and that all hazardous materials and waste be stored and disposed of in accordance with federal, State, and local regulations (HS-APM-10). While these measures will greatly reduce the likelihood of spills and would reduce impacts of spills, they would not completely prevent spills from occurring, resulting in an adverse but less than significant impact (Class III).

## E.1.10.4 Interstate 8 Route Options

### Campo North Route Option

#### Environmental Setting

This option would remain on the north side of I-8 and would traverse just south of a wind turbine and then across sloping undeveloped scrub terrain. The EDR database (EDR, 2007g) was reviewed for sites with known environmental contamination and for sites with potential to have resulted in environmental contamination within the ROW of this alignment. Many of the sites reviewed in the EDR database search are not hazardous materials release sites (known contaminated sites), but rather are listed as facilities that use, store, or dispose of hazardous materials offsite. Sites listed in the environmental database were then reviewed based on distance from the alignment, type of site, and regulatory status of the site. Based on these characteristics, a determination was made whether the site would have potential to impact the project. There are no identified hazardous material sites listed along the Camp North Route Option. (EDR, 2007g).

#### Environmental Impacts and Mitigation Measures

##### Construction Impacts

Based on the location of this short segment, no impacts from residual herbicides or pesticides (Impact P-2), encountering unexploded ordnance (UXO) (Impact P-4), or excavation or grading resulting in mobilization of existing soil or groundwater contamination from known sites (Impacts P-7) are expected along the Campo North Route Option. Therefore, these not addressed in this section.

***Impact P-1: Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and or storage of hazardous materials during construction activities ~~Improper handling and/or storage of hazardous materials during construction could cause soil or groundwater contamination~~ (Class II)***

Hazardous materials such as vehicle fuels and oils and paints would be used and stored during excavation and grading of the transmission line structures and facilities (see Table D.10-7), resulting in a potential for environmental contamination due to improper handling and/or storage of hazardous materials, a significant impact. Soil or groundwater contamination resulting from spills or leaks of hazardous materials during project construction would be a significant impact. APMs HS-APM-1 (personnel trained in proper use and safety procedures for the chemicals used), HS-APM-2 (personnel trained in refueling of vehicles), HS-APM-3 (preparation of environmental safety plans including spill prevention and response plan), HS-APM-8 (SDG&E's and/or General Contractor environmental/health and

safety personnel), and HS-APM-10 (proper storage and disposal of generated waste), would be included as part of the project in order to reduce the likelihood of spills. Small spills or drips that may occur would easily be cleaned up, especially if identified quickly. However, in the event larger spills or leaks occurred, soil or groundwater contamination could occur, particularly if not identified promptly, resulting in a significant impact. ~~However, spills could still occur and cause soil contamination, resulting in a significant impact.~~ Implementation of Mitigation Measures P-1a (Implement Environmental Monitoring Program) and P-1b (Maintain emergency spill supplies and equipment) would reduce the significant environmental impacts to less than significant (Class II).

***Mitigation Measures for Impact P-1: Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and or storage of hazardous materials during construction activities***  
~~*Improper handling and/or storage of hazardous materials during construction could cause soil or groundwater contamination*~~

**P-1a Implement Environmental Monitoring Program.**

**P-1b Maintain emergency spill supplies and equipment.**

***Impact P-3: Unanticipated preexisting soil and/or groundwater contamination could be encountered during excavation or grading (Class II)***

Ground disturbance along the transmission line route for this link would be limited to excavation at and near transmission structures and grading of new access roads along and to the alignment. No impacts from existing environmentally contaminated sites are expected along this segment. Although unanticipated contamination along the Campo North Route Option is unlikely due to the primarily undeveloped nature of the route and surrounding areas, there is a potential for unknown contamination to have occurred along and near roads due to illegal dumping which results in potential to encounter contamination where the North Campo Route Option crosses and is close to these roads. The potential to encounter unknown environmental contamination is a significant impact. Contamination from petroleum products (gasoline, oil, and diesel) is one of the most common types of unknown contamination encountered and is generally detectable by visual and olfactory observation. SDG&E's APMs HS-APM-15, -16 and -17 would be incorporated into the project in order to reduce the significance of this impact by stopping work if suspected contamination is identified. Suspected areas of contamination would be cordoned off and appropriate health and safety measures taken, including sampling and testing of suspected material would be conducted. If contamination greater than regulatory limits is found, then the appropriate agency (RWQCB or CUPA) would be notified. However, these measures do not specify how or who will determine if regulatory limits are exceeded, and 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, a significant impact. In addition, no requirements for documentation of these incidents are included, including reporting locations of, sampling results, and actions taken for potentially contaminated sites to the CPUC and BLM. Therefore, Mitigation Measures P-3a and P-3b would also need to be implemented to ensure that laboratory data are properly interpreted by trained personnel with regard to contamination levels for reporting to the appropriate regulatory agency and documentation that these measures are properly implemented, reducing the impact from encountering unknown contamination to less than significant (Class II).

***Mitigation Measures for Impact P-3: Unanticipated preexisting soil and/or groundwater contamination could be encountered during excavation or grading***

**P-3a**      **Appoint individuals with correct training for sampling, data review, and regulatory coordination.**

**P-3b**      **Document compliance with measures for encountering unknown contamination.**

**Operational Impacts**

***Impact P-5: Soil or groundwater contamination could result from accidental spill or release of hazardous materials during operation and maintenance (Class III)***

Soil or groundwater contamination could result from accidental spill or release of hazardous materials along the transmission alignment during maintenance operations. This could result in exposure of maintenance workers and the public to hazardous materials; and could result in contamination to soil and/or groundwater. SDG&E would reduce these impacts with APMs that require: personnel using hazardous material be trained in their use, safety procedures, and proper use of safety equipment (HS-APM-1); environmental safety plans associated with hazardous material use and storage for the project be developed (HS-APM-3); and that all hazardous materials and waste be stored and disposed of in accordance with federal, State, and local regulations (HS-APM-10). While these measures will greatly reduce the likelihood of spills and would reduce impacts of spills, they would not completely prevent spills from occurring, resulting in an adverse but less than significant impact (Class III).

***Impact P-6: Herbicides used for vegetation control around towers and other project facilities could result in adverse health effects to the public or maintenance workers (Class III)***

SDG&E applies herbicide, in conjunction with mechanical clearing of vegetation, to prevent or remove vegetation in the right-of-way. Herbicide is applied to bare soil to prevent emergence of new growth and to emergent plant material (SDG&E, 2006, Chapter 2 and Appendix A). The vegetation removal program uses eight different herbicides to clear all vegetation to mineral soil within a 10-foot radius around poles and structures, and their known toxicity and persistence in soil are summarized in Table D.10-8. SDG&E and their contractor's follow a Herbicide Application Protocol (SDG&E, 2006, Appendix A) to prevent environmental hazards and safety and health concerns. All herbicide is applied by hand sprayer to restrict the chemical to within 10 feet of the structures (SDG&E, 2006). This herbicide application during operation and maintenance of the Proposed Project could potentially impact the workers applying the chemical, maintenance workers in the ROW, or public that enters the affected right of way areas; however, all of these herbicides are classified as Class III (Low Toxicity) by U.S. EPA. The potential exposure of workers applying the herbicide would also be minimized by following the manufacturer's recommendations for mixing and applying the chemicals, and for use of protective clothing and respiratory protection. Maintenance workers in the ROW could be exposed to residual herbicides if the soil application was recent and excessive dust was inhaled. Public accessing the ROW may cause dust to become airborne and inhaled. However, considering the generally low toxicity of these herbicides, their restricted use at project structures, and the non-routine access of these areas by maintenance workers and the general public the presence of residual herbicide in soil and airborne dust does not pose a significant adverse health risk. This is a less than significant impact (Class III).

**Buckman Springs Underground Option**

The Buckman Springs Underground Option traverses undeveloped mountain terrain and include approximately 2 miles of underground transmission line. [The EDR database \(EDR, 2007g\) was reviewed for](#)

sites with known environmental contamination and for sites with potential to have resulted in environmental contamination within the ROW of this alignment. Many of the sites reviewed in the EDR database search are not hazardous materials release sites (known contaminated sites), but rather are listed as facilities that use, store, or dispose of hazardous materials offsite. Sites listed in the environmental database were then reviewed based on distance from the alignment, type of site, and regulatory status of the site. Based on these characteristics, a determination was made whether the site would have potential to impact the project. There are no identified hazardous material sites listed along the Buckman Springs Underground Option (EDR, 2007g).

## Environmental Impacts and Mitigation Measures

### Construction Impacts

Because of its location, the underground option is expected to have no impacts from residual herbicides or pesticides (Impact P-2), encountering unexploded ordnance (UXO) (Impact P-4), or excavation or grading resulting in mobilization of existing soil or groundwater contamination from known sites (Impacts P-7). Therefore, these categories of impact are not addressed in for this option.

***Impact P-1: Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and or storage of hazardous materials during construction activities***~~***Improper handling and/or storage of hazardous materials during construction could cause soil or groundwater contamination (Class II)***~~

Hazardous materials such as vehicle fuels and oils and paints would be used and stored during excavation and grading of the transmission line structures and facilities (see Table D.10-7), resulting in a potential for environmental contamination due to improper handling and/or storage of hazardous materials, a significant impact. Soil or groundwater contamination resulting from spills or leaks of hazardous materials during project construction would be a significant impact. APMs HS-APM-1 (personnel trained in proper use and safety procedures for the chemicals used), HS-APM-2 (personnel trained in refueling of vehicles), HS-APM-3 (preparation of environmental safety plans including spill prevention and response plan), HS-APM-8 (SDG&E's and/or General Contractor environmental/health and safety personnel), and HS-APM-10 (proper storage and disposal of generated waste), would be included as part of the project in order to reduce the likelihood of spills. Small spills or drips that may occur would easily be cleaned up, especially if identified quickly. However, in the event larger spills or leaks occurred, soil or groundwater contamination could occur, particularly if not identified promptly, resulting in a significant impact.~~However, spills could still occur and cause soil contamination, resulting in a significant impact.~~ Implementation of Mitigation Measures P-1a (Implement Environmental Monitoring Program) and P-1b (Maintain emergency spill supplies and equipment) would reduce the significant environmental impacts to less than significant (Class II).

***Mitigation Measures for Impact P-1: Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and or storage of hazardous materials during construction activities***~~***Improper handling and/or storage of hazardous materials during construction could cause soil or groundwater contamination***~~

**P-1a      Implement Environmental Monitoring Program.**

**P-1b      Maintain emergency spill supplies and equipment.**

***Impact P-3: Unanticipated preexisting soil and/or groundwater contamination could be encountered during excavation or grading (Class II)***

Ground disturbance along the transmission line route for this link would include excavation for trenches and transmission structures foundations and grading of new access roads along and to the alignment. No impacts from existing environmentally contaminated sites are expected along this segment. Although unanticipated contamination along the Buckman Springs Underground Option is unlikely due to the primarily undeveloped and rural nature of the route and surrounding areas, there is a potential for unknown contamination to have occurred along and near roads due to illegal dumping which results in potential to encounter contamination where the Buckman Springs Underground Route Option crosses and is close to these roads. Contamination from petroleum products (gasoline, oil, and diesel) is one of the most common types of unknown contamination encountered and is generally detectable by visual and olfactory observation. The potential to encounter unknown environmental contamination is a significant impact. SDG&E's APMs HS-APM-15, -16 and -17 would be incorporated into the project in order to reduce the significance of this impact by stopping work if suspected contamination is identified. Suspected areas of contamination would be cordoned off and appropriate health and safety measures taken, including sampling and testing of suspected material would be conducted. If contamination greater than regulatory limits is found, then the appropriate agency (RWQCB or CUPA) would be notified. However, these measures do not specify how or who will determine if regulatory limits are exceeded, and 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, a significant impact. In, addition no requirements for documentation of these incidents are included, including reporting locations of, sampling results, and actions taken for potentially contaminated sites to the CPUC and BLM. Therefore, Mitigation Measures P-3a and P-3b would also need to be implemented to ensure that laboratory data are properly interpreted by trained personnel with regard to contamination levels for reporting to the appropriate regulatory agency and documentation that these measures are properly implemented, reducing the impact from encountering unknown contamination to less than significant (Class II).

***Mitigation Measures for Impact P-3: Unanticipated preexisting soil and/or groundwater contamination could be encountered during excavation or grading***

- P-3a**        **Appoint individuals with correct training for sampling, data review, and regulatory coordination.**
- P-3b**        **Document compliance with measures for encountering unknown contamination.**

**Operational Impacts**

***Impact P-5: Soil or groundwater contamination could result from accidental spill or release of hazardous materials during operation and maintenance (Class III)***

Soil or groundwater contamination could result from accidental spill or release of hazardous materials along the transmission alignment during maintenance operations. This could result in exposure of maintenance workers and the public to hazardous materials; and could result in contamination to soil and/or groundwater. SDG&E would reduce these impacts with APMs that require: personnel using hazardous material be trained in their use, safety procedures, and proper use of safety equipment (HS-APM-1); environmental safety plans associated with hazardous material use and storage for the project be developed (HS-APM-3); and that all hazardous materials and waste be stored and disposed of in accordance with federal, State, and local regulations (HS-APM-10). While these measures will greatly reduce the

likelihood of spills and would reduce impacts of spills, they would not completely prevent spills from occurring, resulting in an adverse but less than significant impact (Class III).

***Impact P-6: Herbicides used for vegetation control around towers and other project facilities could result in adverse health effects to the public or maintenance workers (Class III)***

SDG&E applies herbicide, in conjunction with mechanical clearing of vegetation, to prevent or remove vegetation in the right-of-way. Herbicide is applied to bare soil to prevent emergence of new growth and to emergent plant material (SDG&E, 2006, Chapter 2 and Appendix A). The vegetation removal program uses eight different herbicides to clear all vegetation to mineral soil within a 10-foot radius around poles and structures, and their known toxicity and persistence in soil are summarized in Table D.10-8. SDG&E and their contractor's follow a Herbicide Application Protocol (SDG&E, 2006, Appendix A) to prevent environmental hazards and safety and health concerns. All herbicide is applied by hand sprayer to restrict the chemical to within 10 feet of the structures (SDG&E, 2006). This herbicide application during operation and maintenance of the Proposed Project could potentially impact the workers applying the chemical, maintenance workers in the ROW, or public that enters the affected right of way areas; however, all of these herbicides are classified as Class III (Low Toxicity) by U.S. EPA. The potential exposure of workers applying the herbicide would also be minimized by following the manufacturer's recommendations for mixing and applying the chemicals, and for use of protective clothing and respiratory protection. Maintenance workers in the ROW could be exposed to residual herbicides if the soil application was recent and excessive dust was inhaled. Public accessing the ROW may cause dust to become airborne and inhaled. However, considering the generally low toxicity of these herbicides, their restricted use at project structures, and the non-routine access of these areas by maintenance workers and the general public the presence of residual herbicide in soil and airborne dust does not pose a significant adverse health risk. This is a less than significant impact (Class III).

## West Buckman Springs Option

### Environmental Setting

The West Buckman Springs Option diverges from the Interstate 8 Alternative and continues west across I-8, Cottonwood Valley and Buckman Springs Road, and then turns north remaining about 0.3 miles east of the ranch and school located in Cottonwood Valley. The EDR database (EDR, 2007g) was reviewed for sites with known environmental contamination and for sites with potential to have resulted in environmental contamination within the ROW of this alignment. Many of the sites reviewed in the EDR database search are not hazardous materials release sites (known contaminated sites), but rather are listed as facilities that use, store, or dispose of hazardous materials offsite. Sites listed in the environmental database were then reviewed based on distance from the alignment, type of site, and regulatory status of the site. Based on these characteristics, a determination was made whether the site would have potential to impact the project. There are no identified hazardous material sites listed along the Buckman Springs Underground Route Option (EDR, 2007g).

### Environmental Impacts and Mitigation Measures

#### Construction Impacts

Based on the location of this option, no impacts from residual herbicides or pesticides (Impact P-2), encountering unexploded ordnance (UXO) (Impact P-4), and excavation or grading resulting in mobili-

zation of existing soil or groundwater contamination from known sites (Impacts P-7) are expected. Therefore, these are not addressed for the West Buckman Springs Option.

***Impact P-1: Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and or storage of hazardous materials during construction activities~~Improper handling and/or storage of hazardous materials during construction could cause soil or groundwater contamination~~ (Class II)***

Hazardous materials such as vehicle fuels and oils and paints would be used and stored during excavation and grading of the transmission line structures and facilities (see Table D.10-7), resulting in a potential for environmental contamination due to improper handling and/or storage of hazardous materials, a significant impact. Soil or groundwater contamination resulting from spills or leaks of hazardous materials during project construction would be a significant impact. APMs HS-APM-1 (personnel trained in proper use and safety procedures for the chemicals used), HS-APM-2 (personnel trained in refueling of vehicles), HS-APM-3 (preparation of environmental safety plans including spill prevention and response plan), HS-APM-8 (SDG&E's and/or General Contractor environmental/health and safety personnel), and HS-APM-10 (proper storage and disposal of generated waste), would be included as part of the project in order to reduce the likelihood of spills. Small spills or drips that may occur would easily be cleaned up, especially if identified quickly. However, in the event larger spills or leaks occurred, soil or groundwater contamination could occur, particularly if not identified promptly, resulting in a significant impact.~~However, spills could still occur and cause soil contamination, resulting in a significant impact.~~ Implementation of Mitigation Measures P-1a (Implement Environmental Monitoring Program) and P-1b (Maintain emergency spill supplies and equipment) would reduce the significant environmental impacts to less than significant (Class II).

***Mitigation Measures for Impact P-1: Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and or storage of hazardous materials during construction activities~~Improper handling and/or storage of hazardous materials during construction could cause soil or groundwater contamination~~***

**P-1a Implement Environmental Monitoring Program.**

**P-1b Maintain emergency spill supplies and equipment.**

***Impact P-3: Unanticipated preexisting soil and/or groundwater contamination could be encountered during excavation or grading (Class II)***

Ground disturbance along the transmission line route for this link would be limited to excavation at and near transmission structures and grading of new access roads along and to the alignment. No impacts from existing environmentally contaminated sites are expected along this segment. Although unanticipated contamination along the West Buckman Springs Option is unlikely due to the primarily undeveloped nature of the route and surrounding areas, there is a potential for unknown contamination to have occurred along and near roads due to illegal dumping which results in potential to encounter contamination where the West Buckman Springs Option crosses and is close to these roads. Contamination from petroleum products (gasoline, oil, and diesel) is one of the most common types of unknown contamination encountered and is generally detectable by visual and olfactory observation. The potential to encounter unknown environmental contamination is a significant impact. SDG&E's APMs HS-APM-15, -16 and -17 would be incorporated into the project in order to reduce the significance of this impact by stopping work if suspected contamination is identified. Suspected areas of contamination would be cordoned off and appropriate health and safety measures taken, including sampling and testing of suspected material would be conducted. If contamination greater than regulatory limits is found, then

the appropriate agency (RWQCB or CUPA) would be notified. However, these measures do not specify how or who will determine if regulatory limits are exceeded, and 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, a significant impact. In, addition no requirements for documentation of these incidents are included, including reporting locations of, sampling results, and actions taken for potentially contaminated sites to the CPUC and BLM. Therefore, Mitigation Measures P-3a and P-3b would also need to be implemented to ensure that laboratory data are properly interpreted by trained personnel with regard to contamination levels for reporting to the appropriate regulatory agency and documentation that these measures are properly implemented, reducing the impact from encountering unknown contamination to less than significant (Class II).

***Mitigation Measures for Impact P-3: Unanticipated preexisting soil and/or groundwater contamination could be encountered during excavation or grading***

**P-3a**        **Appoint individuals with correct training for sampling, data review, and regulatory coordination.**

**P-3b**        **Document compliance with measures for encountering unknown contamination.**

**Operational Impacts**

***Impact P-5: Soil or groundwater contamination could result from accidental spill or release of hazardous materials during operation and maintenance (Class III)***

Soil or groundwater contamination could result from accidental spill or release of hazardous materials along the transmission alignment during maintenance operations. This could result in exposure of maintenance workers and the public to hazardous materials; and could result in contamination to soil and/or groundwater. SDG&E would reduce these impacts with APMs that require: personnel using hazardous material be trained in their use, safety procedures, and proper use of safety equipment (HS-APM-1); environmental safety plans associated with hazardous material use and storage for the project be developed (HS-APM-3); and that all hazardous materials and waste be stored and disposed of in accordance with federal, State, and local regulations (HS-APM-10). While these measures will greatly reduce the likelihood of spills and would reduce impacts of spills, they would not completely prevent spills from occurring, resulting in an adverse but less than significant impact (Class III).

***Impact P-6: Herbicides used for vegetation control around towers and other project facilities could result in adverse health effects to the public or maintenance workers (Class III)***

SDG&E applies herbicide, in conjunction with mechanical clearing of vegetation, to prevent or remove vegetation in the right-of-way. Herbicide is applied to bare soil to prevent emergence of new growth and to emergent plant material (SDG&E, 2006, Chapter 2 and Appendix A). The vegetation removal program uses eight different herbicides to clear all vegetation to mineral soil within a 10-foot radius around poles and structures, and their known toxicity and persistence in soil are summarized in Table D.10-8. SDG&E and their contractor's follow an Herbicide Application Protocol (SDG&E, 2006, Appendix A) to prevent environmental hazards and safety and health concerns. All herbicide is applied by hand sprayer to restrict the chemical to within 10 feet of the structures (SDG&E, 2006). This herbicide application during operation and maintenance of the Proposed Project could potentially impact the workers applying the chemical, maintenance workers in the ROW, or public that enters the affected right-of-way areas; however, all of these herbicides are classified as Class III (Low Toxicity) by U.S. EPA. The potential exposure of workers applying the herbicide would also be minimized by following

the manufacturer's recommendations for mixing and applying the chemicals, and for use of protective clothing and respiratory protection. Maintenance workers in the ROW could be exposed to residual herbicides if the soil application was recent and excessive dust was inhaled. Public accessing the ROW may cause dust to become airborne and inhaled. However, considering the generally low toxicity of these herbicides, their restricted use at project structures, and the non-routine access of these areas by maintenance workers and the general public the presence of residual herbicide in soil and airborne dust does not pose a significant adverse health risk. This is a less than significant impact (Class III).

### South Buckman Springs Option.

The South Buckman Springs Option route would diverge from the I-8 Alternative alignment at the intersection of the Modified Route D Alternative route and would follow the Modified D Route Alternative for its first 4 miles (see Section E.4). At the point where the Modified Route D Alternative would turn southwest at MP MD-4.5, this option would continue 2 miles to the west and southwest, turn northwest along Buckman Springs Road, and join the West Buckman Springs Option at about MP BSW-1.7.

### Environmental Setting

The South Buckman Springs Option diverges from the Modified Route D Alternative and continues west across Cameron Valley, Cottonwood Valley, and turns and parallels Buckman Springs Road to the northwest and then west. The alignment crosses pasture land and open undeveloped land, several rural residences and ranches are along the alignment route. There are no identified hazardous material sites listed along the South Buckman Springs Option route (EDR, 2007f and 2007h) and a review of the Geotracker website (RWQCB, 2007) indicated no known UST or LUST sites along this route. The EDR databases were reviewed for sites with known environmental contamination and for sites with potential to have resulted in environmental contamination within the ROW of this alignment. Many of the sites reviewed in the EDR database searches are not hazardous materials release sites (known contaminated sites), but rather are listed as facilities that use, store, or dispose of hazardous materials offsite. Sites listed in the environmental databases were then reviewed based on distance from the alignment, type of site, and regulatory status of the site. Based on these characteristics, a determination was made whether the site would have potential to impact the project.

### Construction Impacts

No impacts from residual herbicides or pesticides (Impact P-2), encountering unexploded ordnance (UXO) (Impact P-4), and excavation or grading resulting in mobilization of existing soil or groundwater contamination from known sites (Impacts P-7) are expected along the South Buckman Springs Option route and are therefore not addressed in this section.

***Impact P-1: Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and/or storage of hazardous materials during construction activities ~~Improper handling and/or storage of hazardous materials during construction could cause soil or groundwater contamination~~ (Class II)***

Hazardous materials such as vehicle fuels and oils and paints would be used and stored during excavation and grading of the transmission line structures and facilities (see Table D.10-7), resulting in a potential for environmental contamination due to improper handling and/or storage of hazardous materials, a significant impact. Soil or groundwater contamination resulting from spills or leaks of hazardous materials during project construction would be a significant impact. APMs HS-APM-1

(personnel trained in proper use and safety procedures for the chemicals used), HS-APM-2 (personnel trained in refueling of vehicles), HS-APM-3 (preparation of environmental safety plans including spill prevention and response plan), HS-APM-8 (SDG&E's and/or General Contractor environmental/health and safety personnel), and HS-APM-10 (proper storage and disposal of generated waste), would be included as part of the project in order to reduce the likelihood of spills. Small spills or drips that may occur would easily be cleaned up, especially if identified quickly. However, in the event larger spills or leaks occurred, soil or groundwater contamination could occur, particularly if not identified promptly, resulting in a significant impact. ~~However, spills could still occur and cause soil contamination, resulting in a significant impact.~~ Implementation of Mitigation Measures P-1a (Implement Environmental Monitoring Program) and P-1b (Maintain emergency spill supplies and equipment) would reduce the significant environmental impacts to less than significant (Class II).

**Mitigation Measures for Impact P-1: Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and or storage of hazardous materials during construction activities**

**P-1a Implement Environmental Monitoring Program.**

**P-1b Maintain emergency spill supplies and equipment.**

***Impact P-3: Unanticipated preexisting soil and or groundwater contamination could be encountered during excavation or grading (Class II)***

Ground disturbance along the transmission line route for this link would be limited to excavation at and near transmission structures and grading of new access roads along and to the alignment. No impacts from existing environmentally contaminated sites are expected along this segment. Although unanticipated contamination along the South Buckman Springs Option route is unlikely due to the primarily undeveloped and rural residential nature of the route and surrounding areas, there is a potential for unknown contamination to have occurred along and near roads due to illegal dumping which results in potential to encounter contamination where the South Buckman Springs Option route crosses and is close to these roads. Contamination from petroleum products (gasoline, oil, and diesel) is one of the most common types of unknown contamination encountered and is generally detectable by visual and olfactory observation. The potential to encounter unknown environmental contamination is a significant impact. SDG&E's APMs HS-APM-15, -16 and -17 would be incorporated into the project in order to reduce the significance of this impact by stopping work if suspected contamination is identified, suspected areas of contamination would be cordoned off and appropriate health and safety measures taken, sampling and testing of suspected material would be conducted, and if contamination is found to be greater than regulatory limits the appropriate agency (RWQCB or CUPA) shall be notified. However, these measures do not specify how or who will determine if regulatory limits are exceeded, and if laboratory data is 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, a significant impact. In, addition no requirements for documentation of these incidents are included, including reporting locations of, sampling results, and actions taken for potentially contaminated sites to the CPUC and BLM (if on BLM lands). Therefore Mitigation Measures P-3a and P-3b 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, reducing the impact from encountering unknown contamination to less than significant (Class II).

***Mitigation Measure for Impact P-3: Unanticipated preexisting soil and or groundwater contamination could be encountered during excavation or grading***

**P-3a**      **Appoint individuals with correct training for sampling, data review, and regulatory coordination.**

**P-3b**      **Document compliance with measures for encountering unknown contamination.**

**Operational Impacts**

***Impact P-5: Soil or groundwater contamination could result from accidental spill or release of hazardous materials during operation and maintenance (Class III)***

Soil or groundwater contamination could result from accidental spill or release of hazardous materials along the transmission alignment during maintenance operations. This could result in exposure of maintenance workers and the public to hazardous materials; and could result in contamination to soil and or groundwater. SDG&E would reduce these impacts with APMs that require: personnel using hazardous material be trained in their use, safety procedures, and proper use of safety equipment (HS-APM-1); environmental safety plans associated with hazardous material use and storage for the project be developed (HS-APM-3); and that all hazardous materials and waste be stored and disposed of in accordance with federal, State, and local regulations (HS-APM-10). In the event a spill were to occur, these APMs would reduce the potential for contamination from such a spill and exposure of workers or the public to hazardous materials 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 an adverse but less than significant impact (Class III).

***Impact P-6: Herbicides used for vegetation control around towers and other project facilities could result in adverse health effects to the public or maintenance workers (Class III)***

SDG&E applies herbicide, in conjunction with mechanical clearing of vegetation, to prevent or remove vegetation in the right-of-way. Herbicide is applied to bare soil to prevent emergence of new growth and to emergent plant material (SDG&E, 2006, Chapter 2 and Appendix A). SDG&E and their contractor's follow an Herbicide Application Protocol (SDG&E, 2006, Appendix A) to prevent environmental hazards and safety and health concerns which is summarized in Table D.10-8 - Summary of SDG&E's Herbicide Application Protocol. All herbicide is applied by hand sprayer to restrict the chemical to within 10 feet of the structures (SDG&E, 2006). This herbicide application during operation and maintenance of the South Buckman Springs Option could potentially impact the workers applying the chemical, maintenance workers in the ROW, or public that enters the affected right of way areas; however all of these herbicides are classified by U.S. EPA as Class III - Low Toxicity. The potential exposure of workers applying the herbicide would also be minimized by following the manufacturer's recommendations for mixing and applying the chemicals, and for use of protective clothing and respiratory protection. Maintenance workers in the ROW could be exposed to residual herbicides if the soil application was recent and excessive dust was inhaled. Public accessing the ROW may cause dust to become airborne and inhaled. However, with use of SDG&E's application protocols, and considering the generally low toxicity of these herbicides (see Table D.10-9), their restricted use at project structures, and the non-routine access of these areas by maintenance workers and the general public the presence of residual herbicide in soil and airborne dust does not pose a significant adverse health risk. This is an adverse but less than significant impact (Class III).

## Chocolate Canyon Option.

The Chocolate Canyon Option consists of modifying the route of the 230 kV overhead transmission line in the first 3 miles north of the freeway to a location lower on the slope of Chocolate Canyon. The option would extend the underground portion about 0.1 mile further north along Alpine Boulevard, then turn west to an open area adjacent to Alpine Boulevard where the transition towers would be constructed. From this point, the route would cross the freeway overhead and remain overhead to join the I8.

## Environmental Setting

The Chocolate Canyon Option would continue underground an additional 0.1 mile along Alpine Boulevard through an area of scattered residences. The alignment then transitions to overhead and crosses Interstate 8 and traverses north across the lower slopes of chocolate Canyon, north and then west along the south western edge of El Capitan Reservoir, and then turns westward crossing San Diego River and rejoining the I-8 Alternative alignment south of El Capitan Mountain. After crossing Interstate 8 the alignment primarily crosses open undeveloped land of the CNF, and several facilities along the edges of the lake and near the dam associated with El Capitan Reservoir. There are no identified hazardous material sites listed along the Chocolate Canyon Option route (EDR, 2007f) with potential to have caused environmental contamination and a review of the Geotracker website (RWQCB, 2007) indicated no known UST or LUST sites along this route. The EDR databases were reviewed for sites with known environmental contamination and for sites with potential to have resulted in environmental contamination within the ROW of this alignment. Many of the sites reviewed in the EDR database searches are not hazardous materials release sites (known contaminated sites), but rather are listed as facilities that use, store, or dispose of hazardous materials offsite. Sites listed in the environmental databases were then reviewed based on distance from the alignment, type of site, and regulatory status of the site. Based on these characteristics, a determination was made whether the site would have potential to impact the project.

## Construction Impacts

No impacts from residual herbicides or pesticides (Impact P-2), encountering unexploded ordnance (UXO) (Impact P-4), and excavation or grading resulting in mobilization of existing soil or groundwater contamination from known sites (Impacts P-7) are expected along the Chocolate Canyon Option route and are therefore not addressed in this section.

***Impact P-1: Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and or storage of hazardous materials during construction activities.***  
~~***Improper handling and/or storage of hazardous materials during construction could cause soil or groundwater contamination (Class II)***~~

Hazardous materials such as vehicle fuels and oils and paints would be used and stored during excavation and grading of the transmission line structures and facilities (see Table D.10-7), resulting in a potential for environmental contamination due to improper handling and/or storage of hazardous materials, a significant impact. Soil or groundwater contamination resulting from spills or leaks of hazardous materials during project construction would be a significant impact. APMs HS-APM-1 (personnel trained in proper use and safety procedures for the chemicals used), HS-APM-2 (personnel trained in refueling of vehicles), HS-APM-3 (preparation of environmental safety plans including spill prevention and response plan), HS-APM-8 (SDG&E's and/or General Contractor environmental/health

and safety personnel), and HS-APM-10 (proper storage and disposal of generated waste), would be included as part of the project in order to reduce the likelihood of spills. Small spills or drips that may occur would easily be cleaned up, especially if identified quickly. However, in the event larger spills or leaks occurred, soil or groundwater contamination could occur, particularly if not identified promptly, resulting in a significant impact.~~However, spills could still occur and cause soil contamination, resulting in a significant impact.~~ Implementation of Mitigation Measures P-1a (Implement Environmental Monitoring Program) and P-1b (Maintain emergency spill supplies and equipment) would reduce the significant environmental impacts to less than significant (Class II).

**Mitigation Measures for Impact P-1: Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and or storage of hazardous materials during construction activities**

**P-1a Implement Environmental Monitoring Program.**

**P-1b Maintain emergency spill supplies and equipment.**

***Impact P-3: Unanticipated preexisting soil and or groundwater contamination could be encountered during excavation or grading (Class II)***

Ground disturbance along the transmission line route for this link would consist of a short stretch of trench excavation to extend the underground portion of the alignment and along the overhead portion would be limited to excavation at and near transmission structures and grading of new access roads along and to the alignment. No impacts from existing environmentally contaminated sites are expected along this segment. Although unanticipated contamination along the Chocolate Canyon Option route is unlikely due to the primarily undeveloped and rural residential nature of the route and surrounding areas, there is a potential for unknown contamination to have occurred along and near roads due to illegal dumping which results in potential to encounter contamination where the Chocolate Canyon Option crosses and is close to these roads. Contamination from petroleum products (gasoline, oil, and diesel) is one of the most common types of unknown contamination encountered and is generally detectable by visual and olfactory observation. The potential to encounter unknown environmental contamination is a significant impact. SDG&E's APMs HS-APM-15, -16 and -17 would be incorporated into the project in order to reduce the significance of this impact by stopping work if suspected contamination is identified, suspected areas of contamination would be cordoned off and appropriate health and safety measures taken, sampling and testing of suspected material would be conducted, and if contamination is found to be greater than regulatory limits the appropriate agency (RWQCB or CUPA) shall be notified. However, these measures do not specify how or who will determine if regulatory limits are exceeded, and if laboratory data is 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, a significant impact. In, addition no requirements for documentation of these incidents are included, including reporting locations of, sampling results, and actions taken for potentially contaminated sites to the CPUC and BLM (if on BLM lands). Therefore Mitigation Measures P-3a and P-3b 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, reducing the impact from encountering unknown contamination to less than significant (Class II).

***Mitigation Measure for Impact P-3: Unanticipated preexisting soil and or groundwater contamination could be encountered during excavation or grading***

**P-3a**      **Appoint individuals with correct training for sampling, data review, and regulatory coordination.**

**P-3b**      **Document compliance with measures for encountering unknown contamination.**

**Operational Impacts**

***Impact P-5: Soil or groundwater contamination could result from accidental spill or release of hazardous materials during operation and maintenance (Class III)***

Soil or groundwater contamination could result from accidental spill or release of hazardous materials along the transmission alignment during maintenance operations. This could result in exposure of maintenance workers and the public to hazardous materials; and could result in contamination to soil and or groundwater. SDG&E would reduce these impacts with APMs that require: personnel using hazardous material be trained in their use, safety procedures, and proper use of safety equipment (HS-APM-1); environmental safety plans associated with hazardous material use and storage for the project be developed (HS-APM-3); and that all hazardous materials and waste be stored and disposed of in accordance with federal, State, and local regulations (HS-APM-10). In the event a spill were to occur, these APMs would reduce the potential for contamination from such a spill and exposure of workers or the public to hazardous materials 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 an adverse but less than significant impact (Class III).

***Impact P-6: Herbicides used for vegetation control around towers and other project facilities could result in adverse health effects to the public or maintenance workers (Class III)***

SDG&E applies herbicide, in conjunction with mechanical clearing of vegetation, to prevent or remove vegetation in the right-of-way. Herbicide is applied to bare soil to prevent emergence of new growth and to emergent plant material (SDG&E, 2006, Chapter 2 and Appendix A). SDG&E and their contractor's follow an Herbicide Application Protocol (SDG&E, 2006, Appendix A) to prevent environmental hazards and safety and health concerns which is summarized in Table D.10-8 - Summary of SDG&E's Herbicide Application Protocol. All herbicide is applied by hand sprayer to restrict the chemical to within 10 feet of the structures (SDG&E, 2006). This herbicide application during operation and maintenance of the Chocolate Canyon Option could potentially impact the workers applying the chemical, maintenance workers in the ROW, or public that enters the affected right of way areas; however all of these herbicides are classified by U.S. EPA as Class III - Low Toxicity. The potential exposure of workers applying the herbicide would also be minimized by following the manufacturer's recommendations for mixing and applying the chemicals, and for use of protective clothing and respiratory protection. Maintenance workers in the ROW could be exposed to residual herbicides if the soil application was recent and excessive dust was inhaled. Public accessing the ROW may cause dust to become airborne and inhaled. However, with use of SDG&E's application protocols, and considering the generally low toxicity of these herbicides (see Table D.10-9), their restricted use at project structures, and the non-routine access of these areas by maintenance workers and the general public the presence of residual herbicide in soil and airborne dust does not pose a significant adverse health risk. This is an adverse but less than significant impact (Class III).

### E.1.10.5 Future Transmission System Expansion for Interstate 8 Alternative

As described in Section E.1.1, the Interstate 8 Alternative Substation that would be built as a part of the Interstate 8 Alternative would accommodate up to six 230 kV circuits and a 500 kV circuit. Only two 230 kV circuits are proposed by this alternative at this time, but construction of additional 230 kV circuits and a 500 kV circuit out of the Interstate 8 Alternative Substation may be required in the future. This section considers the impacts of construction and operation of these potential future transmission lines. There are three routes that are most likely for these future lines; each is addressed below. Figure Ap.1-29 illustrates the potential routes of the transmission lines.

#### Environmental Setting – 230 and 500 kV Future Transmission System Expansion

The future 230 and 500 kV lines from the Interstate 8 Alternative Substation would follow one or more of the following routes.

##### ***Interstate 8 Route Including Underground Within Alpine Boulevard***

Please note the Interstate 8 Alternative route including underground within Alpine Boulevard would only be applicable for future 230 kV lines. Additional 230 kV circuits could be installed underground within Alpine Boulevard, with appropriate compact duct banks and engineering to avoid, or possibly relocate, existing utilities. See Section E.1.10.1 and E.1.10.2 for a description of the Environmental Setting and Mitigation Measures for Public Health and Safety for the Interstate 8 Alternative. The future transmission line route would follow the Interstate 8 Alternative's 230 kV route to the point where it meets the Proposed Project at MP 131. The future transmission route would then join the proposed route corridor to the west, continuing past the Sycamore Canyon Substation to the Chicarita Substation. See Section D.10.2, D.10.8, and D.10.9 for a description of the Environmental Setting and Mitigation Measures for Public Health and Safety of the Inland Valley Link and the Coastal Link of the Proposed Project. The Interstate 8 230 kV future transmission route could then follow the Proposed Project's 230 kV Future Transmission Expansion route from Chicarita to the Escondido Substation shown in Figure B-12a. See Section D.10.11 for a description of the Environmental Setting and Mitigation Measures for the Proposed Project's Future Transmission Expansion route.

##### ***Route D Alternative Corridor***

Additional 230 or 500 kV circuits could follow the Route D Alternative corridor to the north of Descanso, after following the Interstate 8 Alternative 230 kV route from the Interstate 8 Substation to MP I8 70.3. The environmental setting and mitigation measures for Public Health and Safety of the Route D Alternative can be found in Section E.3.10.1 and in Section E.3.10.2. It should be noted, however, that the Route D Alternative Public Health and Safety impacts and mitigation measures are for a 500 kV transmission line, and the Interstate 8 future transmission line as detailed above could be either a 500 kV line or a 230 kV line. For a description of a typical 500 kV transmission support structure and a typical 230 kV support structure see Section B.3.1.

The Route D corridor would connect with the Proposed Project corridor at Milepost 114.5, and could then follow either: (1) the Proposed Project southwest to the Chicarita Substation and then follow the Proposed Project's 230 kV Future Transmission Expansion route (see description in Section B.2.7) from Chicarita to the Escondido Substation; or (2) the Proposed Project northeast to the Proposed Central East Substation and then follow the Proposed Project's 500 kV Future Transmission Expansion route shown

in Figure B-12b (see description in Section B.2.7). See Section D.10.2 for more information on the Public Health and Safety setting of the Central, Inland Valley, and Coastal Links of the Proposed Project.

For the Public Health and Safety setting, impacts, and mitigation measures of the Proposed Project's 230 kV Future Transmission Expansion route and the Proposed Project's 500 kV Future Transmission Expansion route see Section D.10.11.

### ***Interstate 8 Alternative with Modified Route D alignment and West of Forest alignment***

The future 230 or 500 kV lines could follow the proposed Interstate 8 Alternative route from the Interstate 8 Alternative Substation until reaching the Modified Route D Alternative corridor (within the 368 Corridor identified by the Department of Energy's Draft West-wide Corridor Programmatic EIS) and then follow the Modified Route D Alternative corridor south for 11 miles to MP MD-26. For the Public Health and Safety setting and impacts along the Modified Route D corridor see Section E.4.10. At MP MD-26, new 230 or 500 kV circuits would turn west and connect with the northernmost segment of the West of Forest Alternative route as described in Section E.1.1. This route would meet up with the Interstate 8 Alternative at approximately MP I8-79 and would follow the I8 Alternative's overhead 230 kV route to the point where it meets the Proposed Project at MP 131. The future transmission route would then join the proposed route corridor to the west, continuing past the Sycamore Canyon Substation to the Chicarita Substation. It could then follow the Proposed Project's 230 kV Future Transmission Expansion route (see description in Section B.2.7) from Chicarita to the Escondido Substation.

### ***West of Forest Corridor (MP MD-26 to MP I8-79)***

The alignment starts at MP MD-26 and heads northwesterly across primarily undeveloped hills and valleys, crossing open and barren terrain dissected by numerous small washes, local arroyos (ephemeral stream channels), and canyons. The hill and valley terrain is covered with scattered scrub vegetation and exposed rock bedrock outcrops. The alignment crosses numerous roads including Hilary Drive, Mark Trail, Lawson Valley Road, Forest Route 16SD1, Sycuan Truck Trail, Dehesa Road, Harbison Canyon Road, and Mountain View Road. The and trails, including Old Viejas Grade, Goudie Road, Dubois Truck Trail, Tule Creek Road, Boulder Springs Road, Eagle Peak Road, and Westside Road. Scattered rural residences/ranches are located near or along Skyline Truck Trail, Lawson Valley Road, Sycuan Truck Trail, Dehesa Road, Harbison Canyon Road, and Mountain View Road.

As the route is primarily rural and undeveloped, it is unlikely that environmental contamination would have occurred. A preliminary internet search was conducted for environmental contamination and based on this search, no hazardous material sites were found within the general vicinity of the future transmission route (USEPA, 2007).

## **Environmental Impacts – 230 or 500 kV Future Transmission System Expansion**

### **Construction Impacts**

As there are no areas within the future transmission route that are used by the military, Impact P-4 (Areas used by the military may contain unexploded ordnance (UXO) and could explode and injure workers or the public during construction) would not occur. As there are no known soil or groundwater contamination sites, Impact P-7 (Excavation or grading could result in mobilization of existing soil or groundwater contamination from known sites) would not occur.

***Impact P-1: Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and or storage of hazardous materials during construction activities~~Improper handling and/or storage of hazardous materials during construction could cause soil or groundwater contamination~~ (Class II)***

Hazardous materials, such as vehicle fuels and oils, would be used and stored during construction activities, resulting in a potential for soil contamination from improper handling, spills, or leaks. This would be a significant impact. Additionally, helicopters may be used to support construction activities in areas where access is limited or where there are environmental constraints to accessing the project area with standard construction vehicles and equipment. All helicopter construction and maintenance activities would be based at a fly yard. Refueling activities for the helicopters could potentially result in soil contamination from improper handling and storage of helicopter fuel at the staging areas or during refueling, a potentially significant impact. Soil or groundwater contamination resulting from spills or leaks of hazardous materials during project construction would be a significant impact. Mitigation Measures similar to SDG&E's APMs for the Proposed Project would be implemented as part of these future projects, including: Mitigation Measure P-1c (Personnel trained in proper use and safety procedures for the chemicals used), Mitigation Measure P-1d (Personnel trained in refueling of vehicles), Mitigation Measure P-1e (Preparation of environmental safety plans including spill prevention and response plan), Mitigation Measure P-1f (Applicant and/or General Contractor environmental/health and safety personnel), and Mitigation Measure P-1g (Proper storage and disposal of generated waste) which would be included as part of the projects in order to reduce the likelihood of spills. Small spills or drips that may occur would easily be cleaned up, especially if identified quickly. However, in the event larger spills or leaks occurred, soil or groundwater contamination could occur, particularly if not identified promptly, resulting in a significant impact.~~Nevertheless, spills could still occur and cause soil contamination, resulting in a significant impact.~~ Implementation of measures such as Mitigation Measures P-1a (Implement Environmental Monitoring Program) and P-1b (Maintain emergency spill supplies and equipment) would be applied to reduce the significant environmental impacts of hazardous material spills to less than significant (Class II). The full text of the mitigation measures appears in Appendix 12.

***Mitigation Measures for Impact P-1: Soil or groundwater contamination could result from accidental spill or release of hazardous materials due to improper handling and or storage of hazardous materials during construction activities~~Improper handling and/or storage of hazardous materials during construction could cause soil or groundwater contamination~~***

- P-1a**      **Implement Environmental Monitoring Program.**
- P-1b**      **Maintain emergency spill supplies and equipment.**
- P-1c**      **Personnel trained in proper use and safety procedures for the chemicals used.** All personnel involved in using hazardous materials shall be trained in the proper use and safety procedures for the chemical and provided with the necessary Personal Protection Equipment (PPE). A Hazard Communication (HAZCOM) Plan with Material Safety Data Sheets on all hazardous materials used for the project shall be developed. [HS-APM-1]
- P-1d**      **Personnel trained in refueling of vehicles.** Only personnel trained in refueling vehicles would be allowed to perform this operation. All refueling operation shall be in designated areas or preformed by assigned vehicles. [HS-APM-2]
- P-1e**      **Preparation of environmental safety plans including spill prevention and response plan.** All applicable environmental safety plans associated with hazardous materials shall be developed for the project. These plans include but are not necessarily limited to Hazardous Material Business (HMB) Plan; HAZCOM Plan; Spill Response Plan; 90-day temporary storage and disposal (TSD) facility permit; and Spill Prevention Control and Countermeasure (SPCC – only if storage is over 1,350 gallons at one location) Plan. [HS-APM-3]

- P-1f Applicant and/or General Contractor environmental/health and safety personnel.** The applicant will assign an Environmental Field Representative and/or General Contractor assigned Health & Safety Office to the project. [HS-APM-8]
- P-1g Proper storage and disposal of generated waste.** All hazardous waste and solid waste shall be stored and disposed of in accordance with federal, State, and local regulations. Whenever feasible, hazardous material minimization methods shall be employed and all hazardous materials recycled. [HS-APM-10]

***Impact P-2: Residual pesticides and/or herbicides could be encountered during grading or excavation on currently or historically farmed land in agricultural areas (Class II)***

The potential presence of residual pesticide and herbicide contamination in soil and/or groundwater on currently or historically farmed land in the agricultural areas along the future transmission line alignments represents a significant impact to the health of construction workers and the public (See Section E.1.6.4 for details concerning agriculture in this region). Mitigation Measures similar to SDG&E's APMs for the Proposed Project would be implemented as part of these future projects, including: Mitigation Measure P-2b, Mitigation Measure P-2c, and Mitigation Measure P-2d, which would be implemented with the projects in order to reduce the significance of this impact. This would entail stopping work if suspected contamination is identified, cordoning off the area and taking appropriate health and safety measures, sampling and testing of suspected material, and if contamination is found to be greater than regulatory limits, the appropriate agency (RWQCB or CUPA) shall be notified. However, even with the implementation of these mitigation measures, the impact would be significant as pesticide and herbicide contamination is not always readily apparent by visual or olfactory indicators. Implementation of measures such as Mitigation Measure P-2a (Test for residual pesticides/herbicides) would be required to reduce this impact to less than significant (Class II).

***Mitigation Measures for Impact P-2: Residual pesticides and/or herbicides could be encountered during grading or excavation on currently or historically farmed land in agricultural areas***

- P-2a Test for residual pesticides/herbicides on currently or historically farmed land in agricultural areas.**
- P-2b Stop work if contamination is detected.** If during excavation if soil or groundwater contamination is suspected (e.g., unusual soil discoloration or strong odor), the contractor or subcontractor shall immediately stop work and notify the General Contractor's assigned Health & Safety Officer and/or the applicant's field environmental representative. [HS-APM-15]
- P-2c Cordon off contaminated areas.** If soil or groundwater contamination is suspected, work near the excavation site shall be terminated, the work area cordoned off, and appropriate health and safety procedures implemented for the location by the General Contractor's assigned Health & Safety Officer and/or the applicant's field environmental representative. Preliminary samples of the soil, groundwater, or material shall be taken by an OSHA trained individual. These samples shall be sent to a California Certified Laboratory for characterization. [HS-APM-16]
- P-2d Notification of regulatory agencies.** If the sample testing determines that contamination is not present, work would be allowed to proceed at the site. However, if contamination is found above regulatory limits, the regulatory agency (e.g., RWQCB or CUPA) responsible for responding to and for providing environmental oversight of the region shall be notified in accordance with State or local regulations. [HS-APM-17]

***Impact P-3: Unanticipated preexisting soil and/or groundwater contamination could be encountered during excavation or grading (Class II)***

Ground disturbance along the transmission line routes would consist primarily of excavation at and near transmission structures and grading of new access roads along and to the alignment. Although no known existing environmentally contaminated sites are expected along undeveloped portions of the future transmission lines, some of the routes could pass near future or currently unidentified hazardous material sites, resulting in a potential to encounter unknown contamination during construction. Additionally unknown contamination may be present near developed and rural areas near the ROW and near remote area roads due to illegal dumping, a potentially significant impact. Contamination from petroleum products (gasoline, oil, and diesel) is one of the most common types of unknown contamination encountered and is generally detectable by visual and olfactory observation.

Mitigation measures similar to SDG&E's APMs for the Proposed Project would be implemented as part of these future projects, including: Mitigation Measure P-2b, P-2c, and P-2d which would be implemented as a part of the project in order to reduce the significance of this impact by stopping work if suspected contamination is identified by visual staining or odor, cordoning off suspected areas of contamination and taking appropriate health and safety measures, sampling and testing of suspected material conducted, and if contamination is found to be greater than regulatory limits the appropriate agency (RWQCB or CUPA) shall be notified. However, these measures do not specify how or who will determine if regulatory limits are exceeded, and 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. This would be a significant impact. In, addition no requirements for documentation of these incidents are included, including reporting to CPUC and BLM the locations of sampling results and actions taken for potentially contaminated sites. Therefore, Mitigation Measures P-3a and P-3b would also need to be implemented to ensure that laboratory data are properly interpreted by trained personnel with regard to contamination levels for reporting to the appropriate regulatory agency and documentation that these measures are properly implemented, reducing the impact from encountering unknown contamination to less than significant (Class II).

***Mitigation Measures for Impact P-3: Unanticipated preexisting soil and/or groundwater contamination could be encountered during excavation or grading***

- P-2b** Stop work if contamination is detected. [HS-APM-15]
- P-2c** Cordon off contaminated areas. [HS-APM-16]
- P-2d** Notification of regulatory agencies. [HS-APM-17]
- P-3a** Appoint individuals with correct training for sampling, data review, and regulatory coordination.
- P-3b** Document compliance with measures for encountering unknown contamination.

**Operational Impacts**

***Impact P-5: Soil or groundwater contamination could result from accidental spill or release of hazardous materials during operation and maintenance (Class II)***

Soil or groundwater contamination could result from accidental spill or release of hazardous materials along the transmission alignment during maintenance operations. This could potentially result in exposure of maintenance workers and the public to hazardous materials; and could result in contamination to

soil and/or groundwater. Mitigation Measures similar to SDG&E's APMs for the Proposed Project would be implemented as part of these future projects, including: Mitigation Measure P-1c (Personnel trained in proper use and safety procedures for the chemicals used), Mitigation Measure P-1e (Preparation of environmental safety plans including spill prevention and response plan), and Mitigation Measure P-1g (Proper storage and disposal of generated waste). These measures would reduce the likelihood of spills and would reduce any significant impacts of spills, but they would not completely prevent spills from occurring; however, in the event a spill were to occur, these mitigation measures would reduce the potential for contamination from such a spill and exposure of workers or the public to hazardous materials by ensuring that that any spilled material and any resulting surface 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, a less than significant impact (Class II)

***Mitigation Measure for Impact P-5: Soil or groundwater contamination could result from accidental spill or release of hazardous materials during operation and maintenance***

- P-1c Personnel trained in proper use and safety procedures for the chemicals used. [HS-APM-1]**
- P-1e Preparation of environmental safety plans including spill prevention and response plan. [HS-APM-3]**
- P-1g Proper storage and disposal of generated waste. [HS-APM-10]**

***Impact P-6: Herbicides used for vegetation control around towers and other project facilities could result in adverse health effects to the public or maintenance workers (Class III)***

SDG&E applies herbicide, in conjunction with mechanical clearing of vegetation, to prevent or remove vegetation in the right-of-way. Herbicide is applied to bare soil, to prevent emergence of new growth, and to emergent plant material (SDG&E, 2006, Chapter 2 and Appendix A). The vegetation removal program uses eight different herbicides to clear all vegetation to mineral soil within a 10-foot radius around poles and structures. SDG&E and their contractor's follow an Herbicide Application Protocol (SDG&E, 2006, Appendix A) to prevent environmental hazards and safety and health concerns, which is summarized Table D-10-8. The herbicides used by SDG&E and their known toxicity and persistence in soil are summarized in Table D.10-9. All herbicide is applied by hand sprayer to restrict the chemical to within 10 feet of the structures (SDG&E, 2006). This herbicide application during operation and maintenance of the Proposed Project could potentially impact the workers applying the chemical, maintenance workers in the ROW, or public that enters the affected right of way areas; however all of these herbicides are classified as Class III (Low Toxicity) by U.S.EPA. The potential exposure of workers applying the herbicide would also be minimized by following the manufacturer's recommendations for mixing and applying the chemicals, and recommendations for use of protective clothing and respiratory protection. Maintenance workers in the ROW could be exposed to residual herbicides if the soil application was recent and excessive dust was inhaled. Public accessing the ROW may cause dust to become airborne and inhaled. However, considering the generally low toxicity of these herbicides, their restricted use at project structures, and the non-routine access of these areas by maintenance workers and the general public the presence of residual herbicide in soil and airborne dust does not pose a significant adverse health risk. This is a less than significant impact (Class III).