

## E.4.10 Public Health and Safety – Environmental Contamination

The Modified Route D Alternative route is described in Section E.4.1. It includes three main segments: a southwesterly segment that crosses BLM, CNF and private lands before reaching the Cameron Substation, a westerly segment that follows the southern boundary of the CNF, and a northerly segment that is primarily on CNF land and includes the Modified Route D Substation.

### E.4.10.1 Environmental Setting

The Modified Route D Alternative traverses a mix of mountain, hill, mesa, and valley terrain for its entire length. The Modified Route D Alternative traverses gently to steeply sloping hill and mountains, crossing the edges and foothills of Hauser, Echo, Barber, and Middle Mountains, and the intervening hills, which are dissected by many small creeks. The alignment also crosses numerous larger streams and valleys including La Posta Valley, Cameron Valley, Hauser Creek, Potrero Creek, Cottonwood Creek, Wilson Creek, Sweetwater River, and Taylor Creek.

The Modified Route D Alternative route starts just north of the I-8 freeway and traverses south crossing the I-8 freeway and Old Highway 80 before turning west and crossing primarily undeveloped terrain with scattered rural residences in the area. The alignment crosses La Posta Road before turning south approximately paralleling the eastern side of Cameron and passing near to a few scattered rural residences through open hillsides with grass and scrub vegetation.

Near to approximately MP MRD-8.2 the alignment turns west, crossing Buckman Springs Road and Lake Morena Drive and traversing through agricultural land with rural residences, ranches, and irrigated pasture land along the alignment. At approximately MP MRD-11 the alignment would transition back to crossing hill and valley terrain consisting of undeveloped open land with scrub brush, grasses, and bare rock outcrops. The alignment continues west through open hillsides with scrub vegetation and crosses just south of a chicken ranch off of Round Potrero Road between approximately MPs MRD-16.5 to MRD-17. Continuing west the route crosses more undeveloped open space, Barrett Lake Road and the San Diego City Conduit (a flume from Barrett Lake).

At approximately MP MRD-21.2 the alignment turns northerly and continues across primarily undeveloped hill and mountain terrain with bare rock outcrops and scattered scrub brush, paralleling and crossing numerous unpaved roads. Between approximately MPs MRD-22.5 to MRD-23.5 the Modified Route D Alternative route crosses an area with many scattered rural residences. The alignment continues though primarily undeveloped hill and mountain terrain, crossing between and past two ranches and crossing Japatul Road between MPs MRD-25 and MRD-26.5 and crossing between and past several more ranches and crossing Japatul Dehesa Road between MPs MRD-30 and MRD-31. The alignment then continues to traverse north across hill and valley terrain with sparse vegetation (grasses and scrub brush) to the Modified Route D Substation just south of the I-8 freeway and north of the Sweetwater River.

The Modified Route D Alternative Substation would convert the transmission line from 500 kV to 230 kV. The substation would be located west of Japatul Valley Road and south of I-8. The 230 kV route exiting the substation toward I-8 (approximately two miles to the north) would join the Interstate 8 Alternative near MP I8-71.3 and transition underground at the same point as the Interstate 8 Alternative (at the east end of Alpine Boulevard).

The Star Valley Option would take the 230 kV transmission line from substation heading northwest, to join the Interstate 8 Alternative somewhat to the west of the Modified Route D Alternative, near MP I8-74

**Database Search.** EDR environmental database searches (EDR, 2007m, 2007n, 2007o) for a one-half-mile-wide corridor (one-quarter mile on both sides) for the alignment were reviewed and analyzed for sites within 0.25 miles of the Modified Route D Alternative. ~~It was~~They were analyzed for sites within 0.25 miles of the route with known environmental contamination or that store, use, and dispose of significant quantities of hazardous materials. The database search also looked for sites with the potential to have resulted in environmental contamination within the alternative ROWs. 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. Based on review of EDR environmental databases there are no known hazardous material sites within 0.25 miles of the Modified Route D Alternative with potential to impact the project. Appendix 13 includes the results of the database search for existing contaminated sites.

#### E.4.10.2 Environmental Impacts and Mitigation Measures

Table E.4.10-1 summarizes the impacts of the Modified Route D Alternative and the Central South Substation Alternative on public health and safety – contamination.

Table E.4.10-1. Impacts Identified – Alternatives – Public Health and Safety - Contamination

Impact No.	Description	Impact Significance
<b>Modified Route D 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
<b>Modified Route D 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-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
<b>Star Valley Option <u>and PCT Reroute Option C/D</u></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 Modified Route D Alternative and therefore is not addressed in this section. Full text of the mitigation measures is provided in Appendix 12.

***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 Modified Route D Alternative (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 Measure for Impact P-1: 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 Modified D Alternative route that passes through on currently or historically farmed land~~agricultural land~~. The potential to encounter pesticide or herbicide contaminated soil during grading or excavation for construction represents a potential significant impact due to 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. Nevertheless, even with the implementation of APMs, the impact would be significant as pesticide and herbicide contamination is not always readily apparent by visual or olfactory indicators. Mitigation Measure P-2a (Test for residual pesticides/herbicides in agricultural areas) 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)***

Although unanticipated contamination along the Modified Route D Alternative is unlikely due to the primarily undeveloped and rural nature of the surrounding areas, there is a potential for unknown contamination to have occurred along and near roads in the area due to illegal dumping which results in a potential to encounter contamination where the route 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. 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. 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.) (See Appendix 12 for the full text of the mitigation measures.)

***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 during operation and maintenance of substation facilities at the Modified Route D Alternative Substation or during maintenance of the transmission lines, transition towers, and other associated transmission components for the Modified D Alternative transmission line. 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). 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, 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). SDG&E and their contractor's follow a Herbicide Application Protocol (SDG&E, 2006, Appendix A), which is summarized in Table D-10-8, to prevent environmental hazards and safety and health concerns. 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.10-9. 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 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, 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.4.10.3 Modified Route D Alternative Substation

To convert the 500 kV transmission line to 230 kV so it can go underground through Alpine on Interstate 8 Alternative, a 40-acre substation would be required along the alternative route. This site is about 2 miles south of I-8, where the Interstate 8 Alternative would transition to allow for underground construction in Alpine Boulevard.

##### Environmental Setting

The Modified Route D Alternative Substation site is located in undeveloped private land and is covered with sparse vegetation.

**Database Search.** The EDR environmental database search (EDR, 2007h) was reviewed and analyzed for sites within 0.25 miles of the substation site with known environmental contamination or that store, use, and dispose of significant quantities of hazardous materials; sites with the potential to have resulted in environmental contamination within the alternative site boundaries. The EDR database 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. Based on review of EDR environmental database there are no known hazardous material sites in the vicinity of the Modified Route D Alternative Substation that have a potential to impact the project. Appendix 13 includes the results of the database search for existing contaminated sites.

##### Environmental Impacts and Mitigation Measures

###### Construction Impacts

The site is located on private land nearly surrounded on three sides by CNF land. There are no developed roads through the site. It has not been used for agriculture requiring pesticides or herbicides, and has not been used for military exercises. Therefore, Impacts P-2 (Residual pesticides and/or herbicides could be encountered), P-4 (encountering unexploded ordinance), Impact P-3 (Unanticipated preexisting soil and/or groundwater contamination could be encountered), and P-7 (Excavation or grading could result in mobilization of existing soil or groundwater contamination from known sites) would not occur at the substation site and therefore are 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 substation (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). (See Appendix 12 for the full text of the mitigation measures.)

***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.**

### 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 potentially result in exposure of facility 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 addition, the Modified Route D Alternative Substation would require a new Hazardous Material Business Plan, Hazardous Communication Plan, Spill Response Plan, Temporary Storage and Disposal facility permit, and Spill Prevention and Countermeasure Plan for the facility. 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, 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). SDG&E and their contractor's follow a Herbicide Application Protocol (SDG&E, 2006, Appendix A), which is summarized in Table D-10-8, to prevent environmental hazards and safety and health concerns. 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.10-9. 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 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, 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).

#### E.4.10.4 Star Valley Option

The Star Valley Option route diverges from the Modified Route D Alternative at approximately MP MRD-34.1 to the northwest and travels 3 miles to join the I-8 Alternative at approximately MP I8-73.8. This option provides for the 230 kV transmission line to join the Interstate 8 Alternative somewhat to the west of where the Modified Route D Alternative would join it.

#### Environmental Setting

The Star Valley Option route traverses undeveloped hill and valley open space of the CNF as well as private vacant land, and is covered with sparse vegetation. Between MPs SVO-2 and SVO-3, the route crosses and parallels several rural roads and truck trails and the area dotted with scattered rural residences.

**Database Search.** An EDR environmental database search (EDR, 2007o) was reviewed and analyzed for sites within 0.25 miles of the Star Valley Option route with known environmental contamination or that store, use, and dispose of significant quantities of hazardous materials; sites with the potential to have resulted in environmental contamination within the alternative site boundaries. The EDR database 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. Based on review of EDR environmental database there are

no known hazardous material sites in the vicinity of the Star Valley Option route with potential to impact the project. Appendix 13 includes the results of the database search for existing contaminated sites.

## Construction Impacts

Impacts P-2 (Residual pesticides and/or herbicides could be encountered), P-4 (encountering unexploded ordinance), and P-7 (Excavation or grading could result in mobilization of existing soil or groundwater contamination from known sites) would not occur along the Star Valley Option route and therefore are 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 Star Valley Option (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). (See Appendix 12 for the full text of the mitigation measures.)

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

Although unanticipated contamination along the Star Valley Option route is unlikely due to the primarily undeveloped and rural nature of the surrounding areas, there is a potential for unknown contamination to have occurred along and near roads in the area due to illegal dumping which results in a potential to encounter contamination where the route 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. 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 cordoned off and appropriate health and safety measures taken, conducting 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, 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. 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). (See Appendix 12 for the full text of the mitigation measures.)

***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 at the substation during operation and maintenance of substation facilities. This could potentially result in exposure of facility 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, 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). SDG&E and their contractor's follow a Herbicide Application Protocol (SDG&E, 2006, Appendix A), which is summarized in Table D-10-8, to prevent environmental hazards and safety and health concerns. 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.10-9. 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 Pro-

posed 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 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, 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).

#### E.4.10.5 PCT Reroute Option C/D

The PCT Reroute Option C/D is described in Section E.4.1.3 and illustrated on Figures E.4.1-1b and E.4.1-1c. This route option would diverge from the Modified Route D Alternative route at MP MRD-10.8 and rejoin the route at MP MRD-14.

##### *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 (Class II)*

Hazardous materials such as vehicle fuels and oils would be used and stored during construction activities for the PCT Reroute Option C/D (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. 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). (See Appendix 12 for the full text of the mitigation measures.)

##### *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*

**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 along the PCT Reroute Option C/D route is unlikely due to the primarily undeveloped and rural nature of the surrounding areas, there is a potential for unknown

contamination to have occurred along and near roads in the area due to illegal dumping which results in a potential to encounter contamination where the route 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. 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 cordoned off and appropriate health and safety measures taken, conducting 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, 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. 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). (See Appendix 12 for the full text of the mitigation measures.)

***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 at the substation during operation and maintenance of substation facilities. This could potentially result in exposure of facility 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, 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). SDG&E and their contractor's follow a Herbicide Application Protocol (SDG&E, 2006, Appendix A), which is summarized

in Table D-10-8, to prevent environmental hazards and safety and health concerns. 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.10-9. 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 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, 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).

#### Comparison of Impacts: Modified Route D Alternative and PCT Reroute Option C/D

There is no difference between these two route options from the perspective of hazardous materials. Neither is likely to encounter existing contamination.

### E.4.10.65 Future Transmission System Expansion

For the Proposed Project and route alternatives along the Proposed Project route, Section B.2.7 identifies Future Transmission System Expansion routes for both 230 kV and 500 kV future transmission lines. These routes are identified, and impacts are analyzed in Section D of this EIR/EIS, because SDG&E has indicated that transmission system expansion is foreseeable, possibly within the next 10 years. For the SWPL alternatives, 500 kV and 230 kV expansions would also be possible. The potential expansion routes for the Route D Alternative are described in the following paragraphs.

#### 230 and 500 kV Future Transmission System Expansion

The Modified Route D Alternative would begin at approximately Interstate 8 MP-47 and would head southwest then northward until it reached the Interstate 8 Alternative at approximately MP I8-71. A substation could be built to convert the 500 kV line to 230 kV at approximately MD-34, the Modified Route D Substation Alternative. The double-circuit 230 kV line would exit the substation overhead, then continue north into the CNF, joining the Interstate 8 Alternative at approximately MP I8-71 where it transitions to underground at the east end of Alpine Boulevard. The Modified Route D Substation would accommodate up to six 230 kV circuits and a 500 kV circuit. Only two 230 kV circuits are proposed at this time, but construction of additional 230 kV circuits and a 500 kV circuit out of the Modified Route D Substation may be required in the future. There are three routes that are most likely for these future lines; each is described below. Figure E.1.1-6 illustrates the potential routes of the future transmission lines.

- Two 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. This route would follow the Interstate 8 Alternative route from the Interstate 8 Alternative Substation until MP I8-70.8 where it would transition underground until MP I8-79 where it would transi-

tion overhead again. The future transmission line route would continue to follow the Interstate 8 Alternative's overhead 230 kV route to the point where it meets the Proposed Project at MP 131. See Section E.1.10.1 and E.1.10.2 for the Public Health and Safety setting, impacts, and mitigation measures along the I-8 route. 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 the Public Health and Safety setting, impacts, and mitigation measures for the Inland Valley and Coastal Links. 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 shown in Figure B-12a. See Section D.10.11 for the Public Health and Safety setting, impacts, and mitigation measures for the Future Transmission System Expansion of the Proposed Project.

- Additional 230 and 500 kV circuits could follow the Route D Alternative corridor (see description in Section E.3.1) to the north of Descanso, after following the Interstate 8 Alternative 230 kV route from the Interstate 8 Substation to MP I8 70.3. See Section E.3.10.1 and E.3.10.2 for the Public Health and Safety setting, impacts, and mitigation measures along Route D. The Route D corridor would connect with the Proposed Project corridor at MP 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 northeastward 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, D.10.7, D.10.8, and D.10.9 for the Public Health and Safety setting, impacts, and mitigation measures for the Central, Inland Valley, and Coastal Links of the Proposed Project. See Section D.10.11 for the Public Health and Safety setting, impacts, and mitigation measures for the Future Transmission System Expansion of the Proposed Project.
- The future 230 and 500 kV lines could follow the Modified Route D Alternative corridor (within the 368 Corridor identified by the Department of Energy's Draft West-wide Corridor Programmatic EIS) south for 8 miles to MP MD-26. See Section E.4.10.1 and E.4.10.2 for the Public Health and Safety setting, impacts, and mitigation measures along Modified Route D. 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. See Section E.1.10.5 for the Public Health and Safety setting, impacts, and mitigation measures along MP MD-26 to MP I8-79 corridor. This route would meet up with the Interstate 8 Alternative at approximately MP I8-79 and would follow the Interstate 8 Alternative's overhead 230 kV route to the point where it meets the Proposed Project at MP 131 (for a description of the Interstate 8 transmission corridor see Section E.1.1). 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 System (see description in Section B.2.7) from Chicarita to the Escondido Substation. See Section D.10.11 for the Public Health and Safety setting, impacts, and mitigation measures for the Future Transmission System Expansion of the Proposed Project.