

E.3.10 Public Health and Safety – Contamination

The Route D Alternative would diverge north from the I-8 Alternative at MP I8-70.3, passing primarily through the Cleveland National Forest. This alternative would require construction of the Central South Substation at the point where it would join the Proposed Project route.

E.3.10.1 Environmental Setting

Land Use. The alignment starts just north of I-8 and heads northerly across undeveloped hills and valleys of the Cuyamaca Mountains, crossing rocky, 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 dirt roads 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 Tule Spring Road and Boulder Creek Road. The Central South Substation Alternative would occupy relatively flat terrain along the Proposed Project ROW

Database Search. An EDR environmental database search (EDR, 2007g) for a one-half mile wide corridor (one-quarter mile on both sides) for the alignment was reviewed and analyzed for sites within 0.25 miles of the Route D Alternative 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 ROWs. 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 the review of this EDR environmental database, there are no hazardous material sites within 0.25 miles of the Route D Alternative. This database search included the substation site.

E.3.10.2 Environmental Impacts and Mitigation Measures

Table E.3.10-1 summarizes the impacts of the Route D Alternative and the Central South Substation Alternative on public health and safety – contamination.

Table E.3.10-1. Impacts Identified – Alternatives – Public Health and Safety - Contamination

Impact No.	Description	Impact Significance
Route D Alternative		
P-1	<u>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</u> 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

Table E.3.10-1. Impacts Identified – Alternatives – Public Health and Safety - Contamination

Impact No.	Description	Impact Significance
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
Central South Substation Alternative		
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
P-5	Soil or groundwater contamination could result from accidental spill or release of hazardous materials during operation and maintenance	Class III

Construction Impacts

Based on review of the EDR environmental database (EDR, 2006a), there are no hazardous material sites within 0.25 miles of the Route D Alternative. The vicinity not been used for agriculture or for military training. Therefore, 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 and 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 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, which would be 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: 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 Route D Alternative is unlikely due to the undeveloped and rural nature of the surrounding areas, there is a potential for unknown contamination to have occurred along and near area roads due to illegal dumping. 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. Thus there is a potential to encounter contamination where the Route D Alternative alignment cross these roads, 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. 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.

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, towers, and other associated transmission components for the Route D Alternative. 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 requiring: 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 developed (HS-APM-3); and all hazardous materials and waste be stored and disposed of in accordance with pertinent 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.3.10.3 Central South Substation Alternative

This substation would be constructed in connection with the Route D Alternative to convert the transmission line from 500 kV to 230 kV.

Environmental Setting

The Central South Substation would be located on a gently sloping plateau. The area is open ranch land covered by scattered scrub and grasslands vegetation. The EDR database (EDR, 2006a) 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 the EDR environmental database (EDR, 2006a), there are no hazardous material sites within 0.25 miles of the Central South Substation Alternative.

The site has not been used for cropland or irrigated pasture or for military training. Therefore, Impacts P-2 (Residual pesticides and/or herbicides could be encountered), P-4 (encountering unexploded ordnance), and P-7 (Excavation or grading could result in mobilization of existing soil or groundwater contamination from known sites) would not occur at the site and are not addressed in this section.

Construction Impacts

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 Central South 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).

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 new Central South Substation would require 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. 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).

Overall, the impacts due to the use of hazardous materials or discovery of contamination would be less than significant.

E.3.10.4 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 Route D Alternative would begin at approximately MP I8-70 and would head northward until it reached the Central South Substation Alternative at approximately MP 114.5 of the Proposed Project. The Route D Alternative would convert to 230 kV at the Central South Substation and a double-circuit 230 kV line would be constructed southwest from that substation to the Sycamore Canyon Substation. The Central South Substation would accommodate up to six 230 kV circuits and an additional 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 Central South Substation may be required in the future. There are two

routes that are most likely for these future lines; each is addressed below. Figure E.1.1-6 illustrates the potential routes of the future transmission lines.

Additional 230 and 500 kV circuits could follow the Proposed Project corridor starting at MP 114.5. The routes could either: (1) follow the Proposed Project corridor southwest to the Chicarita Substation and 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; 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, 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.