

E.2.10 Public Health and Safety – Contamination

The BCD Alternative would diverge from the I-8 Alternative at approximately I8-MP-39.5. The alternative heads north-northwest. At MP BCD-6.5, the route would turn northwest briefly before heading west again at MP BCD-9, ultimately rejoining the Interstate 8 Alternative at MP I8-58.

E.2.10.1 Environmental Setting

Land Use. The alignment passes northward along the southwestern edge of the In-Ko-Pah Mountains and foothills, crossing semi-arid open undeveloped land dissected by small washes and local arroyos (ephemeral stream channels). The route supports scattered shrubby vegetation and rock outcrops are prominent. The area is sparsely populated, with a few scattered rural residences and ranches. The alignment traverses McCain Valley east of Tule Lake, crossing a wetland and passing by McCain Valley Conservation Camp at 2550 McCain Valley Road, Boulevard. The route continues north and northwest across and along Lark Canyon. This portion of the alignment crosses several dirt roads and jeep trails, including McCain Valley Road, Lost Valley Road, and Manzanita-Cottonwood Road.

At approximately milepost BCD-9 the alignment turns west and continues across the southern end of the In-Ko-Pah and Laguna Mountains, crossing along its route hills, valleys, small washes, and arroyos. The valleys and canyons include Thing Valley, Long Canyon, and Horse Canyon. The BCD Alternative then crosses open undeveloped land and that is covered by sparse scrub vegetation with areas of bare rock outcropping. This area undeveloped open space and open space recreation land within Cleveland National Forest. The BCD Alternative route crosses numerous dirt roads and trails along this portion, including Canebrake Road, Fred Canyon Road, Kitchen Creek Road, and Sheephead Mountain Road.

Database Search. An EDR environmental database search (EDR, 2007g) covering a one-half-mile-wide corridor (one-quarter mile on both sides) for the BCD Alternative alignment was reviewed. It was 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. Based on review of the EDR environmental database search results, there is only one hazardous material site within 0.25 miles of the BCD Alternative with the potential to impact the alternative. This site is summarized in Table E.2.10-1. A summary of sites identified along the BCD Alternative route and other routes is found in the EDR database included in Appendix 7.

Table E.2.10-1. Identified Hazardous Material Sites within 0.25 Miles of the BCD Alternative

EDR Map ID ¹	Site Name	Site Address	Database Lists ²	Comments
42, 43	McCain Valley Conservation Camp	2550 McCain Valley Road, Boulevard	RCRA-SQG, FINDS, HAZNET, LUST, SWEEPS UST, SD Co. SAM, CA WDS, SD Co. HMMD	Small quantity generator. Leaking UST listed for site, gasoline leak that affected drinking water aquifer. Tank was closed in 1999. Site is listed as remedial action underway.

Sources: EDR, 2007g.

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

2 See Appendix 7 for detailed description of regulatory agency listings.

FEDERAL DATABASES

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

CA WDS: California Waste Discharge System - sites which have been issued waste discharge requirements.

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

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

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.

E.2.10.2 Environmental Impacts and Mitigation Measures

This section presents a discussion of impacts and mitigation measures for the BCD Alternative as a result of construction, operation, and maintenance of the project. Table E.2.10-2 summarizes the impacts of the BCD Alternative on public health and safety. The full text of mitigation measures is provided in Appendix 12.

Table E.2.10-2. Impacts Identified – Alternatives – Public Health and Safety – Contamination

Impact No.	Description	Impact Significance
Route BCD Alternative and BCD South Option		
P-1	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
P-7	Excavation or grading could result in mobilization of existing soil or groundwater contamination from known sites	Class II

Construction Impacts

Because of its location in open country not previously used for crops or for military training, Impacts P-2 (Residual pesticides and/or herbicides could be encountered) and P-4 (encountering unexploded ordinance) would not occur along the BCD Alternative and are therefore not addressed in this section.

Impact P-1: 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 (see Table D.10-7), resulting in a potential for environmental contamination. Impacts could arise from improper handling and/or storage of hazardous materials. This would be a significant impact. SDG&E's 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. However, spills still could 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-3: Unanticipated preexisting soil and or groundwater contamination could be encountered during excavation or grading (Class II)

Although unanticipated contamination along the BCD Alternative is unlikely due to the undeveloped nature and open space recreation uses of the area, there is a potential for unknown contamination to have occurred along and near area roads as a consequence of illegal dumping. This would result in a potential to encounter contamination where the BCD Alternative route crosses these roads. 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 are required to ensure that laboratory data regarding contamination levels is properly interpreted by trained personnel and reported to the appropriate regulatory agency. These measures also require 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 II)

The environmental database review indicates that one site with current known contamination (undergoing remediation) is listed along the BCD Alternative, the McCain Valley Conservation Camp at 2550 McCain Valley Road (located approximately 1000 feet west of milepost BCD-1.5). The presence of this contaminated site near to the alignment results in a potential for contaminated soil and/or groundwater to have migrated to the project ROW and thus be encountered during excavation or grading, 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 related to 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 four step 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 BCD 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.2.10.3 BCD South Option

The BCD South Option would extend south approximately 5.6 miles from the BCD Alternative near the BCD Alternative's crossing of La Posta Truck Trail to the point of intersection with the Modified Route D Alternative route south of I-8. From the point of divergence from the BCD Alternative route, the BCD South Option would generally follow La Posta Truck Trail south, crossing La Posta Valley, just north of I-8 and then spanning I-8 and ascending the ridges south of I-8. The BCD South Option would terminate at the Modified Route D Alternative route at BCDS Milepost 5.6 and near Modified Route D Milepost 2.5.

Environmental Setting

The BCD South Option diverges from the BCD Alternative route and traverses south across primarily undeveloped scrub and forest land of the CNF. Between The BCD Alternative and La Posta Valley the alignment crosses hills covered with grasses and scattered scrub vegetation. Through the La Posta Valley the alignment crosses through pasture land and open undeveloped land with several rural residences and ranches along the alignment route. South of La Posta Valley the alignment transitions back into undeveloped open spaced with scattered scrub vegetation and scattered rural residences along dirt roads. There are no identified hazardous material sites listed along the BCD South 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.

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 BCD South Option route and are therefore not addressed in this section.

Impact P-1: 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. 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. 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: 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 BCD South 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 con-

tamination where the BCD South Option route crosses and is close to these roads. 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 envi-

ronmental 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 BCD South 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).