

D.10 Hazards and Hazardous Materials

This section describes the affected environment for Hazards and Hazardous Materials in Section D.10.1 and presents the relevant regulations and standards in Section D.10.2. Sections D.10.3 through D.10.5 describe the impacts of the Proposed Project and the alternatives. Section D.10.6 presents the mitigation measures and mitigation monitoring requirements, and D.10.7 lists references cited.

D.10.1 Environmental Setting / Affected Environment

D.10.1.1 Regional Setting and Approach to Data Collection

This section addresses the environmental setting and approach to data collection related to the construction and operation of the Proposed Project with regard to the issues of environmental contamination and hazardous materials. Sites with known and potential contamination along or near the proposed transmission line route were researched to better define the areas where hazardous waste contaminated sites may impact construction activities. The primary reason to define potentially hazardous sites is to protect worker health and safety and to minimize public exposure to hazardous materials during construction and waste handling. If encountered, contaminated soil may qualify as hazardous waste requiring handling and disposal according to local, State, and federal regulations.

The proposed route traverses land with a variety of uses, including open-space, rural and suburban residential housing, commercial businesses, and minor agricultural. Existing and past land use activities are used as potential indicators of hazardous material storage and use. For example, many current and historic industrial and defense sites have soil or groundwater contamination by hazardous substances. Other hazardous materials sources include leaking underground tanks in commercial and rural areas, contaminated surface runoff from polluted sites and orchards, and contaminated groundwater plumes that may exist along the transmission line route. However, review of the project environmental database (SCE, 2013, Appendix G) and online environmental databases indicates there are no known active hazardous waste sites on or within 1,000 feet of the project right-of-way (ROW). Online databases reviewed are as follows:

- Federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) databases (U.S. EPA, 2014)
- California State Water Resources Control Board (SWRCB) Geotracker (SWRCB, 2014)
- California Department of Toxic Substance Control (DTSC) databases (DTSC, 2014)

D.10.1.2 Environmental Setting by Segment

Based on the online environmental database review described in Section D.10.1.1, there are no known hazardous release sites within the Proposed Project ROW in the West of Devers segment. However, unknown contamination could be present within the ROW due to past and current property uses in the vicinity. The sections below provide general descriptions of the existing uses in the vicinity of the ROW as related to the potential for environmental contamination.

D.10.1.2.1 Segment 1: San Bernardino

The segment from San Bernardino Substation to San Bernardino Junction traverses a mix of industrial/warehouse, commercial, and residential properties, as well as undeveloped open space and agricultural land. Based on the presence of agricultural activities within the SCE ROW and local industrial land

use activities, there is a potential for soil to be encountered along this route that contains pesticides, herbicides and previously unknown industrial contaminants (solvents, hydrocarbons, heavy metals). The former Norton Air Force Base and Superfund cleanup site is located on the north side of the Santa Ana River. The former base landfill is located approximately 0.6 miles north of the Proposed Project and across the river. It received cleanup closure in 2008 (SCE, 2013, Appendix G) and is unlikely to impact project construction at the south side of the San Bernardino Substation.

D.10.1.2.2 Segment 2: Colton and Loma Linda

The Vista Substation to San Bernardino Junction route segment crosses primarily undeveloped open space and passes adjacent to several residential developments. From Vista Substation, the route segment crosses the State Route 215 ROW passing through a recreational vehicle sales property and undeveloped properties before entering Vista Substation. In addition to crossing State Route 215, the route segment crosses unpaved roads in the hills and some paved residential streets. From State Route 215 to east of Reche Canyon Road, the transmission line route would pass through and adjacent to older residential neighborhoods and open space. The route passes through new residential developments between Reche Canyon Road and Prado Lane in Colton before entering undeveloped hills and valleys. Based on the open space and residential land uses along the San Vista Substation to Bernardino Junction segment, there is very low potential to encounter contaminated soil.

D.10.1.2.3 Segment 3: San Timoteo Canyon

The San Timoteo Canyon segment of the transmission line route crosses primarily through undeveloped open space land and a few scattered rural residential and farm properties before reaching the El Casco Substation. This segment parallels and crosses unpaved powerline access roads, two paved rural roads, the paved San Timoteo Landfill access road, and several unpaved private rural roads. The route segment traverses undeveloped slopes and hills on the south side of San Timoteo Canyon but locally passes through developed land uses primarily consisting of ranches and ranch facilities, groves, and other farmland. The intervening land consists of undeveloped grassy hill slopes and ridges. Although there are orchards and farmland, most of the planned transmission structure sites are on ridge tops that largely avoid the agricultural areas, resulting in only a few locations where there is potential for residual pesticide and herbicide in the soil in existing groves and farmed areas. Former and historic underground fuel tanks at two farms are more than 700 feet from the alignment and not likely to affect project construction. About eight new transmission structures are proposed about 1,100 feet north of and downslope of the San Timoteo Landfill. The proposed locations are located on elevated ridges and are not directly downgradient of the local groundwater flowpath. The depth of groundwater (>250 feet) and horizontal separation from the landfill, which is actively recovering landfill gas (Geo-Logic Associates, 2012), should result in transmission structure foundation excavations that are not affected by landfill gas or groundwater. The remaining parts of this segment are free of land use activities that would potentially result in soil or groundwater contamination.

D.10.1.2.4 Segment 4: Beaumont and Banning

The Beaumont and Banning segment of the proposed route crosses through a mix of undeveloped land, low-density residential development, and more dense residential areas. From El Casco Substation to Interstate 10 the route traverses undeveloped hills adjacent to dense residential developments. This segment of the alignment parallels and crosses unpaved transmission line access roads, and crosses paved residential streets and San Timoteo Canyon Road (Oak Valley Parkway). Through the City of Beaumont the route segment traverses residential areas, a golf course, and parks to Cherry Avenue, then crosses through undeveloped hills and gently sloping alluvial fan surfaces with pockets of residen-

tial development located south of the route and extending across the central part of the City of Banning. This segment of the alignment crosses several major streets and paved residential streets in Beaumont, then parallels and crosses unpaved transmission line access roads before reaching the cemetery on North San Gorgonio Avenue. Based on current and historic land uses, in particular the lack of commercial, industrial, and agricultural uses, the Banning and Beaumont segment has a low potential to encounter contaminated soil.

D.10.1.2.5 Segment 5: Morongo Tribal Lands and Surrounding Areas

The Morongo Tribal Lands segment extends from the east border of Banning to Rushmore Avenue and crosses a mix of undeveloped land and scattered rural residential areas. This segment of the proposed route crosses an active gravel quarry and San Gorgonio River wash before extending north of the Desert Hills Outlet Center. East of the Outlet Center the proposed route traverses undeveloped land and parallels and crosses unpaved powerline access roads before passing just south of the residential area at the east boundary of the Morongo Tribal Land. Based on land uses along the Morongo Tribal Lands and Surrounding Areas segment, particularly the lack of commercial, industrial, and agricultural uses, there is low potential for the project to encounter contaminated soil. A former leaking underground fuel tank at the gravel quarry received case closed status in 1992. A former leaking underground fuel tank at the San Gorgonio Memorial Park received case closed status in 2000. Both of these leaking tank sites had soil-only contamination, are more than 500 feet from the nearest transmission structure construction site, and are located down slope from the project. These tank sites are not anticipated to affect construction of the project.

D.10.1.2.6 Segment 6: Whitewater and Devers

The Whitewater to Devers Substation segment of the proposed route crosses predominantly undeveloped land with some residential areas in San Gorgonio. The route crosses and parallels numerous unpaved powerline access roads and then crosses State Route 62. To the west of Devers Substation, the route passes land occupied by wind energy farms and a pocket of scattered rural residences on both sides of State Route 162. The Whitewater River is crossed approximately 2 miles west of State Route 162. Based on land uses along the Whitewater and Devers segment, particularly the lack of commercial, industrial, and agricultural uses, there is low potential for the project to encounter contaminated soil.

D.10.1.3 Environmental Setting for Connected Actions

Common to All Areas. Existing and past land use activities are potential indicators of hazardous materials and hazardous waste storage and use. The primary reasons to define potentially hazardous sites are to protect the health and safety of construction and operations personnel and to minimize public exposure to hazardous materials during construction and waste handling. Sources of hazardous materials include hazardous or toxic materials associated with accidental spills, purposeful illegal dumping, and other uncontrolled discharges into the environment.

Examples of contamination that could result in areas of hazards and hazardous materials, include diesel leakage from failure of a truck's fuel pump, improper disposal of paint cans, and even leaching of chemicals from abandoned mines and mining equipment. Additionally, there may be areas where pollution is being or has been cleaned up under federal, State or locally funded programs. Due to the presence of former military lands in some areas, sites may contain unexploded ordnance or exploded ordnance residue from munitions training exercises. In areas where agriculture has been or is practiced, there is the potential for residue from application or spills of pesticides and herbicides.

Desert Center Area. The Desert Center area includes BLM administered lands in Riverside County. The nearest populated areas include the unincorporated town of Desert Center, the Lake Tamarisk Park development, and Eagle Mountain Village. The nearest incorporated population centers include Blythe, Coachella, and Indio in Riverside County, and Twentynine Palms in San Bernardino County.

As described in Section B.7, the proposed Palen Solar Power and Desert Harvest Solar Projects as well as two other solar PV projects would be located in the Desert Center area. The Phase I Environmental Site Assessment conducted for the Palen Solar Power Project found no evidence or record of any use, spillage, or disposal of hazardous substances on the site, nor was there any other environmental concern that would require remedial action. Similarly, no evidence or record of any use, spillage, or disposal of hazardous substances was found within the Desert Harvest Solar Project site. However, a Phase I Environmental Site Assessment conducted for a project adjacent to the Desert Harvest Solar Project indicated that the project area was possibly used historically as a military training facility and that there is some potential for munitions and explosives of concern to be present on site. Similar site conditions are expected for the solar PV projects, depending on their location.

Blythe Area. The Blythe area includes BLM administered lands as well as private undeveloped and agricultural lands in eastern Riverside County. Within this general area, the types of hazardous materials used and types of hazardous material sites and hazards are similar to those described above for all areas.

D.10.2 Applicable Regulations, Plans, and Standards

Hazardous substances are defined by federal and State regulations to protect public health and the environment. Hazardous materials have certain chemical, physical, or infectious properties that cause them to be considered hazardous. Hazardous substances are defined in CERCLA Section 101(14), and also in the California Code of Regulations (CCR), Title 22, Chapter 11, Article 2, Section 66261, which provides the following definition:

A hazardous material is a substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of, or otherwise managed.

For this analysis, soil that would be excavated from a site containing hazardous materials would be considered to be a hazardous waste if it exceeds specific CCR Title 22 criteria, or on federal lands, if it exceeded criteria defined in CERCLA or other relevant federal regulations. Remediation (cleanup and safe removal/disposal) of hazardous wastes found at a site is required if excavation of these materials would be performed; it may also be required if certain other activities are proposed. Even if soils or groundwater at a contaminated site do not have the characteristics required to be defined as hazardous wastes, remediation of the site may be required by regulatory agencies subject to jurisdictional authority. Cleanup requirements are determined on a case-by-case basis by the agency taking lead jurisdiction

D.10.2.1 Federal

Clean Water Act

The Federal Clean Water Act (CWA) is the principal Federal statute protecting navigable waters and adjoining shorelines from pollution. The law was enacted with the intent of restoring and maintaining

the chemical, physical, and biological integrity of the waters of the United States (U.S.). Since its enactment, the CWA has formed the foundation for regulations detailing specific requirements for pollution prevention and response measures. The United States Environmental Protection Agency (EPA) implements provisions of the CWA through a variety of regulations, including the National Contingency Plan and the Oil Pollution and Prevention Regulations. Implementation of the CWA is the responsibility of each state.

Toxic Substances Control Act and the Resource Conservation and Recovery Act

The Federal Toxic Substances Control Act (1976) and the Resource Conservation and Recovery Act of 1976 (RCRA) established a program administered by the U.S. Environmental Protection Agency (EPA) for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the “cradle to grave” system of regulating hazardous wastes. The use of certain techniques for the disposal of some hazardous wastes was specifically prohibited by HSWA.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, was enacted by Congress on December 11, 1980. This law provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA established requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. CERCLA also enabled the revision of the National Contingency Plan (NCP). The NCP provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, and/or contaminants. The NCP also established the National Priorities List (NPL). CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) on October 17, 1986.

Resource Conservation and Recovery Act

RCRA (40 C.F.R. Parts 239–282), which amended the Solid Waste Disposal Act (42 U.S.C. Section 6901 et seq.), establishes a framework for the proper management of hazardous and nonhazardous solid waste. This act, along with the Toxic Substances Control Act of 1976, enacted a program administered by the EPA for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the “cradle to grave” system of regulating hazardous wastes from their creation to disposal. The use of certain techniques for the disposal of some hazardous wastes was specifically prohibited by the HSWA. RCRA focuses on active and future facilities; it does not address abandoned or historical sites, which are managed under CERCLA.

In 1992 the EPA authorized the Department of Toxic Substances Control (DTSC) to implement the RCRA program in California.

Toxic Substances Control Act

The Toxic Substances Control Act of 1976 (15 U.S.C. § 2601 et seq.) was enacted by Congress to give the EPA the ability to track the 75,000 industrial chemicals currently produced or imported into the United States. The EPA repeatedly screens these chemicals and can require reporting or testing of those that may pose an environmental human-health hazard. It can ban the manufacture and import of those chemicals that pose an unreasonable risk.

Oil Pollution and Prevention Regulation

The goal of the oil pollution prevention regulation in 40 C.F.R. Part 112 is to prevent oil discharges from reaching navigable waters of the U.S. or adjoining shorelines. The rule was also written to ensure effective responses to oil discharges. The rule further specifies that proactive, and not passive, measures be used to respond to oil discharges. The oil pollution regulation contains two major types of requirements: prevention requirements (SPCC Rule) and Facility Response Plan (FRP) requirements. The SPCC rule requires facilities that could reasonably be expected to discharge oil in quantities that may be harmful into navigable waters to develop and implement SPCC plans. The EPA amended the SPCC Rule in 2006 to extend the SPCC compliance dates in Sections 112.3(a), (b), and (c) for all facilities until October 31, 2007. SPCC plans must be prepared, certified (by a professional engineer), and implemented by facilities that store, process, transfer, distribute, use, drill, produce, or refine oil or oil production.

Hazard Management and Resource Restoration Program

The Hazard Management and Resource Restoration (HMRR) program is administered by the BLM. Its mission is to protect lives, resources, and property, and to improve the health of landscapes and watersheds by: minimizing the environmental contamination on public lands; reducing and eliminating risk associated with physical and environmental hazards; restoring resources affected by oil discharges and hazardous release; and administering CERCLA assessments.

D.10.2.2 State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (“Porter-Cologne”) (California Water Code § 13000 et seq.) is a State law that provides a comprehensive water quality management system for the protection of California waters. Porter-Cologne designated the State Water Resources Control Board as the ultimate authority over State water rights and water quality policy and established nine Regional Water Quality Control Boards (RWQCBs) to oversee water quality on a day-to-day basis at the local/regional level. The RWQCBs have the responsibility of granting National Pollutant Discharge Elimination System (NPDES) permits for stormwater runoff from construction sites.

California Environmental Protection Agency (Cal-EPA)

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

- **Department of Pesticide Regulation.** The Department of Pesticide Regulation has the primary responsibility for regulating all aspects of pesticide sales and use to protect the public health and the environment. The Department’s mission is to evaluate and mitigate impacts of pesticide use, maintain the safety of the pesticide workplace, ensure product effectiveness, and encourage the development and use of reduced risk pest control practices while recognizing the need for pest management in a healthy economy.

- **Department of Toxic Substances Control.** The DTSC mission is to restore, protect, and enhance the environment, and to ensure public health, environmental quality and economic vitality by regulating hazardous waste, conducting and overseeing cleanups, and developing and promoting pollution prevention.
- **Integrated Waste Management Board.** The mission of the IWMB is to protect the public health and safety and the environment through waste prevention, waste diversion, and safe waste processing and disposal.
- **State Water Resources Control Board.** The SWRCB mission is to preserve and enhance the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations.

Department of Toxic Substances Control

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

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

California Office of Emergency Services (OES)

In order to protect the public health and safety and the environment, the OES is in charge of establishing and managing statewide standards for business and area plans relating to the handling and release or threatened release of hazardous materials. Basic information on the location, type, quantity, and the health risks of hazardous materials handled, used, stored, or disposed of in the state, which could be accidentally released into the environment, needs to be available to firefighters, health officials, planners, public safety officers, health care providers, regulatory agencies, and other interested parties. The information provided by business and area plans is necessary in order to prevent or mitigate the damage to the health and safety of persons and the environment from the release or threatened release of hazardous materials into the workplace and environment. These regulations are covered under Chapter 6.95 of the California Health and Safety Code Article 1 – Hazardous Materials Release Response and Inventory Program (Sections 25500-25520) and Article 2 – Hazardous Materials Management (Sections 25531-25543.3).

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

Each business shall prepare a HMBP if that business uses, handles, or stores a hazardous material or an extremely hazardous material in quantities greater than or equal to the following:

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

California Occupational Safety and Health Administration (Cal-OSHA)

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

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

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

Office of Environmental Health Hazard Assessment (OEHHA)

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

D.10.2.3 Local

Certified Unified Program Agency

The Certified Unified Program Agency (CUPA) is the agency certified by the DTSC to conduct the Unified Program at the local level. The program consists of hazardous waste generator and on-site treatment programs, aboveground and underground storage tank programs, Hazardous Materials Management, Business Plans, and Inventory Statements, and the Risk Management and Prevention Program.

County of Riverside Certified Unified Program Agency

The County of Riverside CUPA is responsible for administering the hazardous materials program for the County for Riverside, as well as the cities of Banning, Beaumont, Calimesa, and Palm Springs.

San Bernardino County

The San Bernardino County Fire Department (SBCFD), Hazardous Materials Division (HMD) is the certified unified program agency (CUPA) responsible for administering the hazardous materials program within San Bernardino County. San Bernardino County Solid Waste Management Division of the Department of Public Works conducts regular inspection and methane gas monitoring at the closed and active landfills in the county.

D.10.3 Environmental Impacts of the Proposed Project

This section presents discussion of impacts and mitigation measures for Proposed Project related to hazardous material handling and storage, accidental spills, and encountering known and unknown pre-existing soil contamination. Construction impacts and operational impacts are addressed.

D.10.3.1 Approach to Impact Assessment

The principal environmental impact involving hazardous waste associated with the Proposed Project would relate to the potential mobilization of contaminants resulting in exposure of workers and the general public (e.g., excavation and handling of contaminated soil). Hazardous materials in the construction area may require special handling as toxic substances and hazardous waste can create an exposure risk to workers and the general public due to spills or upset or from excavation and transport.

Toxic substances may cause short-term or long-lasting health effects. For example, toxic substances can cause eye or skin irritation, disorientation, headache, nausea, allergic reactions, acute poisoning, chronic illness, or other adverse health effects if human exposure exceeds certain levels (the level depends on the substance involved). Carcinogens (substances known to cause cancer) are a special class of toxic substances. Examples of toxic substances include most heavy metals, pesticides, and benzene (a carcinogenic component of gasoline). Ignitable substances are hazardous because of their flammable properties. Gasoline, hexane, and natural gas are examples of ignitable substances. Corrosive substances are chemically active and can damage other materials or cause severe burns upon contact. Examples include strong acids and bases such as sulfuric (battery) acid or lye. Reactive substances may cause explosions or generate gases or fumes. Explosives, pressurized canisters, and pure sodium metal (which reacts violently with water) are examples of reactive materials.

Soil that is excavated from a site would be a hazardous waste if it exceeds specific CCR Title 22 criteria. Remediation (cleanup and safe removal/disposal) of hazardous wastes found at a site is required if excavation of these materials is performed. Contaminated soil exceeding regulatory limits for construction

backfill would require onsite treatment or transport to offsite processing facilities. Contaminated soil removed from the construction area must be transported according to State and federal regulations and be replaced by import soil approved for backfill. Similar issues pertain to contaminated groundwater. Even if soil or groundwater at a contaminated site does not have the characteristics required to be defined as hazardous wastes, remediation of the site may be required by regulatory agencies with jurisdictional authority. Cleanup requirements would be determined on a case-by-case basis by the agency taking lead jurisdiction.

Although no known contaminated sites with potential to impact the project were identified in this review, it is possible that previously unknown contaminated sites could be discovered during construction of the project. Contamination of soils may exist in the agricultural, commercial, and light industrial land use areas of the project area due to offsite migration of pollutants, unauthorized dumping, and historic unreported hazardous materials spills.

D.10.3.1.1 Applicant Proposed Measures

SCE proposed no Applicant Proposed Measures (APMs) related to hazardous materials, and no APMs for other resources are referenced in this section.

D.10.3.2 CEQA Significance Criteria

The significance criteria for assessing the impacts to hazardous materials are based on the Environmental Checklist in Appendix G of the CEQA guidelines. An impact would be considered significant if project construction or operation would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. The routine storage and use of hazardous materials, principally fuels, lubricants, solvents, and paints at project staging areas, construction sites and substations could result in spills and leaks and the subsequent cleanup and disposal.
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Spills and accidental releases of fuel, oil, solvents and other hazardous materials could occur in staging yards, construction sites, substations, and along the transmission line during maintenance that could expose workers and the public to hazardous conditions.
- Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment. Project construction of new access roads, transmission structures, and substation upgrades could encounter pre-existing contaminated soil at known hazardous waste sites or at previously unknown spill or waste sites.
- Create a significant hazard to workers that encounter residual pesticides and/or herbicides during grading or excavation in agricultural areas. Project construction on historic, recent or active agricultural land where the presence of residual pesticide and herbicide contamination of the soil could represent a potential health hazard associated with exposure of construction workers and the public to contaminated soil.

D.10.3.3 Impacts and Mitigation Measures

Impact HH-1: Improper handling, storage, or accidental spills or releases of hazardous materials could result in harm to the public, project workers, or the environment

Construction of the Proposed Project has the potential to result in leaks and accidental spills of hazardous materials at staging yards and construction sites. During construction operations, hazardous materials such as vehicle fuels, oil, hydraulic fluid, and other vehicle maintenance fluids would be used and stored in construction staging yards. Gasoline, diesel fuel, oil, hydraulic fluid, lubricants paints, solvents, adhesives, and cleaning chemicals used in construction activities, equipment, and vehicles can be released during construction as a result of accidents, and/or leaking equipment or vehicles. Spills and leaks of hazardous materials during construction activities could result in soil or groundwater contamination. Operations and maintenance activities could result in spills and leaks of hazardous materials at the substations and along the transmission line. The storage of hazardous materials used for routine maintenance activities may occur at the substations where leaks and spills could also result in worker exposure and soil contamination. As part of project permitting, SCE would be required to prepare and submit for approval a project-specific Storm Water Pollution Prevention Plan (SWPPP) to the Santa Ana River Basin and the Colorado River Basin Regional Water Quality Boards (RWQCBs). The SWPPP would include provisions to conduct worker training related to storage, use, and handling of hazardous materials, including fueling and maintenance for vehicles, equipment, and helicopters. In addition, SCE would be required to prepare and submit a project-specific Spill Prevention, Control, and Countermeasures Plan (SPCC Plan) to the Hazardous Materials Division of the San Bernardino County Fire Department and the Hazardous Materials Management Division of the Riverside County Department of Environmental Health. The approved SWPPP and SPCC Plans would be submitted to CPUC and BLM prior to the start of construction. The full extent of agency requirements under the SWPPP and SPCC Plans may not cover all concerns identified in this EIR/EIS. Therefore, impacts would be further minimized through the implementation of Mitigation Measure HH-1a (Prepare a hazardous materials and waste management plan), which would supplement these plans.

Mitigation Measure for Impact HH-1: Improper handling, storage, or accidental spills or releases of hazardous materials could result in harm to the public, project workers, or the environment

HH-1a Prepare a Hazardous Materials and Waste Management Plan. SCE shall prepare a Project-specific Hazardous Materials and Waste Management Plan. Hazardous materials used and stored on site for the proposed construction activities — as well as hazardous wastes generated onsite as a result of the proposed construction activities — shall be managed according to the specifications outlined below.

- **Hazardous Materials and Hazardous Waste Handling:** A project-specific hazardous materials management and hazardous waste handling program shall developed prior to initiation of the project. The program will include the following components: (1) proper hazardous materials use, storage and disposal requirements as well as hazardous waste management procedures; (2) the program shall identify types of hazardous materials to be used during the project and the types of wastes that would be generated; and (3) all project personnel shall be provided with project-specific training to ensure that all hazardous materials and wastes associated with the project are handled in a safe and environmentally sound manner and disposed of according to applicable rules and regulations. Specifically, employees handling wastes shall have or receive hazardous materials training and shall be trained in hazardous waste procedures, spill contingencies, waste minimiza-

tion procedures and treatment, storage and disposal facility (TSDF) training in accordance with current OSHA Hazard Communication Standard and Title 22 CCR. SCE shall use land-fill facilities that are authorized to accept the types of waste generated and hauled.

- **Transport of Hazardous Materials:** Hazardous materials that would be transported by truck include fuel (diesel fuel and gasoline) and oil and lubricants for equipment. Containers used to store hazardous materials would be properly labeled and kept in good condition. Written procedures for the transport of hazardous materials used would be established in accordance with U.S. Department of Transportation and Caltrans regulations. A qualified transporter would be selected to comply with U.S. Department of Transportation and Caltrans regulations.
- **Fueling and Maintenance of Construction Equipment:** Written procedures for fueling and maintenance of construction equipment would be prepared prior to construction. Refueling and maintenance procedures may require vehicles and equipment to be refueled on site or by tanker trucks. Procedures will require the use of drop cloths made of plastic, drip pans and trays to be placed under refilling areas to ensure that chemicals do not come into contact with the ground. Refueling stations would be located in designated areas where absorbent pad and trays would be available. The fuel tanks would also contain a lined area to ensure that accidental spillage does not occur. Drip pans or other collection devices would be placed under the equipment at night to capture drips or spills. Equipment would be inspected daily for potential leakage or failures. Hazardous materials such as paints, solvents, and penetrants would be kept in an approved locker or storage cabinet.
- **Fueling and Maintenance of Helicopters:** Written procedures for fueling and maintenance of helicopters would be prepared prior to construction. Procedures may require helicopters be refueled at helicopter staging areas or local airports. Procedures would include the use of drop cloths made of plastic, drip pans and trays to be placed under refilling areas to ensure that chemicals do not come into contact with the ground. Refueling areas would be located in designated areas where absorbent pad and trays are available.
- **Emergency Release Response Procedures:** An Emergency Response Plan detailing responses to releases of hazardous materials would be developed prior to construction activities. The plan must prescribe hazardous materials handling procedures for reducing the potential for a spill during construction, and would include an emergency response program to ensure quick and safe cleanup of accidental spills. Hazardous materials shall not be stored near drains or waterways. Fueling shall not take place within 500 feet of drains or waterways. All construction personnel, including environmental monitors, would be made aware of state and federal emergency response reporting guidelines for accidental spills.

The Plan shall be submitted to CPUC and BLM 30 days prior to the start of construction for review and approval.

Impact HH-2: Ground disturbance could result in mobilization of contaminants currently existing in the soil, creating potential pathways of exposure to humans or other sensitive receptors

There are no known hazardous waste sites within 1,000 feet of the project alignment (based on a review of Government Code Section 65962.5, also known as the Cortese List). However, unanticipated soil contamination could exist along the proposed alignment due to illegal dumping or other historical activities (e.g., mining). Possible types of contamination include gasoline and diesel fuel residuals, heavy metals, solvents, and/or other hazardous materials. Without proper field screening and laboratory testing, con-

taminated soil could be inadvertently handled and disposed of improperly, resulting in additional environmental contamination or exposure of workers to contaminated materials. To prevent this adverse impact, appropriate handling, screening, and disposal procedures are required.

Mitigation Measure for Impact HH-2: Ground disturbance could result in mobilization of contaminants currently existing in the soil, creating potential pathways of exposure to humans or other sensitive receptors.

HH-2a Prepare a Soil Management Plan. A Soil Management Plan shall be developed and implemented for construction of the Proposed Project. The objective of the Soil Management Plan is to provide guidance for the proper handling, onsite management, and disposal of impacted soil that might be encountered during construction activities. The plan would include practices that are consistent with the California Title 8, Occupational Safety and Health Administration (Cal-OSHA) regulations, as well as appropriate remediation standards that are protective of the planned use. Appropriately trained professionals would be on site during preparation, grading, and related earthwork activities to monitor soil conditions encountered. The Soil Management Plan would provide guidelines for the following:

- Identifying impacted soil
- Assessing impacted soil
- Soil excavation
- Impacted soil storage
- Verification sampling
- Impacted soil characterization and disposal

The plan shall outline how Project construction crews would identify, handle, and dispose of potentially contaminated soil; identify the qualifications of the appropriately trained professionals that would monitor soil conditions and conduct soil sampling during construction; coordinate laboratory testing; and oversee disposal. The Plan shall identify the anticipated field screening methods and appropriate regulatory limits to be applied to determine proper handling and disposal. The Soil Management Plan shall also include requirements for documenting and reporting incidents of encountered contaminants, such as documenting locations of occurrence, sampling results, and reporting actions taken to dispose of contaminated materials. In the event that potentially contaminated soils were encountered within the footprint of construction, soils would be tested and stockpiled. The appropriate Certified Unified Program Agency (CUPA) or RWQCB would determine whether further assessment is warranted.

The Soil Management Plan shall be submitted to the CPUC and BLM 30 days prior to the start of construction for review and approval.

Impact HH-3: Ground disturbance could result in mobilization of pesticides and herbicides in agricultural soils, creating potential pathways of exposure to humans or other sensitive receptors

If encountered, residual pesticide and herbicide contamination of the soil in the agricultural areas of the Proposed Project represents a potential significant impact due to the potential health hazards associated with exposure of construction workers and the public to contaminated soil. Active agriculture occurs within the ROW along Segment 1; historic and recent agricultural areas occur along Segment 3. Grading of access and spur roads and excavation of transmission structure foundations could encounter soil contaminated with pesticides and herbicides, creating a potential health hazard. Mitigation Measure HH-3a (Identify pesticide/herbicide contamination) would address this issue.

Mitigation Measure for Impact HH-3: Ground disturbance could result in mobilization of pesticides and herbicides in agricultural soils, creating potential pathways of exposure to humans or other sensitive receptors.

HH-3a Identify pesticide/herbicide contamination. Prior to construction, soil samples shall be collected in construction areas where the land has historically or is currently being used for agriculture and would be subject to ground disturbance by the project. The sampling is to identify the possible presence of and to delineate the extent of pesticide and/or herbicide contamination. Excavated materials containing elevated levels of pesticide or herbicide will require special handling and disposal procedures consistent with the requirements of Mitigation Measure HH-2a (Prepare a soils management plan). As appropriate, State, Riverside County and San Bernardino County regulatory agencies shall be contacted to provide oversight regarding the handling, treatment, and/or disposal options. In the event pesticide or herbicide contamination is found, CPUC/BLM shall be notified of the event and shall be kept apprised of the steps taken to address the problem.

D.10.3.4 Impacts of Connected Actions

Impact HH-1: Improper handling, storage, or accidental spills or releases of hazardous materials could result in harm to the public, project workers, or the environment

Common to All Areas. Site grading and the construction of access roads could disturb existing hazardous materials, if present. Geotechnical study borings could also disturb existing hazardous materials. Construction of a renewable energy facility would require the use of hazardous materials, including:

- Various fluids from on-site maintenance of construction vehicles and equipment (e.g., gasoline, diesel fuel, lubricating oils, hydraulic fluids, glycol-based coolants, and spent lead-acid storage batteries).
- Incidental chemical waste from the maintenance of equipment and the application of corrosion-control protective coatings (e.g., solvents, paints, and coatings).
- Construction-related debris (e.g., dimension lumber).

During operation, waste from equipment maintenance and repair may include hazardous constituents. Some industrial wastes (e.g., spent solvents) may be hazardous, but well-established procedures exist for their management, disposal, and recycling. Wastes from herbicide applications could include empty containers and possibly some herbicide rinsing solutions.

For solar PV projects, cadmium telluride (CdTe) may be present in solar panels. CdTe is considered toxic if ingested or inhaled. Human exposure of CdTe would occur only if a module, sealed in glass, generated flake or dust particles. The potential for CdTe release could only occur from severe pitting of the panel surface. In addition, some high-performance solar photovoltaic cells contain small amounts of selenium and arsenic, which could be emitted if solar cells are broken during construction or handling. For photovoltaic facilities using high-performance solar cells, special handling of solar panels containing toxic metals would be required to prevent accidental breakage. This would affect recycling of the solar cell materials at off-site facilities.

The environmental analysis for the Desert Harvest Solar Project provides an example of a typical solar PV project (BLM, 2012). The analysis concluded that hazardous or flammable materials used during construction would consist primarily of small volumes of petroleum hydrocarbons and their derivatives (e.g., fuels, oils, lubricants, and solvents) required for the operation of construction equipment. During the operation and maintenance phase of the project, fewer hazardous materials would be used than during construction, but the types of hazardous materials would be the same.

Typical measures to mitigate the risk and adverse impact of handling, storage, use, or accidental spills or releases of hazardous materials into the environment during construction and operation of solar PV facilities include:

- Prepare and implement a Hazardous Materials and Waste Management Plan
- Prepare and implement a Spill Prevention and Cleanup Plan
- Prepare and implement a Soil Management Plan
- Prepare and implement a Pesticide/Herbicide Use Plan
- Maintain on-site spill containment and cleanup kits
- Best Management Practices (BMPs) for hazardous materials
- Prepare and implement a Spill Prevention Control and Countermeasures Plan
- Prepare and implement an Environmental Health and Safety Plan
- Prepare and implement an Emergency Response and Inventory Plan
- Ensure proper disposal or recycling of photovoltaic panels and other infrastructure
- Use Licensed Herbicide Applicator

The Palen Solar Power Project is in the Desert Center area and would use mirrors to concentrate solar energy on a tower, rather than employ PV panels to capture energy. The analysis for this project concluded that during construction, the hazardous materials would include paint, cleaners, solvents, gasoline, diesel fuel, motor oil, welding gases, and lubricants (CEC, 2014). Any impact of spills or other releases of these materials would be limited to the site because of the small quantities involved, reduced chances of release because of infrequent use, and the temporary containment berms that would be used by contractors. During operations, hazardous chemicals such as cleaning agents, lube oil, sulfuric acid, sodium hydroxide, ammonium hydroxide, diesel fuel and other various chemicals would be used and stored on-site and would represent a limited off-site hazard due to their small quantities, low volatility, and/or low toxicity. While natural gas would be used in significant quantities, it would not be stored on site. It would be delivered through a new 8-inch pipeline extension. The risk of release would be reduced levels through mandatory adherence to applicable regulations (i.e., 49 CFR Parts 190-192) and the development and implementation of effective safety management practices.

To mitigate any adverse impact of handling, storage, use, or accidental spills or releases of hazardous materials into the environment during construction and operation of the Palen Solar Power Project, the following measures were included:

- Hazardous Material Storage and Use Requirements.
- Prepare and implement a Hazardous Materials Business Plan.
- Prepare and implement a Safety Management Plan.
- Construction Site Security Plan.
- Operation Security Plan.
- Prepare and implement a Cooling Water Management Plan.

Impact HH-2: Ground disturbance could result in mobilization of contaminants currently existing in the soil, creating potential pathways of exposure to humans or other sensitive receptors

Common to All Areas. In the areas where connected projects have been identified, the locations of most of the solar PV projects are unknown. Therefore, the potential for existing soil contaminants to be disturbed during construction and for people to be exposed is unknown. However, conducting a Phase I Environmental Site Assessment at each site would determine what and where existing contamination may exist. Based on the assessment, either a site would be deemed safe to disturb or clean-up and containment actions would be required to ensure contaminant mobilization or human exposure would not occur.

Desert Center Area. Two projects in this area are at known locations. Phase I Environmental Site Assessments conducted for both the Palen Solar Power Project and Desert Harvest Solar Project found no evidence or record of any use, spillage, or disposal of hazardous substances within these particular sites. However, the Phase I Environmental Site Assessment conducted for a project adjacent to Desert Harvest Solar Project indicated that project area was possibly used historically as a military training facility and that there is some potential for munitions and explosives of concern to be present on site. This was mitigated by that project's developing and implementing a plan to address munitions and explosives of concern.

Impact HH-3: Ground disturbance could result in mobilization of pesticides and herbicides in agricultural soils, creating potential pathways of exposure to humans or other sensitive receptors

Common to All Areas. Ground disturbance associated with the connected projects in the Desert Center and Blythe areas could mobilize pesticides and herbicides in soils and create potential pathways of exposure to humans or other sensitive receptors. The potential for this to occur would be the same as that analyzed for other contaminants under impacts HH-1 (use of hazardous materials including pesticides/herbicides) and HH-2 (ground disturbance), and similar mitigation measures would apply.

D.10.3.5 CEQA Significance Determination for Proposed Project and Connected Actions

Impact HH-1: Improper handling, storage, or accidental spills or releases of hazardous materials could result in harm to the public, project workers, or the environment (Class II)

Construction of the Proposed Project has the potential to result in leaks and accidental spills of hazardous materials at staging yards and construction sites. As a condition of required permits, SCE would be required to prepare and submit a SWPPP to the RWQCB for review and approval. In addition, SCE would be required to prepare and submit a SPCC Plan to the agencies having jurisdiction over hazardous materials in the respective counties. The approved SWPPP and SPCC Plans would be submitted to CPUC and BLM prior to the start of construction. With adoption and implementation of these plans and implementation of Mitigation Measure HH-1a (Prepare a Hazardous materials and waste management plan), this impact would be less than significant (Class II).

For connected solar projects in the Desert Center and Blythe areas, the potential for improper handling, storage, or accidental spills or releases of hazardous materials to harm to the public, project workers, or the environment would be reduced by implementation of typical mitigation measures. For both the Palen and Desert Harvest projects (CEC, 2014 and BLM, 2012), this impact was found to be less than significant with mitigation (Class II). With implementation of typical mitigation, Impact HH-1 also would be less than significant with mitigation for connected solar PV projects (Class II).

Impact HH-2: Ground disturbance could result in mobilization of contaminants currently existing in the soil, creating potential pathways of exposure to humans or other sensitive receptors (Class II for Proposed Project; Class II or Class III for Connected Actions)

There are no known hazardous waste sites on or near the project alignment (Government Code Section 65962.5). However, unanticipated soil contamination could be encountered. With implementation of Mitigation Measure HH-2a (Prepare a soil management plan), this impact would be less than significant (Class II).

For the connected actions in the Desert Center area, based on the Phase I Environmental Site Assessment for the Palen Solar Power Project, this impact was found to be less than significant (Class III). For

the Desert Harvest Solar Project, this impact was found to be less than significant with mitigation (Class II). For the other connected solar projects in the Desert Center and Blythe areas, Phase I Environmental Site Assessments would be required. The findings of the assessments would establish measures to treat any existing contamination discovered. This impact would be less than significant impact with typical mitigation applied (Class II).

Impact HH-3: Ground disturbance could result in mobilization of pesticides and herbicides in agricultural soils, creating potential pathways of exposure to humans or other sensitive receptors (Class II)

Residual pesticide and herbicide contamination of the soil could exist in the agricultural areas of the Proposed Project and could be encountered during grading and excavation. Historic and recent agricultural areas occur along Segment 3; active agriculture occurs within the ROW along Segment 1. With implementation of Mitigation Measure HH-3a (Identify pesticide/herbicide contamination) this impact would be less than significant (Class II).

For connected solar projects, Phase I Site Assessments and implementation of mitigation measures similar to those for the Proposed Project (see Section D.10.3.3) would reduce this impact to less than significant with mitigation (Class II).

D.10.4 Environmental Impacts of Project Alternatives

Three alternatives are considered in this section, and the No Project/No Action Alternative is evaluated in Section D.10.5. The project alternatives would be located within the WOD corridor. Alternatives are described in detail in Appendix 5 (Alternatives Screening Report) and are summarized in Section C.

Hazards and hazardous materials within the ROW are described by segment in Section D.10.1.2 above; the description of the environmental setting would apply equally to the alternatives.

D.10.4.1 Tower Relocation Alternative

The Tower Relocation Alternative would locate certain transmission structures in Segments 4 and 6 farther from existing homes than would be the case under the Proposed Project.

Three impacts related to hazards and hazardous materials were identified for the Proposed Project. These impacts also would apply to the Tower Relocation Alternative, which overall would be the same as the Proposed Project, with the exception of the relocated transmission towers that are described above and in Appendix 5. The full text of all mitigation measures referenced in this section is presented in Section D.10.3.3, except where otherwise noted.

Impact HH-1: Improper handling, storage, or accidental spills or releases of hazardous materials could result in harm to the public, project workers, or the environment

In general, the relocated towers would be moved approximately 50 feet farther from the southern edge of the ROW. The risk of a spill or accidental release of hazardous materials would be the same for this alternative as for the Proposed Project. As part of project permitting, SCE would be required to prepare and obtain approval of a project-specific Storm Water Pollution Prevention Plan (SWPPP) and a project-specific Spill Prevention, Control, and Countermeasures Plan (SPCC Plan). These required plans would reduce the risk of a spill or accidental release of hazardous materials. Implementation of Mitigation Measure HH-1a (Prepare a hazardous materials and waste management plan) would further reduce the risk of harm to the public, project workers, or the environment through the accidental release of hazard-

ous materials. Compliance with existing regulations and implementation of mitigation would ensure that this adverse effect would be minor.

Impact HH-2: Ground disturbance could result in mobilization of contaminants currently existing in the soil, creating potential pathways of exposure to humans or other sensitive receptors

There are no known hazardous waste sites within 1,000 feet of the relocated towers (based on a review of Government Code Section 65962.5, also known as the Cortese List). The risk that ground disturbance would mobilize existing contaminants is the same as for the Proposed Project towers. With implementation of Mitigation Measure HH-2a (Prepare a soil management plan), this adverse effect would be minor.

Impact HH-3: Ground disturbance could result in mobilization of pesticides and herbicides in agricultural soils, creating potential pathways of exposure to humans or other sensitive receptors

The mobilization of soil that is contaminated with residual pesticides or herbicides would result in a substantial adverse effect due to the potential health hazards associated with exposure of construction workers and the public to contaminated soil. One of the relocated towers is located within an orchard or nursery, and several of the relocated towers are located on or near a golf course. Implementation of Mitigation Measure HH-3a (Identify pesticide/herbicide contamination) would ensure that this adverse effect would be minor.

CEQA Significance Determination for Tower Relocation Alternative

The CEQA significance determination for each hazards and hazardous materials impact in this alternative is presented below.

Impact HH-1: Improper handling, storage, or accidental spills or releases of hazardous materials could result in harm to the public, project workers, or the environment (Class II)

Like the Proposed Project, construction and operation of this alternative could harm the public, project workers, or the environment through the accidental release of hazardous materials during construction. With implementation of Mitigation Measure HH-1a (Prepare a hazardous materials and waste management plan) and compliance with existing regulation, this impact would be less than significant (Class II).

Impact HH-2: Ground disturbance could result in mobilization of contaminants currently existing in the soil, creating potential pathways of exposure to humans or other sensitive receptors (Class II)

As with the Proposed Project, contaminated soil could be mobilized through construction-related ground disturbance, which could expose humans or other sensitive receptors to contaminants. With implementation of Mitigation Measure HH-2a (Prepare a soil management plan), this impact would be less than significant (Class II).

Impact HH-3: Ground disturbance could result in mobilization of pesticides and herbicides in agricultural soils, creating potential pathways of exposure to humans or other sensitive receptors (Class II)

Excavation of transmission structure foundations could mobilize soil contaminated with pesticides and herbicides, creating a potential health hazard. Implementation of Mitigation Measure HH-3a (Identify pesticide/herbicide contamination) would ensure that this impact would be less than significant (Class II).

D.10.4.2 Iowa Street 66 kV Underground Alternative

The Iowa Street 66 kV Underground Alternative would place a 1,600-foot segment of subtransmission line underground, rather than overhead.

Three impacts related to hazards and hazardous materials were identified for the Proposed Project. These impacts also would apply to the Iowa Street 66 kV Underground Alternative, which overall would be the same as the Proposed Project, with the exception of the underground portion of the subtransmission line that is described above and in Appendix 5. The full text of all mitigation measures referenced in this section is presented in Section D.10.3.3, except where otherwise noted.

Impact HH-1: Improper handling, storage, or accidental spills or releases of hazardous materials could result in harm to the public, project workers, or the environment

This alternative would place a 1,600-foot segment of 66 kV subtransmission line underground instead of on overhead poles. Due to the more intensive excavation construction activity associated with the underground segment, this alternative would have a higher likelihood of construction spills. Implementation of Mitigation Measure HH-1a (Prepare a hazardous materials and waste management plan) would reduce the risk of harm to the public, project workers, or the environment through the accidental release of hazardous materials. Compliance with existing regulations and implementation of mitigation would ensure that this adverse effect would be minor.

Impact HH-2: Ground disturbance could result in mobilization of contaminants currently existing in the soil, creating potential pathways of exposure to humans or other sensitive receptors

While this alternative would increase the amount of ground disturbance compared to the Proposed Project, there are no known hazardous waste sites within 1,000 feet of the underground subtransmission line (based on a review of Government Code Section 65962.5, also known as the Cortese List). With implementation of Mitigation Measure HH-2a (Prepare a soil management plan), this adverse effect would be minor.

Impact HH-3: Ground disturbance could result in mobilization of pesticides and herbicides in agricultural soils, creating potential pathways of exposure to humans or other sensitive receptors

The underground subtransmission line is located adjacent to some agricultural areas, so there is a possibility of encountering soil that is contaminated by residual pesticides and herbicides. This risk is greater than for the Proposed Project due to the increased amount of ground disturbance required for the underground construction. Implementation of Mitigation Measure HH-3a (Identify pesticide/herbicide contamination) would ensure that this adverse effect would be minor.

CEQA Significance Determination for Iowa Street 66 kV Underground Alternative

The CEQA significance determination for each hazards and hazardous materials impact in this alternative is presented below.

Impact HH-1: Improper handling, storage, or accidental spills or releases of hazardous materials could result in harm to the public, project workers, or the environment (Class II)

Construction and operation of this alternative could result in accidental release of hazardous materials. With implementation of Mitigation Measure HH-1a (Prepare a hazardous materials and waste management plan) and compliance with existing regulation, this impact would be less than significant (Class II).

Impact HH-2: Ground disturbance could result in mobilization of contaminants currently existing in the soil, creating potential pathways of exposure to humans or other sensitive receptors (Class II)

Contaminated soil could be mobilized through construction-related ground disturbance, which could expose humans or other sensitive receptors to contaminants. With implementation of Mitigation Measure HH-2a (Prepare a soil management plan), this impact would be less than significant (Class II).

Impact HH-3: Ground disturbance could result in mobilization of pesticides and herbicides in agricultural soils, creating potential pathways of exposure to humans or other sensitive receptors (Class II)

Excavation of the trench for the underground alternative could mobilize soil contaminated with pesticides and herbicides. Implementation of Mitigation Measure HH-3a (Identify pesticide/herbicide contamination) would ensure that this impact is less than significant (Class II).

D.10.4.3 Phased Build Alternative

The Phased Build Alternative would retain existing double-circuit 220 kV transmission structures to the extent feasible, remove single-circuit structures, add new double 220 circuit structures, and string all structures with higher-capacity conductors.

Three impacts related to hazards and hazardous materials were identified for the Proposed Project. These impacts also would apply to the Phased Build Alternative. The full text of all mitigation measures referenced in this section is presented in Section D.10.3.3, except where otherwise noted.

Impact HH-1: Improper handling, storage, or accidental spills or releases of hazardous materials could result in harm to the public, project workers, or the environment

Construction of this alternative, as with the Proposed Project, could harm the public, project workers, or the environment through the accidental release of hazardous materials (such as fuel, lubricants, coolants, and hydraulic and transmission fluids). Although less construction would occur overall, the risk of harm to the public, project workers, or the environment through the accidental release of hazardous materials for this alternative would be similar to the Proposed Project.

While the quantities of hazardous materials and their locations of use may vary between the alternative and the Proposed Project, the risk of a spill or accidental release of hazardous materials would be the similar for this alternative as for the Proposed Project. As part of project permitting, SCE would be required to prepare and obtain approval of a project-specific Storm Water Pollution Prevention Plan (SWPPP) and a project-specific Spill Prevention, Control, and Countermeasures Plan (SPCC Plan). These required plans would reduce the risk of a spill or accidental release of hazardous materials. Implementation of Mitigation Measure HH-1a (Prepare a hazardous materials and waste management plan) would further reduce the risk of harm to the public, project workers, or the environment through the accidental release of hazardous materials. Compliance with existing regulations and implementation of mitigation would ensure that this adverse effect would be minor.

Impact HH-2: Ground disturbance could result in mobilization of contaminants currently existing in the soil, creating potential pathways of exposure to humans or other sensitive receptors

With fewer areas of ground disturbance under the Phased Build Alternative, there would be fewer opportunities to mobilize existing contaminants that may be present in the soil, as compared to the Proposed Project. Unanticipated soil contamination could exist along the proposed alignment due to illegal dumping or other historical activities (e.g., mining). Possible types of contamination include gasoline and diesel fuel residuals, heavy metals, solvents, and/or other hazardous materials. This contaminated could be

mobilized through construction-related ground disturbance, which could expose humans or other sensitive receptors to contaminants. With implementation of Mitigation Measure HH-2a (Prepare a soil management plan), this adverse effect would be minor.

Impact HH-3: Ground disturbance could result in mobilization of pesticides and herbicides in agricultural soils, creating potential pathways of exposure to humans or other sensitive receptors

The mobilization of soil that is contaminated with residual pesticides or herbicides would result in a substantial adverse effect due to the potential health hazards associated with exposure of construction workers and the public to contaminated soil. While there would be less soil disturbance under the alternative, the disturbance would occur in similar areas to the Proposed Project.

Active agriculture occurs within the ROW along Segment 1; historic and recent agricultural areas occur along Segment 3. Grading of access and spur roads and excavation of transmission structure foundations could mobilize soil contaminated with pesticides and herbicides, creating a potential health hazard. Implementation of Mitigation Measure HH-3a (Identify pesticide/herbicide contamination) would ensure that this adverse effect would be minor.

CEQA Significance Determination for Phased Build Alternative

The CEQA significance determination for each hazards and hazardous materials impact in this alternative is presented below.

Impact HH-1: Improper handling, storage, or accidental spills or releases of hazardous materials could result in harm to the public, project workers, or the environment (Class II)

Construction and operation of this alternative could harm the public, project workers, or the environment through the accidental release of hazardous materials (such as fuel, lubricants, coolants, and hydraulic and transmission fluids). With implementation of Mitigation Measure HH-1a (Prepare a hazardous materials and waste management plan) and compliance with existing regulation, this impact would be less than significant (Class II).

Impact HH-2: Ground disturbance could result in mobilization of contaminants currently existing in the soil, creating potential pathways of exposure to humans or other sensitive receptors (Class II)

Contaminated soil could be mobilized through construction-related ground disturbance, which could expose humans or other sensitive receptors to contaminants. With implementation of Mitigation Measure HH-2a (Prepare a soil management plan), this impact would be less than significant (Class II).

Impact HH-3: Ground disturbance could result in mobilization of pesticides and herbicides in agricultural soils, creating potential pathways of exposure to humans or other sensitive receptors (Class II)

Grading of access and spur roads and excavation of transmission structure foundations could mobilize soil contaminated with pesticides and herbicides, creating a potential health hazard. Implementation of Mitigation Measure HH-3a (Identify pesticide/herbicide contamination) would ensure that this impact would be less than significant (Class II).

D.10.5 Environmental Impacts of No Project / No Action Alternative

D.10.5.1 No Project Alternative Option 1

The No Project/No Action Alternative (No Project Alternative) Option 1 is described in Section C.6.3.1. It would consist of a new 500 kV circuit, primarily following the Devers-Valley transmission corridor and extending 26 miles between Devers Substation. It would also require a new 40-acre substation south of Beaumont, and 4 new 220 kV circuits extending 7 miles from the new Beaumont Substation to El Casco Substation, primarily following the existing El Casco 115 kV ROW. The remainder of the No Project Alternative, from El Casco Substation to the San Bernardino and Vista Substations, would be identical to the Proposed Project. Information on environmental resources and project impacts is derived from the Devers–Palo Verde 500 kV No. 2 Project EIR/EIS (CPUC and BLM, 2006) and the El Casco System Project Draft EIR (CPUC, 2007); which include nearly all of the No Project alignment.

No Project Alternative Transmission Lines and Beaumont Substation. Ground disturbance on or near sites of known previous hazardous materials storage or spills may encounter contaminated soil and groundwater. Also, unreported spills or illegal dumping may have occurred, leading to unanticipated discovery of contamination. In agricultural areas, lands with residual herbicide or pesticide may be encountered. Contamination may be encountered in both developed and rural areas. In addition, during project construction, hazardous materials (including fuels, lubricants, solvents, and similar materials) may be stored, used, and spilled. Implementation of hazardous materials and waste management plans (addressing materials use, storage, handling, transportation, and disposal, as well as fueling and maintenance of equipment and emergency response to releases) would serve to address these impacts. A soil management plan would address unanticipated discovery of contamination, and soil testing for pesticide and herbicide contamination in agricultural areas would serve to address the issue of residuals in the soil. The Devers to Beaumont Substation alignment would follow the existing Devers to Valley alignment. The analysis of the Devers to Valley alignment in the DPV2 EIR/EIS concluded that impacts from residual contamination in soil or from accidental spills would be less than significant with mitigation.

D.10.5.2 No Project Alternative Option 2

No Project Alternative Option 2 would require the construction of over 40 miles of new 500 kV transmission line, following the existing Valley-Serrano 500 kV line. The alternative is described in Section C.6.3.2, and illustrated on Figure C-6b.

Contaminated soils or groundwater may be encountered or mobilized through ground disturbance on or near sites of known previous hazardous materials storage or spills. Also, unanticipated discovery or mobilization of hazardous materials may occur near areas of unreported spills or illegal dumping. The El Sobrante Landfill is located approximately 0.5 miles north of the ROW near MP 19.5. Past or present activities at the landfill may have resulted in unanticipated contamination of soil or groundwater downgradient of the landfill that could be disturbed or mobilized by construction of this alternative. Also, commercial and industrial activity along Interstate 15 on either side of the transmission corridor may have resulted in unanticipated contamination of soil or groundwater. Agricultural lands are concentrated in the Perris Valley at the far eastern end of the corridor, and may contain residual herbicide or pesticide soil contamination that could be mobilized during ground disturbing activities, including excavation for transmission structure foundations. The same as in the Proposed Project and No Project Alternative Option 1, during construction hazardous materials may be stored, used, and spilled. Mitigation requirements would be the same as for Option 1.

D.10.6 Mitigation Monitoring, Compliance, and Reporting

Table D.10-1 presents the mitigation monitoring, compliance, and reporting actions for hazards and hazardous materials.

Table D.10-1. Mitigation Monitoring Program – Hazards and Hazardous Materials

MITIGATION MEASURE	<p>HH-1a: Prepare a Hazardous Materials and Waste Management Plan. SCE shall prepare a Project-specific Hazardous Materials and Waste Management Plan. Hazardous materials used and stored on site for the proposed construction activities — as well as hazardous wastes generated onsite as a result of the proposed construction activities — shall be managed according to the specifications outlined below.</p>
	<ul style="list-style-type: none"> <li data-bbox="521 569 1438 947"> <p>▪ Hazardous Materials and Hazardous Waste Handling: A project-specific hazardous materials management and hazardous waste handling program shall developed prior to initiation of the project. The program will include the following components: (1) proper hazardous materials use, storage and disposal requirements as well as hazardous waste management procedures; (2) the program shall identify types of hazardous materials to be used during the project and the types of wastes that would be generated; and (3) all project personnel shall be provided with project-specific training to ensure that all hazardous materials and wastes associated with the project are handled in a safe and environmentally sound manner and disposed of according to applicable rules and regulations. Specifically, employees handling wastes shall have or receive hazardous materials training and shall be trained in hazardous waste procedures, spill contingencies, waste minimization procedures and treatment, storage and disposal facility (TSDF) training in accordance with current OSHA Hazard Communication Standard and Title 22 CCR. SCE shall use landfill facilities that are authorized to accept the types of waste generated and hauled.</p> <li data-bbox="521 953 1438 1121"> <p>▪ Transport of Hazardous Materials: Hazardous materials that would be transported by truck include fuel (diesel fuel and gasoline) and oil and lubricants for equipment. Containers used to stored hazardous materials would be properly labeled and kept in good condition. Written procedures for the transport of hazardous materials used would be established in accordance with U.S. Department of Transportation and Caltrans regulations. A qualified transporter would be selected to comply with U.S. Department of Transportation and Caltrans regulations.</p> <li data-bbox="521 1127 1438 1421"> <p>▪ Fueling and Maintenance of Construction Equipment: Written procedures for fueling and maintenance of construction equipment would be prepared prior to construction. Refueling and maintenance procedures may require vehicles and equipment to be refueled on site or by tanker trucks. Procedures will require the use of drop cloths made of plastic, drip pans and trays to be placed under refilling areas to ensure that chemicals do not come into contact with the ground. Refueling stations would be located in designated areas where absorbent pad and trays would be available. The fuel tanks would also contain a lined area to ensure that accidental spillage does not occur. Drip pans or other collection devices would be placed under the equipment at night to capture drips or spills. Equipment would be inspected daily for potential leakage or failures. Hazardous materials such as paints, solvents, and penetrants would be kept in an approved locker or storage cabinet.</p> <li data-bbox="521 1428 1438 1596"> <p>▪ Fueling and Maintenance of Helicopters: Written procedures for fueling and maintenance of helicopters would be prepared prior to construction. Procedures may require helicopters be refueled at helicopter staging areas or local airports. Procedures would include the use of drop cloths made of plastic, drip pans and trays to be placed under refilling areas to ensure that chemicals do not come into contact with the ground. Refueling areas would be located in designated areas where absorbent pad and trays are available.</p> <li data-bbox="521 1602 1438 1820"> <p>▪ Emergency Release Response Procedures: An Emergency Response Plan detailing responses to releases of hazardous materials would be developed prior to construction activities. The plan must prescribe hazardous materials handling procedures for reducing the potential for a spill during construction, and would include an emergency response program to ensure quick and safe cleanup of accidental spills. Hazardous materials shall not be stored near drains or waterways. Fueling shall not take place within 500 feet of drains or waterways. All construction personnel, including environmental monitors, would be made aware of state and federal emergency response reporting guidelines for accidental spills.</p> <p data-bbox="521 1827 1438 1881">The Plan shall be submitted to CPUC and BLM 30 days prior to the start of construction for review and approval.</p>

Table D.10-1. Mitigation Monitoring Program – Hazards and Hazardous Materials

Location	Entire project
Monitoring / Reporting Action	CPUC/BLM monitor verifies that SCE submits the required Plan, and monitors compliance during construction.
Effectiveness Criteria	Plan is submitted and adopted, and is implemented fully during construction
Responsible Agency	CPUC/BLM
Timing	30 days prior to construction Plan is submitted for review and approval.

MITIGATION MEASURE **HH-2a: Prepare a Soil Management Plan.** A Soil Management Plan shall be developed and implemented for construction of the Proposed Project. The objective of the Soil Management Plan is to provide guidance for the proper handling, onsite management, and disposal of impacted soil that might be encountered during construction activities. The plan would include practices that are consistent with the California Title 8, Occupational Safety and Health Administration (Cal-OSHA) regulations, as well as appropriate remediation standards that are protective of the planned use. Appropriately trained professionals would be on site during preparation, grading, and related earthwork activities to monitor soil conditions encountered. The Soil Management Plan would provide guidelines for the following:

- Identifying impacted soil
- Assessing impacted soil
- Soil excavation
- Impacted soil storage
- Verification sampling
- Impacted soil characterization and disposal

The plan shall outline how Project construction crews would identify, handle, and dispose of potentially contaminated soil; identify the qualifications of the appropriately trained professionals that would monitor soil conditions and conduct soil sampling during construction; coordinate laboratory testing; and oversee disposal. The Plan shall identify the anticipated field screening methods and appropriate regulatory limits to be applied to determine proper handling and disposal. The Soil Management Plan shall also include requirements for documenting and reporting incidents of encountered contaminants, such as documenting locations of occurrence, sampling results, and reporting actions taken to dispose of contaminated materials. In the event that potentially contaminated soils were encountered within the footprint of construction, soils would be tested and stockpiled. The appropriate Certified Unified Program Agency (CUPA) or RWQCB would determine whether further assessment is warranted.

The Soil Management Plan shall be submitted to the CPUC and BLM 30 days prior to the start of construction for review and approval.

Location	Entire Project
Monitoring / Reporting Action	CPUC/BLM monitor verifies that SCE submits the required Plan, and monitors compliance during construction.
Effectiveness Criteria	Plan is submitted and adopted, and is implemented fully during construction
Responsible Agency	CPUC/BLM
Timing	30 days prior to construction Plan is submitted for review and approval.

MITIGATION MEASURE **HH-3a: Identify pesticide/herbicide contamination.** Prior to construction, soil samples shall be collected in construction areas that where the land has historically or is currently being used for agriculture and would be subject to ground disturbance by the project. The sampling is to identify the possible presence of and to delineate the extent of pesticide and/or herbicide contamination. Excavated materials containing elevated levels of pesticide or herbicide will require special handling and disposal procedures consistent with the requirements of Mitigation Measure HH-2a (Prepare a soils management plan). As appropriate, State, Riverside County and San Bernardino County regulatory agencies shall be contacted to provide oversight regarding the handling, treatment, and/or disposal options. In the event pesticide or herbicide contamination is found, CPUC/BLM shall be notified of the event and shall be kept apprised of the steps taken to address the problem.

Location	Areas of current or past agricultural use.
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Table D.10-1. Mitigation Monitoring Program – Hazards and Hazardous Materials

Monitoring / Reporting Action	CPUC/BLM monitor verifies compliance during construction.
Effectiveness Criteria	Contaminated soil is properly identified and managed, protecting workers and the public
Responsible Agency	CPUC/BLM
Timing	Prior to construction in current or historic agricultural areas, soil is sampled for residual pesticides and herbicides.

D.10.7 References

- BLM (Bureau of Land Management). 2012. Desert Harvest Solar Farm Final EIS. http://www.blm.gov/ca/st/en/fo/palmsprings/Solar_Projects/Desert_Harvest_Solar_Project.html. Accessed February 16, 2015.
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- CPUC and BLM. 2006. SCE Devers–Palo Verde 500 kV No. 2 Project EIR/EIS, Sections on West of Devers Alternative. <http://www.cpuc.ca.gov/environment/info/aspen/dpv2/toc-deir.htm>. Accessed April 15, 2015.
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- DTSC (California Department of Toxic Substance Control). 2014. Review of online DTSC EnviroStor database. <http://www.envirostor.dtsc.ca.gov/public>. Accessed September 16, 2014.
- Geo-Logic Associates. 2012. Preliminary Evaluation Monitoring Program Report, San Timoteo Sanitary Landfill, San Bernardino County, CA. October.
- SCE (Southern California Edison). 2013. Proponents Environmental Assessment (PEA) for the West of Devers Upgrade Project. Appendix H. EDR DataMap.
- SWRCB (California State Water Resources Control Board). 2014. Online Databases Accessed Through Geotracker program. <http://geotracker.waterboards.ca.gov>. Accessed September 15, 16, and 17, 2014.
- U.S. EPA (U.S. Environmental Protection Agency). 2014. Federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) databases. <http://cumulis.epa.gov/supercpad/cursites/srchsites.cfm>. Accessed September 16 and 23, 2014.