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CHAPTER 4 – ENVIRONMENTAL IMPACT ASSESSMENT

4.7 HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Measures	Less-Than-Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) If located within an airport land use plan or within two miles of a public airport or public use airport for which such a plan has not been adopted, result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) If located within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Would the project:	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Measures	Less-Than-Significant Impact	No Impact
h) If located in an area in which wildlands are adjacent to urbanized areas or in which residences are intermixed with wildlands, expose people or structures to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.7.0 Introduction

This section discusses potential hazards to public health and safety associated with construction, operation, and maintenance of the San Diego Gas & Electric Company (SDG&E) East County (ECO) Substation Project (Proposed Project). This analysis addresses existing contamination of hazardous materials, fire potential, hazards to public and worker health and safety, and physical hazards. As described in this section, all impacts associated with hazardous materials will be reduced to a less-than-significant level with the implementation of the applicant-proposed measures (APMs).

4.7.1 Methodology

SDG&E conducted a Phase I Environmental Site Assessment (ESA)¹ for the proposed ECO Substation site, a limited Phase I ESA for the 138 kilovolt (kV) transmission line route, and a comprehensive records search for all other Proposed Project components. The Phase I ESA for the ECO Substation site and the limited Phase I ESA for the 138 kV transmission line are included in Attachment 4.7-A: Phase I Environmental Site Assessments. The research included a thorough review of state and federal databases that identify sites registered on one or more environmental oversight agency database lists. Searches for known hazardous materials sites in the vicinity of the Proposed Project area were conducted via the Internet across federal, state, and local hazardous materials databases, including the California Department of Toxic Substances Control’s (DTSC) Cortese List and Toxic Alert for California Superfund sites. Emergency evacuation and response plans and Office of Emergency Services websites for the County of San Diego were reviewed, and staff was contacted for emergency and evacuation data. In addition, the General Plan for the County of San Diego and the Mountain Empire Subregional Plan were reviewed for relevant hazards and hazardous materials policies, plans, and programs.

¹ The ESA study was conducted in accordance with the American Society for Testing and Materials Standard E-1527-00: Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

Records Review

Seventy-two federal, state, local, and other databases were reviewed to determine areas where contamination might be encountered during construction. These databases included:

- National Priority List
- Federal Superfund Liens
- Comprehensive Environmental Response, Compensation, and Liability Information System
- San Diego Hazardous Materials Management Division (HMMD) Database
- Leaking Underground Storage Tank (LUST) Database
- DTSC Cortese List
- Statewide Spills, Leaks, Investigations, and Cleanups
- Corrective Actions Reports

For the purpose of this document, a review of databases and files was expanded from the prescribed one-mile radius to a search distance of two miles because of the remote location of the Proposed Project. Additionally, the Phase I ESA assessed the transmission corridor in one-mile-long segments. This review identified hazardous materials and chemicals use, generation, storage, treatment or disposal, and release incidents of such materials that may impact the Proposed Project.

Historical Use

Aerial photographs and Sanborn Fire Insurance maps, historical gas stations and dry cleaners, and previous environmental investigations were reviewed to determine the likelihood of encountering hazardous materials in the Proposed Project area as a result of historical use.

Site Reconnaissance

A reconnaissance survey of the ECO Substation site was conducted on March 19 and 20, 2008. A site reconnaissance of the 138 kV transmission line was conducted on April 21, 2008.

4.7.2 Existing Conditions

The following subsections describe the types and amounts of hazardous materials likely to be present within two miles of each Proposed Project component, with the exception of the White Star Communication Facility, which was researched within 1,000 feet. In addition, schools within 0.25 mile of the Proposed Project have been identified according to California Environmental Quality Act (CEQA) requirements. All Proposed Project components are located in a rural area of eastern San Diego County with limited development and industrial uses, where historical land use is not likely to contribute to hazardous materials contamination.

Regulatory Background

Federal

United States Environmental Protection Agency

The United States (U.S.) Environmental Protection Agency (EPA) has deemed specific wastes to be hazardous. These types of wastes are organized into three categories. These categories, as well as the types of materials each includes, are as follows:

- F-List: Non-specific source wastes common in manufacturing and industrial processes. Wastes from the F-list are published under Title 40 Code of Federal Regulations (CFR) Section 261.31.
- K-List: Source-specific wastes from specific industries, including pesticide manufacturing and petroleum refining. K-list wastes are published under 40 CFR Section 261.32.
- P-List and U-List: Discarded commercial chemical products in an unused form. Wastes from the P- and U-lists are published under 40 CFR Section 261.33.

Waste that has not been previously listed may still be considered hazardous if it exhibits one of the four characteristics stated in 40 CFR 261 Subpart C, namely ignitibility, corrosivity, reactivity, and toxicity.

Uniform Building Code and Uniform Fire Code

Federal fire protection codes are provided in the Uniform Building Code (UBC) and the Uniform Fire Code (UFC). The 1997 UBC established building materials, spacing, and other items or practices that must be used to minimize the risk of fires to structure and facilities. The 2006 edition of the UFC addresses fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards and safety measures, hazardous material storage and use, and other general and specialized fire-safety requirements.

Resource Conservation and Recovery Act

Developed by the U.S. EPA, the Resource Conservation and Recovery Act (RCRA) regulates potential health and environmental problems associated with hazardous and non-hazardous waste. This law is implemented through Subtitle C, 42 United States Code (U.S.C.) Section 6921, *et. seq.*, and its implementing regulations, 40 CFR Section 260, *et seq.* Subtitle C of RCRA controls the generation, transportation, treatment, storage, and disposal of hazardous waste through a “cradle-to-grave” system of hazardous waste management techniques and requirements. Subtitle C applies to all states and to all hazardous waste generators. This law also specifies the quantity of waste that is governed under this regulation.

Comprehensive Environmental Response, Compensation, and Liability Act and Superfund Amendments and Reauthorization Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA) (an amendment to CERCLA)

identify requirements for planning, reporting, and notification concerning hazardous materials and hazardous material releases into the environment. SARA and CERCLA regulations are presented in 40 CFR Sections 302 through 355.

Part 302 mandates immediate notification to the Local Emergency Planning Committee (LEPC) when a hazardous material above its reportable quantities (RQ) is released into the environment. Notification must also be provided to the National Response Center in Washington, D.C. if CERCLA hazardous materials above RQ are released. These CERCLA-regulated materials are listed in the table at 40 CFR Section 302.4.

Part 311 requires a facility to develop a list of and/or provide Material Safety Data Sheets of hazardous material stored, handled, or used at a facility. A copy of this information must be provided to the State Emergency Response Center, LEPC, and local fire departments.

42 U.S.C. Section 11023 and 40 CFR Section 372.30 identify annual reporting requirements associated with hazardous material released into the environment. Reporting requirements include both routine discharges and spill releases. Title III of SARA (identified as the Emergency Planning and Community Right-To-Know Act of 1986) mandates that states develop local chemical emergency preparedness programs as well as provide information on hazardous materials used at facilities in local communities. Additionally, SARA identifies requirements for planning, reporting, and notification concerning hazardous materials.

Clean Water Act and Clean Air Act

The Clean Water Act (CWA) and Clean Air Act (CAA) provisions address accidental releases of hazardous materials to surface waters and the atmosphere, respectively. Requirements for Spill Prevention Control and Countermeasure (SPCC) plans were developed as one of the regulations under the CWA. Requirements of SPCCs are provided in 40 CFR Part 112 (Oil Spill Prevention).

SPCC plans are intended to reduce the threat of spills of hydrocarbons to “navigable waters” of the U.S. Therefore, the site-specific plan must identify design, control, training, and response requirements of a facility. A SPCC plan is required for all facilities that store hydrocarbons and oils (e.g., gasoline, diesel, asphalt, and transformer liquids) exceeding 1,320 gallons in one or more containers. Recent changes to this regulation include all containers storing 55 gallons or more. Hazardous materials emission regulations under the CAA provisions are provided in 40 CFR Part 68 and are designated to prevent accidental releases of hazardous materials into the environment. CAA requirements concerning the Proposed Project are addressed in Section 4.3 Air Quality.

Occupational Safety and Health Act

The Occupational Safety and Health Act (OSHA) hazardous material regulations govern worker safety. Separate OSHA standards have been developed for construction and industrial workers. Generally, 29 CFR Part 1926 governs construction worker safety, while 29 CFR Part 1910 applies to industrial workers.

U.S. Department of Transportation

The Department of Transportation regulations govern the interstate transport of hazardous materials and wastes through implementation of the Hazardous Materials Transportation Act (HMTA). The provisions of the HMTA contain requirements for hazardous materials shipments and packaging and guidelines for marking, manifesting, labeling, packaging, placarding, and spill reporting. Specific regulations dealing with hazardous materials are covered under 49 CFR Section 173.50, *et seq.*, 49 CFR 173.56 (Hazardous Material Regulations, Shippers – General Requirements for Shipping and Packaging), and 49 CFR Part 397 (Transportation of Hazardous Materials; Driving and Parking Rules).

State

Division of Occupational Safety and Health

Construction and industrial worker safety issues are covered under the California Occupational Safety and Health Act (Cal-OSHA) of 1970. Most of these regulations are provided in Title 8 of the California Code of Regulations (CCRs) and enforced by Cal-OHSA. Any explosives necessary for construction and other activities must comply with the Cal-OSHA regulations presented in Title 8 CCR Division 1, Chapter 4. Requirements for vehicles transporting explosives on public highways are provided in the California Vehicle Code, Division 14. A contractor with a valid California “Blaster License,” pursuant to Cal-OSHA Article 8, Section 1550 through 1580, must conduct all blasting.

Department of Toxic Substances Control

The DTSC is responsible for regulating hazardous waste, cleaning up existing contamination, and identifying ways to reduce hazardous waste at the federal level, while the California EPA regulates hazardous wastes at the state level. The OSHA regulates hazards and hazardous materials in the workplace at the federal level, while the Cal-OSHA regulates them at the state level.

Regional Water Quality Control Board

The Regional Water Quality Control Board (RWQCB) develops and enforces water quality objectives and implementation plans that protect beneficial uses of the state’s waters (Water Code § 13000, *et seq.*). The Proposed Project area is located within the jurisdiction of the Colorado Basin RWQCB. This RWQCB is the primary regulatory agency with jurisdiction over stormwater discharges, as well as activities that have the potential to impact the quality of surface water or groundwater.

California Hazardous Materials and Waste Codes

California laws and regulations associated with the storage, handling, use, and/or disposal of hazardous materials are provided in various sections of California’s Health and Safety Code (H&SC) and CCRs. The federal RCRA allows individual states to develop their own programs to regulate hazardous waste discharges. The state program, however, must be at least as stringent as RCRA requirements.

California has developed its own hazardous waste control program through the passage of the California Hazardous Waste Control Law (HWCL). It should be noted, however, that the HWCL includes hydrocarbon waste (e.g., oils, lubricants, and greases) that are not classified as hazardous waste under the federal RCRA regulations. California regulations also cover generators of universal waste (e.g., batteries, mercury control devices, dental amalgams, aerosol cans, and lamps/cathode ray tubes) not specified in federal regulations. This regulation is found in Section 25100, *et seq.*, of the H&SC. Administration and enforcement of the HWCL is the responsibility of the DTSC.

H&SC, Section 25500, *et seq.*, known as the Hazardous Materials Release Response Plans and Inventory Act, and the regulations in Title 19 CCR Section 2620, *et seq.* require that local governments be responsible for the regulation of facilities that store, handle, or use hazardous materials above threshold quantities (TQs). The TQs for identified hazardous materials are 55 gallons for liquids, 500 pounds for solids, and 200 cubic feet for compressed gases measured at standard temperature and pressure. The law mandates that facilities storing these hazardous materials in excess of their TQs prepare a Hazardous Material Business Plan (HMBP). The HMBP must identify the facility's internal response requirements to accidental spills, such as emergency contacts, hazardous material inventory and quantities, control methods, emergency response, and training. The law also requires that the HMBP be submitted to the local administering agency (normally the local fire department or public health agency). All spills from a facility must be reported to both the local administrative agency and the Governor's Office of Emergency Services.

H&SC, Section 25249.5, *et seq.*, the Safe Drinking Water and Toxics Enforcement Act (Proposition 65), regulates cancer-causing and reproduction-impairing chemicals. Users of regulated chemicals identified under this law are responsible for issuing a clear and reasonable warning to members of the public prior to exposing them to such chemicals above a threshold amount (H&SC § 25249.6). The law is also intended to prevent discharges or releases of specified hazardous materials into a "source of drinking water" and provides a periodically updated listing of chemicals of concern (*Id.* § 25249.5). Proposition 65 is administered through California's Office of Environmental Health Hazard Assessment.

The California Unified Hazardous Waste and Hazardous Material Management Regulatory Program Act is located in California H&SC, Section 25404, *et seq.* This Act establishes requirements for dealing with hazardous waste locally by creating the Certified Unified Program Agency (CUPA). This responsibility is delegated through a Memorandum of Understanding between the California EPA and the local agency. The primary CUPA for the Proposed Project is the San Diego County Department of Environmental Health, HMMD for San Diego County. Currently, the Imperial County Office of the DTSC in Calexico administers the CUPA responsibilities in the region.

California Building Code

Most state fire regulations for structures and other facilities are covered in the California Building Code (CBC). The CBC specifies acceptable design and construction requirements associated with fire protection for various facilities or structures. The CBC augments the UBC and provides information for California-specific changes.

These regulations are enforced by county or city building departments. Fire-related concerns and regulations are administered by the California Department of Forestry and Fire Protection (CAL FIRE), the Office of the State Fire Marshal, and by local county or city fire chiefs or marshals.

Public Resource Code

Several regulations have been adopted in the Public Resource Code (PRC) that cover safety aspects of electrical transmission lines. The most notable examples of these regulations are as follows:

- PRC Section 4292 requires clearing of flammable vegetation to reduce fire hazards around specific structures that support certain connectors or types of electrical apparatus. This cleared area (10-foot radius) is required to be kept clear of flammable vegetation during the entire fire season.
- PRC Section 4293 requires specific clearance between conductors and vegetation. The clearance required increases as the line voltage increases. This code also requires the removal of trees adjacent to electrical transmission lines that may present a hazard if they fall on the line.

Local

San Diego County

In San Diego County, the administrator for the CUPA is the HMMD. Hazardous materials are dealt with under various county codes and regulations. The HMMD hazardous material requirements include hazardous waste determination, storage and transportation of hazardous waste, treatment and disposal requirements, biennial reporting, emergency preparedness and prevention, emergency procedures, business plans, personnel training, and violation. The regulations for storage and use of explosives in the county are provided in San Diego County General Regulation, Section 6904. County fire codes are provided in Title 3, Division 5, Chapter 3, County Fire Code, Section 35, *et seq.*

The County Fire Code not only includes the CBC and UFC, but also other provisions, such as access road requirements, emergency access requirements, maintenance requirements for vacant property, disposal of wood chips and other organic materials, blasting, hazardous fire areas, use of spark arresters, open-flame equipment, and use of fire roads and firebreaks. In addition, the fire code provides requirements for brush and vegetative growth management along transmission line right-of-ways (ROWs). Brush clearance requirements for structures are identified in Section 16 of the Code, and brush clearance for roadways are described in Section 15. Other fire regulations for the county are provided in the San Diego County General Regulation, Section 6905.

Jacumba Airport Land Use Compatibility Plan

The Jacumba Airport Land Use Compatibility Plan was created to provide for the orderly growth of the Jacumba Airport and the surrounding area, as well as to ensure the safety of the inhabitants within the vicinity of the airport and the public in general. The Airport Land Use Compatibility

Plan provides policies specific to the airport influence area, noise impact zone, safety zone, airspace protection zone, and overflight zone.

Existing Hazardous Sites

East County Substation

A Phase I ESA for the ECO Substation site found no hazardous materials sites within two miles. However, three informal shooting ranges on the ECO Substation parcel were identified during the site reconnaissance as an REC and are shown in Figure 4.7-1: Hazards Map. Spent ammunition from small arms ranges left to accumulate over time may present a threat to both human health and the environment. There are other chemicals of concern (COCs) from shooting ranges such as arsenic, copper, nickel, and zinc. Lead and other COCs present in spent ammunition become bioavailable primarily through oxidation. A relevant exposure scenario for the ECO Substation would include construction and maintenance workers accidentally ingesting lead while engaged in earthmoving activities such as trenching and excavation. There are also ongoing concerns based on impacts to ecological systems and wildlife due to incidental ingestion. The REC at the informal shooting ranges is the dispersal of known lead-containing materials from spent shotgun shells and bullets, in addition to the hazardous materials and heavy metals from the general waste and debris identified at the ranges.

Southwest Powerlink Loop-In

Because the Southwest Powerlink (SWPL) loop-in will connect into the ECO Substation, results from the Phase I ESA for the ECO Substation site are also pertinent for the SWPL loop-in.

138 kV Transmission Line

Of the 72 federal, state, local, and other databases reviewed for the Phase I ESA, 26 properties between approximate Milepost (MP) 3 and MP 13.3 with past or current hazardous materials cases were identified within two miles of the transmission line. These sites are listed in Table 4.7-1: Hazardous Materials Sites Records Review. No recorded sites were located within or immediately adjacent to the transmission line corridor. In addition to the properties identified in Table 4.7-1: Hazardous Materials Sites Records Review, the records search identified a total of 72 orphan sites along the transmission line corridor. Orphan sites are those listed in various databases as being in the vicinity of the researched properties that do not have addresses designated on a map.

The Phase I ESA also included a reconnaissance site visit that was conducted on April 21, 2008. Between MP 3 and 5 and MP 13 and 13.3, the field reconnaissance revealed six sites not previously identified during the database records search, including a large automotive yard, debris pile, agricultural fields and mixing tank, equipment storage yard, scrap metal junkyard, and solid waste disposal facility. At some locations, aboveground storage tanks, drums, automotive waste and debris were observed on site. However, the debris pile has since been removed from the site and the agricultural fields are part of a certified organic farm.

Boulevard Substation Rebuild

Because the Boulevard Substation is located at the end of the 138 kV transmission line at approximate MP 13.3 and the records search for the Phase I ESA was conducted within a two-

mile radius of the transmission line, results from the Phase I ESA for the 138 kV transmission line are also pertinent for the Boulevard Substation.

White Star Communication Facility Rebuild

No hazardous materials are within 1,000 feet of the communication facility.

Contaminated Soil and Groundwater

No soil or groundwater contamination was identified at any of the Proposed Project component locations. Groundwater is also not expected to be encountered due to its depth from the surface, as described further in Section 4.8 Hydrology and Water Quality.

Fire Hazards

Based on historical data, the area from the proposed ECO Substation site west to the community of Jacumba has a low fire occurrence rate, with only 24 recorded fires since records have been kept (1867). The area is generally comprised of low lying, arid vegetation, providing a low volume of available fuel, which makes large fires very rare. There have been a total of three fires over the past 50 years that have consumed in excess of 1,000 acres each, the largest of which was the Tule Fire that occurred in 1982 and burned 4,645 acres. A small increase in fire risk and available fuels exists along the route of the 138 kV transmission line from the community of Jacumba, as the 138 kV transmission line parallels the SWPL westward and then north to the Boulevard Substation. However, risk in this area is only elevated slightly. In addition, the 138 kV transmission route crosses very rocky terrain as it travels north to the Boulevard Substation rebuild site. This type of terrain provides breaks in vegetation that naturally suppress fire and reduce the potential for spreading.

Despite the fact that there have been relatively few large fires in the Proposed Project area over the past 50 years, the fire threat, which has been mapped by the California Fire and Resource Assessment Program (FRAP), depicts the area as having a moderate to very high classification. The FRAP data for the Proposed Project area is depicted in Figure 4.7-1: Hazards Map. The FRAP defines fire threat as the likelihood that an area will burn combined with the severity of burn behavior characteristics (such as intensity, speed, and embers produced). According to this map, over 50 percent of the Proposed Project is located in the very high fire threat classification.

Schools

No schools are located within 0.25 mile of any of the Proposed Project components. The nearest school—Jacumba Elementary School—is located at approximate MP 4, approximately one mile south of the 138 kV transmission line. Two additional schools—Clover Flat Elementary School and Boulevard State Preschool—are located approximately 1.25 miles west of the Boulevard Substation.

Airports and Airstrips

A private non-registered airstrip—Empire Ranch—is located approximately 650 feet southwest of the 138 kV transmission line at approximate MP 12. The Jacumba Airport is located approximately one mile south of the 138 kV transmission line at approximate MP 2.5. These facilities are described in more detail in Section 4.14 Transportation and Traffic.

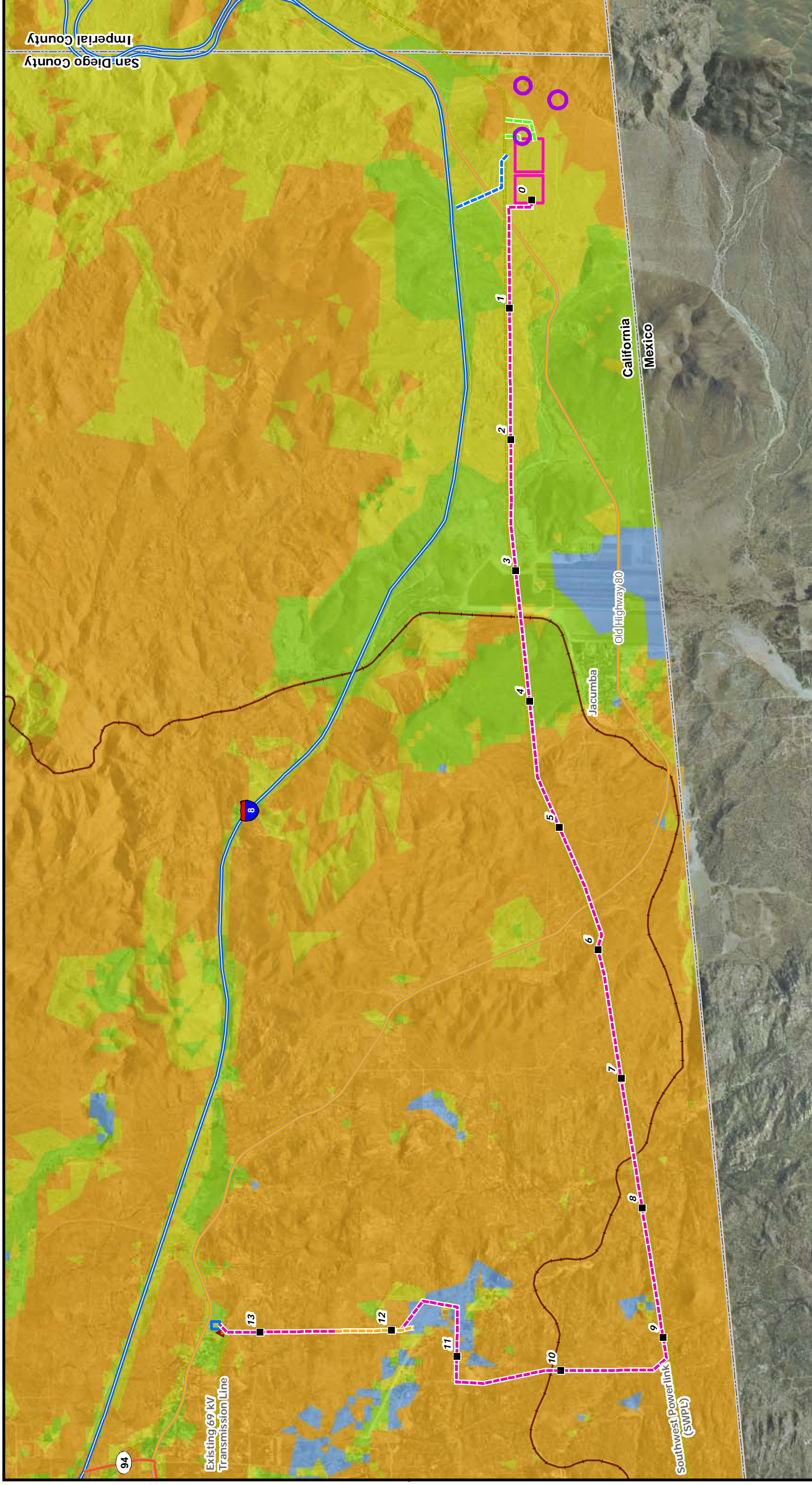
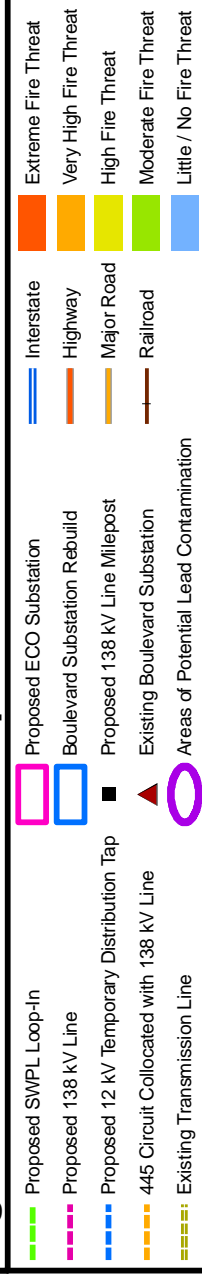


Figure 4.7-1: Hazards Map



1:45,000



East County Substation Project

Table 4.7-1: Hazardous Materials Sites Records Review

Approx. Milepost Range	Hazardous Materials Site	Type of Hazardous Materials Site	Associated Risk	Reason
3-4	Jacumba Burn Site One	Irrigated Open Space	No Risk	This site poses no risk to the project due to its distance from the transmission line.
	Jacumba Burn Site Two	Irrigated Open Space	No Risk	This site poses no risk to the project due to its distance from the transmission line.
	DeAnza Springs Campground	Domestic Water Disposal	No Risk	The site poses no risk to the project due to their distance from the transmission line. In addition, no violations have been reported indicating a release of contaminants.
4-5	Woodward Shell Gas Station	LUST	No Risk	This site poses no risk to the project due to its distance from the transmission line.
	Jacumba Texaco	LUST	No Risk	This site poses no risk to the project due to its distance from the transmission line.
5-6	Jacumba Community Service District	Information Not Available (INA)	No Risk	This site poses no risk to the project due to its distance from the transmission line. In addition, no violations have been reported indicating a release of contaminants.
	Jacumba Street Burnsite	Solid Waste Facility/Landfill Site	No Risk	This site poses no risk to the project due to its distance from the transmission line and location down-gradient. In addition, no violations have been reported indicating a release of contaminants.
	Rogers Automotive	LUST	No Risk	This site poses no risk to the project due to its distance from the transmission line and location down-gradient. In addition, no violations have been reported indicating a release of contaminants.
	E-M-H Realty and Investment Corporation	LUST	No Risk	This site poses no risk to the project due to its distance from the transmission line and location down-gradient.
	Nolta	LUST	No Risk	This site poses no risk to the project based on the results of the recent site assessment.

Approx. Milepost Range	Hazardous Materials Site	Type of Hazardous Materials Site	Associated Risk	Reason
	Feaser's Garage	INA	No Risk	This site poses no risk to the Proposed Project because no violations have been reported indicating a release of contaminants.
	National Projects Inc.	INA	No Risk	This site poses no risk to the Proposed Project because no violations have been reported indicating a release of contaminants.
	Jacumba Fire Department	INA	No Risk	This site poses no risk to the Proposed Project because no violations have been reported indicating a release of contaminants.
7-8	Carrizo Gorge Railway	INA	No Risk	This site poses no risk to the project because no violations have been reported indicating a release of contaminants.
	Pacific Bell	Underground Storage Tank (UST)	No Risk	This site poses no risk to the Proposed Project due to its distance from the transmission line. In addition, no violations have been reported indicating a release of contaminants.
11-12	1509 Starship Lane	INA	No Risk	This site poses no risk to the Proposed Project due to its distance from the transmission line.
	Boulevard Transfer Station	Solid Waste Facility/Landfill Site	No Risk	This site poses no risk to the Proposed Project due to its distance from the transmission line and location down-gradient. In addition, no violations have been reported indicating a release of contaminants.
	Live Oak Springs Resort	Domestic Water Disposal	No Risk	This site poses no risk to the Proposed Project due to its distance from the transmission line. In addition, no violations have been reported indicating a release of contaminants.
12-13.3	McCain Valley Conservation Camp	LUST	No Risk	This site poses no risk to the Proposed Project due to its distance from the transmission line and groundwater flow direction.
	Mountain Top Market	LUST	No Risk	This site poses no risk to the Proposed Project due to its distance from the transmission line and remediation status.

Approx. Milepost Range	Hazardous Materials Site	Type of Hazardous Materials Site	Associated Risk	Reason
	Department of Transportation (Caltrans) Boulevard Facility	LUST	No Risk	This site poses no risk to the Proposed Project due to its distance from the transmission line and groundwater levels below excavation depths.
	Benney's Garage	UST	No Risk	This site poses no risk to the Proposed Project because no violations have been reported indicating a release of contaminants.
	State of California Department of Forestry	INA	No Risk	This site poses no risk to the Proposed Project because no violations have been reported indicating a release of contaminants.
	Rich's Automotive	INA	No Risk	This site poses no risk to the Proposed Project because no violations have been reported indicating a release of contaminants.
	Boulevard Post Office	INA	No Risk	This site poses no risk to the Proposed Project because no violations have been reported indicating a release of contaminants.
	William Lee	Laboratory Waste	No Risk	This site poses no risk to the Proposed Project due to its regulatory status and limited release quantity reported.

Source: Tetra Tech, 2008

Emergency/Evacuation Plans

The County of San Diego Office of Disaster Preparedness implements the San Diego County Operational Area Emergency Plan. The San Diego County Operational Area Evacuation Annex (Annex) was designed to be used as a template for preparation of other jurisdictional evacuation plans and to supplement or support the evacuation plans developed and implemented by local jurisdictions. The Annex provides strategies, protocol, organizational frameworks, and recommendations that may be used to implement a coordinated evacuation effort within the San Diego County Operational Area, which includes San Diego County, 18 cities, and all special districts such as school districts. The Annex also provides estimates on the resident population within each jurisdiction that may be impacted by certain hazards and will require evacuation, the number of residents that may need assistance securing shelter or transportation, and the estimated number of household pets that may need to be accommodated in the event of an evacuation effort. In addition, the Annex provides hazard-specific considerations, transportation routes, and capacities for general evacuation, shelter capacities throughout the county, locally available resources, resources available through mutual aid, and other special needs considerations.

The Annex includes hazard-specific evacuation routes for dam failure, earthquakes, tsunamis, floods, and wildfires. The primary evacuation routes consist of the major interstates, highways, and prime arterials within San Diego County.

4.7.3 Impacts

Significance Criteria

Standards of significance were derived from Appendix G of the CEQA Guidelines. Proposed Project impacts will be considered significant if they:

- Create a hazard to public health or the environment by the routine transport, use, or disposal of hazardous materials
- Create a hazard to the public or the environment by reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment
- Emit hazardous emissions or handle hazardous materials within 0.25 mile of a school
- Are located at a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a hazard to the public or the environment
- Are located within two miles of a public or private airport and will result in a safety hazard for people residing or working in the Proposed Project area
- Impair implementation of, or physically interfere with, an adopted emergency response or evacuation plan
- Expose people or structures to a risk of loss, injury, or death related to wildland fires

Question 4.7a – Hazardous Material Transport, Use, or Disposal

Construction – Less-than-Significant Impact

A general listing of types of chemicals used during construction is provided in Table 4.7-2: Hazardous Materials Typically Used for Construction. Use of hazardous materials during construction may pose potential health and safety hazards to construction workers, nearby

residents, and the environment surrounding the Proposed Project. Potential impacts from the use of hazardous materials are generally associated with potential spills or other unauthorized releases during ground clearing and access road construction; steel pole erection, including foundation excavation and construction; and conductor pulling, splicing, and tensioning for the installation of the 138 kV transmission line, as well as the construction of the ECO Substation and rebuild of the Boulevard Substation. Other potential impacts involving the use of hazardous materials during construction are associated with temporary storage sites, transportation to worksites, and refueling and servicing of equipment.

With the implementation of SDG&E's APMs, as discussed in Section 4.7.4 Applicant-Proposed Measures, which include proper handling and disposal of hazardous materials and training, this potential impact will be reduced to a less-than-significant level.

Operation and Maintenance – Less-than-Significant Impact

Use of hazardous materials during operation and maintenance of the Proposed Project will pose potential health and safety hazards to workers, residents, and the environment adjacent to the 138 kV transmission line and Boulevard Substation rebuild site. These potential hazardous material impacts are associated with possible spills during routine or emergency maintenance or normal operation along the 138 kV transmission line corridor and at the ECO Substation and Boulevard Substation rebuild. As part of the ultimate configuration, 14 500/230 kV transformers, three 230/138 kV transformers, four 34/230 kV transformers, and two 138/12 kV Station Light & Power transformers containing a total of approximately 569,800 gallons of oil will be required as part of the ECO Substation. As part of the ultimate configuration of the Boulevard Substation, two 138/12 kV transformers and one 138/69 kV transformer containing a total of approximately 25,660 gallons of oil will be required. The potential exists for a transformer to leak due to age, major natural events, or collisions from operation and maintenance equipment. To reduce the impacts from a potential leak, SDG&E will install localized containment around each transformer at the ECO Substation and Boulevard Substation. Localized containment will consist of concrete slabs and walls configured to contain the total volume of oil in the transformers. Additionally, the containment pits will drain stormwater through filtered pipes; which, should oil come in contact with the filter material, will plug-up, thereby keeping oil from leaving the containment pit.

Mineral oil will be used for transformers. Mineral oil is considered a hazardous material under California regulations. In addition, mineral oil storage or use in aboveground storage containers in levels exceeding 1,320 gallons in one or multiple containers at a site is regulated under the CWA. These regulations require the preparation of a site-specific SPCC Plan, which will contain the proper procedures for storage, handling, spill response, and disposal of hazardous materials, including fueling, maintenance, spill containment, leak inspection, and clean-up procedures. The SPCC Plan will identify the spill-response materials that must be maintained in vehicles and substation sites during construction. With the implementation of the APMs and the preparation and implementation of a SPCC Plan, this potential impact will be reduced to a less-than-significant level.

Table 4.7-2: Hazardous Materials Typically Used for Construction

Hazardous Materials	
ABC fire extinguisher	Ammonium hydroxide
Air tool oil	Battery acid (in vehicles and in the meter house of the substations)
Automatic transmission fluid	Insect killer
Bottled oxygen	Puncture seal tire inflator
Canned spray paint	Chain lubricant (contains methylene chloride)
Diesel de-icer	Connector grease (penotox)
Diesel fuel	Diesel fuel additive
Eye glass cleaner (contains methylene chloride)	Contact cleaner 2000
Gasoline	Gasoline treatment
Hot stick cleaner (cloth treated with polydimethylsiloxane)	Lubricating grease
Hydraulic fluid	Starter fluid
Insulating oil (inhibited, non-PCB)	Methyl alcohol
Mastic coating	Paint thinner
Propane	WD-40
Safety fuses	ZIP (1,1,1-trichloroethane)
Sulfur hexafluoride (within the circuit breakers in the substations)	Brake fluid
Two-cycle oil (contains distillates and hydro-treated heavy paraffinic)	Acetylene gas
Wasp and hornet spray (1,1,1-trichloroethene)	Antifreeze (ethylene glycol)
ZEP (safety solvent)	Motor oils

Most of the chemicals used for operation or maintenance activities are similar to those used in construction and have been provided in Table 4.7-2: Hazardous Materials Typically Used for Construction. However, the use of these chemicals will normally be considerably less than those used during construction. Furthermore, hazardous chemicals used will be brought to, and removed from, the site by maintenance personnel rather than stored on site for extended periods. Therefore, impacts will be less than significant.

Question 4.7b – Reasonably Foreseeable Upset and Accident Conditions

Construction – Less-than-Significant Impact

The Boulevard Substation rebuild will include demolition of the existing Boulevard Substation and removal of an existing residence, one garage, one barn, and five outbuildings. Hazardous substances, such as gasoline and oil, associated with the existing Boulevard Substation may exist. Therefore, there is the possibility that demolition and construction of the substation could include a risk of releasing existing hazardous substances and exposing people to potential health hazards. Implementation of the APMs, including soil and material testing at the Boulevard Substation during the dismantling process, will reduce impacts to a less-than-significant level.

Additionally, as discussed in response to Question 4.7a – Hazardous Material Transport, Use, or Disposal, a potential exists for hazardous materials that will be used in construction vehicles and equipment to inadvertently be released through spills or leaks. Implementation of the APMs, including training, as well as the implementation of state and federal regulations concerning hazardous materials handling, including the implementation of a SPCC Plan will reduce the potential for a spill and the associated impacts. As a result, impacts will be less than significant.

Operation and Maintenance – Less-than-Significant Impact

Hazardous material impacts will be associated with potential spills during normal operation or routine or emergency maintenance along the 138 kV transmission line corridor and at the ECO and Boulevard substations. However, the use of the chemicals provided will normally be considerably less than those used during construction. As discussed in the response to Question 4.7a – Hazardous Material Transport, Use, or Disposal, SDG&E will implement a SPCC Plan to prevent and address any accidental release of hazardous materials, thereby reducing impacts from operation and maintenance to a less-than-significant level.

Question 4.7c – Hazardous Substances in Close Proximity to Schools – No Impact

The Proposed Project will not be located within 0.25 mile of an existing or proposed school location. Thus, no impact will occur.

Question 4.7d – Existing Hazardous Materials Sites

Construction – Less-than-Significant Impact

No existing hazardous materials sites are present on or within close proximity to any Proposed Project components. While some of the properties listed in Table 4.7-1: Hazardous Materials Sites Records Review have the potential to, or are known to contain, hazardous substances, and/or may have affected the local groundwater table, they pose no risk to the Proposed Project due to their localized nature, distance from the transmission line corridor, and/or elevation down-

gradient from the transmission line. The reason why each is not expected to pose a risk to the Proposed Project is provided in Table 4.7-1: Hazardous Materials Sites Records Review. Based on the sites' distance from the project, regulatory status, and/or lack of violations reported, none of the orphan sites identified pose any risk to the transmission line. In addition, the groundwater table is at a sufficient depth that it will not be encountered by excavation activities.

Because no existing hazardous materials sites are on or near the ECO Substation site, it is unlikely that hazardous materials will be encountered during excavation at the site, with the exception of lead. However, the ECO Substation footprint is not sited on an area where any of the formal shooting ranges are located. If excavation will occur in close proximity to the potentially lead-contaminated area, SDG&E will implement APM-HAZ-04, which includes testing of the contaminated area and appropriate cleanup, to ensure impacts are less than significant.

While the Phase I ESA identified pesticides and herbicides used in agricultural operations at the Jacumba Valley Ranch to be an issue of concern, these agricultural fields are part of an organic farming operation and no fertilizers, pesticides, or herbicides are currently in use. Therefore encountering pesticides or other contamination in this area is unlikely and no impact is expected.

Operation and Maintenance – No Impact

The operation and maintenance activities will not have any impacts because no known existing contamination sites are in the Proposed Project area. Future maintenance activities will primarily occur on above-grade structures. Therefore, the potential for uncovering existing hazardous materials sites during the operation and maintenance phase is unlikely and no impact will occur.

Question 4.7e – Public Airport Hazards – *Less-than-Significant Impact*

The 138 kV transmission line is the only project component within one mile of an airport—the Jacumba Airport—and within the sphere of its Airport Land Use Compatibility Plan. At approximate MP 2.5, where the 138 kV transmission line is located closest to the airport, the line will be parallel to the existing SWPL, which has poles taller than the proposed 138 kV transmission line poles. At this distance, the proposed 115-foot-tall structures will conform to the required 50 to 1 horizontal-to-vertical slope and will not be classified as an obstruction. Therefore, impacts to public airports will be less than significant. Additional discussion of airports is presented in Section 4.14 Transportation and Traffic.

Question 4.7f – Private Airstrip Hazards – *No Impact*

The 138 kV transmission line is the only Proposed Project component within close proximity to a private airstrip. The Empire Ranch airstrip is located approximately 650 feet southwest of the proposed 138 kV transmission line corridor at approximate MP 12. Because the Proposed Project will be constructed at the base of a hillside, aircraft flight patterns will not be impacted by the construction of the transmission line. Thus, no impact will occur.

Question 4.7g – Emergency Evacuation and Response Plan Interference – *No Impact*

None of the Proposed Project components will be constructed within public roadways. The 138 kV transmission line will cross Old Highway 80, Carrizo Gorge Road, Jewel Valley Road, and

Tule Jim Lane, in addition to a number of other roadways. As described in detail in Section 4.14 Transportation and Traffic, emergency access will not be directly impacted during construction because all streets will remain open to emergency vehicles at all times. Thus, no impact will occur.

Question 4.7h – Wildland Fires

Construction – Less-than-Significant Impact

Despite the relatively low volume of fuel available in the Proposed Project area, construction activities have the potential to start a fire due to the increased presence of vehicles, equipment, and human activity. In particular, heat or sparks from construction vehicles or equipment have the potential to ignite dry vegetation. In general, Proposed Project activities will be largely confined to non-vegetated areas, including cleared access roads and work pads. In addition, SDG&E will implement the APMs in Section 4.7.4 Applicant-Proposed Measures, which include developing and implementing a Construction Fire Prevention Plan to reduce impacts to a less-than-significant level. Because operation and maintenance activities are already conducted by SDG&E in the area, the schedule of these activities will not increase significantly as a result of the new facilities, and they will occur primarily in already cleared areas, the potential to start a fire from these activities will be less than significant. SDG&E also implements the Wildland Fire Prevention and Fire Safety Electric Standard Practice during all operation and maintenance work, which will further ensure that impacts will be less than significant.

Operation and Maintenance – Less-than-Significant Impact

Operation and maintenance work, which will include regular vegetation clearing to minimize the potential for fire, will occur at every Proposed Project component site. If a wildfire occurs within the Proposed Project area, Proposed Project components will not be affected due to the large amount of cleared vegetation surrounding them. The cleared areas will act as fire breaks, thereby preventing fire damage.

The mechanical and structural design and construction of the 138 kV transmission line must meet the requirements of the California Public Utilities Commission, General Order No. 95 (GO 95), Rules for Overhead Electric Line Construction. Although energized conductors can create potential for a fire hazard, SDG&E takes into account normal and unusual structural loading in its designs under GO 95 to prevent these fire hazards. Vehicles will use existing roads to access Proposed Project components during operation and maintenance activities, which will reduce the potential for vehicle heat to ignite dry vegetation and start a fire. In addition, a shield wire will be installed on the steel poles to protect the energized conductor from lightning, further reducing potential fire hazards. Therefore, the potential for operation and maintenance of the proposed transmission line to cause a wildland fire is less than significant.

4.7.4 Applicant-Proposed Measures

The following measures are proposed to reduce impacts to a less-than-significant level:

- APM-HAZ-01: Prior to construction, all SDG&E, contractor, and subcontractor Project personnel will receive training regarding the appropriate work practices necessary to

effectively implement the APMs to comply with the applicable environmental laws and regulations associated with hazardous materials.

- APM-HAZ-02: A Phase II ESA will be conducted on the existing Boulevard Substation parcel after the equipment has been removed to determine if there is any surface or subsurface contamination. If required by the Phase II investigation, remediation will occur in accordance with all applicable federal, state, and local regulations.
- APM-HAZ-03: During the Boulevard Substation dismantling process, the existing equipment to be dismantled will be tested in accordance with federal, state, and local standards to determine appropriate recycle, reuse, or disposal alternatives.
- APM-HAZ-04: Soil testing for lead contamination will be conducted for all excavation sites within 500 feet of the informal shooting ranges. In addition, an Unanticipated Soil/Lead Contamination Handling Plan will be prepared to address the procedures to follow in the event that lead contamination is discovered during testing or excavation activities. This plan will contain provisions for a worker lead awareness program, as well as guidelines for the identification, removal, transport, and disposal of lead-impacted materials. This plan will also emphasize that all activities within, or in close proximity to, contaminated areas will follow applicable environmental and hazardous waste laws and regulations.
- APM-HAZ-05: SDG&E will develop a Construction Fire Prevention Plan for the Project and monitor construction activities to ensure its implementation and effectiveness. At a minimum, the Construction Fire Prevention Plan will include the following:
 - a description of the procedures that will be implemented to minimize the potential to start a fire (including vegetation clearing, parking requirements, etc.),
 - the requirements of Title 14 of the California Code of Regulations, Article 8 #918 “Fire Protection,”
 - relevant components of the SDG&E Wildland Fire Prevention and Fire Safety Electric Standard Practice (2009) included in Attachment 4.7-B: SDG&E Wildland Fire Prevention and Fire Safety Electric Standard Practice,
 - the fire-fighting equipment (including shovels, axes, and fire extinguishers) that must be maintained on site and in vehicles for the duration of construction,
 - the appropriate timing and use of fire-protective mats or shields during grinding and welding operations,
 - emergency response and reporting procedures, and
 - relevant emergency contact information.

SDG&E will provide a draft copy of the Construction Fire Prevention Plan to the California Public Utilities Commission (CPUC), CAL FIRE, the Bureau of Land Management, County of San Diego, and local community fire departments at least 90 days before the start of any construction activities. Agency comments on the Construction Fire Prevention Plan will be provided by SDG&E to all other reviewing parties and SDG&E will resolve each comment in consultation with CAL FIRE. The final Construction Fire Prevention Plan will be approved by CAL FIRE at least 30 days prior to the initiation of construction activities. SDG&E will fully implement the Construction Fire Prevention Plan during all construction activities.

- APM-HAZ-06: SDG&E will implement the Wildland Fire Prevention and Fire Safety Electric Standard Practice (2009) included as Attachment 4.7-B: SDG&E Wildland Fire Prevention and Fire Safety Electric Standard Practice (2009) during all construction, operation, and maintenance work associated with the Project.

4.7.5 References

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