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4.8 HAZARDS AND HAZARDOUS MATERIALS

Would the Proposed Project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	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?			✓	
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?			✓	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			✓	
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?			✓	
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?				✓
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?				✓
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			✓	

Would the Proposed Project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fire, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			✓	

4.8.0 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) and Southern California Gas Company—hereinafter referred to as “the Applicants”—proposed Pipeline Safety & Reliability Project (Proposed Project). The Proposed Project involves construction, operation, and maintenance of an approximately 47-mile-long, 36-inch-diameter natural gas transmission pipeline that will carry natural gas from SDG&E’s existing Rainbow Metering Station to the pipeline’s terminus on Marine Corps Air Station (MCAS) Miramar. This analysis addresses existing hazardous materials, wildland fire potential, hazards to public and worker health and safety, and physical hazards related to the construction, operation and maintenance of the Proposed Project. As described in this section, any potential Proposed Project impacts associated with hazards and hazardous materials will be less than significant with the implementation of the Applicants-Proposed Measures (APMs) described in Section 4.8.4 Applicants-Proposed Measures.

4.8.1 Methodology

Analysis of existing hazards and hazardous materials involved a review of applicable documents, including the following:

- the Phase I Environmental Site Assessment (ESA) conducted by Haley & Aldrich for the Proposed Project, which is included as Attachment 4.8-A: Phase I Environmental Site Assessment;
- the Safety Study conducted by ENERCON Services, Inc. (ENERCON) for the Proposed Project, which is included as Attachment 4.8-B: Safety Study;
- the County of San Diego General Plan;
- the City of San Diego General Plan;
- the City of Escondido General Plan;
- the City of Poway General Plan;

- California Department of Forestry and Fire Protection (CAL FIRE) data; and
- emergency evacuation and response plans and Office of Emergency Services (OES) websites for the County of San Diego, City of San Diego, City of Escondido, and City of Poway.

The following subsections describe the records review and site reconnaissance conducted to support the Phase I ESA.

Records Review

Haley & Aldrich conducted the Phase I ESA using the American Society of Testing and Materials (ASTM) Standard E1527-13. The Phase I ESA included a review of federal, state, local, and other hazardous materials databases to determine areas where contamination might be encountered during construction. These databases are described in Attachment 4.8-A: Phase I Environmental Site Assessment.

The database search covered areas located within the ASTM-specified minimum search distances, which are provided in Attachment 4.8-A: Phase I Environmental Site Assessment. Haley & Aldrich utilized Environmental Data Resources, Inc. (EDR) to conduct a search for hazardous sites within 0.5 or one mile from the Proposed Project. EDR provided a comprehensive list of hazardous sites in the vicinity of the Proposed Project, based on the minimum search radii specified for regulatory databases in ASTM Standard E1527-13. The results of the database search identified the use, generation, storage, treatment, or disposal of hazardous materials and chemicals, as well as release incidents of such materials that may impact the Proposed Project. The database search results are presented in the EDR Corridor Study in Appendix C of the Phase I ESA. In addition, aerial photographs and historical documentation provided by the GeoTracker and EnviroStor databases were reviewed to determine the likelihood of encountering hazardous materials in the Proposed Project area as a result of historical use.

Site Reconnaissance

As part of the Phase I ESA, Haley & Aldrich conducted a reconnaissance survey for the northern portion of MCAS Miramar on October 10, 2014. A site reconnaissance was conducted for the remainder of the Proposed Project on April 7, 2015. The surveys included a review of the Proposed Project area for evidence of the use and storage of hazardous materials, or the release of hazardous materials or petroleum products. No evidence of hazardous materials use, storage, and/or disposal was observed in the vicinity of the alignment during the site reconnaissance. A summary of the site reconnaissance is included in Attachment 4.8-A: Phase I Environmental Site Assessment.

4.8.2 Existing Conditions

The following subsections describe the regulatory background and physical setting of the Proposed Project as it relates to hazards and hazardous materials.

Regulatory Background

The following subsections describe federal, state, and local regulations regarding hazards and hazardous materials that are relevant to the Proposed Project.

Federal

United States Department of Transportation

The United States (U.S.) Department of Transportation's Office of Pipeline Safety was created under the Natural Gas Pipeline Safety Act of 1968 and continues to be the lead federal regulator of pipeline safety. The Natural Gas Pipeline Safety Act of 1968, as amended through March 2006 (Title 49, Subtitle VIII, Chapter 601 of the U.S. Code [U.S.C.]), specifies the minimum safety standards for designing, installing, constructing, initially inspecting, and initially testing a new natural gas pipeline facility. The standards include the characteristics of the material used in constructing a facility, design factors for specific locations, and the public safety factors, particularly its ability to prevent and contain a natural gas spill. The design standards for specific locations reflect site-specific geological, topographical, seismic, and soil conditions.

Federal pipeline safety regulations that relate specifically to natural gas are codified in Title 49, Parts 190 through 192 of the Code of Federal Regulations (CFR). Title 49, Part 192 of the CFR prescribes federal safety standards for transportation of natural gas by pipeline. One of the key pipeline design factors is the class location. Class locations representing more populated areas require higher safety factors in pipeline design, testing, and operation. The class location unit is defined by the number of dwelling units, high occupancy buildings, or open areas within 660 feet of the pipeline centerline on a continuous mile of pipeline. Based on this definition, natural gas pipelines are classified as one of the following four classes that correspond to the number of dwelling units, high occupancy buildings, or open occupied areas:

- A Class 1 location has 10 or fewer dwelling units per mile intended for human occupancy.
- A Class 2 location has more than 10 but less than 46 dwelling units per mile intended for human occupancy.
- A Class 3 location:
 - has 46 or more dwelling units per mile intended for human occupancy; or
 - is located within 100 yards of either a building (e.g., a school, restaurant, or other business), or a small, well-defined outside area (e.g., a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more people on at least five days a week for 10 weeks in any 12-month period. The days and weeks need not be consecutive.
- A Class 4 location is in any class location unit where buildings with four or more stories aboveground are prevalent.

In 2002, Congress passed an act to strengthen the nation's pipeline safety laws. The Pipeline Safety Improvement Act of 2002 requires gas transmission operators to develop and follow a written integrity management program to address risks on each covered transmission pipeline

segment within high consequence areas (HCAs). HCAs may be defined by one of two methods. In the first method (i.e., Method 1), an HCA includes:

- current Class 3 and 4 locations;
- any area in Class 1 or 2 locations where the potential impact radius is greater than 660 feet and there are 20 or more buildings intended for human occupancy within the potential impact circle; or
- any area in Class 1 or 2 locations where the potential impact radius includes an identified site¹.

In the second method (i.e., Method 2), an HCA includes any area within a potential impact circle that contains 20 or more buildings intended for human occupancy, or an identified site.

Federal and state regulations require operators of gas pipelines in HCAs to conduct a risk analysis and implement integrity management programs. Integrity management programs include measures designed to protect HCAs and enhance public safety from pipeline failure. These measures include the installation of low-pressure alarms, emergency flow-restricting devices, automatic safety shut-off valves, and computerized monitoring and leak detection systems. The integrity management programs continually assess and evaluate pipeline safety, as well as identify and incorporate newly populated areas. The pipeline integrity management rule requires an assessment of HCAs at least every seven years.

In 2011, Congress passed the Pipeline Safety, Regulatory Uncertainty, and Job Creation Act to amend Title 49 of the CFR. The purpose of this legislation was to enhance the safety, environmental protection, and reliability associated with the transportation of energy products by pipeline.

United States Environmental Protection Agency

The U.S. Environmental Protection Agency (EPA) maintains a list of materials considered to be hazardous to the environment or to human health. Those materials are categorized as follows:

- F-List: Wastes from the F-List are published under Title 40, Section 261.31 of the CFR. They include non-specific source wastes that are common in manufacturing and industrial processes.
- K-List: K-List wastes are published under Title 40, Section 261.32 of the CFR. They include source-specific wastes from particular industries, including pesticide manufacturing and petroleum refining.

¹ An identified site is an outside area or open structure that is occupied by 20 or more people on at least 50 days in any 12-month period; a building that is occupied by 20 or more people on at least five days a week for any 10 weeks in any 12-month period; or a facility that is occupied by people who are confined, are of impaired mobility, or would be difficult to evacuate.

- P-List and U-List: Wastes from the P-List and U-List are published under Title 40 CFR Part 261.33. They include discarded commercial chemical products in an unused form.

Waste that has not been previously listed may still be considered hazardous if it exhibits one or more of the following characteristics: ignitibility, corrosivity, reactivity, or toxicity (40 CFR § 261 Subpart C). Information regarding the hazard classification of natural gas is available in Title 49, Part 172 of the CFR.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) regulates potential health and environmental problems associated with both hazardous and non-hazardous waste. This law is implemented by the U.S. EPA through Title 42, Subtitle C, Section 6921 et seq. of the U.S.C. and its implementing regulations (i.e., Title 40, Part 260 et seq. of the CFR). The generation, transportation, treatment, storage, and disposal of hazardous waste is regulated through Subtitle C of the RCRA, which addresses a “cradle-to-grave” approach to hazardous waste management. All states are subject to Subtitle C with regard to hazardous waste generation. The RCRA also specifies the quantities of wastes that are regulated.

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

The Comprehensive Environmental Response, Compensation, and Liability Act and the Superfund Amendments and Reauthorization Act (SARA), together with their implementing regulations, govern the use, planning, reporting, cleanup, and notification of hazardous materials and hazardous material releases into the environment. These statutes are codified in Title 40, Parts 239 through 282 of the CFR, and the regulations are defined in Title 40, Parts 302 through 355 of the CFR.

Annual reporting requirements for hazardous materials released into the environment—including both routine discharges and spill releases—are provided in Title 42, Section 11023 and Title 40, Section 372.30 of the U.S.C. In addition, Title III of SARA (identified as the Emergency Planning and Community Right-To-Know Act of 1986) requires that all states develop and implement local chemical emergency preparedness programs and make available information pertaining to hazardous materials used at facilities within local communities.

Clean Water Act and Clean Air Act

The Clean Water Act (CWA) provides measures governing the accidental release of hazardous materials to surface waters, and the Clean Air Act (CAA) provides measures aimed at preventing the accidental release of hazardous materials into the atmosphere. Requirements for Spill Prevention Control and Countermeasure (SPCC) plans were developed as one of the regulations under the CWA. Requirements of SPCC plans are provided in Title 40, Part 112 (Oil Spill Prevention) of the CFR. Regulations for implementing the CAA and governing hazardous material emissions are provided in Title 40, Part 68 of the CFR.

Occupational Safety and Health Act

The hazardous materials regulations of the Occupational Safety and Health Act govern worker safety, with separate standards developed for construction and industrial workers. Generally, Title 29, Part 1926 of the CFR governs construction worker safety, whereas Title 29, Part 1910 of the CFR applies to industrial workers.

Hazardous Materials Transportation Act

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

*State**California Public Utilities Commission*

Intrastate natural gas pipelines, such as the Proposed Project, are regulated under the jurisdiction of the California Public Utilities Commission (CPUC). More specifically, CPUC General Order 112-E governs the design, construction, testing, operation, and maintenance of gas gathering and transmission and distribution piping systems in the State of California. These rules are supplements to the federal regulations and do not supersede federal pipeline safety regulations.

State regulations also provide specific safety requirements that are more stringent than the federal rules, and cover the following areas:

- exemptions;
- hazardous pipeline safety technical standards;
- intrastate pipeline operators;
- leak detection and cathodic protection;
- periodic hydrostatic testing;
- hydrostatic test results;
- maps, records procedures, and inspections;
- contingency plans;
- notification of break, explosion, or fire;
- local enforcement; and
- regulations for enforcement proceedings.

In response to the 2010 natural gas pipeline incident in San Bruno, California, State Bill (SB) 216 was signed into law on October 10, 2010. New pipeline safety regulations set forth in SB 216 were codified in California Public Utilities Code Section 957, which reads, in part:

“(a) (1) Unless the commission determines that it is prohibited from doing so by subdivision (c) of Section 60104 of Title 49 of the United States Code, the commission shall require the installation of automatic shut-off or remote controlled sectionalized block valves on both of the following facilities, if it determines those valves are necessary for the protection of the public:

(A) Intrastate transmission lines that are located in a high consequence area.

(B) Intrastate transmission lines that traverse an active seismic earthquake fault.

(2) Each owner or operator of a commission-regulated gas pipeline facility that is an intrastate transmission line shall provide the commission with a valve location plan, along with any recommendations for valve locations. The commission may make modifications to the valve location plan or provide for variations from any location requirements adopted by the commission pursuant to this section that it deems necessary or appropriate and consistent with protection of the public.

(3) The commission shall additionally establish action timelines, adopt standards for how to prioritize installation of automatic shut-off or remote controlled sectionalized block valves pursuant to paragraph (1), ensure that remote and automatic shut-off valves are installed as quickly as is reasonably possible, and establish ongoing procedures for monitoring progress in achieving the requirements of this section.

(b) The commission shall authorize recovery in rates for all reasonably incurred costs incurred for implementation of the requirements of this section.

(c) The commission, in consultation with the Pipeline and Hazardous Materials Safety Administration of the United States Department of Transportation, shall adopt and enforce compatible safety standards for commission-regulated gas pipeline facilities that the commission determines should be adopted to implement the requirements of this section.”

Natural Gas Pipeline Safety Act of 2011

Assembly Bill 1937—which was approved by the governor of California on August 25, 2014 and subsequently enacted in Section 955.5 of the California Public Utilities Code—requires gas corporations to provide notification to schools or hospitals within 500 feet of proposed nonemergency construction or excavation of a gas pipeline. Notifications must be provided no less than three working days prior to the commencement of construction activities. The bill also requires that corporations maintain records detailing the date and time of notifications, as well as relevant administrative contact information. These records must be available for inspection for a minimum of five years from the date of notification. Each notification is required to include the name, address, telephone number, and emergency contact information of the gas corporation and the specific location of proposed construction activities. In addition, each hospital or school will be provided a telephone number to call for information on what to do in the event of a gas leak.

Division of Occupational Safety and Health

The California Occupational Safety and Health Act of 1970 provides measures that address the safety of construction and industrial workers; Title 8 of the California Code of Regulation (CCR) implements the majority of these measures. The California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) is responsible for enforcing the occupational and public safety laws adopted by the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA). OSHA is responsible for the regulation of workplace hazards and hazardous materials at the federal level, while Cal/OSHA regulates hazards and hazardous materials at the state level.

California Environmental Protection Agency's Department of Toxic Substances Control

The California EPA (CalEPA) is charged with developing, implementing, and enforcing the state's environmental protection laws. CalEPA's Department of Toxic Substances Control (DTSC) regulates hazardous waste, cleans up existing contamination, and attempts to reduce the amount of hazardous waste produced in California.

San Diego Regional Water Quality Control Board

The San Diego Regional Water Quality Control Board (RWQCB) is responsible for protecting the beneficial uses of surface water and groundwater resources in the San Diego area. The RWQCB adopted a Water Quality Control Plan (Basin Plan) in September 1994 and amended the plan in April 2011. The Basin Plan sets forth implementation policies, goals, and water management practices in accordance with the Porter-Cologne Water Quality Control Act. The Basin Plan establishes both numerical and narrative standards and objectives for water quality aimed at protecting aquatic resources. Project discharges to surface waters in the region are subject to the regulatory standards set forth in the Basin Plan, which prevents the discharge of hazardous materials into waters of the U.S. The RWQCB also enforces the provisions of the state statutes that protect groundwater.

California Hazardous Materials and Waste Codes

Within the State of California, the storage, handling, use, and/or disposal of hazardous materials is regulated through various sections of the California Health and Safety Code (HSC). In addition, HSC Section 33437 requires lessees or purchasers of property in a redevelopment project to comply with all covenants, conditions, and restrictions imposed by the agency for the reasonable protection of lenders. Individual states are required by the RCRA to develop their own programs for the regulation of hazardous waste discharges; however, such plans are required to meet or exceed RCRA requirements.

The California Hazardous Waste Control Law (HWCL) addresses the control of hazardous wastes for the state. The HWCL regulates generators of universal waste (e.g., batteries, mercury control devices, dental amalgams, aerosol cans, and lamps/cathode ray tubes) under HSC Section 25100 et seq., as well as hydrocarbon waste (e.g., oils, lubricants, and greases) that is not classified as hazardous waste under RCRA. The DTSC is responsible for the administration and enforcement of the HWCL.

The Hazardous Materials Release Response Plans and Inventory Act (HSC § 25500 et seq.) and regulations provided in Title 19, Section 2620 et seq. of the CCR require local governments to 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 as follows:

- 55 gallons for liquids,
- 500 pounds for solids, and
- 200 cubic feet for compressed gases measured at standard temperature and pressure.

Any facility storing such hazardous materials in excess of the TQs is required to prepare a Hazardous Materials Business Plan (HMBP) to identify its internal response requirements to accidental spills. The HMBP may identify emergency contacts, hazardous material inventory and quantities, control methods, emergency response measures, and employee training methods. HMBPs must be submitted to the appropriate local administering agency (typically, the local fire department or public health agency). In the event of a spill from such a facility, both the local administrative agency and the California Governor's OES must be notified.

HSC Section 25249.5 et seq. of the Safe Drinking Water and Toxics Enforcement Act of 1986 (i.e., Proposition 65) is administered through the California Office of Environmental Health Hazard Assessment and regulates cancer-causing and reproduction-impairing chemicals. Under this act, users of such regulated chemicals are required to issue a public warning before a potential exposure to chemicals above a threshold amount occurs (HSC § 25249.6). In addition, this legislation is aimed at preventing discharges or releases of specified hazardous materials into a drinking water source. Chemicals of concern are periodically updated and listed in HSC Section 25249.5.

HSC Section 25404 et seq. includes the California Unified Hazardous Waste and Hazardous Material Management Regulatory Program Act, which establishes specific requirements for the local handling of hazardous waste by instituting a Certified Unified Program Agency (CUPA). The responsibility for managing local hazardous wastes is delegated by CalEPA to the CUPA through a Memorandum of Understanding. The primary CUPA for the Proposed Project site is the County of San Diego Department of Environmental Health's Hazardous Materials Division (HMD).

California Department of Forestry and Fire Protection Unit Fire Management Plans

CAL FIRE has developed an individual Unit Fire Management Plan for each of its 21 units and six contract counties. These plans include stakeholder contributions and priorities and identify strategic areas for pre-fire planning and fuel treatment. CAL FIRE has developed a strategic fire management plan for the San Diego Unit, which covers the Proposed Project area, and addresses citizen and firefighter safety, watersheds and water, timber, wildlife and habitat (including rare and endangered species), unique areas (e.g., scenic, cultural, and historic), recreation, range, structures, and air quality. The plan includes stakeholder contributions and priorities, and identifies strategic areas for pre-fire planning and fuel treatment, as defined by the people who live and work with the local fire issues.

Local

Pursuant to Article XII, Section 8 of the California Constitution, the CPUC has exclusive jurisdiction in relation to local government to regulate the design, siting, installation, operation, maintenance, and repair of natural gas pipeline transmission facilities. Other state agencies have concurrent jurisdiction with the CPUC. Although local governments do not have the power to regulate such activities, the CPUC encourages, and the Applicants participate in, cooperative discussions with affected local governments to address their concerns where feasible. As part of the environmental review process, the Applicants have considered relevant regional and county, policies, and issues, and have prepared this evaluation of the Proposed Project's potential impacts to hazards and hazardous materials.

County of San Diego

Within San Diego County, hazardous materials are addressed through various county codes and regulations. As the CUPA, the HMD's 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 standards for violations.

The County of San Diego Consolidated Fire Code includes requirements for access roads, emergency access, maintenance 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. Brush clearance requirements for structures and roadways are identified in Section 68 of the Fire Code. Other fire regulations for the county are provided in General Regulation Section 6905.

The following goals and policies within the Safety Element of the County of San Diego General Plan are relevant to the Proposed Project:

- Goal S-3: Minimized Fire Hazards: Minimize injury, loss of life, and damage to property resulting from structural or wildland fire hazards.
- Goal S-11: Controlled Hazardous Materials Exposure: Limited human and environmental exposure to hazardous materials that pose a threat to human lives or environmental resources.
- Policy S-11.1: Land Use Location: Require that land uses involving the storage, transfer, or processing of hazardous materials be located and designed to minimize risk and comply with all applicable hazardous materials regulations.
- Policy S-11.3: Hazards-Sensitive Uses: Require that land uses using hazardous materials be located and designated to ensure sensitive uses, such as schools, hospitals, day care centers, and residential neighborhoods, are protected. Similarly, avoid locating sensitive uses near established hazardous materials users or High Impact Industrial areas where incompatibilities would result.

In addition to the Safety Element of the General Plan, the County of San Diego Department of Planning and Land Use drafted guidelines for determining the significance of airport hazards in July 2007. These guidelines include applicable obstruction standards, relevant Federal Aviation Administration (FAA) regulations, heliport regulations, air and ground hazards, and project design considerations.

City of San Diego

The Public Facilities, Services, and Safety Element of the City of San Diego General Plan addresses public facilities and services, such as fire and rescue, police, storm water protection, and disaster preparedness. The General Plan identifies goals and policies intended to allow for the efficient and adequate provision of public services and facilities, as well as to reduce the potential for hazardous or emergency situations to occur.

City of Escondido

The Community Protection and Safety Element of the City of Escondido General Plan summarizes goals and policies associated with hazardous materials (Goal 8, Policies 8.1 through 8.11) and fire protection (Policy 2.14). The following goal and policies are relevant to the Proposed Project:

- Fire Protection Policy 2.14: Require new development in high wildland fire risk areas to incorporate site design, maintenance practices, and fire resistant landscaping to protect properties and reduce risk.
- Goal 8 – Hazardous Materials: A safe and healthy community and environment that is protected from the use, storage, and transport of hazardous materials.
 - Hazardous Materials Policy 8.2: Coordinate with relevant agencies to enforce applicable laws regulating the handling, use, production, storage, disposal, and transportation of hazardous materials, and notify the appropriate city, county, state, and federal agency in the event of a violation.
 - Hazardous Materials Policy 8.3: Maintain regulations requiring proper handling, storage and disposal of hazardous materials to prevent leakage, potential explosion, fire, or the escape of harmful gases, and to prevent individually innocuous materials from combining to form hazardous substances.

City of Poway

The following goal and policy within the Public Safety Element of the City of Poway General Plan are relevant to the Proposed Project:

- Goal 7 – It is the goal of the City of Poway to provide a safe and healthy environment for the residents of Poway.
 - Policy G – Hazardous Waste Management: The City supports the San Diego County Hazardous Waste Management Plan and seeks its implementation by encouraging waste minimization, proper disposal of household hazardous wastes and by

establishing criteria for land use decisions regarding hazardous waste treatment facility siting.

Emergency Response and Evacuation Plans

County of San Diego

The County of San Diego Office of Disaster Preparedness implements the County of San Diego Operational Area Emergency Plan. The Operational Area consists of the County, 18 cities (including the cities of San Diego, Escondido, and Poway), and all special districts, including school districts. A formal joint powers agreement exists between the county and the 18 incorporated municipalities. During a disaster response, the County of San Diego's OES is responsible for activating the county's Emergency Operations Center and coordinating resources with applicable agencies, as well as collecting status reports and other information from organizations and facilities that may have sustained damage.

The County of San Diego 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. Strategies, protocols, organizational frameworks, and recommendations that may be used to implement a coordinated evacuation effort within the County of San Diego Operational Area are included in the Annex. It identifies hazard risks for resident populations within each jurisdiction, evacuation procedures, 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, 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. Primary evacuation routes consist of the major interstates, highways, and prime arterials within San Diego County.

City of San Diego

The City of San Diego's Fire-Rescue Department Community Emergency Response Teams (CERTs) help local communities build an as-needed base of emergency preparedness. The CERT program brings together neighbors, team members, and co-workers within their own community, in coordination with the San Diego Fire-Rescue Department. Other agencies also offer coordinated services in the event of an emergency or evacuation, such as the City of San Diego Office of Homeland Security, the San Diego Police Department, the San Diego County Sheriff's Department, and the County of San Diego's OES.

City of Escondido

Evacuation routes and policies regarding emergency preparation are summarized in the Community Protection Element of the City of Escondido General Plan. Section B of this element provides a map of evacuation routes and strategies for minimizing the loss of life, injury, and damage to property. Policies 1.1 through 1.12 are relevant to emergency preparedness and

include the implementation of emergency exercises, the identification of potential shelters, the maintenance of a database of natural hazards, the continual update of evacuation routes, and the promotion of public awareness through the local CERT.

City of Poway

Attachment F: Evacuation Operations of the City of Poway Emergency Operations Plan details a specific list of objectives and strategies associated with the implementation of effective evacuation procedures. The objectives outlined within the plan include the expeditious removal of individuals from hazardous areas, maintaining evacuation traffic, providing transportation for disabled individuals, and the proper allocation of transportation and law enforcement resources. The Emergency Operations Plan also identifies responsible parties and outlines strategies for designating evacuation routes and temporary evacuation points.

Environmental Setting

Existing Hazardous Sites

The EDR Corridor Study within the Phase I ESA reported that there are approximately 395 hazardous materials sites located within 0.5 or one mile² of the Proposed Project. The search distances corresponding with each database are provided in Attachment 4.8-A: Phase I Environmental Site Assessment. Thirty-seven of the 395 sites were considered to be “Recognized Environmental Conditions” (RECs) and were investigated further based on the proximity to the Proposed Project; the presence of impacted soils, soil vapor, or groundwater up gradient of the Proposed Project area; and the material threat of a release in the vicinity of the Proposed Project area. Hazardous sites that were considered to be RECs in the Phase I ESA are listed in Table 4.8-1: Hazardous Materials Sites Records Review. Hazardous sites were considered to be adjacent if the boundary of the site adjoined either the proposed alignment or the roadway along which the alignment is proposed. More information on these sites is provided in Attachment 4.8-A: Phase I Environmental Site Assessment.

Information pertaining to the remainder of the sites can be found in Attachment 4.8-A: Phase I Environmental Site Assessment. No orphan sites (i.e., sites listed in various databases as being in the vicinity of the researched properties that do not have addresses designated on a map) were identified in the Proposed Project area or on adjoining properties.

The Proposed Project will be constructed across MCAS Miramar for approximately 3.2 miles, from Milepost (MP) 43.7 to MP 46.9. The base is currently active, and has been used for military exercises and training since 1917. It is suspected that military munitions and explosives of concern (e.g., unexploded ordnance [UXO]) may be present in the vicinity of the Proposed Project alignment.

² EDR utilizes the search radii specified in ASTM Standard E1527-13 when searching applicable databases or records. Depending on the database, the search distance typically ranges from 0.25 to one mile from the Proposed Project.

Table 4.8-1: Hazardous Materials Sites Records Review

Hazardous Materials Site	Type of Hazardous Materials Site³	Closest Proposed Project Component	Approximate Distance from the Closest Proposed Project Component	Affected Media	Associated Risk	Reason
Naton Tractor Incorporated	AST, LUST	MP 1.5	400 feet east	Soil potentially contaminated with gasoline	Low Risk	This site was closed in 1989 and does not pose a significant risk to the Proposed Project.
Rainbow Oaks	HIST CORTESE, LUST, SLIC, SWEEPS UST, UST	MP 1.7	200 feet south	Groundwater contaminated with petroleum hydrocarbons	Low Risk	This does not pose a significant risk to the Proposed Project because groundwater flows to the southeast, away from the Proposed Project. In addition, the case was closed in 2010.
Stewart Canyon Road and Old Highway 395	CHMIRS	MP 5.8	Within the Proposed Project area	Unknown; a diesel spill occurred as a result of a vehicle crash between two dump trucks	Low Risk	This site is not considered to pose a significant risk to the Proposed Project due to the absence of open environmental investigations or remedial action associated with the reported release.

³ Regulatory database acronyms:

- AST = Aboveground Petroleum Storage Tank Facilities
- CHMIRS = California Hazardous Material Incident Report System
- CORTESE = “Cortese” Hazardous Waste & Substances List
- EMI = Emissions Inventory Data
- FINDS = Facility Index System/Facility Registry System
- HAZNET = Facility and Manifest Data
- HIST CORTESE = Hazardous Waste & Substances Site List
- HIST UST = Historical Underground Storage Tank Facilities
- LUST = Leaking Underground Storage Tank Facilities
- Notify 65 = Proposition 65 Records
- NPDES = National Pollutant Discharge Elimination System Permits Listing
- RCRA-SQG = Resource Conservation and Recovery Act – Small Quantity Generator
- SLIC = Spills, Leaks, Investigations, and Cleanup
- SWEEPS UST = Statewide Environmental Evaluation and Planning System Underground Storage Tank
- UST = Underground Storage Tank Facilities

Hazardous Materials Site	Type of Hazardous Materials Site³	Closest Proposed Project Component	Approximate Distance from the Closest Proposed Project Component	Affected Media	Associated Risk	Reason
Mobil Station 18-034*	CHMIRS, EDR Historical Auto Station, LUST, Notify 65, RCRA-SQG, SLIC, SWEEPS UST, UST	MP 8.4	Adjacent to the east	Groundwater contaminated with petroleum hydrocarbons	Potential Risk	Groundwater is present between seven and 22 feet below ground surface (bgs) and reportedly flows to the southwest, toward the Proposed Project. Therefore, this site may pose a risk to the Proposed Project.
Champagne Texaco	EDR U.S. Historical Auto Station, HIST CORTESE, HIST UST, LUST, SWEEPS UST, UST,	MP 15.5	Adjacent to the southeast	Soil and groundwater contaminated with petroleum hydrocarbons	Low Risk	According to available documentation, groundwater reportedly flows northwest, toward the Proposed Project, and residual impacts are present in the subsurface. However, this site was closed in 2006, and groundwater was reported below the deepest extent of proposed excavation activities. Therefore, this site does not pose a significant risk to the Proposed Project.
Vacant Lot	SLIC	MP 18.3	0.1 mile northeast	Unknown; a diesel release was documented within a vacant lot	Low Risk	This site was closed in 1993 and does not pose a significant risk to the Proposed Project.
Connecticut General Life Insurance/McCleaners	SLIC	MP 22.6	Adjacent to the west	Groundwater contaminated with volatile organic carbons (VOCs)	Low Risk	According to the GeoTracker website, this site was closed in 2002. Therefore, this site does not pose a significant risk to the Proposed Project.

Hazardous Materials Site	Type of Hazardous Materials Site³	Closest Proposed Project Component	Approximate Distance from the Closest Proposed Project Component	Affected Media	Associated Risk	Reason
E-Z Auto Repair	HIST UST, LUST	MP 22.9	Adjacent to the east	Groundwater contaminated with petroleum hydrocarbons	Low Risk	Groundwater is present between 13 and 19 feet bgs and reportedly flows to the south, potentially toward the Proposed Project. However, this site was closed in 2003, and groundwater is present below the deepest extent of proposed excavation activities. Therefore, this site does not pose a significant risk to the Proposed Project.
Shell Service Station*	HAZNET, HIST UST, LUST, RCRA-SQG	MP 23.6	Adjacent to the northeast	Groundwater contaminated with petroleum hydrocarbons	Potential Risk	Although this site was closed in 2004, residual soil impacts may be present on site and groundwater (eight to 15 feet bgs) reportedly flows west-southwest, toward the Proposed Project. Therefore, this site may pose a risk to the Proposed Project.
Mobil Station 18-100	LUST, RCRA-SQG, UST	MP 23.6	Adjacent to the west	Groundwater contaminated with petroleum hydrocarbons	Low Risk	Groundwater in the vicinity of this site reportedly flows to the southwest, away from the Proposed project. Therefore, this site does not pose a significant risk to the Proposed Project.

Hazardous Materials Site	Type of Hazardous Materials Site³	Closest Proposed Project Component	Approximate Distance from the Closest Proposed Project Component	Affected Media	Associated Risk	Reason
Golden Gate Gasoline	CORTESE, LUST	MP 23.8	0.2 mile east	Groundwater contaminated with diesel and petroleum hydrocarbons	Low Risk	Based on the distance between this site and the Proposed Project, this site does not pose a significant risk to the Proposed Project.
Hoover Dry Cleaners	Historical Dry Cleaners	MP 23.8	400 feet northeast	Unknown media contaminated with tetrachloroethylene (PCE)	Low Risk	Based on the distance between this site to the Proposed Project and the absence of documentation regarding the release, this site does not pose a significant risk to the Proposed Project.
Dunn-Edwards Corporation/ 7 Day Market	HAZNET, LUST, RCRA-SQG, SLIC	MP 23.9	Adjacent to the northwest	Groundwater contaminated with petroleum hydrocarbons	Low Risk	Although groundwater impacts have not been delineated on site, groundwater flow is to the southwest, away from the Proposed Project. Therefore, this site does not pose a significant risk to the Proposed Project.
Civic Center Plaza/Mr. Terry 1-Hr Mart	Information Not Available (INA)	MP 24	Adjacent to the east	Groundwater contaminated with petroleum hydrocarbons	Low Risk	The site is closed and does not pose a significant risk to the Proposed Project. However, contaminated media may potentially be encountered during excavation activities.

Hazardous Materials Site	Type of Hazardous Materials Site³	Closest Proposed Project Component	Approximate Distance from the Closest Proposed Project Component	Affected Media	Associated Risk	Reason
North County Transit District	AST, CORTESE, LUST, NPDES, RCRA-SQG, SLIC, UST	MP 24.2	0.15 mile west	Groundwater contaminated with PCE and trichloroethylene	Low Risk	Based on the reported on-site groundwater flow to the south and the distance from this site to the Proposed Project, this site does not pose a significant risk to the Proposed Project.
Jim L. Daniels	CORTESE, LUST	MP 24.3	150 feet south	Groundwater contaminated with waste oil, motor oil, hydraulic oil, and lubricating oil	Low Risk	This site is closed and does not pose a significant risk to the Proposed Project.
U.S. Post Office Escondido Station	LUST, UST	MP 24.4	450 feet east	Groundwater contaminated by a gasoline release	Low Risk	This site is closed and does not pose a significant risk to the Proposed Project.
Thrifty Service Station*	LUST, SWEEPS UST	MP 24.6	Adjacent to the east	Groundwater contaminated with petroleum hydrocarbons	Potential Risk	Groundwater is present between five and eight feet bgs and reportedly flows to the west-northwest, toward the Proposed Project. Therefore, this site may pose a risk to the Proposed Project.

Hazardous Materials Site	Type of Hazardous Materials Site ³	Closest Proposed Project Component	Approximate Distance from the Closest Proposed Project Component	Affected Media	Associated Risk	Reason
Han's United States Petroleum and Service*	LUST, UST	MP 24.6	Adjacent to the southeast	Groundwater contaminated with petroleum hydrocarbons	Potential Risk	Groundwater is present between five and nine feet bgs and reportedly flows to the northwest, towards the Proposed Project. In addition, free phase hydrocarbon contamination (free product) is present below Centre City Parkway. Therefore, this site may pose a risk to the Proposed Project.
Budget Gas*	LUST	MP 24.6	Adjacent to the southwest	Groundwater contaminated with petroleum hydrocarbons	Potential Risk	Groundwater is present approximately 14 feet bgs and the groundwater flow direction was not reported. Therefore, potential groundwater impacts may pose a risk to the Proposed Project.
Mobil Service Station*	CORTESE, LUST, RCRA-LQG, UST	MP 24.89	Adjacent to the east	Groundwater contaminated with petroleum hydrocarbons	Potential Risk	A release of gasoline was reported on site; however, no additional information was available on GeoTracker or in the EDR Report. Therefore, potential groundwater impacts may pose a risk to the Proposed Project.

Hazardous Materials Site	Type of Hazardous Materials Site³	Closest Proposed Project Component	Approximate Distance from the Closest Proposed Project Component	Affected Media	Associated Risk	Reason
7-Eleven*	LUST, SLIC	MP 24.9	Adjacent to the west	Groundwater contaminated with petroleum hydrocarbons	Potential Risk	Groundwater is present between four and 10 feet bgs and reportedly flows to the north, toward the Proposed Project. Therefore, potential on-site groundwater impacts may pose a risk to the Proposed Project.
G&S Gasoline and Minimart*	LUST, SLIC, UST	MP 24.9	Adjacent to the south	Groundwater contaminated with petroleum hydrocarbons	Potential Risk	Groundwater is present between six and 10 feet bgs and reportedly flows to the north, toward the Proposed Project. Therefore, potential on-site groundwater impacts may pose a risk to the Proposed Project.
Schniepp Property	LUST	MP 25.3	0.15 mile northeast	Groundwater contaminated with petroleum hydrocarbons	Low Risk	Based on the distance from this site to the Proposed Project, this site does not pose a significant risk to the Proposed Project.
Gas and Save	LUST, RCRA-SQG, UST	MP 25.6	Adjacent to the northeast	Groundwater contaminated with gasoline	Low Risk	This site is closed and does not pose a significant risk to the Proposed Project.
Camp Escondido	EnviroStor	MP 25.6	0.5 mile southwest	Unknown media contaminated with unexploded ordnance and munitions and explosives of concern	Low Risk	Based on the distance from this site to the Proposed Project, this site does not pose a significant risk to the Proposed Project.

Hazardous Materials Site	Type of Hazardous Materials Site³	Closest Proposed Project Component	Approximate Distance from the Closest Proposed Project Component	Affected Media	Associated Risk	Reason
Chevron 9-3920*	CORTESE, LUST	MP 25.6	Adjacent to the southeast	Groundwater contaminated with petroleum hydrocarbons	Potential Risk	Groundwater is present between 16 and 20 feet bgs and reportedly flows to the south, toward the Proposed Project. Therefore, potential on-site groundwater impacts may pose a risk to the Proposed Project.
Shell Oil Products Company	HIST CORTESE, LUST, RCRA-SQG, UST	MP 33	Adjacent to the west	Groundwater contaminated with petroleum hydrocarbons	Low Risk	Groundwater is present between 13 and 20 feet bgs and reportedly flows to the west, away from the Proposed Project. Therefore, this site does not pose a significant risk to the Proposed Project.
Rancho Bernardo Texaco*	CORTESE, HAZNET, LUST, RCRA-SQG, SLIC, UST	MP 33	Adjacent to the southeast	Groundwater contaminated with petroleum hydrocarbons	Potential Risk	Groundwater is present between eight and 13 feet bgs and reportedly flows to the west, toward the Proposed Project. Therefore, potential on-site groundwater impacts may pose a risk to the Proposed Project.
7-Eleven Food Store #13624	CORTESE, EMI, HAZNET, LUST, SLIC	MP 37.1	Adjacent to the west	Groundwater contaminated with methyl tert-butyl ether and tert-Butyl alcohol	Low Risk	Groundwater is present between 19 and 24 feet bgs and reportedly flows to the southwest, away from the Proposed Project. Therefore, this site does not pose a significant risk to the Proposed Project.

Hazardous Materials Site	Type of Hazardous Materials Site³	Closest Proposed Project Component	Approximate Distance from the Closest Proposed Project Component	Affected Media	Associated Risk	Reason
Poway Econo Lube	AST, HAZNET, LUST, UST	MP 37.3	Adjacent to the northwest	Groundwater contaminated with petroleum hydrocarbons	Potential Risk	Groundwater is present between 14 and 20 feet bgs and reportedly flows to the south, away from the Proposed Project. Although this site was initially eligible for closure in April 2014, free product was detected in on-site groundwater monitor wells. Based on the proximity of this site to the Proposed Project and the presence of free product in groundwater, this site may pose a risk to the Proposed Project.
William P. Racicot DDS	SLIC	MP 37.7	Adjacent to the southeast	Groundwater contaminated with petroleum hydrocarbons	Low Risk	This site is closed and does not pose a significant risk to the Proposed Project.
Union Oil Service Station #488	HAZNET, HIST UST, LUST	MP 37.8	Adjacent to the northwest	Groundwater contaminated with petroleum hydrocarbons	Low Risk	Groundwater is present between 10 and 15 feet bgs and reportedly flows to the southwest, away from the Proposed Project. Residual contaminants are present in groundwater; however, this site is closed and groundwater does not flow toward the Proposed Project. Therefore, this site does not pose a significant risk to the Proposed Project.

Hazardous Materials Site	Type of Hazardous Materials Site ³	Closest Proposed Project Component	Approximate Distance from the Closest Proposed Project Component	Affected Media	Associated Risk	Reason
Chevron 94955	EMI, HAZNET, LUST, RCRA-SQG, UST	MP 37.8	Adjacent to the northeast	Groundwater contaminated with petroleum hydrocarbons	Potential Risk	Groundwater is present between 10 and 17 feet bgs and reportedly flows to the west, toward the Proposed Project. Although this site was closed in 2013, residual contaminants are present in on-site groundwater. Based on proximity of this site to the Proposed Project and the reported groundwater flow direction, this site may pose a risk to the Proposed Project.
Shell Service Station/ Callaway Oil Incorporated*	CORTESE, EMI, HIST UST, LUST, RCRA-SQG, UST	MP 37.8	Adjacent to the southwest	Groundwater contaminated with petroleum hydrocarbon	Potential Risk	Groundwater is present between seven and 17 feet bgs and reportedly flows to the west and north, potentially toward the Proposed Project. Although this site was closed in 2013, residual contaminants may be present in soils and groundwater in the vicinity of the site. Based on the proximity of this site to the Proposed Project and the reported groundwater flow direction, this site may pose a risk to the Proposed Project.

Hazardous Materials Site	Type of Hazardous Materials Site ³	Closest Proposed Project Component	Approximate Distance from the Closest Proposed Project Component	Affected Media	Associated Risk	Reason
Circle K*	FINDS, LUST, RCRA-SQG, SLIC, UST	MP 37.9	Adjacent to the southwest	Groundwater contaminated with petroleum hydrocarbons	Potential Risk	Groundwater is present between seven and 13 feet bgs and reportedly flows in variable directions. This site is currently in remediation and may pose a risk to the Proposed Project.
Sycamore Canyon Facility, Raytheon Systems Company	EMI, SLIC	MP 40.2	Within the Proposed Project area	INA	Low Risk	This site was closed in 2013 and does not pose a significant risk to the Proposed Project.

Source: Haley & Aldrich 2014

Note: * = Based on the reported groundwater depth and flow direction at this site, shallow subsurface contaminants may be encountered during excavation activities associated with the Proposed Project.

Contaminated Soil and Groundwater

A total of 37 hazardous materials sites were identified as RECs in the Phase I ESA and are listed in Table 4.8-1: Hazardous Materials Sites Records Review. Thirty-one sites in the vicinity of the Proposed Project reported current and/or historical groundwater impacts. Fourteen of these 31 sites pose a potential risk to the Proposed Project due to the reported groundwater depth and/or flow direction at each site. Justification for the associated risk (i.e., low risk or no risk) of each hazardous materials site is provided in Table 4.8-1: Hazardous Materials Sites Records Review. No other soil or groundwater contamination was identified at any of the Proposed Project component locations.

Fire Hazards

The majority of the Proposed Project (approximately 27.9 miles) is located within the CAL FIRE Fire and Resource Assessment Program's (FRAP's) Extreme Threat to People class, and approximately 11 miles of the Proposed Project are located within the Very High Threat to People class. Approximately 3.3 and 4.7 miles of the proposed alignment are located within the High Threat to People and Moderate Threat to People classes, respectively.

San Diego County has an extremely fire-prone landscape; the county is dominated by a Mediterranean-type climate (i.e., mild, wet winters and hot, dry summers), which supports dense drought-adapted shrub lands that are highly flammable. Winds originating from the Great Basin, locally known as the Santa Ana winds, create extreme fire weather conditions characterized by low humidity, sustained high-speed winds, and strong gusts. The Santa Ana winds create extremely dangerous fire conditions and have been the primary driver of most of California's catastrophic wildfires. Wildland fire threat classes in the vicinity of the Proposed Project are depicted in Attachment 4.8-C: Wildland Fire Threat Map.

Schools

A total of 39 public schools, private schools, preschools, and/or day care centers are located within 0.25 mile of the Proposed Project. As presented in Section 4.14, Public Services, the following 10 public schools are located directly adjacent to roadways along which the Proposed Project will be constructed:

- Pomerado Elementary School,
- Escondido High School,
- St. Michael's School,
- Abraxas Continuation High School,
- Thurgood Marshall Middle School,
- Bear Valley Middle School,
- Meadowbrook Middle School
- L.R. Green Elementary School,
- Thurgood Marshall Middle School, and
- San Pasqual High School

The following nine preschools, day care centers, and/or private educational facilities are located directly adjacent to roadways along which the Proposed Project will be constructed:

- Canyon Ridge Christian Prep,
- St. Bartholomew's Preschool,
- Rancho Bernardo Community Presbyterian Church (RBCPC) Preschool
- Kiddies Corner Daycare and Preschool
- Discovery Isle Daycare and Preschool
- Chabad Hebrew Academy
- Legacy Montessori School
- Oak Knoll Montessori, and
- The Classical Academy.

A total of 23 public and/or private schools, preschools, and day care centers were identified within 500 feet of the Proposed Project. All approximate distances from the Proposed Project were measured from the school property boundary to the Proposed Project temporary construction easement. The schools identified within 0.25 mile of the Proposed Project are listed in Table 4.8-2: Schools within 0.25 Mile of the Proposed Project.

According to Section 955.5 of the California Public Utilities Code, natural gas corporations are required to provide notification to schools or hospitals within 500 feet of proposed nonemergency construction or excavation of gas pipeline. The public schools, private schools, preschools, and day care centers identified within 500 feet of the Proposed Project are identified in Table 4.8-2: Schools within 0.25 Mile of the Proposed Project.

Airports

MCAS Miramar is located approximately 1.25 miles west of MP 44.9. FAA notice requirements and obstruction standards within the MCAS Airport Land Use Compatibility Plan (ALUCP) are regulated by the standards set forth by Part 77, Subparts B and C of the Federal Aviation Regulations. The Proposed Project is located within 10,000 feet of the nearest runway on MCAS Miramar. The next closest airport is Montgomery Field, which is located 3.25 miles southwest of the southern terminus of the alignment.

4.8.3 Impacts

The following subsections describe the criteria of significance used to assess potential impacts from hazards and hazardous materials that may result from implementation of the Proposed Project, and examine those potential impacts.

Table 4.8-2: Schools within 0.25 Mile of the Proposed Project

School	Jurisdiction	Closest Proposed Project MP	Approximate Distance to Closest Proposed Project MP
Mustard Seed School	County of San Diego	2.3	Within 500 feet
Canyon Ridge Christian Prep	County of San Diego	2.4	Within 500 feet
Escondido High School	City of Escondido	22.5	Within 500 feet
Toddler Town	City of Escondido	22.7	Within 500 feet
Lincoln Elementary School	City of Escondido	23.2	0.23 mile
Kids Galore	City of Escondido	23.5	0.19 mile
Los Ninos Head Start	City of Escondido	24.7	0.20 mile
Grace Lutheran School/Preschool	City of Escondido	25.2	Within 500 feet
Felicita Elementary School	City of Escondido	25.2	0.19 mile
Infusion Church Preschool	City of Escondido	25.6	0.23 mile
North County Community Services Preschool	City of Escondido	25.7	0.16 mile
Montessori Children's School	City of Escondido	25.8	Within 500 feet
Juniper Elementary School	City of Escondido	26.0	Within 500 feet
Westminster Christian Preschool	City of Escondido	26.1	0.21 mile
Bear Valley Middle School	City of Escondido	28.0	Within 500 feet
L.R. Green Elementary School	City of Escondido	28.0	Within 500 feet
The Classical Academy	City of Escondido	28.1	Within 500 feet
San Pasqual High School	City of Escondido	28.6	Within 500 feet
RBCPC Preschool	City of San Diego	32.9	Within 500 feet
St. Bartholomew's Preschool	City of Poway	33.7	Within 500 feet
Pomerado Christian Preschool	City of Poway	34.0	Within 500 feet
Bernardo Heights Middle School	City of San Diego	34.5	0.25 mile
Rancho Bernardo High School	City of San Diego	34.7	0.25 mile
Country Montessori School	City of San Diego	34.7	Within 500 feet
Poway Hilltop Preschool	City of Poway	34.8	0.19 mile

School	Jurisdiction	Closest Proposed Project MP	Approximate Distance to Closest Proposed Project MP
St. Michael's School	City of Poway	34.8	Within 500 feet
Oak Knoll Montessori	City of Poway	35.2	Within 500 feet
Discovery Isle Child Development Center	City of Poway	35.8	0.16 mile
Abraxas Continuation High School	City of Poway	36.2	Within 500 feet
Meadowbrook Middle School	City of Poway	36.9	Within 500 feet
Legacy Montessori School	City of Poway	37.2	0.10 mile
Pomerado Elementary School	City of Poway	37.3	Within 500 feet
Kiddies Korner Daycare and Preschool	City of Poway	37.9	Within 500 feet
Discovery Isle Child Development Center	City of Poway	39.2	Within 500 feet
Smartstart Children's Academy	City of San Diego	41.4	0.23 mile
Chauncy I. Jerabek Elementary School	City of San Diego	41.9	0.18 mile
Chabad Hebrew Academy	City of San Diego	42.2	0.21 mile
Alliant International University	City of San Diego	42.8	0.25 mile
Thurgood Marshall Middle School	City of San Diego	43.3	Within 500 feet

Source: San Diego Geographic Information Source (SanGIS) 2012; Google 2014.

Significance Criteria

Standards of significance were derived from Appendix G of the California Environmental Quality Act Guidelines. Impacts to hazards and hazardous materials would be considered significant if the Proposed Project:

- Creates a hazard to public health or the environment by the routine transport, use, or disposal of hazardous materials
- Creates a hazard to the public or the environment by reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment
- Emits hazardous emissions or handles hazardous materials within 0.25 mile of a school
- Is 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, creates a hazard to the public or the environment
- Is located within two miles of a public or private airport and results in a safety hazard for people residing or working in the Proposed Project area
- Impairs implementation of, or physically interferes with, an adopted emergency response or evacuation plan
- Exposes people or structures to a risk of loss, injury, or death related to wildland fires

Question 4.8a – Hazardous Material Transport, Use, or Disposal

Construction – Less-than-Significant Impact

Construction of the Proposed Project will require the use of fuel and lubricants inside vehicles and equipment. Use of these hazardous materials during construction may pose 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 spills or other unauthorized releases during Proposed Project activities, such as ground clearing, construction of new structures, excavation activities associated with pipeline and mainline valve (MLV) installation, and the installation of horizontal borings. Other potential impacts involving the use of hazardous materials during construction are associated with temporary storage sites, transportation to work areas, and refueling and servicing of equipment. A general listing of types of chemicals anticipated to be used during construction is provided in Table 4.8-3: Hazardous Materials Typically Used During Construction.

Table 4.8-3: Hazardous Materials Typically Used During Construction

Hazardous Materials	
ABC fire extinguisher	Gasoline treatment
Acetylene gas	Hot stick cleaner (cloth treated with polydimethylsiloxane)
Air tool oil	Hydraulic fluid
Ammonium hydroxide	Insecticide (1,1,1-trichloroethene)
Antifreeze (ethylene glycol)	Insulating oil (inhibited, non-polychlorinated biphenyl)
Automatic transmission fluid	Lubricating grease
Battery acid (in vehicles)	Mastic coating
Bottled oxygen	Methyl alcohol
Brake fluid	Motor oils
Canned spray paint	Paint thinner
Chain lubricant (contains methylene chloride)	Propane
Connector grease (penotox)	Puncture seal tire inflator
Contact Cleaner 2000 (precision aerosol cleaner)	Safety fuses
Diesel de-icer	Starter fluid
Diesel fuel	Two-cycle oil (contains distillates and hydro-treated heavy paraffinic)
Diesel fuel additive	WD-40
Eyeglass cleaner (contains methylene chloride)	ZEP (safety solvent)
Gasoline	ZIP (1,1,1-trichloroethane)

Use of hazardous materials within the right-of-way (ROW) will be limited to fuel for construction equipment and vehicles, lubricants for tools, and similar substances, as described and listed in Table 4.8-3: Hazardous Materials Typically Used During Construction. No storage or use of large quantities of any of these materials will be required within the Proposed Project ROW. Due to the limited amount of these materials that will be required, impacts associated with a large release that could affect the local environment are not anticipated. Although fuel trucks will be utilized on site, a release originating from a fuel tank is not likely to occur. The Applicants' construction crews will keep a spill kit at each work area for use in the event of a spill, in accordance with SDG&E's Water Quality Construction Best Management Practices (BMP) Manual.

As described in Section 4.8.4 Applicants-Proposed Measures, the Applicants will implement APM-HAZ-01 and APM-HAZ-02, which include the preparation of a Hazardous Materials and Waste Management Plan (HMWMP) and Health and Safety Plan (HSP), respectively. The HMWMP will outline the proper storage, use, transportation, waste minimization, and disposal of hazardous materials associated with the Proposed Project. The HSP will include preventative measures to ensure the safety of Proposed Project personnel, outline procedures for incident response and reporting, and provide information on the usage and location of safety equipment. In addition, the Applicants will implement APM-HAZ-03 to ensure that Proposed Project personnel receive adequate training on applicable APMs and BMPs. Therefore, impacts resulting from the transport, use, and disposal of hazardous materials will result in a less-than-significant impact.

Construction of the Proposed Project will result in the generation of various waste materials that will require recycling and/or disposal. Waste items and materials will be collected by construction crews and stored in roll-off boxes or other similar containers at the staging areas. All waste materials that are not recycled will be characterized, profiled, managed, and properly disposed of in accordance with all federal, state, and local laws and regulations.

Non-hazardous waste will be transported to an appropriately licensed local waste management facility, as described in Section 4.17 Utilities and Service Systems. Hazardous materials will be disposed of at facilities that are permitted to accept such materials, in accordance with all applicable federal, state, and local laws and regulations. The Clean Harbors Class 1 Landfill in Buttonwillow, California and the Waste Management Kettleman Hills Facility located in Kettleman Hills, California are permitted to handle hazardous waste. The Soil Safe – Adelanto soil recycling facility located in Adelanto, California is permitted to accept and recycle non-hazardous hydrocarbon contaminated soils. The nearest Class III landfills to the Proposed Project alignment are the Sycamore Landfill, Miramar Landfill, and Otay Landfill, which all accept construction, demolition, and non-hazardous waste.

If contaminated soil or groundwater is unexpectedly encountered during excavation activities, work will be stopped and the impacted materials will be sampled in place and analyzed to determine appropriate disposal or treatment options. If impacted materials are identified, soils will be properly stockpiled or placed in roll-off bins for characterization and subsequent disposal. Monitoring and sampling activities will be conducted by an experienced environmental professional with 40-hour Hazardous Waste and Emergency Operations (HAZWOPER) training. Based on the results of the analysis and the procedures outlined in the HMWMP, the Applicants

will decide whether to remove or avoid the contaminated soil and/or groundwater. As a result, impacts from uncovering unknown contaminated soil will be less than significant.

APM-HAZ-03 will also be implemented to ensure that pre-construction training on BMPs and APMs (including the proper handling and disposal of hazardous materials) is administered to Proposed Project personnel. Therefore, any potential impacts will be reduced to a less-than-significant level with the implementation of the proposed APMs.

Operation and Maintenance – Less-than-Significant Impact

Operation and maintenance activities will be conducted in accordance with the Applicants' standard procedures and will include routine maintenance and inspection of the pipeline, MLVs, and pressure-limiting and metering equipment; emergency planning; on-call response; and incident reporting. Similar to construction of the Proposed Project, the hazardous materials listed in Table 4.8-3: Hazardous Materials Typically Used During Construction may be used during operation and maintenance activities. However, the use of these chemicals will be temporary and all chemicals will be properly contained in vehicles and equipment.

The operation of natural gas pipeline constitutes the transportation of a hazardous material; however, the natural gas will be contained within the pipeline during normal operation and maintenance and in accordance with federal pipeline safety regulations that relate specifically to the transport of natural gas, including Title 49, Parts 190 through 192 of the CFR. Potential impacts could result from an accidental release of natural gas; however, given the wall thickness of the pipe and the inspection and test standards required during construction, the potential for a rupture or leak is very low. Potential impacts are further reduced by enhanced safety features, including the intrusion detection and leak monitoring system, which will alert the Applicants of third-party excavation near the pipeline, and will also alert the excavator through visual clues (i.e., 48-inch warning mesh/tape) and automatic shut-off valves.

The potential individual and societal risks⁴ associated with an inadvertent release were qualitatively and quantitatively analyzed by ENERCON. The analysis used historical data to identify the potential events that could occur and determined the probability of each potential event to occur during operation of the Proposed Project. Standard modeling software was used to calculate the consequences of each potential event along the alignment. The results of the analysis have been included as Attachment 4.8-B: Safety Study. The results indicate that the individual risk associated with an inadvertent release of natural gas during operation of the Proposed Project is 4.52 times 10^{-7} fatalities per year (i.e., one in 2,212,389 years), which is lower than the risk significance criteria⁵. Impacts resulting from an inadvertent release and the conclusions of Attachment 4.8-B: Safety Study are further discussed in the response to Question 4.8b for Operation and Maintenance. Given the design of the pipeline and the results of the

⁴ Individual risk is the probability that a single person will be impacted by an accidental release event; the societal risk is the probability that a specified number of individuals (i.e., the area with the highest population density) will be affected by a given event.

⁵ The significance criteria used in Attachment 4.8-B: Safety Study is one times 10^{-6} fatalities per year for individual risk and a ratio of less than one for societal risk.

Safety Study, potential impacts resulting from the transport and use of hazardous materials during operation of the Proposed Project will be less than significant.

Question 4.8b – Reasonably Foreseeable Upset and Accident Conditions

Construction – Less-than-Significant Impact

As discussed in the response to Question 4.8a – Hazardous Material Transport, Use, or Disposal, a potential exists for hazardous materials used during construction to be inadvertently released through spills or leaks. Implementation of APM-HAZ-03, which includes training and compliance with federal and state regulations concerning hazardous materials handling, will reduce the potential for a spill and any associated impacts. As a result, potential impacts will be less than significant.

Operation and Maintenance – Less-than-Significant Impact

The operation of natural gas pipeline involves the risk of fire or explosion resulting from an accidental release and combustion of natural gas. The typical causes of pipeline rupture include pipeline corrosion; material or welding defects; equipment failure; third-party digging activities in the vicinity of the pipeline; and ground movement associated with fault rupture, liquefaction, and/or landslides. However, while geological hazards exist, the likelihood of a fault rupture, liquefaction, and/or landslides in the vicinity of the Proposed Project is low. As described in Section 4.6 Geology, Soils, and Seismicity, these hazards are not anticipated to affect the pipeline given the location, general characteristics of modern pipelines, and the specific design of the Proposed Project.

Attachment 4.8-B: Safety Study presents a quantitative analysis of the potential individual and societal risks associated with accidental release during operation of the Proposed Project. As previously discussed, the analysis concluded that the individual risk level associated with the Proposed Project is 4.52 times 10^{-7} fatalities per year (i.e., one in 2,212,389 years) and the societal risk ratio is less than one. As discussed in Attachment 4.8-B: Safety Study, the generally accepted significance criteria for individual risk is one times 10^{-6} fatalities per year and for societal risk is a ratio of less than one; therefore, the risk of potential accidental release events during operation of the Proposed Project is very low.

As discussed in Attachment 4.8-B: Safety Study, the Proposed Project includes design features that use the best available technology and practices to reduce the frequency of inadvertent releases and associated risks. The pipeline has been designed with cathodic protection and test leads to monitor and prevent corrosion. During construction, all welds will be inspected by pipeline inspectors and tested using x-ray to provide a digital image of the internal composition of pipeline joint welds. The pipe and field joints will be coated with a protective epoxy coating and all new pipeline segments will be inspected to locate and repair faults or voids in their coating prior to being lowered into the trench. As described in Chapter 3 – Project Description, several safety features have been included in the design of the project to prevent third-party damage to the pipeline, including heavy-wall pipe, and intrusion and leak detection monitoring systems, and increased depth of cover when compared to DOT requirements. In addition, mainline valves will be installed at least every five miles along the pipeline to shut down the

flow of gas during operation and maintenance activities or emergency situations, thus meeting Class 4 location criteria.

As described in Chapter 3 – Project Description, inspections of the pipeline and associated equipment will generally occur on at least an annual basis, with some surveys and inspections occurring much more frequently. Inspections of aboveground equipment for atmospheric corrosion will occur once every three years, and pigging or in-line inspections and exposures to verify pigging results will occur once every seven years. These activities will provide for prompt and effective responses to significant, irregular conditions detected along the pipeline. Due to the Proposed Project’s design features and the results of Attachment 4.8-B: Safety Study, potential impacts resulting from a reasonably foreseeable upset or accident conditions will be less than significant.

Question 4.8c – Hazardous Substances in Close Proximity to Schools

Construction – Less-than-Significant Impact

As previously described, 39 public schools, private schools, preschools, and day care centers are located within 0.25 mile of the Proposed Project. In addition, 19 educational facilities and/or day care centers are located directly adjacent to roadways along which the Proposed Project will be constructed. As previously discussed, Section 955.5 of the California Public Utilities Code requires natural gas corporations to provide notification to schools or hospitals within 500 feet of proposed nonemergency construction or excavation of a gas pipeline. Therefore, the Applicants will implement APM-HAZ-04, which will ensure that schools within 500 feet of construction activities are notified according to the regulations within Section 955.5 of the California Public Utilities Code. In addition, as described in Section 4.14 Public Services, APM-PS-01 will be implemented to facilitate communication with applicable school districts no less than 60 days prior to beginning construction.

If hazardous materials are released or encountered during construction, they will be contained and managed through the implementation of applicable BMPs and APMs, as described in Section 4.8.4 Applicants-Proposed Measures. In addition, the Applicants will comply with local air quality emissions regulations to the extent feasible, as discussed in Section 4.3 Air Quality and Section 4.7 Greenhouse Gas Emissions. Due to the temporary and short-term nature of construction and the relatively small quantity of hazardous materials to be used during construction, impacts to schools from potential hazardous substance releases or emissions will be less than significant.

Operation and Maintenance – Less-than-Significant Impact

Routine maintenance activities will typically occur at the aboveground facilities and will not generally involve the use of hazardous materials. If a repair is required, it will be performed in a similar manner as was conducted during the construction phase of the Proposed Project. As previously discussed in the response to Question 4.8b, the transportation of a natural gas via pipeline involves the risk of fire or explosion resulting from an accidental release and combustion of natural gas. Potential hazards are similar to those for existing pipelines that traverse in close proximity to schools, particularly in urban areas, however, the probability of an incident is likely lower given the design of the pipeline and safety enhancements of the Proposed

Project. As discussed in Question 4.8b, Attachment 4.8-B: Safety Study concluded that the potential individual and societal risks associated with potential accidental release events during operation of the Proposed Project are low. The previously discussed Proposed Project design features, such as wall thickness and pipe welding practices, meet or exceed the applicable regulations and safety standards. In addition, regular pipeline inspections and monitoring systems will provide early warning of any threats to the pipeline integrity, further reducing the potential for an accidental release to occur.

As previously stated, natural gas will be transported in close proximity to several schools; however, the natural gas is contained within a closed, heavy-walled system that will not involve any transportation or handling by humans. Likewise, the system will not routinely emit a hazardous material, and any infrequent planned blow-off of natural gas will be controlled and coordinated with nearby schools. Therefore, impacts to schools from potential hazardous substance releases or emissions will be less than significant.

Question 4.8d – Existing Hazardous Materials Sites

Construction – Less-than-Significant Impact

As described previously in Table 4.8-1: Hazardous Materials Sites Records Review, 14 out of 37 hazardous materials sites may pose a potential risk to human health and the environment during construction of the Proposed Project. Groundwater contaminants (e.g., petroleum hydrocarbons and VOCs) are present beneath 11 of these hazardous sites at depths ranging from four to 22 feet bgs. In addition, groundwater in the vicinity of each site reportedly migrates toward the Proposed Project. Construction of the Proposed Project includes the installation of trenches that will be seven to eight feet deep and five to six feet wide. Therefore, contaminated groundwater may be encountered during construction activities at these sites. These 11 contaminated sites are identified in Table 4.8-1: Hazardous Materials Sites Records Review.

Three out of the 14 upgradient hazardous sites—Chevron 9-3920, Poway Econo Lube, and Chevron 94955—reported on-site groundwater impacts in the vicinity of the Proposed Project. However, the depth to water at each site was reported to be deeper than the maximum excavation depth required for pipeline installation. Therefore, contaminated groundwater is not anticipated to be encountered at these three sites.

The remaining 23 RECs identified in the Phase I ESA are not considered to pose a significant risk to the Proposed Project based on the following:

- the site has achieved regulatory closure;
- there is a significant distance between the site and the Proposed Project;
- the depth to groundwater was reported at levels below the deepest extent of proposed excavation activities; and/or
- the potentially contaminated groundwater plume on site is not hydrologically connected to the Proposed Project.

While these 23 sites are not anticipated to pose a significant threat to human health or the environment during construction of the Proposed Project, residual contaminated groundwater could potentially be encountered during excavation activities. Because shallow groundwater

may be present at several hazardous sites during excavation activities, APM-HAZ-01, APM-HAZ-02, and APM-HAZ-03 will be implemented to ensure that contaminated soil or groundwater does not pose a risk to human health or the environment. The HMWMP outlined in APM-HAZ-01 includes procedures on identifying, dewatering, treating, and removing contaminated media encountered during construction activities. The HSP described in APM-HAZ-02 will include procedures for injury prevention and emergency response. The implementation of APM-HAZ-03 will ensure that Proposed Project personnel are familiar with the procedures outlined in the APMs.

As described previously in Section 4.8.2 Existing Conditions, the Proposed Project will be constructed within MCAS Miramar from near MP 43.7 to the southern terminus at the Line 2010 Cross-Tie facility. Within MCAS Miramar, the Proposed Project travels adjacent to the San Diego County Water Authority's (SDCWA's) Aqueducts #1 and #2 and a maintained firebreak. The area where the Proposed Project will be constructed has been previously disturbed during construction of the SDCWA aqueduct lines, and additional surface disturbance in the area has occurred during maintenance of the firebreak. However, as result of past military trainings and exercises conducted within MCAS Miramar, it is suspected that UXO may be present along this section of the Proposed Project alignment. The Proposed Project has the potential to disturb UXO during construction, which could cause the UXO to detonate and injure construction personnel in its vicinity. As a result, APM-HAZ-05 will be implemented to reduce the risk of encountering a UXO during construction activities. APM-HAZ-05 requires the Applicants to coordinate with MCAS Miramar personnel, including the MCAS Miramar Explosive Ordnance Disposal Unit, prior to construction to determine proper procedures for the avoidance of UXO during construction, as well as the procedures for notification, safety, and disposal of any potential UXO that are encountered during construction. APM-HAZ-05 also requires a qualified UXO technician to sweep construction areas for UXO prior to initial ground disturbance and to monitor excavation activities in areas where UXO may be present.

The proposed APMs are described further in Section 4.8.4 Applicants-Proposed Measures. Based on the implementation of APM-HAZ-01, APM-HAZ-02, APM-HAZ-03, and APM-HAZ-05, potential impacts resulting from existing hazardous materials sites will be less than significant.

Operation and Maintenance – Less-than-Significant Impact

Typical operation and maintenance activities will not involve ground disturbance. If excavation activities are deemed necessary in the vicinity of potentially contaminated soils or groundwater, these activities will be performed in a similar manner as for construction. While the potential for uncovering existing hazardous materials sites during operation and maintenance of the Proposed Project is unlikely since work will occur in areas that were excavated during construction, potential hazardous waste will be properly identified, treated, and disposed of in accordance with all federal, state and local laws and regulations. Therefore, impacts from existing hazardous material sites, if they were to be encountered, will be less than significant.

Question 4.8e – Public Airport Hazards – No Impact

MCAS Miramar is located approximately 1.25 miles west of the Proposed Project. The Proposed Project will be designed and constructed in accordance with the noise, safety, airspace

protection, and overflight policies and standards described in the MCAS Miramar ALUCP, which was designed to prevent new structures from becoming hazards to air navigation. According to the MCAS Miramar ALUCP, and based on the distance from the Proposed Project to MCAS Miramar, the height of construction activities associated with the Proposed Project are subsequently required to be conducted within a 100-to-one approach/departure surface from the nearest runway. However, based on the distance of the Proposed Project to the nearest runway, the equipment and structures associated with the Proposed Project do not exceed the federal height restrictions designated by the 100-to-one vertical slope regulation. The tallest aboveground facility associated with the Proposed Project will be approximately six feet tall. Therefore, the Proposed Project will not create an obstruction to navigable air space, and a notification to the FAA is not required. As a result, no impacts to public airports will occur.

Question 4.8f – Private Airstrip Hazards – *No Impact*

No components of the Proposed Project are located within two miles of a private airstrip. Therefore, no impacts to private airstrips will occur.

Question 4.8g – Emergency Evacuation and Response Plan Interference

Construction – Less-than-Significant Impact

The proposed alignment crosses over Interstate (I-) 15 twice along the northernmost 20 miles of the Proposed Project. The Annex considers major interstates, highways, and prime arterials to be primary evacuation routes. As described in Section 4.16 Transportation and Traffic, construction activities occurring within and across potential evacuation routes will be conducted in accordance with the Traffic Management Plan outlined in APM-TRA-01. In addition, APM-TRA-05 will be implemented to facilitate coordination with emergency service providers and ensure that evacuation routes are not obstructed in the event of an emergency. Emergency service providers will be notified 48 hours prior to any road or lane closures that could potentially disrupt traffic. Therefore, with the implementation of the proposed APMs, impacts associated with emergency evacuation procedures or response plans will be less than significant.

Operation and Maintenance – Less-than-Significant Impact

Operation and maintenance will generally not occur in roadways; however, operation and maintenance associated with the Proposed Project may infrequently require temporary road closures to facilitate access to the Proposed Project. With the exception of providing locate-and-mark services, operation and maintenance activities will typically last a few days to a week. As described in Section 4.16, Transportation and Traffic, operation and maintenance work will generally require an average of approximately 1.5 vehicle trips per day and will not substantially increase existing traffic levels along identified roadways. In addition, the Applicants will coordinate with local emergency responders to ensure that potential road closures, if required, will not affect traffic congestion levels and evacuation routes. Therefore, operation and maintenance activities will result in a less-than-significant impact to emergency evacuation and response plans.

Question 4.8h – Wildland Fires

Construction – Less-than-Significant Impact

As discussed previously, the majority of the Proposed Project is located within the CAL FIRE FRAP’s Extreme Threat to People and Very High Threat to People classes. Construction activities could result in a fire due to the increased presence of vehicles, equipment, and human activity in areas of elevated fire hazard severity. In particular, heat or sparks from construction vehicles or equipment have the potential to ignite dry vegetation.

The Applicants will assess work areas for wildland fire risk and reduce the number of hazards inside and around the perimeter of each work area. Vehicles and equipment will not be staged or parked on vegetation. The ROWs will be evaluated and cleared of vegetation according to environmental direction. Vegetation identified as a fire hazard will either be cleared and removed or chipped and spread on site. Cleared vegetation will be disposed of in accordance with instructions from applicable jurisdictional agencies and/or landowners. In addition, the Applicants will implement their existing Operations and Maintenance Wildland Fire Prevention Plan, which is provided in Attachment 4.8-D: SDG&E Operations and Maintenance Wildland Fire Prevention Plan. This plan includes requirements for carrying emergency fire suppression equipment, conducting “tailboard meetings” that cover fire safety discussions, procedural requirements for construction within fire threat zones, restrictions on smoking and idling vehicles, and restrictions during red flag warnings. As a result of implementing the practices and plans described in this section, potential impacts from wildland fires will be less than significant.

Operation and Maintenance – Less-than-Significant Impact

The Proposed Project may pose a fire hazard if vegetation or other obstructions are ignited by vehicles or equipment utilized during operation and maintenance activities. However, the Applicants will follow standard fire prevention practices and conduct a majority of the operation and maintenance activities along existing roads. The potential risk of fire resulting from an accidental release of natural gas during pipeline transmission is discussed in the response to Question 4.6b. As previously described, the Applicants will also implement their existing Operations and Maintenance Wildland Fire Prevention Plan, provided in Attachment 4.8-D: SDG&E Operations and Maintenance Wildland Fire Prevention Plan, during operation and maintenance activities. Based on the implementation of the practices and plans described in this section, operation and maintenance of the Proposed Project will result in a less-than-significant impact to the risk of loss, injury, or death involving wildland fires.

4.8.4 Applicants-Proposed Measures

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

- **APM-HAZ-01:** The Applicants will propose a Proposed Project-specific Hazardous Materials and Waste Management Program for the construction phase of the Proposed Project to ensure compliance with all applicable federal, state, and local regulations. The Hazardous Materials and Waste Management Program will provide a list of the hazardous materials that will be present on site during construction and will include information regarding their storage, use, transportation, and disposal. The plan will also include a list of spill response materials, the location of these materials at the Proposed

Project site during construction, and a list of fire-suppression devices. In addition, the Hazardous Materials and Waste Management Program will outline procedures for the identification and avoidance of contaminated materials, the secondary containment of on-site hazardous materials, spill response measures, and waste minimization during construction. Because potentially contaminated groundwater may be present during excavation activities, the Hazardous Materials and Waste Management Program will include waste-specific procedures for identifying, dewatering, treating, and removing contaminated media encountered during construction activities.

- **APM-HAZ-02:** A Health and Safety Plan will be prepared and implemented during construction. The Health and Safety Plan will educate construction workers on the identification of hazards associated with the Proposed Project, the safety measures that must be taken to prevent injury, natural gas hazards, and the procedures to ensure that personnel receive the necessary training. Safety hazards and applicable federal and state occupational standards will be identified in conjunction with the development of appropriate response actions, as well as the protocol for accident reporting. The Health and Safety Plan will also identify requirements for temporary fencing around staging areas, storage yards, and excavation areas during construction activities, and will describe methods of limiting public access to hazardous facilities. In addition, information regarding medical kits, safety equipment, and evacuation procedures will be outlined in the Health and Safety Plan. A qualified environmental field representative will be present on site to observe, enforce, and document adherence to the Health and Safety Plan as needed. The Health and Safety Plan will be prepared by the Applicants' construction contractor and will be available immediately prior to construction.
- **APM-HAZ-03:** Prior to construction, all Applicants, contractors, and subcontractor Proposed Project personnel will receive training on the work practices necessary for the effective implementation of best management practices and Applicants-Proposed Measures to comply with applicable hazardous materials-related laws and regulations.
- **APM-HAZ-04:** Based on the regulations described in Section 955.5 of the California Public Utilities Code, the Applicants will notify the schools within 500 feet of proposed construction activities. Notifications will be provided no less than 15 working days prior to initiating construction activities associated with the proposed pipeline. The Applicants will maintain the appropriate records specified in the regulations and provide emergency contact information to applicable facilities.
- **APM-HAZ-05:** Prior to construction, the Applicants will evaluate the unexploded ordnance risk along the Proposed Project transmission line alignment within Marine Corps Air Station Miramar from near Milepost 43.7 to the southern terminus of the Proposed Project. As part of the evaluation, the Applicants and their contractors will coordinate with Marine Corps Air Station Miramar staff, including the Explosive Ordnance Disposal Unit, to determine procedures for avoidance of unexploded ordnances, as well as the procedures that construction crews must follow in the event of an unexploded ordnance discovery during construction. These procedures may include, but will not be limited to, conducting a surface sweep for evidence of munitions debris

prior to initial ground disturbance, monitoring earth-disturbing activities in potential munitions hazards areas, and notifying the appropriate entities in the event of a discovery. The Applicants will include these procedures as part of the Safety and Environmental Training given to all personnel prior to beginning work on the Proposed Project, and will follow these procedures during construction within Marine Corps Air Station Miramar.

4.8.5 References

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ATTACHMENT 4.8-A: PHASE I ENVIRONMENTAL SITE ASSESSMENT

ATTACHMENT 4.8-B: SAFETY STUDY

ATTACHMENT 4.8-C: WILDLAND FIRE THREAT MAP

**ATTACHMENT 4.8-D: SDG&E OPERATIONS AND MAINTENANCE WILDLAND FIRE
PREVENTION PLAN**